



2010 - 2011  
**CATALOG**

Every great dream  
begins with a dreamer.

Always remember,  
you have within  
you the strength,  
the patience, and  
the passion to reach  
for the stars  
to change the world.

- Harriet Tubman



## Vision

Transforming lives through learning

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## Mission

Lane is a learning-centered community college that provides affordable, quality, lifelong educational opportunities that include:

- Career technical and lower division college transfer programs,

- Employee skill upgrading, business development and career enhancement,
  - Foundational academic, language and life skills development,
  - Lifelong personal development and enrichment, and
  - Cultural and community services.
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## Core Values

### Learning

- Working together to create a learning- centered environment.
- Recognizing and respecting the unique needs and potential of each learner.
- Fostering a culture of achievement in caring community.

### Diversity

- Welcoming, valuing and promoting diversity among staff, students and our community.
- Cultivating a respectful, inclusive and accessible working and learning environment.
- Working effectively in different cultural contexts to serve the educational and linguistic needs of a diverse community.
- Developing capacity to understand issues of difference, power and privilege.

### Innovation

- Supporting creativity, experimentation and institutional transformation.
- Responding to environmental, technological and demographic changes.
- Anticipating and responding to internal and external challenges in a timely manner.
- Acting courageously, deliberately and systematically in relation to change.

### Collaboration and Partnership

- Promoting meaningful participation in governance.
- Encouraging and expanding partnerships with organizations and groups in our community.

### Integrity

- Fostering an environment of respect, fairness, honesty and openness.
- Promoting responsible stewardship of resources and public trust.

### Accessibility

- Strategically growing learning opportunities.
- Minimizing financial, geographical, environmental, social, linguistic, and cultural barriers to learning.

### Sustainability

- Integrating practices that support and improve the health of systems that sustain life.
  - Providing an interdisciplinary learning environment that builds understanding of sustainable ecological, social, and economic systems, concern for environmental justice, and the competence to act on such knowledge.
  - Equipping and encouraging all students and staff to participate actively in building a socially diverse, just, and sustainable society, while cultivating connections to local, regional, and global communities.
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## Strategic Directions

Lane transforms students' lives through learning

- We acknowledge that students occupy many roles, including those of family members, workers, members of social groups, and citizens of an increasingly interconnected world.
- We provide educational experiences, support services and institutional structures that enhance student learning and success.
- In our work in and outside of the classroom, and in our daily interactions with students and one another, we aim to empower all students; we encourage students to grow, to take risks, and to assume responsibility for succeeding in all aspects of their lives.

(Continued on inside back cover)

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This information is available in an alternate format upon request by contacting Disability Resources: 541.463.5150 (voice) TTY Relay 711 email: [disabilityresources@lanecc.edu](mailto:disabilityresources@lanecc.edu)

This catalog is published for informational purposes and every effort is made to insure accuracy at the time of printing. However, the provisions in this catalog are not to be regarded as an irrevocable contract between the student and the college. Lane Community College reserves the right to change any provision or requirement at any time. Students are advised to study the class schedule and to work closely with a counselor or advisor.

This catalog was prepared with assistance from: Angela Miller, editor; Mary Brau, coordinator of student outcomes assessment and curriculum development; Melanie Brown, curriculum specialist; Steve Barth, typesetter; John Bauguess, photographer. Cover design by Funk/Levis and Associates.

# Academic Calendar 2010-2011

## Summer Term 2010 (session 201110)

Advance Registration begins	May 4, 7 a.m.
Registration begins	June 7, 7 a.m.
Summer term books available	June 15
Summer term classes begin	June 21
Independence Day observed, college closed	July 5
First four-week session	June 21-July 17
First six-week session	June 21-July 31
Eight-week session	June 21-August 14
Twelve-week session	June 21-Sept 11
Second four-week session	July 19-August 14
Second six-week session	August 2-Sept 11
Third four-week session	August 16-Sept 11
Labor Day, college closed	September 6

## Fall Term 2010 (session 201120)

Advance Registration begins	May 18, 7 a.m.
Fall term books available	September 13
Registration begins	September 14, 7 a.m.
Inservice, college closed	September 21
Fall term classes begin	September 27
Last day to receive a tuition refund	October 3, 11:59 p.m.
Veterans' Day, college closed	November 11
Last day for schedule changes	November 19
Thanksgiving weekend, college closed	November 25-28
Finals week	December 6-11
Fall term ends	December 11
Winter break	Dec 12-Jan 2

## Winter Term 2011 (session 201130)

Advance Registration begins	October 19, 7 a.m.
Registration begins	December 7, 7 a.m.
Winter term books available	December 28
New Year's Day observed, college closed	December 31
Winter term classes begin	January 3
Last day to receive a tuition refund	January 9, 11:59 p.m.
Martin Luther King Day, college closed	January 17
Presidents' Day, college closed	February 21
Last day for schedule changes	February 25
Finals week	March 14-19
Winter term ends	March 19
Spring break	March 20-27

## Spring Term 2011 (session 201140)

Advance Registration begins	January 25, 7 a.m.
Registration begins	March 8, 7 a.m.
Spring term books available	March 22
Spring term classes begin	March 28
Last day to receive a tuition refund	April 3, 11:59 p.m.
Inservice, college closed	May 6
Last day for schedule changes	May 20
Memorial Day, college closed	May 30
Finals week	June 6-11
Spring term ends	June 11
Graduation	June 11

Revised 4/10

## June 2010

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## July 2010

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## August 2010

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## November 2010

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## December 2010

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## January 2011

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## February 2011

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## March 2011

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## April 2011

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## May 2011

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## June 2011

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### Taking a class at Lane is easy!

Watch the Getting Started at Lane YouTube video at <http://youtube.com/lanetuberscafe> by entering the "Taking a Class at Lane is Easy" in the search box.

LaneTubersCafe



## Welcome to Lane Community College

Usted puede lograr sus sueños en Lane Community College.

Si su sueño es un título universitario, Lane ofrece una amplia variedad de créditos transferibles. La colegiatura cuesta menos en Lane y usted estará bien preparado cuando se transfiera. Por cierto, 84 por ciento de nuestros graduados dicen que Lane los preparó “bien” o “muy bien” para la universidad. La asociación de grados que tenemos con la Universidad del Estado de Oregon y con la Universidad de Oregon hace que la transferencia sea especialmente sencilla de tramitar.

Si su sueño es una gran carrera, se puede capacitar en Lane. Ofrecemos grados técnicos de dos años, certificados de un año, y programas cortos en más de 40 ocupaciones. Usted entrará al campo laboral con habilidades competitivas. Más del 84 por ciento de nuestros graduados en carreras y programas técnicos obtienen empleo en su área de estudio.

Si usted busca educación continua, o necesita aprender inglés como segundo idioma, u obtener su GED, Lane es para usted. Si usted es un empleador le podemos ayudar a entrenar a su personal. ¿Quiere empezar su propio negocio? Nosotros le podemos ayudar.

Lane tiene planteles en Eugene, Cottage Grove y Florence, y nos puede encontrar en el Internet en *lanecc.edu*. Ofrecemos becas y ayuda financiera estudiantil, así como una variedad de servicios que le ayudarán a enfocarse en el aprendizaje.

Nuestro profesorado y personal están dedicados a su éxito. Muchos de nuestros instructores tienen doctorados así como experiencia de trabajo en el mundo real. Usted recibirá apoyo y atención personal incalculable.

Usted puede lograr sus sueños en Lane Community College. Bienvenido.

Sinceramente,

Mary Spilde, Presidente

You can achieve your dreams at Lane Community College.

If your dream is a college degree, Lane offers a comprehensive range of transfer credits. Tuition is lower at Lane and you'll be well prepared when you transfer. In fact, 84 percent of our graduates say Lane prepared them “well” or “very well” for university. Our degree partnerships with Oregon State University and the University of Oregon make transferring especially easy.



If your dream is a great career, you can train at Lane. We offer two-year degrees, one-year certificates, and fast-track programs in more than 40 occupations. You'll enter the workforce with competitive skills. More than 84 percent of our career and technical graduates get jobs in their fields.

If you seek continuing education or lifelong learning, or need to learn English as a second language, or get your GED, Lane is for you. If you're an employer, we can help you train your workforce. Want to start your own business? We can help.

Lane has locations in Eugene, Cottage Grove and Florence, and we're online at *lanecc.edu*. We offer scholarships and financial aid, and a variety of services to help you focus on learning.

Our faculty and staff are dedicated to your success. Many of our instructors have doctorates as well as real-world work experience. You'll get invaluable personal attention and support.

You can achieve your dreams at Lane Community College. Welcome.

Sincerely,

Mary Spilde, President

## About Lane Community College

Lane is a comprehensive community college dedicated to providing accessible, high quality, affordable, lifelong education. Today, the college offers dozens of credit and noncredit programs.

Lane serves a population of approximately 336,000 people within a 5,000-square-mile area stretching from the Pacific Ocean to the Cascade Mountains.

The district includes most of Lane County, Monroe Elementary School District in Benton County, Harrisburg Union High School District in Linn County, and a small area in northern Douglas County. The college is governed by a seven-member elected board.

In addition to the main campus in south Eugene, the college has centers at a number of locations throughout the district, including Florence, Cottage Grove, downtown Eugene, and the Eugene Airport.

### Enrollment

During the 2008-09 academic year, 36,899 students enrolled in Lane Community College classes. The average age for all students was 32 years.

### Accreditation, Certificates and Affiliations

Lane is accredited by the Northwest Commission on Colleges and Universities, 8060 165<sup>th</sup> Avenue N.E., Suite 100, Redmond, WA 98052. The Commission is an institutional accrediting body recognized by the Council for Higher Education Accreditation and/or the U.S. Department of Education. Related regional accreditation documents are on reserve in the college library for review.

Individual Lane programs are evaluated for quality by numerous vocational and professional accrediting associations, including:

- Automotive Technology, certified by the National Automotive Technicians Education Foundation, a non-profit foundation within the National Institute for Automotive Service Excellence
- Aviation Maintenance, approved under Part 147 of the Federal Aviation Regulations of the Federal Aviation Administration
- Culinary Arts, accredited by the American Culinary Federation Education Foundation Accrediting Commission, a specialized accrediting commission recognized by the Council for Higher Education Accreditation
- Dental Assisting, accredited by American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Department of Education
- Dental Hygiene, accredited by American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Department of Education. The Commission may be contacted at 312.440.4653 or 211 East Chicago Avenue, Chicago, Illinois 60611
- Diesel Technology, evaluated and accredited by the Association of Equipment Distributors Foundation
- Dietary Manager, approval pending from Dietary Managers Association
- Emergency Medical Technology-Paramedic, approved by the Department of Human Services and Trauma Systems, Oregon, meeting requirements of OAR 333-265-0010(2)
- Energy Management, awarded Institute for Sustainable Power Quality accreditation credential from the Interstate Renewable Energy Council, International Standard #01021 for

accreditation and certification of renewable energy training programs and instructors

- Exercise and Movement Science reviewed and endorsed by the American College of Sports Medicine
- Flight Technology certification courses, approved by the Federal Aviation Administration
- Hospitality Management, accredited by the Commission on Accreditation of Hospitality Management Programs
- Medical Office Assistant, accredited by the Commission on Accreditation of Allied Health Education Programs, a specialized accrediting board recognized by the Council for Higher Education Accreditation, on recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment. Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756, 727.210.2350
- Nursing, evaluated and approved through 2012 by the Oregon State Board of Nursing
- Physical Therapist Assistant, granted Candidate for Accreditation status by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association (CAPTE, 1111 N. Fairfax Street, Alexandria, VA) on April 29, 2009. Candidate for Accreditation is a pre-accreditation status of affiliation with the Commission on Accreditation in Physical Therapy Education that indicates the program is progressing toward accreditation; candidacy for accreditation does not assure the program will be granted accreditation status. CAPTE will continue to review program content, standards, and successful objective achievement from fall term 2009 to spring term 2011.
- Respiratory Care, accredited by the Commission on Accreditation for Respiratory Care, coarc.com

### Awards

The college has earned national recognition for many of its instructional programs, services and administrative practices. Lane also is a member of the League for Innovation in the Community College and a Vanguard College. Through the League, Lane exchanges innovative ideas and practices with some of the best community colleges in the United States.

### Funding

Lane Community College is funded by local property taxes, state revenues, and tuition and fees. The 2009-10 General Fund budgeted resources are \$80,077,184 of which approximately 50 percent came from intergovernmental, 43 percent from tuition and mandatory fees, and 7 percent from other sources.

In November 2008, Lane county voters approved an \$83 million 15 year bond. Funds are being used to update instructional facilities, equipment and technology at Lane. Work began summer 2009 with upgrades to roofing, central heating and cooling systems upgrades, and increased safety lighting.

The college also has a foundation which is an independent, nonprofit corporation that raises funds to support programs for which tax monies are insufficient or unavailable.

## How to Get Started at Lane

### Who Can Attend Lane

In general, anyone 18 years or older may enroll in Lane Community College credit classes. A high school diploma is not required. Noncredit classes are generally open to persons 16 years or older.

The college is dedicated to helping each student accomplish his or her immediate educational goals.

### What Lane Has To Offer

Lane Community College offers lower division college courses, career and technical training, precollege and skill development, cooperative programs with area high schools, career and life planning, services for businesses, continuing education, and cultural activities.

### Credit Classes and Programs

Some of the courses offered at the college are for "credit." Credit courses are designed to be transferable to other colleges or to be part of a career and technical degree program. Information about credit program offerings begins on page 70.

### Noncredit Community Education Classes

Noncredit courses are not transferable to Lane's career and technical degree programs or to other colleges. Information about these offerings begins on page 261.

### Good Places to Start

Lane offers a variety of educational options which are designed to meet the needs of individuals at different stages of their lives and education. The following are good places to start.

**AskLane** Lane's 24/7 online tool for finding answers to general questions relating to attending Lane can be found at the top of Lane's homepage at [lanecc.edu](http://lanecc.edu).

**Catalog** This catalog is produced annually in the spring and is available at no charge at college centers. It also is available through the mail for a small charge. To order a catalog, call Lane's Bookstore at 541.463.5256 or use the order form in the *Aspire Magazine*. The catalog also can be found on Lane's Web site, [lanecc.edu](http://lanecc.edu).

Lane's catalog is published for informational purposes and every effort is made to insure accuracy at the time of printing. However, the provisions in this catalog are not to be regarded as an irrevocable contract between the student and the college. Lane Community College reserves the right to change any provision or requirement at any time. Students are advised to study the web class schedule and to work closely with a counselor or advisor. Students also are encouraged to see a counselor or advisor to have an evaluation done early in their programs of study to obtain the most accurate information on their program requirements.

**Class schedule** The quarterly class schedule is available on the web at [lanecc.edu](http://lanecc.edu) about one week before Advance Registration

begins. Advance Registration usually begins the fourth week of the preceding term except fall term, which occurs the preceding spring term.

The *Aspire Magazine* which contains noncredit offerings and an abbreviated list of credit offerings is mailed to homes in the college district approximately one week before registration begins each term. Centers at Cottage Grove and Florence also mail schedules specific to those centers.

**Counseling** Building 1, Room 103, 541.463.3200

The Counseling department assists students in planning and meeting their educational goals. The center provides academic advising, and career and retention counseling. To receive assistance, drop by the center or make an appointment by calling 541.463.3200.

For information about the center and other counseling services, see page 27.

Counseling services also are available at these off-campus centers: Lane Community College at Cottage Grove, 541.942.4202; and Lane Community College at Florence, 541.997.8444.

**Enrollment and Student Financial Services** Building 1, First Floor (Lobby), [lanecc.edu/es/](http://lanecc.edu/es/)  
541.463.3100, 877.520.5391, or TTY 541.463.4722

Enrollment and Student Financial Services admits credit students, provides registration and billing assistance to all students, and responds to all questions and issues regarding financial aid. Hours are Monday, Tuesday, and Thursday, 9 a.m.-5 p.m.; Wednesday, 10 a.m.-5 p.m.; Friday, 9 a.m.-2 p.m. The college is closed on Fridays during summer term.

**Web** Information about the college, such as the catalog, class schedule, and ExpressLane/myLane/myLane, can be found on the Internet at [lanecc.edu](http://lanecc.edu).

### Other Good Starting Places:

College centers and maps, pages 8-9.

Disability Resources, page 27-28.

English as a Second Language, page 262.

International Student Program, page 29-30.

Multicultural Center, page 30.

Native American Program, page 31.

TRIO Learning Center, page 35.

Veterans' Office, page 36.

Women's Center, page 37.

## Como Empezar en Lane

### Quien puede asistir a Lane

En general, cualquier persona 18 años o mayor puede matricularse en clases de valor curricular en Lane Community College. No se requiere diploma de preparatoria. Las clases al público sin valor curricular generalmente están abiertas a personas de 16 años o mayores. El college está dedicado a ayudar a cada estudiante a lograr sus metas educativas inmediatas.

### Que les Ofrece Lane

Lane Community College ofrece cursos de tronco común, capacitación profesional y vocacional, desarrollo de habilidades preuniversitarias, programas cooperativos con preparatorias locales, orientación profesional y personal, servicios para empresas, educación continua, y actividades culturales.

### Programas y Clases de Valor Curricular

Algunos de los cursos que el college ofrece son de "crédito" (valor curricular). Los cursos de crédito curricular están diseñados para transferirlos a otros colleges/universidades o para que formen parte de un programa técnico/profesional. La información sobre clases de crédito curricular empiezan en la página 70.

### Clases de Educación Comunitaria

Los cursos "sin crédito" no pueden transferirse a otros colleges/universidades ni pueden formar parte de un programa de grado técnico/profesional. La información sobre estos cursos empieza en la página 261.

### Buenos Puntos de Partida

Lane ofrece una variedad de opciones educativas las cuales están diseñadas para cumplir con los deseos académicos de las personas durante las diferentes etapas de su vida y educación. A continuación presentamos unos buenos puntos de partida.

**Ask Lane** es la herramienta en línea disponible las 24 horas del día que ayuda a contestar preguntas generales relacionadas con asistir a Lane. Se encuentra en la parte superior de la página inicial de Lane en *lanecc.edu*.

**Catálogo** Este catálogo se produce anualmente durante la primavera y lo puede adquirir gratis en los centros del college. También se puede ordenar, a bajo costo, por correo. Para ordenar un catálogo, llame a la Librería de Lane al 541.463.5256 o puede usar la hoja de pedido que se encuentra en la revista de *Aspire Magazine*. El catálogo se encuentran en el portal de Lane en el Internet, *lanecc.edu*.

El catálogo de Lane es publicado para fines informativos y se hacen todos los esfuerzos para asegurar exactitud a la hora de imprimirlo. Sin embargo, lo presentado en este catálogo no debe ser considerado como un contrato irrevocable entre el estudiante y el college. Lane Community College reserva el derecho de cambiar, en cualquier momento, cualquier parte de lo presentado o de los requisitos. Se les aconseja a los estudiantes revisar la lista de clases y asesorarse detalladamente con un consejero o asesor. También se les recomienda a los

estudiantes obtener una evaluación formal de sus expedientes académicos, al iniciar sus programas de estudios, para así obtener la información más precisa sobre los requisitos que necesitan para sus programas.

**Lista de Clases** El horario de clases trimestrales está a su disposición en el Internet, en *lanecc.edu* aproximadamente una semana antes de que se inicie la Matriculación Previa (Advance Registration, en inglés). La Matriculación Previa usualmente inicia la tercera semana del trimestre anterior excepto el trimestre de otoño, el cual se lleva a cabo durante el trimestre de primavera anterior.

La revista impresa con el horario de clases trimestrales también es enviado por correo a los hogares dentro del distrito escolar aproximadamente una semana antes de que se inicie cada trimestre. Los centros en Cottage Grove y Florence también envían por correo horarios de clases específicos a esos centros.

**Centro de Consejería y Asesoría** Edificio 1, Salón 103, 541.463.3200

El Centro de Consejería y Asesoría ayuda a los estudiantes a planear y alcanzar sus metas educativas. El centro proporciona asesoría académica, y consejería vocacional. Para recibir ayuda, vaya al centro o haga una cita al llamar al 541.463.3200.

Para información sobre el Centro y otros servicios de consejería, ver páginas 27.

Servicios de consejería también se ofrecen en los siguientes centros fuera del plantel:

Downtown Center, 541.463.5940

Lane Community College en Cottage Grove, 541 942-4202

Lane Community College en Florence, 541997-8444

**Admisión/Enrollment and Student Financial Services** Edificio 1, Primer piso, *lanecc.edu/es/*, 541.463.3100, 877.520.5391, or TTY 541.463.4722

Admisión/Enrollment and Student Financial Services proporciona una variedad de servicios para estudiantes de nuevo ingresos y para los que regresan a Lane. Estos servicios incluyen: admisión, apoyo y asesoría para la ayuda financiera, servicios de pagos, y ayuda con matriculación. Los horas de servicios: lunes, martes y jueves, 9 a.m.-5 p.m.; miércoles, 10 a.m.-5 p.m.; viernes, 9 a.m.-2 p.m. El colegio estará cerrado los Viernes durante el trimestre de Verano.

**Internet** Para obtener información sobre el college en el Internet, vaya a *lanecc.edu*.

### Otros Buenos Puntos de Partida

Centros del college, páginas 8-9.

Recursos para Discapacitados, páginas 27-28.

Inglés como Segundo Idioma, página 262.

Programa para Estudiantes Internacionales, páginas 29-30.

Centro Multicultural, página 31.

Programa Nativo Americano, página 31.

Centro de Aprendizaje TRIO, página 35.

Oficina de Veteranos, página 36.

Centro para la Mujer, página 37.



# College Phone Numbers

## Main college phone: 541.463.3000

### Credit Instructional Departments

Academic Learning Skills.....	541.463.5439
Advanced Technology.....	541.463.5380
Arts Division.....	541.463.5409
Business Department.....	541.463.5221
Computer Information Technology.....	541.463.5826
Cooperative Education.....	541.463.5203
Flight Technology.....	541.463.4195
Health and Physical Education.....	541.463.5545
Health Professions.....	541.463.5617
Human Development (Counseling Department).....	541.463.3200
Language, Literature and Communication.....	541.463.5419
Mathematics.....	541.463.5392
Music, Dance and Theatre Arts.....	541.463.5209
Science.....	541.463.5446
Social Science.....	541.463.5427

### Administrators

President.....	541.463.5200
Vice President, College Operations.....	541.463.5311
Vice President, Instruction & Student Services.....	541.463.5302
Assoc. Vice President, Instruction.....	541.463.5306

### Admissions/Enrollment and Student Financial Services

Adult Basic and Secondary Education (ABSE).....	541.463.5214
Downtown Center.....	541.463.5945
ABSE Volunteer Tutor Program.....	541.463.5919
Affirmative Action.....	541.463.5801

### Associated Students of Lane

Community College (ASLCC).....	541.463.5365
Athletics.....	541.463.5599
Bookstore.....	541.463.5256
Bookstore Annex (Downtown Center).....	541.463.5942
Business Development Center.....	541.463.5255
Career and Employment Services.....	541.463.5167
Child and Family Education.....	541.463.5519
Continuing Education.....	541.463.5252
Cooperative Education.....	541.463.5203
Cottage Grove Center*.....	942-4202
Counseling (Main Campus).....	541.463.3200
Counseling* (Downtown Center).....	541.463.5940
Denali (Student Publication).....	541.463.5897
Dental Hygiene Clinic.....	541.463.5206
Disability Resources.....	541.463.5150
Dislocated Worker Program.....	541.463.5223
Distance Learning.....	541.463.5893
Downtown Center.....	541.463.5252

Emergency Calls (on campus).....	541.463.5555
Emergency Medical (on campus).....	541.463.5555
Employment Services.....	541.463.5167
English as a Second Language.....	541.463.5253
Enrollment and Student Financial Services.....	541.463.3100
Family Connections of Lane and Douglas Counties.....	541.463.3954/1.800.222.3290
Financial Aid.....	541.463.3100
Fitness Education Center*.....	541.463.3987
Florence Center.....	541.997.8444/541.463.4800
Foundation.....	541.463.5226
GED, Classes.....	541.463.5214
GED, Testing.....	541.463.5324
Health Clinic.....	541.463.5665
High School Connections.....	541.463.5521
International Students Counselor.....	541.463.3200
KLCC (Radio Station).....	541.463.6000
Lane Child and Family Education.....	541.463.5519
Library*.....	541.463.5220
Medical Emergencies (on campus).....	541.463.5555
Multicultural Center.....	541.463.5276
Music, Dance and Theatre Arts Ticket Office.....	541.463.5202
Public Safety* (emergency calls).....	541.463.5555
General Public Safety Information.....	541.463.5558
Recreational/Club Sports.....	541.463.5293
Registrar, Director of Enrollment and Student Financial Services 541.463.5690	
Student Life and Leadership Development.....	541.463.5336
Student Child Care Office.....	541.463.5519
Student Financial Services Student Loan Payments (Perkins).....	541.463.3012
Tuition and Other Payments.....	541.463.3100
Student Legal Services.....	541.463.5365
Student Records.....	541.463.5690
Student Resource Center.....	541.463.5342
Student Services Downtown Center.....	541.463.5940
Substance Abuse Prevention.....	541.463.5178
TTY (Disability Resources).....	541.463.3079
TTY (Personnel).....	541.463.3999
Torch (Student Newspaper).....	541.463.5881
Tours (Main Campus).....	541.463.5678
Transcript Information Line.....	541.463.5736
Transitions to Success.....	541.463.5837
TRIO Learning Center.....	541.463.3131
Veterans' Office.....	541.463.5663
Women's Center.....	541.463.5353
Work Study.....	541.463.5039
Workforce Development.....	541.463.5223

\*These offices and facilities also can be reached during evening hours.

## Locations and Maps

### Facilities

The college has a 301-acre campus on 30th Avenue in Eugene. About one-third of the construction money came from local taxes and two-thirds from state and federal grants.

A center in downtown Eugene is centrally located and convenient for those who live, work or shop downtown.

Lane Community College at Cottage Grove provides educational services for the southern part of the college district, and the Florence Center serves residents in the western part of the district.

Siltcoos Station, located south of Florence on Siltcoos Lake, is a facility for educational and recreational use.

The Wildish Building provides office space, classrooms and a community conference room.

Lane's Flight Technology program offers ground/flight courses at its facilities at Eugene's Mahlon Sweet Airport. The college's Return-to-Service facility at the airport provides advanced training for Aviation Maintenance Technology students.

The college also offers classes via television and the Internet.

### Bus Pass and Bus Transportation

Credit students taking classes on main campus or the Downtown Center and ESL students at main campus and DTC will be assessed a \$27 per term transportation fee\* which will cover the cost of a Lane Transit District/Lane Community

College term bus pass. All other students will be assessed a \$5 per term transportation fee. Refer to current term class schedule for more information.

\*subject to change

### Parking

#### Main Campus

Parking is permitted in all parking lots on the main campus, hard surface and gravel. Parking is prohibited on main access roads at Gonyea Road and Eldon Schafer Drive. If parking is temporarily permitted in an area where parking is not normally permitted, the area will be clearly marked.

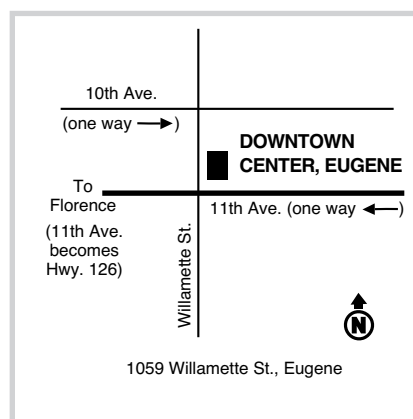
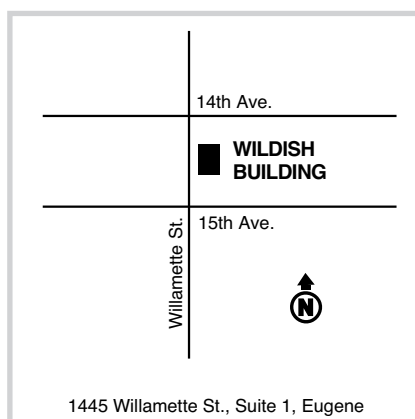
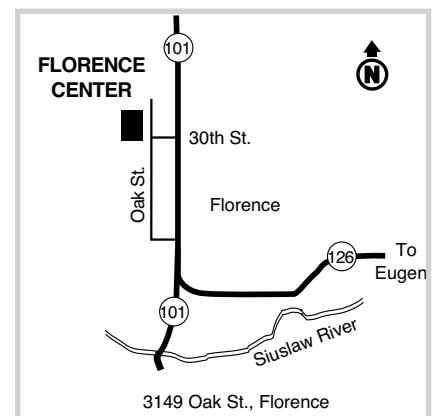
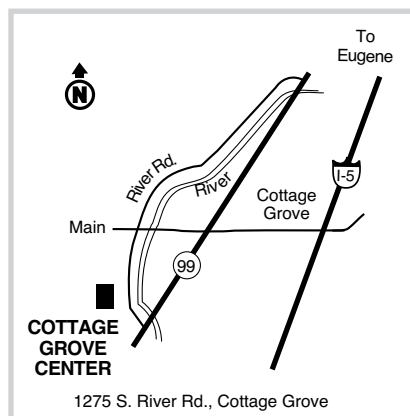
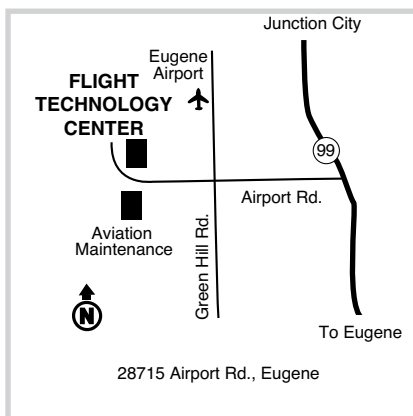
More information about motor vehicle regulations applicable to Lane is available by calling 541.463.5558 or on Lane's website at [lanecc.edu/cops/mvreg.htm](http://lanecc.edu/cops/mvreg.htm).

#### Downtown Center

Parking, 7 a.m. to 6 p.m., Monday through Saturday:

- Lane's Downtown Center students may purchase parking coupons at the Downtown Center for 10 cents for each coupon, cash only. Refer to the quarterly class schedule for current parking program information.
- Validation coupons are accepted by attendants in the Overpark at 10th and Oak and Parcade at 8th and Willamette.
- Parking is free on Saturday and Sunday in the Overpark and Parcade, and for the first hour of parking Monday through Friday, and after 6 p.m. Validation coupons have no cash value.
- Downtown metered lots charge an hourly rate.

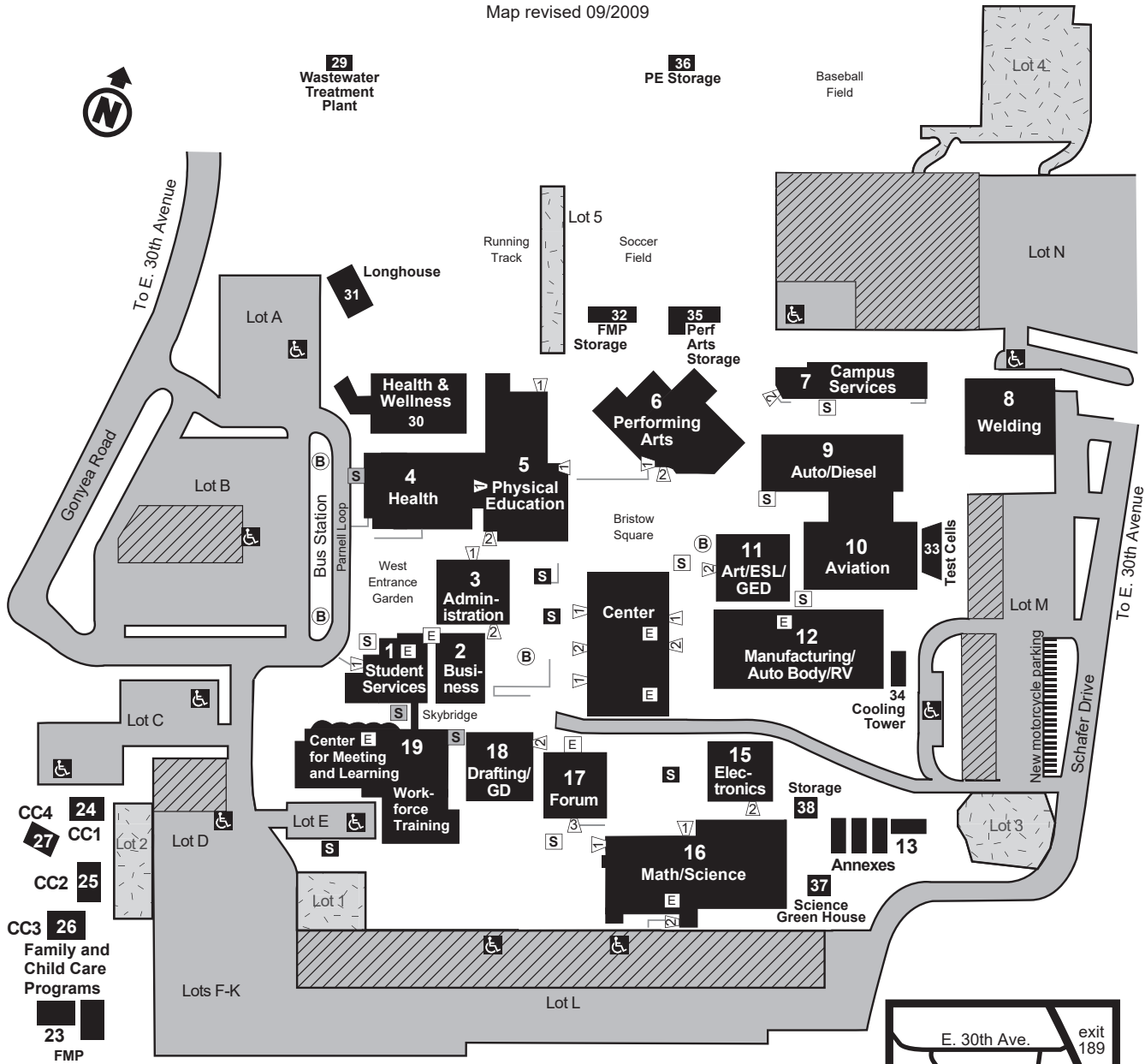
## Maps to Lane Community College Outreach Centers



# Lane Community College Main Campus

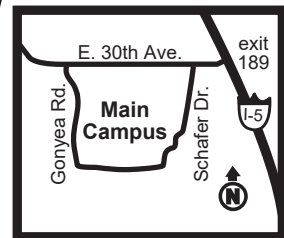
4000 East 30th Avenue ■ Eugene, Oregon 97405 ■ (541) 463-3000

Map revised 09/2009



### KEY

- (B) Bicycle Parking
- (E) Elevator
- Wheelchair Ramp
- (1) Electric Door—number designates floor
- (♿) Parking with Handicapped Permit
- (S) Smoking Area, Uncovered / (S) Smoking Area, Covered / (S) Free Standing Smoking Shelter
- (▨) Compact parking
- (▨) Gravel Parking Areas
- (▨) New motorcycle parking



<b>Number</b>	<b>Building</b>	<b>Number</b>	<b>Building</b>	<b>Number</b>	<b>Building</b>
	Center	10	Aviation	20	Workforce Training Annex
1	Student Services	11	Art/ESL/GED	24	Lane Family Connections and Child Development Center Office
2	Business	12	Manufacturing/Auto Body/RV	25	Infant/Toddler Center
3	Administration	13	Electronics Annexes	26	Preschool
4	Health Professions	15	Electronics	27	ASLCC Child Care Co-op
5	Physical Education	16	Science/Math		
6	Performing Arts	17	Forum		
7	Campus Services	18	Drafting/Graphic Design		
8	Welding	18	Health Clinic +		
9	Auto/Diesel	19	Workforce Training		

### Parking

- Parking is permitted in all parking lots on main campus.
- Parking is prohibited on the access roads to main campus (Gonyea Road and Eldon Schaefer Drive).

## Credit Student Admissions and Registration

### Who May Enroll in Lane Credit Classes

**Students over age 18** Anyone who is at least 18 years of age may enroll in Lane credit classes. A high school diploma is not required. Students planning to use financial aid to attend Lane who do not have a high school diploma, a GED certificate, completed home schooling at the secondary level, or have satisfactorily completed six credits that apply toward an eligible program at Lane must take and pass an Ability to Benefit test. For more information, contact Testing Services 541.463.5324.

**Students under age 18** Anyone under age 18 must be a high school graduate or follow one of the procedures listed below in order to enroll in credit classes at Lane.

- Students who have not graduated and who are not enrolled in high school must have a GED certificate to enroll in credit classes at Lane.
- Students who are under the age of 18 at the time they are applying to Lane to become a credit student, need to complete the on-line admissions application process at [lanecc.edu/es/admissions.html](http://lanecc.edu/es/admissions.html). To finalize the admissions process students under the age of 18 without a high school diploma must complete and submit to Enrollment and Student Financial Services the "Student/Parent-Guardian Consent Signature" form included in the on-line admissions process. Students attending Lane under the age of 18 will not be considered as regularly admitted students until they reach the age of 18 or they have demonstrated that a high school diploma has been earned.

Information about Lane's noncredit and Adult Basic and Secondary Education programs is in the Community Education section of this catalog.

**Residency** More information about residency, including tuition rates and documentation requirements, is provided in the Tuition, Financial Aid and Payment section. Briefly,

Students are considered In-District\* if they

- have maintained a permanent residency within the college district for at least 90 continuous days prior to the first day of the term.

\*In-District includes Lane County, the Monroe Elementary District, and the Harrisburg Union High School District.

Students are considered In-State (out-of-district) if they

- have maintained a permanent residency within the state for at least 90 continuous days prior to the first day of the term.

Students who are In-District, In-State or permanent residents of Washington, Idaho, Nevada, or California pay In-State tuition at Lane.

Please be aware that being designated as an Oregon resident at Lane Community College does not guarantee the same status with any other two-year or four-year institutions, both within and outside the state of Oregon. It is vital that you review the residency requirements at all institutions to understand their in-state residency requirements

### Admissions

The admissions process at Lane is very easy. Simply complete the Admissions Process on-line at [lanecc.edu](http://lanecc.edu), click on "Help for Students" and "Admission."

### International Student Admissions

Building 11, Room 243, 541.463.3404

International students are welcome at Lane. Certain criteria must be met for acceptance. For admission to credit level classes the following documents are required: official records of all upper secondary school work, including a certificate of diploma, and any additional education above that level; acceptable scores on the TOEFL (475 PBT, 153 CBT, 53 iBT) or an IELTS score of 5.5 or STEP Eiken pre-first grade; and proof of financial responsibility. Adequate funds must be available, and immigration authorities rarely give work permits. For admission to the International English as a Second Language program most of the same documents are required, but a TOEFL score and school records are not required. Upon completion of Lane's ESL program you can be admitted to credit level classes without a TOEFL score, but past school records would still be required.

International Student Admission Application deadlines vary each year. Deadline months are August for fall term, November for winter term and February for spring term. No new international students are accepted for summer term. For more specific information contact the International Admissions Advisor at 541.463.3404, Lane Community College, 4000 East 30th Avenue, Eugene, Oregon 97405-0640, or email at [InternationalAdvisor@lanecc.edu](mailto:InternationalAdvisor@lanecc.edu). The international application is now an online process and includes an application processing fee. Go to [lanecc.edu](http://lanecc.edu) to apply. Click on "Help for Students" and "Admission", but be sure to choose "International Admissions". If you are unable to apply online, paper applications can be downloaded from the Lane website at [lanecc.edu/stuser/internat.htm](http://lanecc.edu/stuser/internat.htm).

The International Student Program offers special services and activities that assist international students in succeeding at the college. See pages 29-30. See page 262 for information about Lane's International English as a Second Language program.

### Transferring Credit to Lane

The amount of credit transferred depends upon the nature of the student's college work, which is evaluated according to the academic requirements of Lane Community College. Official transcripts and other transfer documents are accepted from students admitted to Lane.

Once Lane receives a student's official transcript from another school, it becomes the property of Lane Community College and is subject to federal law, The Family Education Rights and Privacy Act (FERPA). A student may view the transcripts but Lane cannot release a copy back to the student. It is suggested that students order an unofficial copy for personal use. See Policies and Procedures, page 54.

More information is available on Lane's transfer practices at [lanecc.edu](http://lanecc.edu), click on [Help For Students](#) and [Transferring Credits](#).



**Programs with Special Admission Procedures**

Each of the following programs has special admission procedures. Students must be officially admitted to these programs. Contact the Health Professions Application Center for more information *hpapplicationcenter@lanecc.edu*. Admission Packets are available on Lane’s website, *lanecc.edu*.

Associate Degree Nursing	Practical Nursing
Dental Hygiene	Dental Assisting
Emergency Medical Technology/Paramedic	Health Records Technology
Physical Therapist Assistant	Medical Office Assistant
	Respiratory Care

The programs listed below are limited enrollment requiring that the program be listed as the major or requiring a special application for acceptance listing as the major. Contact the sponsoring department for information:

Apprenticeship Trades .....	541.463.5843
Automotive Technology .....	541.463.5380
Culinary Arts and Food Service Management .....	541.463.5378
Hospitality Management .....	541.463.5378
Early Childhood Education .....	541.463.5617
Employment Skills Training .....	541.463.5078
Energy Management: Renewable Energy Technician.....	541.463.5446
Energy Management Technician .....	541.463.5446
Fitness Specialist or Fitness Technician .....	541.463.5545
Flight Technology .....	541.463.4195
Graphic Design (the second year).....	541.463.5409
Occupational Skills .....	541.463.5203

**Physical Exams and Immunizations**

Some academic programs and student activities such as varsity sports have special requirements for physical exams and immunizations. Students can get specific information from the sponsoring department.

**Registering for Classes**

**Advance Registration**

Students who attended any credit class during the prior academic year may participate in Advanced Registration. Students attend an Advance Registration Advising Session with an assigned counselor or advisor for assistance in selecting courses and planning a schedule. Advising sessions are offered each term, and a schedule of sessions is available in Counseling.

Advance Registration students must pay current term balance in full by midnight two business days prior to first day of continuing student registration for subsequent term. Failure to do so will result in cancellation of advance registration.

**Schedule Changes**

Students may add and drop full-term classes through the eighth week of the term using ExpressLane/myLane. Schedule changes could result in additional tuition and fees.

Some classes require the instructor’s consent to enroll. ExpressLane/myLane will inform students of this requirement when attempting registration.

Increasing the number of credits for a variable credit class can be processed using ExpressLane/myLane through the last week of regular classes, prior to the beginning of finals week. Additional tuition and applicable fees will be charged to the student’s account, and payment policies will apply.

**Refunds**

Tuition is not prorated. Students who drop a class and meet the refund deadline of Sunday midnight, the first week of the term for classes that meet 11 weeks will be refunded all of the tuition. Students who drop after this deadline will not receive a refund. More information about the refund process is provided in the tuition section of this catalog.



## Steps to Enroll in Credit Classes

All the information you need for attending Lane is on Lane's website at [lanecc.edu](http://lanecc.edu).

### Step 1: Have an e-mail address

All new students will be required to submit an email address when applying to the college by using the online admissions process. Students who already have been admitted are encouraged to enter an email address via their Expresslane/myLane account. Students taking online web courses also may be required to have a valid email address to participate in the course.

If you would like help in arranging for a free email address, contact the Help Desk by stopping by the SHed in Bldg. 4, Room 201 or call 541.463.3333 (ext. 3333 on campus).

### Step 2: Apply for Admission/Readmission

**First time credit student? Apply for admissions.**

From [lanecc.edu](http://lanecc.edu), click on Help for Students in the upper left-hand column and click on Admission in the "New Students" column.

**Already taken credit classes at Lane? Apply for readmission if it has been more than four terms since you attended.**

From [lanecc.edu](http://lanecc.edu), click on Help for Students in the upper left-hand column and click on Apply for Readmission in the "Former Students" column. If you are returning to Lane on a non-immigrant visa, select the Reapply Online link.

**Studying in the United States as an international student or on a non-immigrant visa?**

From [lanecc.edu](http://lanecc.edu), click on Help for Students in the upper left-hand column and click on International Students in the "New Students" column.

**Under 18 and want to take credit classes?**

From [lanecc.edu](http://lanecc.edu), click on Help for Students in the upper left-hand column and click on Under 18 Years Old Admission in the "New Students" column.

**Want to earn credit at Lane while attending high school?**

From [lanecc.edu](http://lanecc.edu), click on High School Connections in the upper left-hand corner to find out how to sign up for College Now, RTEC, Expanded Options and other High School Partnership classes.

### Step 3: Apply for Financial Aid

From [lanecc.edu](http://lanecc.edu), click on Help for Students in the upper left-hand column and click on Financial Aid in the "New" or "Current" Students boxes.

**Step 4: Schedule a Placement Testing appointment** (after receiving your L number). From Lane's home page, click on Steps to Enroll in Credit Classes: New and Transfer Students in the Student Announcements box. Click on Step 4 and follow the instructions to schedule your appointment for Placement Testing. You must schedule your Placement Testing before moving on to Step 5.

### Step 5: Schedule a Student Orientation, Advising, and Registration (SOAR) appointment

From Lane's home page, click on Steps to Enroll in Credit

Classes: New and Transfer Students in the Student Announcements box.

SOAR includes academic advising and new student information. An optional Money Matters workshop will be offered on the same day. Click on Step 5 and follow the instructions to schedule your appointment for SOAR.

To view Lane's degree and certificate programs of study, go to Lane's home page and click on Catalog in the left-hand column to review programs currently offered at Lane.

### Step 6: Register for Classes

**Review credit classes being offered each term and for the current availability of each class.**

From [lanecc.edu](http://lanecc.edu), click on the term's classes, i.e. Spring Classes link on the left-hand column and click on Credit Class Listings by Subject to review classes offered and current availability.

From [lanecc.edu](http://lanecc.edu), click on Help for Students in the upper left-hand column and click and read the directions on Registering for Classes in the "New Students" column.

**Review refund deadlines and payment processes.**

From [lanecc.edu](http://lanecc.edu), click on Help for Students in the upper left-hand column and click on Paying for Classes in the "New Students" column.

If you have any questions about the programs offered at Lane Community College, contact the Counseling Department: email [coundept@lanecc.edu](mailto:coundept@lanecc.edu), call 541.463.3200, or come by the Counseling and Advising center at the 30th Avenue campus, in Building 1, Room 103. For the web version of the above steps go to: [lanecc.edu/stuser/expnso/20.htm](http://lanecc.edu/stuser/expnso/20.htm)



## Pasos para matricularse en clases con valor curricular

Toda la información que necesita para asistir a Lane se encuentra en la página de Internet [lanecc.edu](http://lanecc.edu).

### Paso 1: Tener una dirección electrónica

Todos los estudiantes nuevos deberán presentar una dirección electrónica cuando se matriculan al college al usar el proceso electrónico de matriculación. A los estudiantes que previamente han sido admitidos se les pide que presenten una dirección electrónica por medio de su cuenta Expresslane/mylane. Los estudiantes que toman cursos por medio del Internet también deben tener una dirección electrónica válida para participar en el curso. Si le gustaría obtener ayuda para conseguir una dirección electrónica gratuita, comuníquese con el Help Desk al visitar el SHeD en el edificio 4, salón 201 o llame al 541-541.463.3333 (ext. 3333 en campus).

### Paso 2: Solicitar matriculación/ readmisión

**¿Estudiante de nuevo ingreso para clases con valor curricular? Solicite matriculación.**

De [lanecc.edu](http://lanecc.edu), seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y luego seleccione Admission/Matriculación en la columna "New Students/Estudiantes nuevos".

**¿Ya ha tomado clases con valor curricular en Lane? Solicite readmisión si han pasado más de cuatro trimestres desde su último curso.**

De [lanecc.edu](http://lanecc.edu), seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y luego seleccione Apply for Readmission/Solicitar Readmisión en la columna de "Former Students/Estudiantes anteriores". Si está regresando a Lane con una visa no-inmigrante, seleccione Reapply Online/Readmisión por la red.

**¿Está estudiando en los Estados Unidos como estudiante internacional o con una visa de no-inmigrante?**

De [lanecc.edu](http://lanecc.edu), seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y seleccione International Students/Estudiantes internacionales en la columna "New Students/Estudiantes nuevos".

**¿Eres menor de 18 años y quieres tomar clase con valor curricular?**

De [lanecc.edu](http://lanecc.edu), selecciona Help for Students/Ayuda para Estudiantes en la columna superior izquierda y selecciona Under 18 Years/Menor de 18 años en la columna "New Students/Estudiantes nuevos".

**¿Quieres obtener crédito curricular en Lane mientras cursas la preparatoria?**

De [lanecc.edu](http://lanecc.edu), selecciona "High School Connections/Conexión con preparatorias" en la esquina superior izquierda para informarte cómo puedes matricularte para College Now, RTEC, Expanded Options y otras clases en colaboración con las preparatorias.

### Paso 3: Solicite ayuda financiera

De [lanecc.edu](http://lanecc.edu), seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y seleccione Ayuda Financiera en los cuadros de estudiante "New/Nuevo" o "Current/Actual".

### Paso 4: Haga una cita para el Examen de Ubicación (después de recibir su número L).

En la página inicial de Lane, seleccione "Pasos para matricularse en clases con valor curricular: Estudiantes de nuevo ingreso o de traslado" en el cuadro de Avisos para Estudiantes.

Haga clic en el Paso 4 y siga las instrucciones para hacer su cita para el Examen de ubicación. Es necesario hacer su cita para el examen de ubicación antes de pasar al Paso 5.

### Paso 5: Hacer cita para la Orientación Estudiantil, Asesoría e Inscripción (SOAR por sus siglas en inglés)

En la página inicial de Lane, seleccione "Pasos para matricularse en clases con valor curricular: Estudiantes de nuevo ingresos o de traslado" en el cuadro de Avisos para Estudiantes.

SOAR incluye asesoría académica e información para estudiantes nuevos. Un taller opcional Money Matters se ofrecerá el mismo día. Haga clic en el Paso 5 y siga las instrucciones para hacer su cita para SOAR.

Para ver los programas de certificación y de grado técnico que ofrece Lane, vaya a la página inicial de Lane y seleccione Catalog/Catálogo en la columna de lado izquierdo para revisar los programas que actualmente ofrece Lane.

### Paso 6: Inscríbese a clases

**Repase las clases con valor curricular que se ofrecen cada trimestre así como la disponibilidad actual de cada clase.**

De [lanecc.edu](http://lanecc.edu), seleccione el enlace con las clases del trimestre deseado, p.e. Spring Classes/Clases de primavera y seleccione Credit Class Listings by Subject/Lista de clases con valor curricular por materia para ver las clases que se ofrecen y su disponibilidad actual.

De [lanecc.edu](http://lanecc.edu), seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y lea las instrucciones para inscribirse a clases en la columna de "New Students/Estudiantes nuevos".

**Examine la fecha límite para el reembolso y el proceso de pagos.**

De [lanecc.edu](http://lanecc.edu), seleccione Help for Students/Ayuda para estudiantes en la columna superior izquierda y seleccione Paying for Classes/Pago por clases en la columna de "New Students/Estudiantes nuevos".

Si tiene cualquier pregunta sobre los programas ofrecidos en Lane Community College, comuníquese con el Departamento de Consejería:

**Por correo electrónico: [coundept@lanecc.edu](mailto:coundept@lanecc.edu), llame al 541.463.3200, o visite el Centro de Consejería y Asesoría en el edificio 1, salón 103 del plantel de la Avenida 30.**

**Para la versión en red de los pasos anteriores, vaya a: [lanecc.edu/stuser/expmso/20.htm](http://lanecc.edu/stuser/expmso/20.htm)**



## Overview of Academic Programs

Lane Community College is a comprehensive community college offering career and technical and lower division college classes.

The college offers classes at a number of locations in addition to the main campus. These include the Downtown Center in Eugene, Lane Community College at Florence, Lane Community College at Cottage Grove, and facilities at the Eugene Airport.

In addition to weekday classes, Lane offers some evening and Saturday classes. Evening and Saturday classes for credit are offered on the main campus and at outreach centers. By selecting from among these classes, students can earn college transfer credit or work toward a certificate or degree in one of Lane's career and technical programs. Evening courses are listed in *Aspire Magazine* and on Lane's website at *lanec.edu*.

Lane also offers a variety of different ways students can learn ranging from traditional lecture or lecture/lab classes to open-entry/open-exit classes that permit students to begin and end the class when they wish.

### Career and Technical Programs

Career and Technical Programs lead to certificates and associate of applied science degrees. Many classes required to complete two-year programs can be transferred to four-year colleges. Others do not transfer.

The notations next to each program indicate the following:

AAS—Two-year Associate of Applied Science Degree Program

1-yr cert—One-year Certificate of Completion Program

2-yr cert—Two-year Certificate of Completion Program

CPC—Career Pathway Certificate of Completion

#### Accounting (AAS)

Accounting Clerk (CPC)

Payroll Clerk (CPC)

#### Administrative Office Professional (AAS)

Legal Office Skills (CPC)

Office Software Specialist (CPC)

Small Business Ownership (CPC)

#### Auto Body and Fender Technology (AAS, 2-yr cert)

Auto Collision Option (AAS)

Auto Paint Option (AAS)

#### Automotive Technology (AAS and 2-yr cert)

#### Aviation Maintenance Technician (AAS, 2-yr cert)

#### Business Assistant (1-yr cert)

#### Computer Information Systems - Health Informatics (AAS)

#### Computer Network Operations (AAS)

Network Security (CPC)

#### Computer Programming (AAS)

Geographic Information Science (CPC)

Web Programming (CPC)

#### Computer Simulation and Game Development (AAS)

Computer Game Programming in C++ (less than 1-yr cert)

#### Computer Specialist (1-yr cert)

#### Construction Technology (AAS, 1-yr cert)

#### Construction Trades, General Apprenticeship (AAS, cert)

#### Culinary Arts and Food Service Management (AAS)

Baking and Pastry (CPC)

Food Preparation and Production (CPC)

Dietary Manager (CPC)

#### Dental Assisting (1-yr cert)

#### Dental Hygiene (AAS)

#### Diesel Technology (AAS, 2-yr cert)

Lift Truck/Material Handling Equipment Technician Option (AAS)

#### Drafting (AAS, 1-yr cert)

#### Early Childhood Education (AAS and 1-yr cert)

#### Electrician Apprenticeship Technologies (AAS, cert)

Limited Electrician Apprenticeship Technologies (cert)

#### Electronic Technology (AAS)

#### Emergency Medical Technician (1-yr cert)

#### Emergency Medical Technology - Paramedic (AAS)

#### Energy Management Technician (AAS)

Renewable Energy Technician Option (AAS)

Resource Conservation Management Option (AAS)

#### Exercise and Movement Science (AAS)

Fitness Technician (1-yr cert)

Fitness Specialist (2yr cert)

#### Fabrication/Welding Technology (AAS, 1-yr cert)

Welding Processes (1-yr cert)

#### Flight Technology (AAS)

#### Graphic Design (AAS, 2-yr cert)

#### Health Records Technology (1-yr cert)

Medical Coding (CPC)

Medical Transcriptionist (CPC)

#### Hospitality Management (AAS)

Food Service Management (1-yr cert)

Restaurant Ownership (CPC)

#### Human Services (AAS)

Adult Development and Aging (CPC)

#### Human Services: Criminal Justice (AAS)

#### Human Services: Juvenile Corrections (1-yr cert)

#### Industrial Mechanics and Maintenance Technology (AAS, cert)

#### Legal Assistant and Paralegal Studies (AAS, 1-yr cert)

(Collaboration with Umpqua Community College)

#### Manufacturing Technology (AAS, 2-yr cert)

Basic Manufacturing Technician (cert)

Computer Numerical Control Technician Option (AAS)

#### Massage Therapy (Certificate of Completion)

#### Medical Office Assistant (1-yr cert)

#### Multimedia Design (AAS, 1-yr cert)

#### Nursing (AAS)

#### Occupational Skills Training (1-yr cert)

#### Physical Therapist Assistant (AAS) - pending accreditation

#### Respiratory Care (AAS)

#### Retail Management (AAS, 1-yr cert)

Retail Management (CPC)

#### Speech-Language Pathology Assistant (AAS, 1-yr cert)

(collaboration with Chemeketa Community College)

#### Sustainability Coordinator (AAS)

#### Water Conservation Technician (AAS)

### College Transfer Classes and Degrees

The college offers lower division (freshman and sophomore) college credit classes so that a student may complete the first two years of college at Lane.

Lane offers several college transfer degrees and preparation for a number of college transfer majors. For a complete list of majors, see page 52.

#### Associate of Arts Oregon Transfer Degree (AAOT)

- Designed for students who want flexibility to transfer to any school in the Oregon University System (OUS).
- AAOT accepted to meet lower division general education requirements
- Ensures junior status for registration purposes
- Limited transferability of career technical courses
- Does not guarantee admission to OUS institutions



### **Associate of Science Oregon Transfer — Business Degree (ASOT-BUS)**

- Designed for students who want flexibility to transfer to any school in the Oregon University System with business-focused general education requirements.
- ASOT - Bus accepted to meet lower division general education requirements
- Ensures junior status for registration purposes
- Limited transferability of career technical courses
- Does not guarantee admission to OUS institutions

### **Associate of Science**

- Designed for some transfer majors to match requirements at some four year colleges
- May meet some lower level division general education requirements, but not guaranteed
- Ensures junior status for registration purposes
- Limited transferability of career technical courses

### **Associate of General Studies**

- Designed for students not pursuing a specific transfer or career technical program
- Offers great flexibility in elective credits
- May meet some lower division general education requirements, but not guaranteed
- Limited transferability of career technical courses

### **Direct transfer**

- Designed for students pursuing a specific transfer major at another college or university
- Contact Counseling for information on Direct Transfer

## **Curriculum for High School Students**

Lane's High School Connections programs help high school students make the transition from high school to college. These programs provide an opportunity for students to simultaneously earn both college and high school credits. College Now enables high school students to earn college credits for articulated classes taken at their high schools. The Regional Technical Education Consortium (RTEC) provides career and technical classes for dual credit.

College Now classes are taught in the high school during regular school hours by high school instructors approved by Lane. These classes are similar to those offered in Lane programs, including course content, textbook and length of course. Courses are taught in many subject areas including English, French, Spanish, art, social science, math, business, culinary, early childhood education, graphic design, technical drafting, fabrication/welding, and others. College Now credits are free for 2010-11 academic year.

RTEC provides rigorous and relevant career and technical training according to industry standards. These classes fill the gaps where high schools can no longer offer these courses. RTEC also provides accelerated career technical courses for high schools that need advanced opportunities for their students. Courses are taught at Lane, at the high schools or on line in areas such as apprenticeship, automotive technology, aviation science, drafting, health occupations and computer programming.

Additionally, the High School Connections office works with local school districts who want to sponsor high school students in academic transfer classes through the Expanded Options Program or independently. At times, school districts contract for a college

level career technical class to be provided at the high school site.

For more information about High School Connections programs, visit the website at [lanec.edu/hsconnections](http://lanec.edu/hsconnections) or call 541.463.5521.

## **Cooperative Education**

Cooperative education (Co-op) offers career/technical and college transfer credit for practical work experience related to a student's educational and career goals. Co-op education provides a student with an opportunity to apply theory learned in the classroom to work experience in a career field. The objective of co-op is to provide an on-the-job learning experience in a business or organization which adds meaning and direction to the student's total education. Cooperative education is available in all academic departments.

### **Advantages to the Student**

- financial support through paid employment while earning credit
- guidance in career expectations and demands
- help in locating part-time or full-time employment which may lead to regular employment
- development of skills and self-confidence
- early exploration and confirmation of career choice
- development of job contacts and a work history
- increased motivation for academic achievement
- instruction in resume preparation and interviewing skills

Cooperative education represents a three-way working partnership which includes the student, Lane Community College, and the co-op employer. Co-op provides a way for a student to combine study at Lane with work experience under the supervision of an employer and, like classroom work, is an integral part of a student's educational preparation.

Lane Community College's Cooperative Education is the second largest among two-year colleges in the United States offering cooperative education. An outstanding model internationally, Co-op has quality learning opportunities locally, regionally, nationally, and internationally. Over 2,000 Lane students each year enroll in co-op and work in both paid and non-paid positions. More than 800 employers participate in Co-op each year. Sixty-five percent of all co-op students are retained by employers as regular employees after graduation, although employment is not guaranteed.

To participate in cooperative education, a student is usually expected to successfully complete a specified set of courses prior to the work experience. Students must consult a co-op coordinator (see list on page 16) to set up a cooperative education learning experience. Student compensation is at a rate of pay comparable to employees who do similar work. In some instances, students may receive credit for volunteer or non-paid experiences.

### **Registration Procedures**

1. meet with co-op coordinator in area of study
2. establish credits and seminar time
3. complete agreement form
4. register for classes

**Credits** Course credit may be earned for work experience if a job is related to either the student's major or occupational goal. The student enrolled in co-op receives credit and a grade for work. Normally, a maximum of 18 co-op credits will transfer as elective credit. Credit is assigned on the basis of one credit for 36 hours of work experience. Entry into co-op is by coordinator consent. Certain career and technical programs require co-op credits. Unless prior approval is received from the Cooperative Education Division chair, students must enroll for a minimum of three credits. Co-op is offered all terms, and students may earn up to 12 credits in one term. Cooperative education credits may not be audited or taken pass/no pass. Co-op credits may not be earned for past work experience (see Student Records for Credit by Assessment).

The Cooperative Education Division administers co-op courses. To learn about cooperative education, visit the website: [lanec.edu/cooped/](http://lanec.edu/cooped/) drop by the Co-op office, Building 19, Room 231 or call 541.463.5203.

The following is a list of Cooperative Education coordinators. Students should contact the coordinator in their program prior to enrolling in a cooperative education course.

Curriculum or Transfer Area	Coordinator
Accounting.....	Jamie Kelsch
Administrative Assistant.....	Jamie Kelsch
Aerobics.....	Sue Thompson
American Indian Languages.....	Tamara Pinkas
Anthropology.....	John del Nero
Art & Applied Design.....	Staff
Athletic Training.....	Sue Thompson, Lyndell Wilken
Athletics.....	Sue Thompson
Auto Body & Fender/Paint & Collision.....	Marv Clemons
Automotive.....	Marv Clemons
Aviation Maintenance.....	Marv Clemons
Biology.....	Larry Scott
Business Management.....	Jamie Kelsch
Chemistry.....	Larry Scott
Coaching.....	Sue Thompson
Community Health.....	Lyndell Wilken
Computer Applications Specialist.....	Larry Scott
Computer Network Operations.....	Larry Scott
Computer Programming.....	Larry Scott
Computer User Support.....	Larry Scott
Construction.....	Marv Clemons
Cottage Grove Center.....	Jamie Kelsch
Criminal Justice.....	John del Nero
Culinary Arts.....	Joe McCully
Data Processing.....	Larry Scott
Dental Assisting.....	Leslie Greer
Dental Hygiene.....	Leslie Greer
Diesel.....	Marv Clemons
Disney World.....	Jamie Kelsch
Dietary Manager.....	Staff
Drafting.....	Tamara Pinkas
Early Childhood Education.....	Julianne Stermer
Education (K-14).....	Merrill Watrous
Electronics Technology.....	Marv Clemons
Emergency Medical Technician.....	Tom Brokaw
Energy Management.....	Larry Scott
Engineering (Transfer).....	Larry Scott
English/Writing.....	Tamara Pinkas
Environmental Studies.....	Larry Scott
Ethnic Studies.....	Beverly Farfan
Extended Career Exploration.....	Jamie Kelsch
Fitness Management.....	Sue Thompson
Fitness.....	Sue Thompson

Flight Technology.....	Marv Clemons
Florence.....	Marv Clemons
French.....	Tamara Pinkas
Geography.....	John del Nero
Geology.....	Larry Scott
GIS.....	Lynn Songer
Graphic Design.....	Staff
Health Informatics.....	Larry Scott
Health and Physical Education.....	Sue Thompson
Health Occupations.....	Chuck Fike
Health Records Technology.....	Marti Pittman
History.....	John del Nero
Hospitality Management.....	Joe McCully
Human Services.....	Garry Oldham
International Work Experience.....	Don Terwilliger
Journalism.....	Dorothy Wearne
Landscape.....	Chuck Fike
Legal Assistant.....	Jamie Kelsch
Manufacturing Technology.....	Marv Clemons
Mathematics.....	Larry Scott
Medical Office Assistant.....	Marti Pittman
Multimedia.....	Teresa Hughes
Music.....	Teresa Hughes
Nursing.....	Jennifer Tavernier
Performing Arts.....	Teresa Hughes
Physical Education.....	Sue Thompson
Physical Therapist Assistant.....	Beth Thorpe
Physics.....	Larry Scott
Political Science.....	Steve Candee
Pre-Law.....	Steve Candee
Programming.....	Larry Scott
Psychology.....	Beverly Farfan
Real Estate.....	Jamie Kelsch
Recreation.....	Sue Thompson, Lyndell Wilken
Rehabilitation Therapies.....	Shannon Gaul
Respiratory Therapy.....	Norma Driscoll
Retail Management.....	Jamie Kelsch
Sales and Marketing.....	Jamie Kelsch
Science.....	Larry Scott
Service Learning.....	Beverly Farfan
Simulation and Game Development.....	Larry Scott
Sociology.....	Beverly Farfan
Spanish.....	Tamara Pinkas
Speech.....	Tamara Pinkas
Sustainability.....	Larry Scott
Teacher Education Preparation.....	Merrill Watrous
Water Conservation Technician.....	Larry Scott
Welding.....	Marv Clemons
Wellness.....	Sue Thompson

## Distance Learning

Distance learning refers to instruction that is delivered through technology to students at a distance from their instructor. Most courses offered through distance learning meet Associate of Arts Oregon Transfer (AAOT) degree requirements. The AAOT degree can now be earned through distance learning courses. An annual schedule of course offerings is available from Distance Learning and online at [lanec.edu/distance/annual.htm](http://lanec.edu/distance/annual.htm).

**Online Courses** Online courses are complete courses that include lectures, notes and assignments which are available to students through their office or home computers. Interaction with the instructor and other students is provided through the use of discussion forums and email. All coursework is delivered online via the Internet. Some online courses have on campus labs or exams, or require viewing video programs. **Some online courses have a fee.**

**Telecourses** Telecourses are college credit courses developed by educators and media specialists for television viewing. They include weekly video telelessons, use of the internet, required written and reading assignments, and periodic examinations. Course instructors are available for assistance by phone, in person or via e-mail. Students can view telecourses at home on cable TV, in the Lane Library, and at LCC at Cottage Grove and Florence. Some courses can be downloaded, streamed, or rented on DVD or VHS. Exams are taken on campus.

**All telecourses have a \$25 fee.**

Between 14 and 17 telecourses are offered fall, winter and spring terms and approximately 4-6 courses summer term. Telecourses are available in a wide variety of subject areas such as history, medical terminology, science, psychology, and sociology.

**Live Interactive Courses** Lane offers live interactive courses as a mode of distance learning course delivery. Students enroll in these courses and, depending on the course, participate by viewing the class on local cable channels in their homes, or attending on campus or at an off campus location.

**IP Videoconferencing Services** Videoconferencing services are available for both receiving and originating. Lane can accommodate between 1 and 40 participants. The college's codec equipment is compatible with most standards.

Tuition for distance learning courses is the same as for other courses. Additional fees may be charged.

For more information about telecourses, online, live interactive courses, or IP videoconferencing, call Distance Learning, 541.463.5893 or see [lanecc.edu/distance](http://lanecc.edu/distance).

## Human Development Classes

The teaching component of Counseling is called the Human Development Department.

The Human Development Department offers classes which help students with entering college, career and life planning, decision making, maintaining productive personal and work relationships, understanding families and children, parenting skills, and coping with stress and depression. Personal awareness and growth in applied life skills is emphasized.

Some courses with CG, CPSY and HS prefixes fulfill the social science/human relations component for the associate of applied science degrees and certificates, associate of science, associate of general studies degrees and certificates, and count as electives for the associate of arts Oregon transfer degree.

The department offers both credit and noncredit classes. Methods of delivery include classroom, independent study, telecourse, and online.

## International Learning Opportunities

### International Cooperative Education

The International Cooperative Education program, in partnership with IE3 Global Internships, provides international work opportunities where students earn graded, elective college transfer credit. A wide variety of work experiences are available

throughout the world, including Africa, Asia, Australia, North and South America, and Europe. Living and working in a different culture gives students the chance to acquire international skills that are invaluable in today's global society. For more information, look at [ie3global.ous.edu](http://ie3global.ous.edu) or contact Don Terwilliger, Cooperative Education Division, Building 19/ Room 231B, 541.463.5883.

### Courses with International Focus

Courses with an international focus are available in many subjects including visual arts, music, literature, language, anthropology, geography, and history. Currently, these include:

ANTH 103 Cultural Anthropology	GEOG 216 Geography Pacific Asia
ANTH 211 Selected Topics in Ethnology: Folk Religions	HE 255 Global Health
ANTH 227 Prehistory of Mexico	HST 104, 105, 106 World History
ANTH 228 Cultures of Mexico	HST 195 History of Vietnam War
ANTH 229 Chicano Studies	HST 261 Latin American History
ART 207, 208, 209 History of Asian Art	MUS 108 Music in World Culture
ART 217 Islamic Art	PS 205 International Relations
D 251 Looking at Dance	PS 211 Peace and Conflict Studies: Global
ECON 204 Introduction to International Economics	REL 201 Religions of India
ENG 107, 108, 109 Survey of World Literature	REL 202 Religions of China and Japan
ENG 213 Survey of Asian Literature	REL 203 Religions of the Middle East
ENG 215 Latino/a Literature	REL 243 Nature, Religion and Ecology
ENVS 182 Atmospheric Environment and Population	SOC 216 Global Social Movements
FR 101, 102, 103, 150, 151 First Year French	SPAN 101, 102, 103 First Year Spanish
FR 111, 112, 113, 211, 212, 213 Conversational French	SPAN 201, 202, 203 Second Year Spanish
FR 201, 202, 203 Second Year French	SPAN 211, 212, 213 Conversational Spanish, Intermediate
GEOG 103 Cultural Geography	SP 115 Introduction to Intercultural Communication
GEOG 201 World Regional Geography	
GEOG 214 Mexico and Central America	

For more information, see the course descriptions in this catalog, or call the appropriate academic department.

## Learning Communities

### What are Learning Communities?

Learning Communities are a great way to learn! They help you stay engaged and motivated while you pursue your college and life goals.

Learning Communities classes can be linked in several ways:

- Around a goal, such as writing a successful scholarship application, successfully making a life transition, or succeeding in college;
- Around a question, such as how to approach the environment in a sustainable way;
- Or around a theme, such as the role of food in our culture.

Students enroll in 2 or more classes together, creating a common cohort or "community." Faculty also work together, often attending the different classes too. Your learning experiences are enhanced by this sense of community and

common understanding across disciplines. National research shows that students who take learning communities succeed at higher rates than students who take stand-alone courses. And learning communities classes fulfill the same degree and certificate requirements as stand-alones!

The actual structure of Lane's learning communities vary among classes and instructors. Some learning communities have very closely integrated curricula, so that the classes seem to "talk" to one another throughout the term. Other learning communities are more loosely organized, and the "community feel" comes from getting to know classmates well and investigating a theme across disciplines.

For more information on how to sign up for a learning community at Lane, go to our website: [lanecc.edu/lc](http://lanecc.edu/lc) or call Anne McGrail, Learning Communities Coordinator, at 541-463-3317.

## 2010-2011 Learning Communities

### Lane's First Year Experience: Fast Lane to Success

New Students! Get a jump start on your core classes, meet new people and earn the skills to succeed in college and in life. Take a First Year Learning Community and get connected....

First Year Learning Communities are geared to your success. Take these linked courses and learn proven strategies to make wise choices about school and life. See detailed course offerings for each term at [lanecc.edu/lc](http://lanecc.edu/lc). Choose from among these options:

#### Fast Lane to Success

CG100	College Success
WR 115	Introduction to College Writing
WR 121	English Composition
EL 115	Effective Learning

#### Math Fast Lane

CG100	College Success
MTH 020	Math Renewal
MTH 060	Beginning Algebra

#### Beyond the Field: Fast Lane for Student Athletes

CG100	College Success geared to the student athlete
WR 80, 90, 93, 95, 115, or 121	(Placement test determines writing class)

#### Visualizing Success: Fast Lane for Art Majors

CG 100	College Success
ART 199	Introduction to the Art Major

#### Pen and Page: Develop Your Reading and Writing Skills

RD 80	Preparatory College Reading
WR 80	English Grammar and Sentence Writing

#### Women in Transition

CG220	Life Transitions
CG140T	Career and Life Planning
Recommended but not required:	
BT030	Computer ABCs for Women in Transition
CG100T	College Success WIT
CG207	Life Transitions 2
EL115T	Effective Learning: Women in Transition
MTH010A	Whole Numbers: Fractions and Decimals
MTH020	Math Renewal
PE183U	Strength Training for Women
WR115T	Introduction to College Writing: Transitions
WR121T	English Composition: Transitions

When you come to Lane, be sure to check out these other Learning Communities offerings:

#### BioBonds: Building Blocks for Your Body

CH 112	Chemistry for Health Occupations
BI 112	Biology for Health Occupations

#### Food for Thought, Culinary Arts Majors (fall, spring terms)

MTH 025	Basic Math Applications (fall)
CA170	Cooking Theories and Skill Development
and/or	
WR115	Introduction to College Writing (spring)
CA 186	Restaurant and Kitchen Lab 2

#### Native Circles

CG101	Native Circles: It's Your Life
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#### Show Me the Money (winter term)

WR105	Writing for Scholarships
CG105	Money for College

#### Reconnecting with Nature (spring term)

REL 243	Nature, Religion and Ecology
PS 297	Environmental Politics
BI 103G	General Biology-Global Ecology

See the online class schedule or Aspire Magazine for additional learning communities offerings and get connected at Lane!

## Service Learning

Would you like to remove invasive plants from a wetland, prepare dinners at a community meal site, tutor youth at-risk in math or writing, educate others about health risks, or advocate for abused women. These are examples of service learning, a hands-on approach to learning that encourages students to increase their knowledge and skills through connections and experiences working in the community.

Students work outside their classroom in addressing real community needs. Students identify learning activities, learning objectives, and engage in reflection activities designed to promote critical thinking, problem solving, and civic awareness.

Service Learning course formats vary. Service learning activities may be required, an optional assignment, or extra credit.

For more information, visit [lanecc.edu/sl](http://lanecc.edu/sl) or call 541.463.5395 or email [farfanb@lanecc.edu](mailto:farfanb@lanecc.edu)

BA 195	Service and Ethics in Business
BI 101I	Botanical Beginnings
BI 102H	Forest Biology
BI 103F	Wildflowers of Oregon
BI 103J	Forest Ecology
CG 199	BeThe Change: Personal Development Meets Social Change
COOP 280SL	Cooperative Education: Service Learning
HE 255	Global Health
HS 201	Introduction to Human Services
HS 228	HIV/AIDS and Other Infectious Diseases
SOC 108A	Selected Topics: Women's Bodies
SOC 207	Women and Work
SUST 101	Introduction to Sustainability
WATR 101	Introduction to Water Resources
WATR 105	Water Conservation Indoor
WATR 107	Water Conservation Outdoor
WS 101	Introduction to Women's Studies



## Tuition, Fees, Financial Aid and Payment

### Noncredit Community Education Classes

Noncredit Community Education students pay the following charges:

Tuition + fees .....	listed next to each class
Resource fee .....	\$5 per term

### Credit Classes

Credit students pay the following charges:

Tuition .....	see below
Class fees .....	listed next to each class
Technology fee .....	\$5 per credit
Other fees .....	see below

### Tuition

Residents of Oregon .....	\$83 per credit hour
Non-residents of Oregon .....	\$213 per credit hour
International students:	
Fall winter and spring terms .....	\$213 per credit hour
Summer term .....	\$140 per credit hour

### Other Fees

#### ASLCC Student Activity Fee\*

Credit students taking main campus classes .....\$46.25

ASLCC operating expenses, legal services, student clubs \$13.94; ASLCC Childcare Co-op \$7.62; OSPIRG \$3; Learning Garden \$1; Athletic Department \$12; Oregon Student Association \$2.44; The Torch \$2.75; Long House \$3; Student Productions \$.50

\*This fee is subject to change pending ASLCC elections.

#### Credit by Examination and Credit by Assessment

Examination/assessment fee.....\$51.50 per credit hour

**First Time Credit Enrollment Fee** .....\$30

**Student Health Fee** .....\$12

#### Transportation Fee (nonrefundable)

Credit students on main campus.....\$27 per term

All noncredit classes and credit classes

not held on the main campus.....\$5 per term

For more information, see the Locations and Transportation section in this schedule. Fee is subject to annual increases.

#### International credit students also pay

International student fee.....\$10 per credit hour

**Photo ID** .....\$5

A LCC photo ID is not required to attend Lane. It is available to all currently registered students as an alternate form of photo identification. A card may be purchased through Enrollment and Student Financial Services, Building 1.

#### Transcript Fee

Transcript.....\$5

Transcript Rush Fee\*\* .....\$5

Transcripts are now available on **ExpressLane/myLane** at [lanecc.edu](http://lanecc.edu). Fees for transcripts ordered on **ExpressLane/myLane** will need to be paid with VISA or MasterCard.

\*\*Transcripts that are purchased from Enrollment and Student Financial Services or for transcript requests that indicate that they need rush service will be charged the **Transcript Rush Fee**.

### Average Total Costs

Typical average yearly expenses excluding room and board, transportation, tools, and personal expenses:

Tuition.....	\$2,988
Books.....	\$1,200
Special and Miscellaneous Fees (varies by program).....	\$294
Student Activity Fees.....	\$135.75

A mandatory ASLCC student activity fee is required of all students taking credit classes on Lane's main campus.

Tuition rates, fees and refunds are subject to change without prior notice. Current information will appear in each quarterly class schedule.

### Differential Pricing Program

Beginning with the 2003-04 academic year, Lane's Board of Education approved a differential pricing program to preserve some higher cost career and technical programs. Some courses in the following programs currently have differential fees: Auto Body and Fender, Automotive Technology, Culinary Arts, Diesel Technology, Manufacturing Technology, Dental Hygiene, Dental Assistant, EMT/Paramedic, Medical Office Assistant, Health Records Technology, Nursing, Physical Therapist Assistant, and Respiratory Care.

### Determination of Residency

#### Residents of Oregon

**In-District\*** A student at least 18 years of age or a high school graduate who has maintained a permanent residency within the college district for no less than 90 continuous days prior to the first day of the term is classified as In-District. Residency requirements must be met prior to the date that a term begins.

To change residency to In-District or In-State, the student must initiate the change by printing out a residency form available in the forms section at [lanecc.edu/es/forms.html](http://lanecc.edu/es/forms.html). Students must hand the form directly to an Enrollment and Student Financial Services advisor at Enrollment and Student Financial Services, main campus.

\* In-District includes Lane County, Monroe Elementary District, and Harrisburg Union High School District.

**In-State (Out-of-District)** A student who has maintained a permanent residency within the state for no less than 90 continuous days prior to the first day of the term is classified as In-State and pays Oregon tuition. Residency requirements must be met prior to the date that a term begins.

Students who have maintained permanent residency within the states of Washington, Idaho, Nevada, or California for at least 90 days prior to the first day of the term also pay In-State tuition at Lane.

This exception in tuition does not allow for an exception in residency requirements for special or limited enrollment programs.

#### Out-of-State and International

There are two residency categories in addition to In-District and In-State:

- Out-of-state but a citizen of the United States or registered resident alien.

- International (not a U.S. citizen or registered alien). International students do not become residents regardless of the length of residency within the district.

**Special Circumstances** A student may be classified as In-District or In-State if special circumstances can be documented. The following criteria are used to define special circumstances:

- A veteran and or veteran's dependants who have established permanent residence inside the college district within 90 days prior to the first day of the term and within one year of veterans discharge from active duty will be considered in-district.
- A DD214 (military discharge papers) for the veteran or a DD-93 (record of emergency data listing dependants of veteran) may be required in order to qualify for residency status.
- A released Oregon State prisoner is considered In-District regardless of residency prior to sentencing if a state agency is the sponsor.
- A legal dependent or spouse of a person who has moved into the college district and established a residence is considered In-District.

**Residency** Student residency is determined from information provided by each applicant to the college. Residency does not change without some kind of student interaction. If a student wants to change residency, the student must initiate the change by visiting Enrollment and Student Financial Services, Building 1. The college may require additional documentation to clarify residency status. Only applicants who can provide sufficient documentation that the 90-day residence requirement clearly has been met will be classified In-district or In-State. Once residency has been changed to In-district or In-State, it cannot be reversed. Residency changes will not take affect until the subsequent term following the change.

Please be aware that being designated as an Oregon resident at Lane Community College does not guarantee the same status with other two-year or four-year institutions, both within and outside the state of Oregon. It is vital that you review the residency requirements at all institutions to understand their in-state residency requirements.

**Noncredit Continuing Education Classes** have no residency requirement.

## Financial Aid

Although paying college expenses is the responsibility of students and their families, many individuals cannot assume the full financial burden of a college education. Financial aid is available to help bridge the gap between the costs of education and available student and family resources.

There are three basic types of financial aid: grants, work study and loans. Typically, students are offered a combination of these financial aid awards. Students must repay loans. Grants, earnings and scholarships are not repaid.

### Who is Eligible for Financial Aid?

To be eligible to receive financial aid, a student must meet each of the following requirements:

- Be a U.S. citizen or eligible non-citizen with a valid Social Security number
- Be at least 18 years old. If under 18, a student must have a high school diploma, a GED certificate, or have completed secondary school in a home school setting prior to the term the student wishes to receive aid
- Enroll as a credit student in an eligible degree or certificate

program

- Not be in default on a student loan or owe an overpayment or repayment to a financial aid program
- Maintain satisfactory academic progress (SAP)
- Meet additional eligibility requirements if the student has ever been convicted of sale or possession of illegal drugs while receiving federal student aid
- Be academically ready for study at the college level. Students with a high school diploma, a GED certificate, or have completed secondary school in a home school setting automatically meet this requirement. If the student does not and is over age 18, a student must satisfy the Ability To Benefit requirements
- Complete Lane's reading test and qualify to take Reading 080 or higher
- Be registered with Selective Service if the student is male and born on or after January 1, 1960

### Applying for Financial Aid

Applicants should complete a Free Application for Federal Student Aid (FAFSA) as soon as possible after January 1 regardless of when they plan to start college. A new FAFSA must be submitted for each academic year. The awarding process may take several months. Applying for financial aid is free and applicants should never pay someone to apply.

Enrollment and Student Financial Services provides assistance with completing the application process. Financial Aid also conducts workshops at area high schools and community centers each December and January.

The following programs are applied for by filing a FAFSA:

- Federal Pell Grant
- Academic Competitiveness Grant
- Oregon Opportunity Grant
- Federal Supplemental Educational Opportunity Grant\*
- Federal Work Study\*
- Federal Perkins Loan\* (Subject to change for 2010-11)
- Federal Direct Stafford Loan - Subsidized
- Federal Direct Stafford Loan - Unsubsidized
- Federal Parent PLUS Loan

\* Funds are limited and awarded on a first-come, first-served basis.

Applicants may choose from the following methods to file a FAFSA:

**FAFSA on the Web** Applicants can apply electronically at [fafsa.gov](http://fafsa.gov), following the online instructions. It is recommended that applicants complete a FAFSA on the Web Worksheet prior to filing the application. Worksheets are available online at [fafsa.gov](http://fafsa.gov)

**Paper FAFSA** Applicants may download a PDF FAFSA at [federalstudentaid.ed.gov](http://federalstudentaid.ed.gov). The completed paper application must be mailed for processing to the address printed on the FAFSA application. If internet access is unavailable, applicants may request a paper FAFSA by contacting the Federal Student Aid Information Center at (800) 4-FED-AID.

### Scholarship and Private Donor Funds

A variety of funding resources provide assistance for educational expenses. Students must research and apply for these funds separately. Be wary of "scholarship scams" and organizations that charge a fee. Lane's Career and Employment Services is a great resource for finding scholarship and private donor funds. Other resources include libraries, civic and community organizations, and the internet.

Scholarships and private donor funds have their own application deadlines. Be aware of these when applying.

### Receiving Aid

The amount and type of financial aid offered depend on the student's Expected Family Contribution (EFC), financial need, availability of funds, and enrollment level.

**EFC and Financial Need** EFC is a measure of a student and his/her family's financial strength. The EFC is determined by the federal processor using the information provided on the FAFSA application. Aid for most federal programs is awarded based on financial need. Financial need is the difference between the cost of attendance and the EFC.

**Enrollment Level** The amount of funding varies with the number of credits a student takes. Students may enroll full time (12+ credits), three-quarter time (9-11 credits), half time (6-8 credits) or less than half time (1-5 credits). Most financial aid programs require at least half-time enrollment.

### Satisfactory Academic Progress (SAP)

Students receiving financial aid must maintain SAP to remain eligible to receive financial aid. Regulations require students to complete their program with at least a 2.0 cumulative GPA and within the 150% Maximum Credit Limit.

### SAP Standards

- Good Standing: Complete 66.66% of credits with a term GPA of 2.0 or higher
- Probation: Complete between 50-66.65% of credits
- Probation: Earn a term GPA between 1.7 - 1.99
- FA Suspension: Complete less than 50% of credits
- FA Suspension: Earn a term GPA less than 1.7
- FA Suspension: Complete two consecutive terms in Probation

### What SAP Status Means

- Good Standing – A student is eligible to receive grants, workstudy and loans.
- Probation – A student is eligible to receive grants, workstudy and loans while on probation. However, the probationary term must be completed in Good Standing to avoid FA Suspension in the subsequent term.
- FA Suspension – A student is not eligible to receive grants, workstudy or loans until the FA Suspension status is resolved. Some scholarships and other resources may also be unavailable.

**GPA and Completion Rate** Each term after grades post, financial aid will check both the completion rate and GPA for the term. The number of credits needed for completion will depend upon the enrollment level at the time financial aid disburses. Tables are available at [lanecc.edu/finaid/sap](http://lanecc.edu/finaid/sap) to help determine the completion rate for the term.

**Completed VS Not Completed Credits** Completed credits result from grades of A, B, C, D and P. Credits not completed include I, \* (withdrawal), F, NP, NC, and U.

**Pass Grades and GPA Requirement** If the term GPA is 0.00 solely because of a P grade, the GPA is considered equivalent to a 2.00 for SAP purposes only.

**Withdrawal, Audits, Incompletes, No Pass and No Credit grades** Withdrawing from a class, auditing a class, receiving an I, NC or NP grade will not affect the GPA. However, it will affect the completion rate.

**Resolving FA Suspension** To resolve a FA Suspension status, a student must submit an Appeal to Reinstate.

**150% Maximum Credit Limit** The maximum number of credits a student may attempt cannot exceed 150% of the credits required to complete their program. Attempted credits include all earned, unearned (I, \*, F, NP, Y, and NC), repeated and transfer credits. All attempted credits count toward this limit. Financial aid may exclude some credits attempted before a student changed programs. However, a student is limited to pursuing two programs at Lane.

**Developmental Credit Limit** A student may be eligible to receive financial aid for up to 30 semester or 45 quarter credits of developmental coursework during their lifetime. This includes coursework taken at all colleges.

Developmental courses currently offered at Lane include all courses numbered 001-099 (unless required for the current program); and ENG 116. ESL courses are not considered developmental. Some older developmental courses may not adhere to the current numbering system.

For a complete description of Lane's SAP policy, visit [lanecc.edu/finaid/sap](http://lanecc.edu/finaid/sap)

**Consequences of 100% Withdrawal** Withdrawing from all classes may result in financial debt and make a student academically ineligible for future financial aid (including loans). Congress specifies that students must earn financial aid over the course of a term by attending and participating in classes for at least 60% of the term. Students who withdraw or stop attending before this point do not earn all of their aid. Lane is required to return the unearned portion to the U.S. Department of Education. As a result, the student will owe Lane for the unearned portion.

For more information about withdrawal, go to [lanecc.edu/finaid/withdrawal-info](http://lanecc.edu/finaid/withdrawal-info).

## Paying for Classes

When you register for a class, you are agreeing to pay for the class. If you cannot attend the class, you must drop the class within the timelines listed in the class schedule or the college will charge you for it. See Refunds and Financial Aid for more information.

You may pay your college bill in the following ways:

### By Web

Payments can be made on the web by check or savings account, VISA or MasterCard. Log on to [lanecc.edu](http://lanecc.edu) and access ExpressLane/myLane. Once in ExpressLane/myLane, click on Enrollment and Student Financial Services, then click on Student Account Menu and click on Statement and Payment History. Contact Enrollment and Student Financial Services at 541.463.3100 if you have questions about payments on the web.

### By Mail

Send your payment to Lane Community College, P.O. Box 7100, Eugene, OR 97401-0025. You can pay by check or money order payable to Lane Community College. Include your student ID number ('L student ID number).



### With a Sponsoring Agent

If a sponsoring agency is paying some or all of your educational expenses, it is your responsibility to see that the agency has provided written authorization to Enrollment and Student Financial Services before you register. If the college doesn't receive your authorization in a timely manner, finance charges will be added to your account balance.

### With Financial Aid (credit students only)

Assistance from financial aid is intended to help pay your educational expenses; however, if you do not receive the aid you expect or in time to apply to each terms bill, you still owe the college for charges to your Deferred Billing Terms Agreement account and have the same financial obligations to the college as any other student. If you receive financial aid, that aid will be used to pay all or part of your Deferred Billing Terms Agreement account, depending on the amount of your financial aid awards. The college disburses any remaining financial aid funds to your HigherOne LanecC Debit Card, direct deposit or check. You will receive written directions on how to choose your refund option according to the financial aid disbursement schedule. For more information about the "LaneCC Debit Card", go to [lanecCdebitcard.com](http://lanecCdebitcard.com).

For more information, see the sections on Deferred Billing Terms Agreement, Refunds and Financial Aid in this catalog.

If you have questions about your bill, contact Enrollment and Student Financial Services at 541.463.3100.

### Deferred Billing Terms Agreement

When you register for the first time, the college sets up a college charge account to process your tuition and fees, other charges, credits, refunds, financial aid disbursements, and payments. You are responsible for paying your account in full, even if you are sponsored, expect to receive Financial Aid, think that a family member will pay, or never attend the class.

#### Payments On Account Using ExpressLane/myLane at

**lanecC.edu** Students will be able to make payments on outstanding balances using ExpressLane/myLane. Students with a level of credit will not be mailed a billing notice until the final pink notice is mailed the month before an unpaid account goes into collection status. Credit level students may use the Billing Statement link under Student Records in ExpressLane/myLane to arrange to have a paper bill mailed. Non-credit level students will be mailed paper statements unless they opt not to receive them. ExpressLane/myLane will accept partial or full payments using credit cards or checks. Refunds will be credited to the student's Lane account, and any credits/balance due will be mailed to the student. If a student is eligible to receive a refund, but has a balance owed to Lane, which could be for the next term, the refund will be applied to the outstanding debt. Lane uses a third party pay system called Third Party Payment Authorization to allow you to assign access to a third party to make payments on your account. You may review the complete instructions on setting this up at [lanecC.edu](http://lanecC.edu) by clicking "Students," "Paying for Classes" and "Third Party Authorization." All transactions are handled through a highly secure payment system.

### General Account Information

To find out how much you owe, access ExpressLane/myLane at [lanecC.edu](http://lanecC.edu), click on "Enrollment and Student Financial Services", then "Student Accounts Menu."

**You must pay all money you owe the college before you can register each subsequent term.**

#### Late Fees

- The college will assess a late fee of 2 percent on your unpaid balance from a prior billing period.
- A billing period is the time between statements.

**Notify the college if your address changes** by using ExpressLane/myLane. It is your responsibility to maintain a current address, phone number and email in ExpressLane/myLane at all times. The college will block you from registering or making any schedule changes if we receive returned mail. At the end of each term, any account with an invalid address and a balance forward will be moved to a collection status.

**The college will charge you** a returned item fee for insufficient funds checks or rejected VISA or MasterCard charges.

**The college has the right, without prior notice,** to stop or suspend the extension of financial credit, withhold services, apply some non-payroll monies due you as a payment on your account, and/or turn your account over to a collection agency, under the following circumstances:

- The post office returns a bill the college sends you.
- The bank refuses payment on checks you write.
- Your VISA or MasterCard payment is declined.
- Failure to pay.

Withholding services means that the college may withdraw you from your current classes, block your registration for future classes and workshops, and withhold transcripts.

#### Consequences of Not Paying

If you fail to pay your account, the college may take any or all of the following actions:

- Require immediate payment in full
- Purge advance registration for future term
- Block enrollment for any future terms
- Decline to provide official transcripts
- Turn accounts over to a collections status for non-payment after four months\*
- Garnish Oregon State Tax Return

\* Students will receive a final notice for accounts that are overdue before the college assigns them to a collection status and reports them to a credit bureau. The collection agency will add additional collection fees, court and attorney costs to account.

#### Past Due Accounts Assigned to a Collections Status After

**Four Months** Accounts will be turned over to a collections status for non-payment after four months. Students will receive a final pink billing statement for accounts that are overdue before the college assigns them to a collection status and reports them to a credit bureau. Failure to maintain a correct address in ExpressLane/myLane will result in your account going to collection status if unpaid.

#### Past Due Accounts Must be Paid at the Assigned

**Collection Agency** Students are not able to make payments to Lane for past-due accounts that have been assigned to a collection agency. Students wishing to pay off outstanding



debts to Lane will be referred to the collection agency responsible for their account and will need to make payment in full to that agency.

Students who have paid their accounts in full with the collection agency will not be able to register or have a transcript released until Lane receives the funds from the collection agency and the Lane account balance has been completely cleared. Payments from collection agencies can take eight weeks to reach Lane. No exceptions will be made to allow a student to register or receive an unofficial or official transcript until the account shows paid in full in ExpressLane/myLane at [lanecc.edu](http://lanecc.edu).

## Refunds

### Tuition

When you register for a class, you agree to pay for it. If **you officially drop** the class by the refund deadline, the college will refund your tuition. If the **college cancels a class**, we will refund your tuition in full. **It is your responsibility to drop any class that you do not plan to attend. Students must use ExpressLane/myLane to officially drop a class.** Refer to class schedule for deadlines.

Lane has an **all** or **no** refund policy. Whether or not a student receives a refund or **not** is based on the length of the class and the date that the student drops the class. Students who drop after the refund deadline **will not** receive a refund or credit for dropping the class. (Tuition is not prorated.) If a refund is applicable, the amount is automatically posted as a credit to the student's Deferred Billing Terms Agreement account.

Interpreting the table below, the class duration is the number of weeks the class is scheduled to meet. "Refund Deadline" means by midnight (11:59 p.m.) on Sunday of the first week. For workshop refunds, students need to contact the sponsoring department.

**Credit and Noncredit Classes Tuition Refund Table**

Class duration	Prior to start of classes	Drop Sunday week 1 by midnight
Classes 4 weeks or longer	ALL of the tuition will be refunded.	ALL of the tuition will be refunded.
Classes 2 to 3 weeks	ALL of the tuition will be refunded.	NO tuition will be refunded.
Workshops & classes, 1 week or less	ALL of the tuition will be refunded if dropped three working days or more before the workshop begins.	NO tuition will be refunded.

**It is the student's responsibility to drop/withdraw from any class/ classes he or she does not plan to attend. No refunds or adjustments of tuition and fees will be granted after stated refund deadlines.**

### Class Fees

Refunds may be computed by ExpressLane/myLane when the student enters the drop or withdrawal. Please check with the department if in doubt as to which of the following applies to any of the fees previously assessed for the class subsequently dropped.

### ASLCC Student Activity and Registration Fees

If the college cancels your only credit class, or you withdraw from all your classes during the refund period, the college

automatically refunds these fees.

### How Refunds Are Processed

- Refunds are first applied to any outstanding balance owed.
- If financial aid or a sponsoring agency paid your account, refunds are credited either to you or to the funding source, as appropriate.
- If you have paid your account with VISA/ MasterCard, a refund will be issued to the student by check or onto the lanecdebit card.
- The college applies all other refunds as a credit to your account. **Refund checks are mailed or loaded onto the lanecdebit card, weekly.**
- The Transportation Fee is nonrefundable after the full-term refund deadline. No exceptions will be made.

If medical/emergency circumstances beyond your control prevent you from dropping your classes by the refund deadline, you may request an exception to the refund policy. You must complete the Request for Exception to Refund Policy form available at <http://lanecc.edu/es/forms.html> and attach medical/ emergency documentation of the circumstances. Petitions received after the eighth week of the term and/or without documentation will be denied.

### Statement of Non-Discrimination

If you have a documented medical or emergency reason why you dropped your class after the refund deadline, you can fill out the Petition for Exception to Refund form (.pdf Requires Adobe Acrobat Reader) and submit it to Enrollment Services. A committee will review your request and respond)

Contact Enrollment and Student Financial Services, 541.463.3100, 4000 E. 30th Avenue, Eugene OR 97405, for petitions about **credit classes**.

The deadline for submitting petitions requesting an exception to the refund policy is 5 p.m. on Friday of the eighth week of the term. Refund requests submitted after this date will only be considered when a medical emergency prevented you from using ExpressLane/myLane to drop classes by the refund deadline. Even if your petition is approved, you may still owe fees and finance charges.

For information about exceptions to the refund policy, call Enrollment and Student Financial Services at 541.463.3100.

Contact the following departments for refund petitions about

### Community Education classes.

- Business Development Center, 1445 Willamette, Suite 1, Eugene OR 97401-4087
- Continuing Education and Educational Outreach, 1059 Willamette St., Eugene OR 97401-3113
- Workforce Development, 4000 East 30th Ave., Eugene OR 97405-0640

**If a student does not plan to attend a class, official withdrawal from that class is the student's responsibility.**

### ExpressLane/myLane

Use ExpressLane/myLane to apply for admission, registration, account payments, viewing schedules, class details, and grades. Check each term's class schedule for information on registration dates, getting your "L" number and going on-line in ExpressLane/myLane.

## Academic and Student Services

### Academic Advising

Building 1, Room 103, 541.463.3200

Lane Community College's academic advising model is replicated in many two- and four-year institutions, and meets the standards of the National Academic Advising Association. The model addresses the student's development from enrollment through graduation. Services encompass student retention, academic advising (student advocacy, program development, course selection, career advising, scheduling and decision-making, and referrals) as well as career and retention counseling (career and life planning, counseling and dealing with obstacles including personal issues that impede success).

Lane uses a comprehensive centralized professional advising unit, with academic advisors, counselors, faculty, and other key staff. Advising teams have shared responsibilities to provide a managed advising system for students. The advising teams are clusters or "neighborhoods" identified with: instructional programs, geographical areas and diversity services areas. An administrator oversees all advising functions.

The Counseling Department offers students several academic advising services. They help students:

- learn about Lane services and programs,
- understand college procedures,
- obtain up-to-date written information about requirements for Lane programs and degrees,
- plan course schedules to meet personal needs and program requirements,
- understand how credits from prior colleges may be used toward Lane degrees and certificates,
- select from Lane courses that meet degree requirements at Lane and at four-year schools throughout the state,
- and develop ways to do well in classes and feel satisfied about school.

A counselor and academic advisor are assigned to each academic division and to students who are undecided about a major. A list of transfer programs, counselors and academic advisors appears on pages 52. A list of career and technical programs, counselors and academic advisors appears on page 53. A list of counselors and academic advisors for students who are undecided is located in Counseling.

Students can arrange to meet with a counselor or academic advisor at the reception desk in the Counseling Department, by calling 541.463.3200, or directly contacting the counselor or academic advisor. Students may come in without an appointment during scheduled drop-in hours. Schedules for the term are posted on each office door.

Counselors and academic advisors have in-depth knowledge of academic departments' procedures and resources. New students meet with a department counselor or academic advisor during the program orientation/advisory session. These sessions orient students to their academic programs and provide help with course planning. Students are encouraged to meet with a counselor or academic advisor on a regular basis throughout their stay at Lane.

Representatives from four-year schools in the state make regular visits to Lane Community College. Students considering transfer should meet with these representatives. Schedules of these visits are available in Counseling.

**Advance Registration** Students who have taken at least one credit class at Lane are eligible to participate in Advance Registration. The student attends an Advance Registration Advising Session with his or her assigned counselor or academic advisor for assistance in planning for the next term or the next four terms. Advising sessions are offered for fall, winter, spring, and summer terms.

### Academic Learning Skills

Center Building, Second Floor, 541.463.5439

Academic Learning Skills (ALS) offers courses to improve student success in lower division, career and technical, and transfer courses. ALS courses offer clear and direct articulation with courses required for the Associate of Arts Oregon Transfer degree. ALS coordinates class sequences and outcomes with the following departments: Adult Basic and Secondary Education; English as a Second Language; Language, Literature and Communication; Health Careers; Mathematics; and Women in Transition.

Academic Learning Skills includes:

- **Credit courses to develop skills** The Academic Learning Skills department helps students gain confidence and succeed in college by improving their reading, writing, vocabulary, computer, math, and study skills. Students who are attending college for the first time, who want to improve on previous school performance, or whose goals are to achieve high grades and acquire strong knowledge are provided the instructional coursework to assure their success in college classes.
- **Support for students who have specific learning disabilities** Multi-sensory approaches to learning are included in many skill-building courses. Students strengthen their basic skills through step-by-step instruction. Computer classes include basic keyboarding and word processing, writing, and study skills in an individualized self-paced format.

**Credit Courses** Academic Learning Skills offers courses for college credit. For more information about courses, see the Study Skills and College Prep heading in the course description section of this catalog. Other specialized courses may be found under the following headings in the course descriptions: Mathematics; Computers: Introduction/Information Systems/Computer Science; Computers: Keyboarding; Women in Transition; and Writing.

**Guided Studies Program** Guided Studies is designed for students whose placement test scores indicate the need to strengthen academic skills before entering college-level courses. Guided Studies students are required to take appropriate preparatory courses and are restricted from other college-level courses their first term. Students must meet with the Guided Studies counselor/advisor to set up an appropriate academic plan.

## Assessment and Testing

Building 1, Room 116, 541.463.5324

For current information about Testing Service office hours, fees, to make an appointment and other details, please visit [lanecc.edu/testing](http://lanecc.edu/testing).

Lane Community College offers a wide range of tests to students who want help in understanding themselves and making wise career decisions. The college uses tests as one of several counseling/advising tools, not merely as a record of performance. Testing Services tries to provide all students an opportunity to discuss their test results with a counselor/advisor who will assist them in exploring the meaning and implications of their test results.

Any current Lane student may use Testing Services, and in many cases people who expect to become Lane students may use it. Students who wish to take vocational interest surveys and personality inventories need to see a counselor to determine if a test is desirable and to get a referral. However, students do not need a referral to take GED tests, screening exams conducted for various departments, or the placement tests for new students in reading, writing and math. FAA tests require authorizations in most cases.

Occasionally, in the process of doing research, the college may also require tests of various students or groups of applicants.

**Placement tests** Placement tests also are available at the Cottage Grove and Florence centers, and many local high schools. Vocational interest surveys are available through counselors at Cottage Grove and Florence.

Many kinds of tests and assessments are available:

- Placement tests in reading, writing, and math
- General Educational Development (GED) tests for people wanting their high school Certificate of Equivalency
- Vocational interest surveys
- Personality inventories
- FAA computer-assisted tests for airplane pilots and mechanics
- Screening tests required for entry into some programs with limited enrollments
- FCC computer-assisted tests for radio applications licenses

### Credit for Prior Learning

Generally, there is no need to take a class when a student has already learned the material, no matter where or how. Four alternative ways of earning credit are listed below:

**Credit-by-Examination** Credit-by-Examination (CBE) gives students the opportunity to demonstrate they have mastered material covered in a Lane course. In some cases, they take written examinations covering the content of a course. In other cases, they give performances or demonstrations of their skills in certain areas. If they are successful, Lane will award them college credit. Students must have completed at least 12 credits of non-CBE coursework at Lane and must currently be enrolled in at least six credit hours. Many courses may be challenged through the CBE process. Information on procedures and fees is available at Enrollment and Student Financial Services in the lobby of Building 1.

**Credit-by-Assessment** Students who have experience and knowledge in certain areas may receive college credit for many Lane courses through the Credit-by-Assessment (CBA) process. Examples of relevant experiences are work, volunteer work, travel, certain hobbies, noncredit courses, workshops, and work at schools accredited differently than Lane. If a student can describe and satisfactorily document that such learning satisfies one or more course requirements, faculty members will evaluate these accomplishments and may award course credit. Students must have completed at least 12 credits of non-CBE or CBA coursework at Lane and must currently be enrolled in at least six credit hours. CBA is different from having one's transcript evaluated, a service of the Student Records Office, and also is different from the Credit-by-Exam procedure. Information on procedures and fees is available at Enrollment and Student Financial Services in the lobby of Building 1.

The maximum CBE and CBA credit which may be applied to any degree or certificate is 25 percent.

### College-Level Examination Program and Advanced Placement

Students may take exams on many college subjects through the College-Level Examination Program (CLEP) and receive credit for satisfactory scores in both general areas and various other specific subject areas. The credit Lane grants also is granted at most four-year colleges and universities. These credits do not appear on the Lane transcript. Lane accepts the following general examinations: social sciences/history, natural sciences, and humanities (arts and letters). Lane also accepts the following subject examinations: American History I and II, American Literature, Biology, Calculus with Elementary Functions, Chemistry (General), English Literature, French, Microeconomics, Macroeconomics, Spanish, and Sociology. Contact the Enrollment and Student Financial Services/Student Records Office for more information.

Students who have earned credit through the Advanced Placement (AP) program, usually through advanced high school courses, may receive credit for satisfactory scores. You need to provide Lane with an official report. To order a report, contact the College Board/Advanced Placement at 1-888-CALL-4-AP.

There is more information on Lane's website on scores and exams for both CLEP and AP.

**Miscellaneous Training and Credit** Credit is granted for military training and for work completed at some proprietary schools. Such credit generally applies only toward a vocational program and does not appear on the student's Lane transcript. The student should apply for such credit in Enrollment and Student Financial Services, bringing certificates of completion, school records or other available documentation. The student is notified of the credit granted by requesting a general evaluation (request forms are in Enrollment and Student Financial Services and Student Records), and a record is kept in the student's file. A veteran student will be granted 3 credits of PE (either required or 3 credits in Open Electives) by providing the college with a copy of a DD 214 with an Honorable Discharge.



## Career and Employment Services

Building 1, Room 102, 541.463.5167, [lanecc.edu/ces](http://lanecc.edu/ces)

Lane's Career and Employment Services (CES) offers comprehensive, career-related assistance to students and community members. Individuals can receive help with scholarship research, researching career options, career planning, reentering the job market, or changing career direction. CES provides free employment referral to part-time, temporary and permanent positions on campus or with local and nationwide organizations.

**Career Information** CES offers free career assessments. A career resource library contains an extensive range of information on careers, industries, labor market trends, and job search skills, as well as colleges and programs of study. The most popular source of information is Oregon's Career Information System (CIS), which provides occupational descriptions for 400 careers, including current salary ranges, job outlook, job descriptions, training, and programs of study. Other career materials include career websites, magazines, books and college catalogs.

**Career Advising** Advisors are available by either drop-in or individual appointment for students and community members who would like help with career planning, career exploration and career changes.

**Assessment** As part of the career counseling process, students often find career-related inventories helpful to clarify their goals. These assessments explore career interests, skills, values, and personal style. Some inventories require counselor referral and interpretation. Fees are charged for some assessment tests. Referrals to Career Counselors are available to Lane students.

**On-Campus Student Employment** (Learn and Earn program) Currently enrolled students may find employment as student workers in college departments. Eligible students can work up to 15 hours per week. Jobs pay \$8.50 per hour. Jobs are posted on Lane Job Connection, [lanecc.edu/ces](http://lanecc.edu/ces).

**Federal Work Study** Eligibility is determined through your financial aid award. Jobs are posted on Lane Job Connection, [lanecc.edu/ces](http://lanecc.edu/ces). For more information, contact the financial aid office.

**Off-Campus Student Employment** Lane provides a free employment referral service for students, alumni and community members. Jobs are listed online at [lanecc.edu/ces](http://lanecc.edu/ces) then click the "Lane Job Connection" link.

**Job Search Assistance** Resources are provided in job search skills: writing a resume, interviewing, job search strategies, and Internet/Web resources. Computers with relevant software are available for students to gather information, gain job search skills, and produce job search-related documents.

**Career Fair** CES hosts a Career Fair in April of each year. This event brings 50+ employers to campus and allows students and community members the opportunity to meet and talk about employment within their company.

**Scholarship Information** CES houses scholarship resources and

information as well as access to Internet sites and searches. Scholarship workshops are offered throughout the year, including the annual January financial aid and scholarship workshop, and a 4 credit learning community is offered winter term. CES Advisors and Student Service Associates (SSA's) are available to assist you in your research for cash for college [lanecc.edu/ces/scholarships](http://lanecc.edu/ces/scholarships).

**Student Service Associates** Student Service Associates (SSA's) are peer mentors selected from the student body and trained to assist the Counseling department and Career and Employment Services (CES) in helping new and continuing students with enrollment and registration processes and campus resources. SSA's assist students, alumni, and community members in CES linking them with career development and information, scholarship resources, and job search strategies. In addition, SSA's conduct campus and department tours, assist with campus wide events such as our annual Career Fair, Scholarship Workshop, Lane Preview Night, Early Orientation, and other outreach activities. Interested students should inquire at [lanecc.edu/ces/ssa.htm](http://lanecc.edu/ces/ssa.htm) in early April for application and hiring process for the upcoming academic year.

**Career-Related Classes** Information about career planning, scholarships, and job search skills workshops is available to interested individuals. Connections with credit-earning academic classes such as Career and Life Planning, Cooperative Education and Career Exploration are also offered.

## Child Care

**Lane's Child and Family Center**, center office Building 24, Room 114, 541.463.5519

The center is state licensed and located on the main campus. It provides care for students, staff and community families. The Child and Family Center is open from 7:00 am to 5:30 pm., Monday-Friday and serves children 30 months to five years old. Classrooms are staffed by professional teachers, Lane students and parents. The center is a lab school for students in the Early Childhood Education program and a cooperative where student parents can work to reduce their fees. Child care grant and subsidy assistance is available. For additional information and fee schedules, contact the Child and Family Education Department office.

**Family Connections of Lane and Douglas Counties**, Building 24, 541.463.3954, or 800.222.3290

Family Connections (FC) is a community-based program that works to ensure the children of Lane students and other families have access to safe, quality and affordable child care in Lane County. FC provides the following services:

**Parents** Parents receive personalized referrals to child care options in Lane and Douglas Counties based on specific family needs. Trained consultants search hundreds of child care listings and offer support in making appropriate child care connections. Parents receive research-based information to help assess the quality of their child care choices.

**Child care professionals** Assistance in launching a child care business, training, technical assistance, and resources are offered to people who are interested in caring for children. Training



topics include first aid/CPR, business development, and child guidance. Classes are offered evenings and weekends. Professional development scholarship opportunities are available on a limited basis.

**Servicios en Español** Servicios en Español son ofrecidos y disponibles a todos. Inclusive and accessible services are offered in Spanish.

**Employers** FC helps employers assess the child care needs of their employees. Enhanced referral services, employer tax credits, dependent care assistance programs, and other family friendly benefit information is available.

**Advocacy** FC advocates for improving the child care system in Lane County and produces data reports for public policy and community planning.

More information is available at [lanecc.edu/lfc](http://lanecc.edu/lfc).

## Clubs and Organizations

See Student Life and Leadership Development.

## Community Center for Family Counseling

See page 263.

## Computer Laboratories

All registered Lane students have unlimited access to the open computing laboratories on main campus and at the Cottage Grove and Florence Centers. The technology/ resource fees paid by each student provides this access.

Labs are available at various times weekdays and evenings. For more information on hours and availability of equipment, call the labs at the extensions below, or pick up a brochure at any of the labs.

The Library Laptop Lab has PC laptops. Software for word processing, spreadsheet, database, and miscellaneous educational programs is available. The Micro Computer Lab in Building 4, Room 201 will be moving due to the remodel of Building 4. Please call the number below for new location and information. It has Pentium and Macintosh computers.

Software includes spreadsheet, database, word processing, graphics, desktop publishing, miscellaneous educational programs, and various program languages. For more information, call 541.463.5288.

Students also have access to the SHeD, Student Help Desk, to receive assistance using the SSAN (Staff and Student Access Network) and with other issues. The SHeD, located in the open computer lab in Building 4, Room 201 will be moving due to the remodel of Building 4. Please call the number below for new location information. The SHeD is open during the same operational hours as the computer lab. For more information, call 541.463.3333.

## Counseling

Building 1, Room 103, 541.463.3200

Counseling provides retention and support services to help students achieve success during their learning experiences. The counselors, academic advisors and support staff work

together to present a variety of services to the diverse student population.

Counselors offer assistance with:

- providing orientation services for new students.
- returning to school and adjusting to changes.
- making career and educational decisions.
- developing academic programs.
- improving interpersonal communication skills.
- coping with stress and depression.
- resolving personal and family problems.
- strengthening student success.

During open hours, there is a counselor available to help students with crises or emergencies.

Lane counselors are highly trained professionals with a variety of credentials. All counselors engage in continuing education to maintain excellence and currency in services. All counselors subscribe to the Ethical Standards of the American Counseling Association, and Licensed Professional Counselors are bound by the Oregon Code of Ethics. These standards and laws protect student confidentiality and other rights. Personal information discussed with a counselor is private and confidential, unless the student gives written permission to share it with others; it involves potential danger to self or others; it involves child, elder or vulnerable adult abuse; a court orders the release of information; or other exceptions in accordance with Oregon statutes.

Students and prospective students may contact counselors or academic advisors directly during their posted office hours or through Counseling. The center is available to prospective students and new students for orientation and information on a drop-in basis, as well as continuing students for advising or for referral for counseling or advising.

Counseling is open Monday through Wednesday, 8 a.m.-5 p.m.; Thursday, 8 a.m.-4 p.m.; Friday, 8 a.m.-2 p.m. Counseling and advising services also are available at the Cottage Grove and Florence centers. Contact these centers for information or appointments.

## Disability Resources

Building 1, Room 218, 541.463.5150, (voice); TTY call 711 Relay; 541.463.4937, Fax; [disabilityresources@lanecc.edu](mailto:disabilityresources@lanecc.edu); [lanecc.edu/disability](http://lanecc.edu/disability)

Disability Resources collaborates with students, staff, faculty, and community members to create inclusive, equitable, diverse and sustainable learning environments for all.

The department is a resource for creative problem-solving to enhance access in the following areas:

- Admission/registration assistance, advising and advocacy
- Accommodations for classes, including:
  - Test accommodations (extended time, reduced distraction, reader, scribe)
  - Alternate format (enlargements, audio/ text formats, Braille)
  - Assistive technology (computer software and hardware, assistive devices)
  - Service Providers (sign language interpreter, classroom aide)

- Consultation, referral and disability awareness information
- Campus accessibility information, maps and basic mobility orientation

Other departments provide the following services:

**Career and Employment Services** Career/job/scholarship information is provided for persons with disabilities.

**Health and Physical Education Department** Health and PE teaches a therapeutic exercise and rehabilitation course for temporarily or permanently disabled persons. The instructor sets up an individualized exercise program for each student, taking into account the student's disability, needs and goals.

**Library** The following assistive technology is available for use in the library; text scanners, screen readers, text-enlarging programs, CCTV, large screen monitors, closed caption decoders and cassette players/recorders. The library is also equipped with automatic doors and wheelchair accessible adjustable workstations.

**TRiO Learning Center** Students eligible for Disability Resources also may be eligible for services through TRiO Learning Center.

**Physical Campus** Lane has an interconnecting ramp system that makes most buildings accessible. Restrooms, pay phones (V/TTY), and emergency phones also are accessible.

## English as a Second Language

See page 262.

## Enrollment and Student Financial Services/Financial Aid

Building 1, First Floor, 541.463.3100, (877) 520-5391, TTY 541.463.4722, or [lanecc.edu/es/](http://lanecc.edu/es/)

Enrollment and Student Financial Services provides a variety of services for new and returning Lane students. These services include:

- Admission assistance
- Financial aid advising
- Cash payments
- LCC Photo ID cards (optional)
- Receiving documents from students
- Assistance with ExpressLane/myLane on:
  - Obtaining financial aid information
  - Registration
  - Ordering official transcripts
  - Making credit card, debit, or check payments
  - Updating address, telephone and e-mail information
  - LaneCC Debit Card

**Hours of operation** (subject to change):

Monday, Tuesday and Thursday, 9 a.m. - 5 p.m.; Wednesday, 10 a.m. - 5 p.m.; Friday 9 a.m. - 2 p.m. The college is closed on Fridays during summer term.

## Food Services

Foodservices provides three dining areas for students, faculty and staff. The Snack Bar features chicken tenders, grilled chicken, hamburgers and grab-n-go. The Foodcourt features pizza and pasta, fresh made sandwiches and salads, Pan Asian

(Asian), Carvers Station (roasted meats, vegetables and potatoes), and Veggie Ville (vegetarian and vegan). The Blenders Espresso Bar features fresh Wandering Goat Organic coffee beverages, blended smoothies, sandwiches, grab-n-go, and fresh in house pastries. All are located on the first floor of the Center Building. A full line of vending machines are located throughout campus.

### Hours of Operation (subject to change):

	Mon-Thurs	Fri	Sat
Snack Bar	10:30 a.m.-2 p.m.	10:30 a.m.-3 p.m.	Closed
Foodcourt	7-10:45 a.m. 11:15 a.m.-3 p.m.	7-10:45 a.m. 11:15 a.m.-3 p.m.	Closed
Espresso Bar	7 a.m.-6 p.m.	7 a.m.-3 p.m.	Closed

## Health Clinic

Building 18, Room 101 541.463.5665 [lanecc.edu/healthclinic/](http://lanecc.edu/healthclinic/)

The LCC Health Clinic provides health care services to Lane students and employees, including treatment for acute illnesses, minor injuries, and some chronic conditions. Appointments are preferred. We also provide information and referrals to community resources.

The mission of the LCC Health Clinic is to provide affordable, accessible, efficient, evidence-based health care to the students and employees of Lane Community College. The Health Clinic staff provides holistic care in a collaborative partnership with the patient, with respect for diverse beliefs and needs, assisting the patient to make informed decisions about disease prevention and management of chronic health conditions. The clinic provides education to individuals and groups to enable them to be better consumers of health care and stewards of their own health.

### Services available to eligible students and employees

Students who pay the ASLCC Activity Fee when registering for classes and employees who pay the Health Clinic fee are eligible for these services:

#### Free Services:

- Office visits
- X-ray referral (the clinic does not pay for x-rays)
- Limited follow-up for chronic illness
- Diagnosis and treatment of most acute illnesses
- Treatment of minor trauma including sprains, strains, cuts and abrasions
- Assistance managing mental health issues
- Tobacco cessation support

#### Low Cost Services:

- Specialized procedures such as spirometry, wart treatments and sutures
- Immunizations including flu vaccine
- EKGs
- Lab testing, on-site and reference lab work
- Family planning/contraceptives, pregnancy testing, pap smears
- Men's and women's sexual and reproductive health care
- Physicals for LCC programs and athletics

#### Family Planning Expansion Program:

- A Medicaid funded project offers limited FREE services such as birth control, exams, testing and supplies to those who are eligible. See our website: [lanecc.edu/healthclinic/ffpep/index.html](http://lanecc.edu/healthclinic/ffpep/index.html)

## Services available to all students and employees regardless of eligibility

### Free Services:

- Emergency response
- First aid
- Blood pressure checks
- Referrals to community agencies and health providers

## Services available to individuals with disabilities

- Limited personal care assistance
- Medication assistance
- Loan of crutches

**Payment methods** Payments for our fee-based services are **due at time of service** or can be charged to an open LCC account. Reference lab costs can be billed directly to your insurance by the reference lab.

**Confidentiality** All services provided are confidential. A confidential medical record is established for each patient. This record is kept for 10 years. Federal and Oregon State laws govern the release of these records.

**Health Insurance** Lane Community College does not sell health insurance or handle any insurance claims. Brochures for a low cost health insurance plan for students and their families are available in the clinic lobby.

**Referrals** Patients with health problems beyond the scope and mission of the LCC Health Clinic are referred to specialists in the community, the Peacehealth Urgent Care Center, or local emergency rooms at the patient's expense. If an ambulance is required, the **patient will be responsible for costs incurred.**

**Health Clinic Hours** The health clinic is open Monday through Friday during fall, winter, and spring terms on days that classes are in session. Appointment times are available from 8:20 a.m. until 4 p.m. The Health Clinic is closed from 12:15 p.m. to 1:15 p.m. for lunch. The clinic is also open summer term on a limited basis. Please call for times. Practitioners are not available on weekends, holidays or during school breaks.

## Housing

The following options are available for Lane Community College students taking credit classes leading to a degree, certificate or transfer program.

Students must meet application and income criteria determined by the agency operating each complex and must complete a separate application process for each location. Once the application process is complete, space will be allocated as available.

### Bagley Downs, 19th Avenue between Pearl and High, Eugene

- St. Vincent de Paul offers these units in partnership with Lane. All units are two bedroom.
- Call 541.687.5820, ext. 130 to get on the Lane Community College waiting list. As units become available students on the list will be contacted to complete application and verify income and student status.

### Aurora Building, 100 East 11th, Eugene Village Oaks, 3606 West 18th, Eugene Firwood, 2139 West 12th, Eugene

- Students should apply in person at the Lane County Housing Authority, 300 West Fairview, Springfield.

- Some students may already be on the waiting list at these places. Students also may be on lists at other HACSA complexes. Contact the Lane County Housing Authority, 300 West Fairview, Springfield, and also ask to be placed on the Lane Community College waiting list.

### College Corner, 704 Mill Street, Springfield

- Contact Jennings Property Management, 541.683.2271 for more information regarding Jennings application process.

### University of Oregon [housinguoregon.edu](http://housinguoregon.edu)

- Students who are dual-enrolled may access the UO Housing Office, 541.346.4277.

Many students reside in rental apartments throughout the Eugene-Springfield area. Lane's Student Life and Leadership Development office provides housing referral information to Lane students. Housing information also can be found at [registerguard.com](http://registerguard.com) and at [lanecc.edu](http://lanecc.edu) (search housing).

Contact Tina Lymath, Lane Community College Student Life and Leadership Development, 541.463.5336.

## International Student Program

International Admissions/Advising and Student Activities, Bldg 11

Jane Marshall 541.463.3404, Room 243; Colby Sheldon 541.463.5165, Room 242; Beth Schenderlein 541.463.3409, Room 219 [internationaladvisor@lanecc.edu](mailto:internationaladvisor@lanecc.edu), fax: 541.463.4152

Each year more than 200 international students attend Lane Community College. Students who are in the United States on a student visa can study in either the IESL Program or in credit level classes. There are special admission requirements for international students and support staff is available to help with this process. The International Student Program helps these students create a positive and successful educational experience that includes an orientation to the college and community, immigration advising, an academic schedule, assistance with housing and recreational activities.

Opportunities are available throughout the school for both international and American students, including on-campus activities and enrichment trips to local, regional and statewide places of interest. Students from all over the world join together and share their cultures in activities such as an English Conversation Partner program, social hours, holiday celebrations and an annual International Day. Activities focus on making friends and learning about each other.

International students are offered help in finding homestay living arrangements with local hosts. Students interested in homestays must make requests at least one month prior to arrival.

Assistance is offered in helping international students make connections in the community and finding resources on campus. Information is also available about other living opportunities, bus schedules, business referrals and other services.

More information is available on the International Student Program website at [lanecc.edu/isp/](http://lanecc.edu/isp/).

## Legal Services

Building 1, Room 210A, 541.463.5365

Legal advice is free and available to all credit students on main campus through the mandatory student activity fee. A practicing attorney is available 20 hours per week with limited hours during summer term. Appointments may be made through the Legal Services office.

## Library

Center Building, Second Floor, 541.463.5220

The Library provides a wide variety of resources for instructional, research, recreational, and general information needs of students, faculty, staff, and community residents. The collection includes over 65,000 volumes of books and audiovisual materials, print subscriptions to more than 250 periodicals, and a variety of online databases. Remote access to the Library's online catalog and full-text online databases is available to Lane students and staff. The Library's website is [lanec.edu/library](http://lanec.edu/library).

**Instruction and Services** Librarians provide information assistance to individual students, faculty and staff, offer classes in library research skills, present orientations to classes, assist with the preparation of research assignments, prepare specialized bibliographies, design course-specific web pages, and work with faculty to develop the Library's collection and provide curriculum support. Membership in several library consortia, including the Orbis Cascade Alliance, makes it possible for Lane students to borrow materials from libraries in the Pacific Northwest and around the world. Library services include laptop checkout, group study rooms, a video viewing area, library classroom, and assistive technology.

**Loan Policies** Lane students, faculty, staff, and those who purchase a Community Borrower card may borrow materials. Lane credit students and staff may also borrow materials from other academic libraries in the Pacific Northwest through the Summit online catalog, or as a visiting patron.

**Hours** The Library is open 7:30 a.m.-7 p.m. Monday through Thursday and from 7:30 a.m.-5:30 p.m. Friday. The Library is closed Saturday and Sunday.

**Library Class** For a description of Library classes, see page 226.

## Multicultural Center

Building 1, Room 201, 541.463.5276

Drop by the Multicultural Center lounge and relax, socialize and enjoy tea or coffee in a racism and homophobia-free zone. The center strives to create a space that is safe and supportive of all people, a space that inspires students to stretch and realize their potential.

The center offers support services to students of all ethnic backgrounds to ensure their academic success. Center staff can assist with admissions and financial aid information; referral to community resources including food, shelter, childcare, and medical and dental health; participation in student clubs and associations; starting your own student club; and organizing events throughout the year that promote inclusion and understanding.

## Multicultural Center

Edificio 1, sala 201, 541.463.5276

Venga a la sala del Multi-Cultural Center y relácese, socialice y disfrute de un café en una atmósfera libre de racismo e homofobia. El centro crea un lugar que es seguro para todas las personas, es un lugar que inspira a los estudiantes a extender y desarrollar sus potenciales.

El Centro ofrece servicios de apoyo a estudiantes de todos los étnicos para asegurarles el éxito académico. El personal del Centro puede asistirle con información sobre admisión, ayuda financiera, participación en clubes y asociaciones estudiantiles, como empezar su propio club estudiantil, organizar eventos durante el tiempo escolar para promover entendimiento e inclusión. También encontrará información sobre servicios disponibles hacia la comunidad, tales como; comida, refugio, guarderías, y servicios de salud médica y dental.

## Music, Dance and Theatre Arts

**Music** Music students at Lane have many opportunities to perform publicly as soloists and as members of vocal and instrumental ensembles. Lane has a chamber choir, concert choir, gospel choir, vocal jazz ensemble, symphonic band, jazz ensemble, chamber orchestra, and various small ensembles. These groups perform regularly at term's end and on special occasions, including tours. Solo musicians are encouraged to perform in showcases held once or twice a term, usually at noon, on the main stage. Some of Lane's music ensembles are open to all students, others require auditions. Whether students already have some music training or want to get started, they can share the joy of making music at Lane.

**Dance** Lane's dance program offers a variety of performance opportunities for dance students in all levels and idioms. Open show, at the end of each term, is an opportunity for students in all dance classes to come together to perform in a setting that is informal and fun. The annual Student Dance Concert provides a venue for student choreographers and dancers to demonstrate their skills in a theater setting. Advanced students are invited to audition for Lane Dance Company which performs in the faculty concert presented each year and also is invited to perform in several community venues throughout the year. Collaborations in Rhythm, presented annually, provides Hip-Hop and Jazz dancers performance opportunities.

Individual lessons are available to support students in any of the dance idioms as well as in Pilates and Dance Therapy. Call Bonnie Simoa at 541.463.5645.

**Theatre Productions** Productions are the logical outcome of class work, and Lane strongly encourages its theatre arts students to audition for shows. Public performance is the ultimate test of skill and courage. The Theatre Arts program usually produces several shows a year. Casting policy puts students first and sometimes includes guest artists and performers from the greater Lane community. Lane has earned a reputation for producing some of the best shows in the area.



In addition to faculty directed plays, the Student Production Club produces shows throughout the year including an evening of one act plays written by and for students. Lane faculty maintains strong relations with other producing groups in the community, often recommending students upon the request of that organization and providing students an opportunity to receive credit for their work. Talent grants and scholarships are available. For more information, contact Patrick Torelle at 541.463.5648.

## The Native American Program

Building 1, Room 201, 541.463.5238

The Native American Program purpose is to recruit and retain Native American Indian and Alaska Native students to Lane Community College and assist them in attaining their academic and career goals. The program aim is to help students make a smooth transition into the academic setting by helping them identify, seek and use the appropriate academic and social support services, provided by the college, necessary for them to succeed. Contact James Florendo, 541.463.5238.

## Photo ID

A Lane Community College Photo ID is not required for conducting business at Lane. Many business processes will require a form of photo ID, including a valid driver's license, Lane photo ID or passport. The \$5 charge of a Lane Photo ID is not included in the ASLCC student activity fee. Any faculty/staff member or student currently registered at Lane may purchase a Lane Photo ID from Enrollment and Student Financial Services on the main campus. Replacement cards are \$5. Photo ID's are available beginning the Tuesday of the second week of each term. For information and hours, contact Enrollment and Student Financial Services at 541.463.3100.

## Sports and Fitness

**Fitness Education Center**, Building 5, Room 101, 541.463.3987

The Fitness Education Center provides state-of-the-art exercise equipment and educational instruction in the area health and fitness. Staff and students gain access to the center during usage hours by registering for Fitness Education: Introduction and Fitness Education: Orientation. Students satisfy course requirements through attending exercise sessions during usage hours. The class is available for credit or non-credit through Continuing Education. The environment is supportive, not competitive, educational and encourages people of all fitness levels and abilities. In addition, a professionally trained and dedicated staff is always available for personal guidance.

The orientation covers important exercise principles, instruction in proper equipment adjustments for safety and biomechanical alignment, guidance for cardiovascular equipment, and instruction on the use of the flexibility and functional training area. Students have the opportunity to participate in a health and fitness assessment including blood pressure, body composition and cardiovascular, flexibility, muscular strength, and muscular endurance tests. Seminars on a variety of health, wellness and fitness topics also are available. Students may also sign up for assistance in developing a personalized fitness plan.

The primary objective of the center is to provide an education-based exercise program in a safe, clean and supportive exercise environment. Potential benefits of participation include added energy, improved self-image, improved ability to cope with stress, appetite control and reduced body fat, weight maintenance, and increased emotional stability.

**Recreational and Club Sports Program**, Building 5, Room 204, 541.463.5293

The Recreational Sports program includes an array of services and programs for students, and their immediate families. These include: clubs and community sports, family activities, trips and outings, intramurals and drop-in activities.

Recreational sports special events provide a variety of opportunities for participation in individual and team activities. The one-day and weekend events provide an opportunity for social growth and recreational participation in a safe and fun environment. By design, the program is intended to create a climate where everyone is welcome. Participation in the program is voluntary and determined by interest. Recreational adventures/activities include:

Basketball	Golf	Roller Skating/Blading
Badminton	Hockey Games	Volleyball
Bowling	Ice Skating	Weight Lifting
Fun Runs/Walks	Raft Trips	

All recreational sports activities are governed by regulations provided in the Recreational Sports Handbook and supervised by the Recreational Sports office. All current students and their immediate family members are eligible for participation.

Open gyms (free gym time when classes are not held) are offered for students and faculty/staff in badminton, basketball, indoor soccer, volleyball, tennis, and weight lifting. These drop-in times are scheduled around facility availability. Brochures are available at the beginning of each term with exact times and locations.

The Club/Community Sports program serves individuals who desire to compete in city recreation leagues in the region. This program offers students the opportunity to participate in competitive sports events, to improve skill and overall knowledge of a sport, to help reach their athletic potential, and to build friendships as they enjoy individual and group activities. Club Sports and specific guidelines on eligibility are governed by regulations set forth in the Club Sports Handbook and supervised by the Recreational Sports Office.

**Intercollegiate Athletics**, Building 5, Room 205,  
541.463.5599

Lane Community College sponsors intercollegiate athletics that encourage an emphasis on academics, personal development, personal enrichment, community support, career development, and athletic excellence. The intercollegiate athletic program offers students opportunities to compete in eight varsity sports: Men's and Women's Basketball, Men's and Women's Cross Country, Men's and Women's Track and Field, Men's Baseball, and Women's Soccer. Teams participate in the Northwest Athletic Association of Community Colleges (NWAACC) Conference with 35 other Oregon, Washington, and Canadian colleges. The NWAACC governs the conference, which is divided into four main regions (north, east, south, and west). Lane competes in the southern region. Qualifiers from each region compete annually for conference championship titles.

Fall	Winter	Spring
Women's Cross Country	Women's Basketball	Men's Baseball
Men's Cross Country	Men's Basketball	Women's Track & Field
Women's Soccer		Men's Track & Field

The administration of the Athletic program is conducted through the Health, Physical Education and Athletic Division. The division chair oversees all employees of the Intercollegiate Athletic and Recreational programs. Personnel include the athletic director, head coaches, assistant coaches, athletic trainer, athletic administrative specialist, student recreation director, recreation assistants, and student academic coordinator.

## Student Government: ASLCC

Building 1, Room 210, 541.463.5290

The Associated Students of Lane Community College (ASLCC) legislative body is the Senate, composed of four executive officers, ten senators, and four student staff positions (appointed, non-voting positions). The purpose of ASLCC is to represent student interests and concerns and to promote student involvement in all phases of college life. Financing for ASLCC comes from the mandatory \$45.25 student activity fee.\*

Contact the ASLCC president, staff secretary or the Student Activities Office if you would like to:

- serve on a college committee.
- form an organization.
- plan an activity.
- become involved in student government.
- make suggestions and express concerns.

\*This fee is subject to change pending ASLCC elections.

## Student Life and Leadership Development

Building 1, Room 206, 541.463.5336

The Student Life and Leadership Development office coordinates and supervises the following areas: Student Life Programs; Black Student Union, Latino Student Union, QSA, Native American Student Association, Phi Theta Kappa, and other student clubs and organizations; Associated Students of Lane Community College (ASLCC) including the ASLCC senate and staff, ASLCC

Legal Services, Cultural Events and Programs, Recreational Sports, Oregon Student Association, and the Oregon Student Public Interest Research Group.

Student Life programs provide students with opportunities to develop and enhance leadership skills and gain experiences in administration, budget development, computers, programming, and communication through participation in ASLCC, committees, cultural programs, and workshops.

Active clubs vary from year to year and represent many student interests on campus. Students are encouraged to organize new clubs and special groups compatible with the spirit of the college community. Students interested in contacting specific clubs can stop by Student Life and Leadership Development and leave a note in the club's mailbox. Groups or individuals interested in forming clubs and organizations should contact the director of Student Life and Leadership Development or ASLCC.

The Student Life and Leadership Development office is open Monday - Thursday, 8 a.m.- 6 p.m. and Friday, 8 a.m.- 5 p.m.

**Black Student Union**, Building 1, Room 201, 541.463.5340

The Black Student Union (BSU) is a student-based organization focused on the cultural, social and academic needs of African-American students attending Lane. It seeks to build cultural and community bridges in the general context of the academic environment. The BSU is involved with the sponsorship of three campus/community events during the academic year: Kwanzaa, the Martin Luther King, Jr. Celebration, and Black History Month.

The BSU is open to all students, regardless of race, creed, color, religious affiliation, or sexual orientation. Membership in the BSU requires a commitment to the mission of the BSU. The BSU is committed to the development of cross-cultural ties with all groups on campus and in the community at-large. The faculty advisor for the BSU is Greg Evans.

**Latino Student Union**, Building 1, Room 201,  
541.463.3236

The goal of the Latino Student Union (LSU) is to unite, educate and empower Chicano, Mexicano, Latino, Caribbean, and Hispanic students attending Lane. LSU provides personal, social and academic support and encourages bicultural leadership skill development to serve the needs of the growing Latino community in Lane County. LSU assists with Lane's recruitment and outreach activities to high school students, including the Puertas Abiertas Leadership Academy. The faculty advisor for the LSU is Jim Garcia.

**Queer Straight Alliance**, Building 1, Room 206, 541.463.5331

Queer Straight Alliance (QSA) is dedicated to creating alliances between the local queer population and its straight allies. The primary objectives of the QSA include educating the college and community groups about homophobia, heterosexism, and queer experiences; raising awareness about anti-queer legislation at the state and local levels; providing a safe space for open discussions about sexuality and gender issues; and providing queer-positive outreach to local high schools and community organizations.

**Native American Student Association**, Building 1, Room 201A, 541.463.5238

The Native American Student Association (NASA) is an organization established to provide Native American students an environment which supports traditional cultural values and beliefs and academic achievement. NASA's priority is fostering a positive educational environment for Native American students while they are attending Lane. NASA assists all Native American students in maintaining contact with their tribal educational and financial departments, family, and the Bureau of Indian Affairs. Contacts are supported through the NASA faculty advisor and the network of Lane advisors. NASA openly welcomes all students at Lane to actively participate in NASA events and feel at ease to ask questions about tradition, heritage and the history of the Native American people. The Native American Student Advisor is James Florendo.

**Phi Theta Kappa Honor Society**, 541.463.5345

Phi Theta Kappa is the only honor society for students enrolled in two-year colleges. It originated in 1918 in Mississippi and has over 1,000 chapters which honor students' academic achievement in every discipline. The Sigma Zeta Chapter began at Lane in 1968 and is one of the oldest chapters in Oregon.

To join, students must currently be enrolled in a degree, certificate or transfer program, have completed 12 full-time or 18 part-time credits, have a GPA of 3.25 or better, and be recommended by two members of the faculty as being self-motivated and committed to excellence. There are one-time dues which are payable in several options. For more information, contact chapter advisor Velda Arnaud.



## Student Media

**Denali**, Building 18, Room 213, 541.463.5897

Denali is LCC's literary and visual arts magazine presently published once a year. Original poetry, prose, visual and graphic arts are accepted for evaluation by a student-run editorial board.

Students are employed to assist in editing and production of the magazine and can receive Cooperative Education credit in journalism, graphic design or media arts. Denali operates under the guidelines of the LCC Media Commission and is distributed free of charge to Lane students and staff and to community members of Lane County.

Students wishing to submit copy or art, or become involved in any aspect of producing the magazine may contact Bill Woolum, adviser at 541.463.3398.

Students interested in earning Cooperative Education credit may contact Dorothy Wearne at 541.463.5656.

**Torch**, Building 18, Room 212, 541.463.5655

The Torch is an award-winning, student-produced, weekly campus newspaper with an average circulation of 4,000 copies. Published by authority of the Lane Community College Board of Education through the LCC Media Commission, it is an autonomous newspaper free from censorship by the college administration, faculty and student government.

The Torch serves three purposes: it provides news and information of importance and interest to Lane students and staff; it serves as a learning laboratory for students of journalism, graphic arts, photography, publication design, web design, and advertising; and it provides a communication channel for student commentary and debate. All Lane students may submit guest commentaries and letters for publication in the Torch.

Cooperative Education credit in journalism, graphic design and media arts is available for students working on the Torch. Students interested in joining the Torch staff as writers, photographers or designers may contact Frank Ragulsky, news and editorial adviser, at 541.463.5654 or Dorothy Wearne, production adviser, at 541.463.5656.

## Student Service Associates

Lane's Student Service Associate (SSA) program began in the early 1970's. Since that time, it has been a model for programs throughout the state. The SSA program was designed to improve and supplement regular Counseling Department service delivery through the use of peer mentors. SSAs bridge perceived gaps between staff and students, act as role models, and improve outreach and interaction with diverse student groups. SSAs assist student and community members in Counseling and Career Services by linking them with information about majors, careers, scholarships, and job search. They play active roles in orienting new students and promoting campus resources.

Interested students should inquire with Career and Employment Services, 541.463.5167, in March to learn about the application process for the upcoming academic year.



## Student Snack Shack

Building 1, Second Floor, 541.463.5343

The student run snack shack is offered through Student Government and sells bagels, muffins, cold drinks, chips, water, fresh fruit, yogurt, coffee, etc. for students on a daily basis. Hours vary from 8 a.m.- 3 p.m. most days. Free coffee is offered every Wednesday.

## Student Book Consignment

Center Building, Second Floor 541.463.5344

The student run book consignment is offered through Student Government and sells students' used books at a discount. The Book Consignment is open 4 days a week, hours vary.

## Substance Abuse Prevention

The Recovery Center, Building 1, Room 226, 541.463.5178

The Recovery Center offers comprehensive and confidential substance abuse prevention services for students and staff. Services include information, referral and individual and group counseling about issues which affect students, staff and their families. Support groups are available to support recovery or simply to gain information on a variety of issues including alcohol and other drug abuse, smoking cessation, eating issues, parenting, co-dependency, and related problems. The center suggests a wide variety of choices based on each individual's circumstances. The center does not advocate any particular program of recovery or self-help.

The Recovery Center facilitates the formation of student-run support groups on topical issues such as Narcotics Anonymous and Alcoholics Anonymous. While these meetings are listed in the community as being open meetings, they are facilitated by Lane students and therefore are subject to change from term to term. They are not held during finals week and school breaks.

All services are open to currently enrolled Lane Community College students (and their families) in credit, Adult Basic and Secondary Education, and Workforce Development classes. There is no cost to students or their families. Most services are provided by professionally trained staff. Information and referral services are provided by trained volunteers and students.

All services provided are confidential. Information is not released without student permission, except upon court order. Office hours for fall, winter and spring terms are 9 a.m. to 5 p.m., Monday through Friday. The center is closed summer term.

For more information, e-mail: [harrism@lanecc.edu](mailto:harrism@lanecc.edu) or call the center or visit [lanecc.edu/stuser/subabus.htm](http://lanecc.edu/stuser/subabus.htm).

### Taking a class at Lane is easy!

Watch the Getting Started at Lane YouTube video at <http://youtube.com/lanetuberscafe> by entering the "Taking a Class at Lane is Easy" in the search box.

Lane Tubers Cafe

## Sustainability

Lane's commitment to sustainability is best summarized by our sustainability core value, which states that Lane will:

- Integrate practices that support and improve the health of systems that sustain life.
- Provide an interdisciplinary learning environment that builds understanding of sustainable ecological, social, and economic systems, concern for environmental justice, and the competence to act on such knowledge.
- Equip and encourage all students and staff to participate actively in building a socially diverse, just, and sustainable society, while cultivating connections to local, regional, and global communities.

Lane has many degree programs, classes, and extra curricular activities related to sustainability. Sustainability Associate of Applied Science degrees are:

- Energy Management Technician
- Renewable Energy Technician Option
- Resource Conservation Manager Option
- Sustainability Coordinator
- Water Conservation Technician

Lane also has a suggested course of study for those pursuing an AAOT and interested in sustainability. For more information on this course of study, see pages 163 - 164 or [lanecc.edu/collegecatalog/documents/SCSsustainability.pdf](http://lanecc.edu/collegecatalog/documents/SCSsustainability.pdf).

Extra-curricular activities include several student clubs:

- Global Health-Power to Change, Contact: Susie Cousar at 541.463.5271 or [cousars@lanecc.edu](mailto:cousars@lanecc.edu)
- Green Chemistry Club, Contact: John Thompson at 541.463.5199 or [thompsonj@lanecc.edu](mailto:thompsonj@lanecc.edu)
- Learning Garden Club, Contact: Devon Bonady at 541.463.5899 or [bonadyd@lanecc.edu](mailto:bonadyd@lanecc.edu)
- Oregon Student Public Interest Research Group, Contact: 541.463.5166 or [ospirg@lanecc.edu](mailto:ospirg@lanecc.edu)

To find out about current sustainability events and to learn more about sustainability at Lane visit the website at [lanecc.edu/sustainability](http://lanecc.edu/sustainability).

## Titan Store (Bookstore)

Center Building, Third Floor, 541.463.5256 [titanstore.lanecc.edu](http://titanstore.lanecc.edu).

The Titan Store is located on the third floor of the Center Building with access stairs located across from the Library on the second floor of the Center Building and an elevator on the northeast end of the Center Building. Students may purchase course materials, including textbooks, reference books, general books, art supplies, computer hardware and software, and a variety of school supplies. The Titan Store also carries clothing, specialty and gift items. Course materials also may be purchased online.

Book BuyBack is a service offered during final exam week and at the start of each term. Students may receive up to 50 percent of the amount paid for textbooks that meet the following conditions. The book is:

- needed for the next term
- in good, saleable condition
- clean (some highlighting is permissible)

The Titan Store is open Monday through Thursday, 8 a.m.- 5 p.m. and Friday, 9 a.m.-4:30 p.m. The college is closed on



Fridays during summer term. The store is open extended hours the first week of fall, winter and spring terms and during Book BuyBack. Visit the website for current hours and information.

## TRIO Learning Center

Building 1, Room 219, 541.463.3131, [lanecc.edu/trio/](http://lanecc.edu/trio/)

The TRIO Learning Center (TLC) at Lane Community College helps students succeed. It is a federally funded program with the goal of helping students stay in school and successfully graduate from Lane Community College and/or transfer to a four-year institution. The services provided to eligible students assist in meeting varied challenges of college life and are free of charge. TLC staff are available to assist students individually with their concerns.

TLC offers advice, support and encouragement to students; individual and small group tutoring with emphasis in math, science, writing, and computers; computer lab; academic advising; personal and career counseling; information and referral to services on and off campus; mentoring; cultural enrichment activities; study groups; special workshops and classes; assistance with transfer planning; and visits to Oregon four-year colleges and universities.

### Eligibility

The following criteria must be met to qualify for TRIO.

- enrollment or acceptance for enrollment at Lane Community College.
- working toward a degree at Lane, or planning to transfer to a four-year college or university within three years of enrollment, and have a need for academic support.
- U.S. citizen or registered permanent resident.
- one or more of the following applies:
  - neither parent received a four-year degree
  - qualify for financial aid or meet financial need guidelines
  - have a documented disability that interferes with education

## Tutoring Services

[lanecc.edu/tutor/](http://lanecc.edu/tutor/)

Tutoring Services coordinates free drop-in tutoring in many subject areas and centers on main campus. All tutoring is free to currently enrolled Lane students and provides one-on-one assistance in academic endeavors. **Tutors will** clarify information presented in class or textbooks, help students learn how to think about concepts in courses, engage in discussing ways to work problems, help with effective ways to study and learn, and offer support and encouragement. **Tutors will not** complete a student's homework, edit papers, help with take-home tests, rescue, or do problems without direct student involvement and critical thinking in the process of learning. Students are expected to take responsibility for their own learning, but tutors can empathize with the difficulty of a subject and offer coaching and guidance to make the process easier. For assistance in specific areas, visit the tutoring centers listed below. For general questions, contact Liz Coleman, Tutoring Services Coordinator by phone at 541.463.5783, email at [colemanl@lanecc.edu](mailto:colemanl@lanecc.edu) or come to Tutor Central in the Center Building, Room 208.

**Tutor Central**, Center Building, Room 210, 541.463.5282 (Liz Coleman) [lanecc.edu/tutor/tutorcent.htm](http://lanecc.edu/tutor/tutorcent.htm)

Open fall, winter and spring terms. Tutor schedules are posted on the front table. This is a great place to study independently with easy access to tutors in the following subjects:

- Academic Learning Skills
- Computer Skills (CS 120, Tutor Central, Room 205)
- International Students/English as a Second Language
- Math 10
- Social Sciences
- Speech
- Writing Center (help with papers from any class)
- Quiet study room (Tutor Central, Room 206)
- Group study rooms (Tutor Central, Rooms 209, 214)

**Business Lab**, Building 2, Room 107, 541.463.5765 (Judy Boozer)

The Business Lab provides assistance in Accounting and Business courses. Hours are posted on the door.

**CIT Computer Lab**, Building 19, Room 135A, 541.463.5823 (Pam Dodson)

The Computer Information Technology Department has tutoring available for all students enrolled in classes that use the lab. Tutors are advanced majors in the field of computing.

**Math Resource Rooms**, MTH 10 - MTH 97, Building 16, Room 163, 541.463.5399; MTH 105 and up, Building 16, Room 177, 541.463.5407 (Robert Thompson)

Peer and professional tutors are available. [math.lanecc.edu/math/mrc.html](http://math.lanecc.edu/math/mrc.html)

**Music Lab**, Building 6, Room 125, 541.463.5649 (Alberto Redondo)

Assistance is available for music theory, fundamentals, literature, history, and electronic music. [lanecc.edu/perarts/music/lab.htm](http://lanecc.edu/perarts/music/lab.htm)

**Science Resource Room**, Building 16, Room 193, 541.463.5041 (Star Glass)

Drop-in tutoring, microscopes, models, textbooks, and a computer tutorial for anatomy and physiology are available. Also, go to [lanecc.edu/science/src/index.html](http://lanecc.edu/science/src/index.html).

### Adult Basic and Secondary Education

The ABSE Volunteer Tutor program provides individual and small group tutoring for adult students in Basic Skills, GED, and English as a Second Language. The program has been in existence since the mid 1980's and is located at the Lane Community College Downtown Center. Volunteers are trained in a free 12 hour workshop and may tutor students at any of our campus locations and outreach sites. Tutors can work one-on-one, with small groups, and as classroom assistants in the areas of reading, writing, grammar, conversation, math computers, American culture, and citizenship. To become a tutor, please contact Amy Gaudia at 541.463.5919. Basic information can be found [lanecc.edu/volunteertutor/](http://lanecc.edu/volunteertutor/). If you need a tutor, please ask your instructor to help you submit the Tutor Request form.

## Veterans' Office

Building 1, Room 207, 541.463.5663 [lanecc.edu/va](http://lanecc.edu/va)

Programs at Lane Community College are approved by the Oregon Department of Education State Approving Agency as a qualified training institution for students eligible for Veterans' Administration education benefits. All applications for federal VA educational benefits and enrollment certifications are processed through the VA Regional Office in Muskogee, OK. To confirm your eligibility for VA benefits, contact: Veterans Administration Regional Office, P. O. Box 8888, Muskogee, OK 74402-8888, 1-888-442-4551, 1 0, [gibill.va.gov](http://gibill.va.gov)

For determination of eligibility to collect VA educational benefits go to: [lanecc.edu/va](http://lanecc.edu/va)

**New Enrollments** Students who have never applied for VA benefits should call 541.463.5663 or email [jonese@lanecc.edu](mailto:jonese@lanecc.edu) prior to visiting the Veterans Office to find out what paperwork or information will be needed. The VA takes up to six weeks to process the initial paperwork on a first-time award.

**Electronic Certification** Enrollment Certifications for students who previously have used VA educational benefits, as well as subsequent changes in enrollment, will be submitted to the VA via Electronic Certification. Awards and/or changes usually are processed within four to five weeks.

**Credit Load/Payment** For payment purposes, during a standard term, 12 credits is considered full-time, 9-11 credits is three-quarter-time, 6-8 credits is half-time. If a student registers for less than half-time, the student only receives tuition reimbursement, plus registration fees (not to exceed one-quarter-time) for the entire term. For non-standard terms, VA benefits are paid at an accelerated rate. Contact the Veterans Office for clarification of this policy.

**Program of Study** Students using VA educational benefits must be enrolled in an approved degree or certificate program and only courses applicable toward the degree or certificate and their prerequisites can be certified for VA payment.

**Academic Standards** Students using VA educational benefits will be required to follow all Lane's GPA requirements in accordance with the Academic Standards outlined in this catalog. Each student applying for VA educational benefits will receive a copy of the Standards of Academic Progress for Using VA Benefits at the time of initial certification. These standards apply to all eligible persons using educational benefits administered by the VA.

**Unsatisfactory Progress** The Veterans' Administration will be notified if a student fails to meet the minimum standards of academic progress for three consecutive terms, or receives all "F", "NC," or "NP" grades in any one term, in accordance with Lane's procedures for academic standards. In order to have VA educational benefits reinstated after unsatisfactory progress, a student must satisfactorily complete a subsequent term. The student will be reimbursed retroactively by the VA after completion of a successful term.

## Schedule Changes, Drops and Adds

**Within Drop Period** If courses are dropped any time during the first four weeks of the term, the student is paid at the previous rate up to the date the course is dropped.

**After Drop Period** The VA allows a student to withdraw up to six credits one time only after the fourth week of the term and assumes that there are mitigating circumstances; hence, benefits will be paid at the previous rate until the date the course(s) is dropped. Outside of this one-time, six credit exclusion to the "mitigating circumstances" rule, unless mitigating circumstances are submitted and accepted by the VA, any reduction in credit load after the fourth week of the term will result in an overpayment retroactive back to the first day of the term. If there are "mitigating circumstances" involved in the reduction of credits, documentation and a statement by the student must be submitted to the Veterans Office to be forwarded to the VA for determining any overpayment.

**Prior Credits (Transcripts)** Students applying for Veterans' benefits at Lane who have received college credits prior to entry at Lane—either using VA educational benefits or not—must provide transcripts to Lane. Unless all transcripts are submitted to Lane during the student's first three terms of enrollment, subsequent enrollment periods cannot be certified.

## Supplemental Information

- Students may not repeat any classes previously passed.
- Students will be paid for only those specific courses required in their declared major and any prerequisites.
- If a passing grade was not received in a program's required course, excluding electives, it can be repeated once again for VA payment.
- In order for a student to take prerequisites for major requirements for VA payment in math and writing, testing results from Testing Services must indicate they are necessary.

## Web Access

- Check Lane's home page for the latest information about Lane. ([lanecc.edu](http://lanecc.edu))
- Choose "ExpressLane/myLane" for class registration (add or drop), view your account, pay your bill, view your class schedule, request a transcript, view term grades, and check your financial aid status. Review important ExpressLane/myLane announcements. ([lanecc.edu/explane/index.htm](http://lanecc.edu/explane/index.htm))
- Choose "Student Services" for information about dozens of services including an updated "Student Alert" with important current information. ([lanecc.edu/stuser/stuser.htm](http://lanecc.edu/stuser/stuser.htm))
- The Counseling page provides information about Counseling services, including a list of staff pages with pictures, office location, e-mail addresses and more. ([lanecc.edu/stuser/coundept.htm](http://lanecc.edu/stuser/coundept.htm))
- The Advising page has information on planning your classes, who your assigned counselor is, and a glossary of advising terms. ([lanecc.edu/stuser/acadv.htm](http://lanecc.edu/stuser/acadv.htm))
- Choose "AskLane" to ask questions about processes related to attending Lane. ([lanecc.edu](http://lanecc.edu))

## Women's Program

Building 1, Room 202, 541.463.5353, [lanecc.edu/wp](http://lanecc.edu/wp)

The Women's Program provides integrated, comprehensive services and programs for women and a variety of gender equity activities and projects. The program ensures that women students have access to programs and services tailored to their needs and that the campus climate is sensitive to gender issues. Major program components include the Women's Center, Women in Transition, Career Technical Education advising, and Transiciones.

**Mission Statement** The mission of the Women's Program is to provide an educational environment where women are empowered to improve their lives.

**Purpose** The Women's Program:

- focuses on women's strengths and capacities.
- offers women of diverse backgrounds opportunities to create community and pursue education and life goals.
- promotes the college's ability to build and sustain a welcoming and supportive learning environment for women and create gender equity throughout the college community.
- offers programs, advocacy, information, classes, advising, support services, counseling and referral, and maintains and strengthens relationships with the community.

**Women's Center** The Women's Center acts as a supportive entry point to the college as well as providing services to assist women to stay in school. The center provides information, resource and referral, crisis intervention, advocacy, advising, and individual support. The center maintains bulletin boards on upcoming events and groups, has computer stations for students, has a library focused on women's and gender issues, and a lounge area with coffee and tea. Both drop-in services and individual appointments are available.

**Women in Transition** Women in Transition empowers women in transition to become economically self-sufficient and improve their lives through access to education. The program forms a learning community that includes:

- one-term, seven-credit core classes focusing on life/career planning, decision making/goal setting, self-exploration, and esteem-building
- optional classes in effective learning, math, writing, college success, physical education, and computer skills
- limited assistance with tuition and books
- individual advising
- follow-up services
- evening and online Transiciones classes offered most terms
- a follow-up Life Transitions 2 class

**Transiciones** Transiciones is a bridge program to help Spanish speaking women explore educational options and transition to credit classes. The program offers bilingual/bicultural advising, workshops, and credit and noncredit classes. For more information, call 541.463.3253.

**Transiciones** Transiciones es un programa que ayuda a la mujer Latina, que habla español, encontrar su camino educativo y carera. El programa consiste en dos cursos y conserjería académica. Los cursos se llaman Transiciones y Teniendo Éxito en la Universidad. El curso de Teniendo Éxito en la Universidad se puede tomar por crédito o no. Este programa le ayuda entender y hacer planes realísticos de cómo aplicar para entrar en la escuela, becas, hacer un plan de estudio, y un plan de carera. Para más información llame a Judith Castro 541.463.3253 y deje un mensaje lentamente con su teléfono.

**Career and Technical Education Advising** The Career and Technical Education advisor assists Women in Transition and Transiciones students in exploring the CTE programs offered at Lane. The advisor provides information, advising, group activities, workshops and other experiences that will assist students as they learn about one- and two-year training programs and other avenues to high-wage, high-demand employment.

Other activities of the Women's Program include working with departments to develop classes and services which meet women's needs, organizing workshops and events, providing leadership on gender equity issues and assisting with sexual harassment and gender based complaints.





## Degrees and Certificates

**Certificates** Certificates are granted for satisfactory completion of a state-approved certificate program. All English composition and math requirements must be completed with a “C-” grade or better, unless otherwise noted by the sponsoring department.

**Degrees** Associate degrees are granted for satisfactory completion of a prescribed program of 90 credits or more. Lane offers five associate degrees:

- Associate of Arts Oregon Transfer
- Associate of Applied Science
- Associate of General Studies
- Associate of Science
- Associate of Science Oregon Transfer: Business

Each student should consult with a counselor or advisor to determine an appropriate degree or certificate program.

### General Education and Core Abilities

General education helps students develop knowledge and abilities useful to all programs of study. The purpose of general education at Lane Community College is to foster wisdom through educational depth and breadth. General education at Lane has the following goals:

- to encourage exploration of the academic disciplines: liberal arts, sciences, mathematics, information sciences, and social sciences
- to promote understandings of self, society and the environment crucial to citizens of a diverse global community
- to cultivate habits of mind and heart essential to lifelong learners

### Core Ability Outcomes Statements

Students completing general education will:

**Communicate effectively** Courses fulfilling this outcome may require students to:

- demonstrate understanding and use of effective and respectful listening, interpersonal, small group/collaborative, and public communication skills among diverse populations
- demonstrate effective writing skills through principles of clear thinking; awareness of audience; appropriate conventions of format, structure, and language; and clear thesis development
- be able to read critically for information; develop new ways of seeing and understanding the world; understand points of view and multiple perspectives
- demonstrate general information literacy: critically analyze, synthesize, and evaluate various forms of information including written texts and other media
- develop understanding of another culture through language study

**Think critically and solve problems effectively** Courses fulfilling this outcome may require students to:

- apply the scientific method, incorporating the appropriate mathematical skills or processes as needed in various problem solving contexts
- interpret, translate, and communicate quantitative information expressed in mathematical notation, graphs, charts, tables, symbols, or standard English
- interpret and make inferences from data; estimate outcomes where appropriate
- determine whether conclusions or solutions are reasonable, using inductive and deductive reasoning
- apply technology competently, selecting and using tools appropriate to tasks

**Increase understanding of the relationship between self and community, including self-awareness and personal responsibility.**

Courses fulfilling this outcome may require students to:

- describe interacting facets of environmental and personal health, and identify steps to protect and preserve environmental resources
- plan, implement, and evaluate lifestyle change strategies which contribute to optimal physical and mental health
- describe core aspects of today's integrated global society, including historical perspective, cross-cultural variation, gender issues, as well as group function, interaction and change

**Explore academic disciplines of liberal arts, social sciences, and physical sciences.** Courses fulfilling this outcome may require students to:

- value artistic expression and human creativity
- understand fundamental concepts of physical and life sciences
- understand diverse roots of our nation and world civilizations
- understand the role and appropriate uses of technology in our global society

**Associate Degree or Certificate Requirements** Candidates for an associate degree (AAOT, AAS, AS, AGS, or ASOT - Business) must meet the following requirements:

**Total Credits** Complete the number of credits as required for the individual degree, including Foundational Requirements and Discipline Studies

**Minimum Credits at Lane** Complete at least 24 credits at Lane  
**Grade Point Average** Earn a cumulative GPA of not less than 2.00 at Lane

**Pass/No Pass** Students may select P/NP option up to 16 credits toward a degree/certificate, except as specified by AAS or Certificate programs. This does not include courses only offered P/NP

**Credit-by-Exam and Credit-by-Assessment** credits used toward a degree/certificate may not exceed 25% of total degree credits

Lane does not authorize individual departments to waive general education requirements. The Academic Requirements Review Committee will consider petitions to substitute a college General Education requirement. Petitions are available on the web at [lanec.edu/es/forms.html](http://lanec.edu/es/forms.html). For additional information, see page #.

**Limits on Sequential Courses** Lane promotes skill proficiency development. Therefore, lower level courses taken after completing a higher level course with a grade of C- or greater will not meet degree requirements, i.e., MTH 070 taken after MTH 111 completion. Students who complete courses in mathematics and writing may later elect to complete prerequisite courses, but these prerequisite courses may not then be credited toward a degree or certificate. Such “regression” may be desirable for review and relearning, but it does not count toward accumulating either required or elective credits for any degree or certificate.

**Earning a Second Degree** A student working toward a second degree must complete an additional 24 credit hours of course work. These additional hours must be completed at Lane and are in addition to the 24 credit minimum required to earn any degree or certificate. No additional credits are required for related certificates.



**Suggested Course of Study** Recognition awards and other evidence of program or course completion may be granted, depending upon the nature of the programs and the decision of the administration and faculty. In some cases, for example, a student can earn an award from an instructional department for completion of a suggested course of study. However, a suggested course of study is different from a career and technical program in which a student earns a degree or certificate in a vocational major issued by the Lane Board of Education and approved by the Oregon Department of Education.

### To Apply for a Degree or Certificate

Students are encouraged to apply for degrees or certificates within 3 terms of completion. Students must have completed 12 credits at Lane to apply. Application forms are available online at [lanec.edu/es/forms.html](http://lanec.edu/es/forms.html) and may require a fee.\* The "Application for Diploma" form may be mailed to Enrollment and Student Financial Services or submitted in the drop box in the lobby of building 1 on main campus.

\*\$20 fee for the Oregon Transfer Module notation on transcript; \$10 fee for duplicate or additional copies of diploma parchment

### Application Guidelines

A student has three terms (including the term of application) in which to complete the degree or certificate. Students not completing within three terms of applying must reapply. A student attending less than full-time (12 credits) should take this into consideration at the time of application in order to complete within the three terms.

Applicants must apply by April 30 each year to ensure (1) publication in the commencement booklet for that year, (2) earliest processing for completed degrees and certificates on their transcripts. Review for degree/certificate completion takes 10 - 15 business days following the end of each term.

### Graduation Ceremony

Lane hosts one graduation ceremony each year at the end of spring term. Detailed information about the commencement ceremony is available from the office of Student Life and Leadership Development. All students are eligible to participate in commencement.

### Degree and Certificate Limitations

All state approved degrees and career and technical programs are designed for full-time students completing at least 45 credit hours per year. However, the College recognizes many students earning degrees and certificates are not able to complete a full-time course load each term.

Program requirements evolve over time to reflect changes in knowledge, technology and professional standards. Programs also may be discontinued, depending on departmental review and budgetary decisions. Therefore, a part-time student must work closely with counselors, advisors and program coordinators to meet appropriate and current degree and certificate requirements. The following policies apply to students seeking degrees or certificates:

- Candidates for AAOT, AGS, AAS, AS, and ASOT - Business degrees or two-year certificates entering Lane credit programs

prior to June 2011, and graduating by June 30, 2015, may use the requirements listed for graduation in this catalog or in any subsequent catalog. Candidates for one-year certificates who enter Lane credit programs prior to June 2011, and graduate by June 30, 2013, may use the requirements listed for graduation in this catalog or in any subsequent catalog.

- A candidate who does not complete a program within the above timeframes must meet graduation requirements and policies of the appropriate subsequent catalog. Program coordinators also may require such a candidate to repeat courses, or complete revised courses to meet updated program standards. Most courses do not expire within this timeframe.
- Students completing fewer than six credits per term should consult Counseling and Advising to determine which catalog year and program requirements to follow to achieve their goals.

### Transfer Limitations for Degrees and Certificates

The following policies apply to transfer course work:

- Lane uses course work from colleges and universities that are regionally accredited by:
  - Middle States Association of Colleges and Schools, Middle States Commission on Higher Education
  - New England Association of Schools and Colleges Commission on Institutions of Higher Education
  - New England Association of Schools and Colleges Commission on Technical and Career Institutions
  - North Central Association of Colleges and Schools the Higher Learning Commission
  - Northwest Commission on Colleges and Universities
  - Southern Association of Colleges and Schools Commission on Colleges
  - Western Association of Schools and Colleges, Accrediting Commission for Community and Junior Colleges
  - Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities

The college or university must have been accredited or be a candidate for accreditation when the course work was taken. If the school was a candidate for accreditation, documentation is required.

- For college coursework done outside the US, students need to have transcripts reviewed by an evaluation service. Lane will need to receive a course-by-course evaluation or a detailed report. Students may use an agency of their choice found at the NACES site, [naces.org](http://naces.org), and the official report should be mailed directly to Lane Community College.
- Lane uses Advanced Placement (AP) depending on test and score; CLEP, depending on test and score; DANES Subject Standardized Tests (DSST), depending on test and score; American Council of Education (ACE) as recommendations apply; International Baccalaureate (IB) depending on test and score; Military DD214 for Physical Education only, with official required reports. Please see [lanec.edu/collegecatalog/transfertolcc.html](http://lanec.edu/collegecatalog/transfertolcc.html). Transfer grades are considered "P" (Pass).
- Credit-by-Assessment and Credit-by-Exam may be granted for some courses and for a maximum of 25 percent of the degree or certificate. For information on these options, contact Enrollment and Student Financial Services.
- Coursework at 300 levels or above may require instructional department review on a case by case basis.

All documents submitted to Lane Community College become the property of Lane and are subject to federal law, The Family Education Rights and Privacy Act (FERPA).

### Student Outcomes Assessment

For the purpose of assuring a high quality learning environment, Lane Community College conducts outcomes assessments to measure student learning. Students may be asked to participate in satisfaction surveys, compile portfolios of academic work, take achievement or licensure exams, or demonstrate skills in other

ways. The purpose in all these activities is to monitor the quality of learning at Lane and provide evidence to evaluate and improve programs. Participants can be assured that all assessment results will be treated with strictest professional confidentiality. Results appearing in Lane assessment reports and other public documents are presented anonymously, and no student is individually identified. Students are strongly encouraged to participate to the best of their abilities in these assessment efforts.

### Credit Student Outcomes

The following summary of first-time degree-seeking students entering Lane Community College in fall 2005 is provided in accordance with the federal Student-Right-to-Know act. More information about students and student outcomes at Lane is available at [lanec.edu/research/ir/index.html](http://lanec.edu/research/ir/index.html) or from Institutional Research, Assessment and Planning, 541.463.5576.

From a 2006 cohort of 670 full-time, first-time, degree/certificate-seeking students, 49 completed a degree by spring 2009 (7 percent) and of those remaining, 136 transferred to another higher education institution (20 percent).

In 2009, Lane surveyed 2007-08 graduates and students who completed a majority of degree requirements before leaving Lane. According to the 347 survey respondents:

- 97 percent achieved their goals at Lane.
- 84 percent of students from career and technical programs were employed in jobs related to their field of study after leaving Lane.
- 87 percent of these career and technical students reported Lane's courses were "Very Relevant" or "Relevant" to their jobs.
- 80 percent of students from transfer programs had continued their education after leaving Lane.
- 81 percent of these transfer students reported Lane prepared them "Well" or "Very Well" for classes at their new institution.

## Associate of Arts Oregon Transfer Degree

Any student having the Associate of Arts Oregon Transfer (AAOT) degree recognized on an official college transcript will have met the lower division general education requirements of baccalaureate degree programs of any institution in the Oregon University System.

Students transferring under this agreement will have junior status for registration purposes. Course, class standing, or GPA requirements for specific majors, departments or schools are not necessarily satisfied by an AAOT degree.

### Guidelines

A student must complete a total of 90 quarter credits to be awarded the AAOT.

All courses should be aligned with the student's intended program of study and the degree requirements of the baccalaureate institution to which the student plans to transfer. A student is encouraged to work with an advisor in the selection of courses.

All Foundational Requirements and Discipline Studies courses must be a minimum of 3 credits, except for Health/Wellness/Fitness courses, which may be any number of credits. All Elective courses may be any number of credits.

All courses must be passed with a grade of "C-" or better. Students must have a minimum cumulative GPA of 2.0 at the time the AAOT is awarded.

### Foundational Requirements

**Writing: 8 credits.** Students taking writing classes of three credits each must take WR 121, 122, and either WR 123 or 227. Students taking writing classes of 4 credits each must take WR 121 and either WR 122 or 227. Information Literacy will be included in the Writing Requirement

**Oral Communication: One course** in the fundamentals of speech or communication from the list on page 45.

**Mathematics: One course** in college-level mathematics, for which Intermediate Algebra is a prerequisite.

**Health/Wellness/Fitness: One or more courses** totaling at least three credits from the list on page 45-46.

### Discipline Studies

**Cultural Literacy: One course** from any of the discipline studies from the list on page 44-45.

**Arts and Letters: Three courses** chosen from two or more disciplines from the list on page 42.

**Social Sciences: Four courses** chosen from two or more disciplines from the list on page 43.

**Science/Math/Computer Science: Four courses** from at least two disciplines including at least three laboratory courses in biological and/or physical science from the lists on pages 44.

### Electives

Any college-level course that would bring total credits to 90 quarter hours including up to 12 credits of Career and Technical Education. Career and Technical course prefixes are listed on page 41.

### Notes and Clarifications

1. Writing courses must meet the specific course outcomes as identified by Oregon Writing and English Advisory Council. In addition, the group of courses that is sufficient for meeting this requirement must, together, provide all of the content recommended by the Oregon Writing and English Advisory Committee (OWEAC), including a research component.

2. Although they are important in terms of preparation, courses that are developmental in nature are designed to prepare students for college-level work and are not counted in the 90 quarter hours required for the AAOT.

3. The "Foundational Requirements" above represent minimal skill competencies. As such, they may be open to demonstration of competency.

4. Computer Science courses used in the Science/Math/Computer Science area must meet Oregon Council of Computer Chairs criteria for a science course. Math courses listed in the Science/Math/Computer Science area must meet the outcomes and criteria for Mathematics.

5. All Foundational Requirement courses and Discipline Studies courses must meet the statewide outcomes and criteria for the specific area.

6. The second year of a foreign language, but not the first year, may be included among courses that count toward the Arts and Letters requirement. American Sign Language (ASL) is considered a foreign language.

7. WR 115 may be included in the AAOT degree as an elective

providing that the WR 115 course at the community college has been approved by the Department of Community Colleges and Workforce Development as meeting statewide learning outcomes for the course.

8. The principal advantage of the AAOT is that it fulfills the lower division (freshman/sophomore) General Education requirements for Baccalaureate degrees at all OUS institutions. It does not necessarily meet all of the degree requirements that an OUS institution might have beyond the requirements for majors. The AAOT guarantees that all general education credits that a student earned will be accepted as the general education requirements at the receiving institution.

9. In some cases, students may also be able to use AAOT General Education courses to meet certain lower-division requirements in their intended majors. Here, caution is required, however, since the AAOT degree was not intended for this purpose. Students who have a major in mind, and also want to maximize the amount of AAOT coursework that will count toward it, should work closely with an academic adviser and make use of the ATLAS system when designing their AAOT degrees. General transfer information is available at: [ous.edu/stucoun/prospstu/transfer.php](http://ous.edu/stucoun/prospstu/transfer.php)

For students intending to become teachers, specific recommendations on structuring their AAOT degrees are given at: How to become an Oregon Teacher, [ous.edu/programs/teached/files/AdvisingGuide2008Final.pdf](http://ous.edu/programs/teached/files/AdvisingGuide2008Final.pdf)

10. Because the amount of coursework required for an AAOT degree corresponds to 2 academic years, degree recipients are considered juniors for purposes of registration at an Oregon University System institution. Students should keep in mind, however, that the AAOT does not guarantee that 2 additional years will suffice to earn a Baccalaureate degree. That is because the AAOT does not give students junior standing in their majors. Neither does it guarantee entrance into a competitive major. Students may need to take additional introductory work to prepare for certain majors and should check with an advisor regarding availability at their local community colleges. In addition, it's not uncommon for students to change their majors and find that they must go back and take introductory work in the new area.

11. Students and academic advisers should recognize that although the AAOT provides an excellent structure for many students -- particularly, those who are unsure of their primary academic focus -- it is not ideal for everyone. In particular, it does not articulate well with certain majors such as engineering, biological and physical sciences, and the fine and performing arts. Students contemplating these majors cannot easily accommodate their highly-specific pre-requisite coursework into the AAOT framework. In general, an AAOT recipient who is pursuing any course of study that is credit-heavy at the major lower division level may have to take additional lower-division coursework, specifically for the major, after transfer. Students contemplating such majors should consult closely with an advisor.

**Students may include up to twelve career and technical elective credits in the Associate of Arts: Oregon Transfer (AAOT) and Associate of Science degrees from Lane Community College.** Policies on accepting career and technical credits vary at the four-year colleges in Oregon, especially for students planning a direct transfer without completing the AAOT. Consult an academic adviser about taking career and technical courses as electives for direct transfer to a four-year institution.

Career technical courses are identified by the following prefixes:

AB	Auto Body
AM	Automotive
APR	Apprenticeship
AS	Aerospace Science
AUD	Audio Production
AV	Aviation Maintenance
BT	Business Technology
CA	Culinary Arts
CST	Construction

DA	Dental Assisting
DH	Dental Hygiene
DRF	Drafting
DS	Diesel
ECE	Early Childhood Education
ET	Electronic Technology
EMT	Emergency Medical Technology
EST	Employment Skills Training
FN	Food and Nutrition
FT	Flight Technology
GD	Graphic Design
GWE	General Work Experience
HDFS	Human Development and Family Studies
HIT	Health Information Technology
HO	Health Occupations
HS	Human Services
HRTM	Hotel, Restaurant, Tourism Management
LA	Legal Assistant
LAT	Landscape Architecture Technology
LGL	Legal Assisting
MA	Medical Assisting
MDP	Multimedia Production
MFG	Manufacturing
MUL	Multimedia
NRG	Energy
OST	Occupational Skills Training
PST	Professional Skills Training
PTA	Physical Therapist Assistant
RE	Real Estate
RM	Retail Management
RT	Respiratory Therapy
RTEC	Regional Technology Education Consortium
SUST	Sustainability
VP	Video Production
WLD	Welding
WATR	Water Conservation

**Notes and Limitations** See "Degrees and Certificates" on page 38-39.

For transfer students graduating from high school in 1997 and thereafter, the Oregon University System has a second language admission requirement: two terms of a college-level second language with an average grade of C- or above, OR two years of the same high school-level second language with an average grade of C- or above, OR satisfactory performance on an approved second language proficiency. Demonstrated proficiency in American Sign Language meets this second language admission requirement.

#### **Approved courses for Oregon Transfer degree programs**

Only the following courses meet the Oregon Transfer Module, Associate of Arts Oregon Transfer degree, and Associate of Science Oregon Transfer: Business degree requirements. There are additional courses which can be used for the AS, AGS and the AAS degrees and certificates which are not listed as approved for statewide transfer programs. See course descriptions in this catalog and the limitations as listed with each of the individual degrees and certificates.

#### **The purpose of general education**

The education of undergraduate students is an essential activity of all Oregon colleges and universities. While undergraduate education needs to provide discipline-specific knowledge and skills through concentrated work in an academic major, it must also help students develop the habits of mind that lead to thoughtful and productive global citizenship. All parts of a well-designed education encourage these habits, but an effective General Education curriculum has this as its explicit goal. To this end, it seeks to promote:

- The capacity for analytical thinking and problem solving;
- The ability to communicate effectively, including listening, observing, speaking, and writing;
- An understanding of the natural world and the role of humans in it;
- An appreciation of the arts and humanities and the richness of human experience and expression;
- An awareness of multiple perspectives and the importance of diversity;



- A sense of societal responsibility, community service, and global citizenship; and
- The ability to develop a sense of direction, with the self-discipline needed for the ethical pursuit of a purposeful life.

## Arts and Letters

### Outcomes

As a result of taking General Education Arts and Letters\* courses, a student should be able to:

- Interpret and engage in the Arts and Letters, making use of the creative process to enrich the quality of life; and
- Critically analyze values and ethics within a range of human experience and expression to engage more fully in local and global issues.

\* "Arts and Letters" refers to works of art, whether written, crafted, designed, or performed, and documents of historical or cultural significance.

### Criteria

A course in Arts and Letters should:

- 1) Introduce the fundamental ideas and practices of the discipline and allow students to apply them.
- 2) Elicit analytical and critical responses to historical and/or cultural works, such as literature, music, language, philosophy, religion, and the visual and performing arts.
- 3) Explore the conventions and techniques of significant forms of human expression.
- 4) Place the discipline in a historical and cultural context, and demonstrate its relationship with other disciplines.
- 5) Each course should also do at least one of the following:

- Foster creative individual expression via analysis, synthesis, and critical evaluation
- Compare/contrast attitudes and values of specific historical periods or world cultures; and
- Examine the origins and influences of ethical or aesthetic traditions.

AIL 201,202,203	Chinuk WaWa
ART 111	Introduction to Visual Arts
ART 115	Basic Design: Fundamentals
ART 116	Basic Design: Color
ART 117	Basic Design: 3-Dimensional
ART 131	Introduction to Drawing
ART 200	Graphic Design History
ART 202	Survey of Western Art
ART 203	Survey of American Indian Art and Architecture: North and Central America
ART 204,205,206	History of Western Art
ART 207,208,209	History of Asian Art: India, China, Japan
ART 210	The Photographic Vision
ART 211	Survey of Visual Arts: Early Modern Art
ART 212	Survey of Visual Arts: Modern Art
ART 214	American Art
ART 217	Islamic Art
ART 231,232	Drawing: Intermediate; Perspective
ART 234	Drawing: Figure
ART 250	Ceramics: Hand Building
ART 251	Ceramics: Wheel Throwing
ART 253	Ceramics: Intermediate
ART 261,262	Photography 1,2
ART 270	Printmaking, Intaglio
ART 271	Printmaking, Relief
ART 272	Printmaking, Monotype, Collograph
ART 275	Silkscreen
ART 276	Sculpture: Introduction
ART 277,278	Sculpture: Welding; Wood
ART 281,284	Painting: Introduction; Intermediate
ART 285	Adv Silkscreen
ART 291	Sculpture: Metal Casting
ART 293	Sculpture: Figure
ART 294,295	Watercolor: Introduction; Intermediate
D160	Dance Composition
D 251	Looking at Dance
D 256	Body Fundamentals/Body as Knowledge
D 260	Group Choreography
ENG 100	Children's Literature

ENG 104,105,106	Introduction to Literature: Fiction, Drama, Poetry
ENG 107,108,109	Survey of World Literature
ENG 121	Detective Fiction
ENG 151	Black American Literature
ENG 194	Literature of Comedy
ENG 195,196,197	Introduction to Film Studies
ENG 201,203	Shakespeare
ENG 204,205	Survey of British Literature
ENG 213	Survey of Asian Literature
ENG 215	Latino/a Literature
ENG 222	Literature and Gender
ENG 232	Native American Literature
ENG 240	Nature Literature
ENG 243	Native American Autobiography
ENG 244	Asian American Literature
ENG 250	Introduction to Folklore and Mythology
ENG 253,254	Survey of American Literature
ENG 257	The American Working Class in Fiction and Non-Fiction
ENG 260	Introduction to Women Writers
ENG 261	Science Fiction
ENG 270	Bob Dylan: American Poet
ENG 271,272,273,276	Film Genre: Varied Topics
ES 244	Native American Storytelling
FA 255	Understanding Movies: American Cinema
FA 263	Film in the Fifties
FA 264	Women Make Movies
FA 265	African American Film Images
FR 201,202,203	Second Year French
HUM 100	Humanities Through the Arts
J 134	Photojournalism
J 216	Newswriting 1
MUS 101	Music Fundamentals
MUS 108	Music in World Cultures
MUS 111,112,113	Music Theory 1
MUS 118,119	Music Technology MIDI/Audio 1,2
MUS 201,202,203	Introduction to Music and Its Literature
MUS 205	Introduction to Jazz History
MUS 211,212,213	Music Theory 2
MUS 261,262,263	Music History
MUS 264,265,266	History of Rock Music 1,2,3
SP 100	Basic Communication
SP 105	Listening and Critical Thinking
SP 111	Fundamentals of Public Speaking
SP 112	Persuasive Speech
SP 115	Introduction to Intercultural Communication
SP 130	Business and Professional Speech
SP 218	Interpersonal Communication
SP 219	Small Group Discussion
SP 220	Communication, Gender and Culture
SP 262	Voice and Articulation
SPAN 201,202,203	Spanish, Second Year
TA 140	Acting Shakespeare
TA 141,142,143	Acting 1,2,3
TA 241,242,243	Intermediate Acting
WR 241	Introduction to Imaginative Writing: Fiction
WR 242	Introduction to Imaginative Writing: Poetry
WR 255	The Poet in the City

## Social Science

### Outcomes

As a result of taking General Education Social Science courses, a student should be able to:

- Apply analytical skills to social phenomena in order to understand human behavior; and
- Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

### Criteria

An introductory course in the Social Sciences should be broad in scope. Courses may focus on specialized or interdisciplinary subjects, but there must be substantial course content locating the subject in the broader context of the discipline(s). Approved courses will help students to:

- 1) Understand the role of individuals and institutions within the context of society.
- 2) Assess different theories and concepts, and understand the distinctions



- between empirical and other methods of inquiry.
- 3) Utilize appropriate information literacy skills in written and oral communication.
  - 4) Understand the diversity of human experience and thought, individually and collectively.
  - 5) Apply knowledge and skills to contemporary problems and issues.

ANTH 101	Physical Anthropology
ANTH 102	World Archaeology
ANTH 103	Cultural Anthropology
ANTH 227,228	Prehistory of Mexico; Cultures of Mexico
ANTH 229	Chicano Culture
ANTH 231,232,233	American Indian Studies
CJA 214	Introduction to Forensic Science
ECON 200	Principles of Economics: Introduction to Economics
ECON 201	Principles of Economics: Introduction to Micro Economics
ECON 202	Principles of Economics: Introduction Macro Economics
ECON 204	Introduction to International Economics
ECON 250/ES 250	Class, Race, and Gender in the U.S. Economy
ECON 260	Introduction to Environmental and Natural Resource Economics
ES 101	Historical Racial and Ethnic Issues
ES 102	Contemporary Racial and Ethnic Issues
ES 211	Chicano/Latino Experience: Historical and Ideological Perspectives
ES 212	Chicano/Latino Experience: Political and Ideological Perspectives
ES 213	Chicano/Latino Experience: Contemporary Identity and Cultural Issues
ES 221	African American Experience: Down From the Pyramids, Up From Slavery 10,000 BCE-1877
ES 222	African American Experience: Aspiration 1877-1945
ES 223	African American Experience: A Luta Continua: The Struggle Continues 1945 to Present
ES 231	Asian American Experience: First and Second Generation
ES 232	Asian American Experience: Social Movements of the 20th Century
ES 233	Asian American Experience: Contemporary Issues in Asian America
ES 241	Native American Experience: Consequences of Native American and European Contact
ES 242	Native American Experience: Nineteenth Century Federal-Indian Relations
ES 243	Native American Experience: Contemporary Native American Issues
ES 250/ECON 250	Class, Race, and Gender in the U.S. Economy
GEOG 141	Natural Environment
GEOG 142	Introduction to Human Geography
GEOG 201	World Regional Geography
GIS 245	Maps and Spatial Information
GIS 246	Introduction to GIS
GIS 248	Applications in GIS
HST 101,102,103	History of Western Civilization
HST 104,105,106	World History
HST 195	History of the Vietnam War
HST 201,202,203	History of the United States
HST 207	History of the American West
HST 208	U.S. History Since 1945
HST 209	American History: The Civil War
HST 266	U.S. Women's History
PHL 201	Ethics
PHL 202	Theories of Knowledge
PHL 203	Theories of Reality
PHL 205	Contemporary Moral Issues
PHL 221	Critical Thinking
PS 104	Problems in U.S. Politics/Film 1
PS 105	Problems in U.S. Politics/Film 2
PS 201,202	U.S. Government and Politics
PS 203	State and Local Government and Politics
PS 204	Introduction to Comparative Politics
PS 205	International Relations
PS 208	Introduction to Political Theory
PS 211	Peace and Conflict Studies: Global
PS 212	Peace and Conflict Studies: National

PS 213	Peace and Conflict Studies: Local
PS 225	Political Ideology
PS 275	Legal Processes Through Civil Rights and Liberties
PS 297	Environmental Politics
PSY 201,202,203	General Psychology
PSY 214	Introduction to Personality
PSY 215	Lifespan Developmental Psychology
PSY 216	Social Psychology
PSY 218	Multicultural Psychology
PSY 235,236	Human Development 1,2
PSY 239	Introduction to Abnormal Psychology
REL 201	Religions of India (Hinduism, Buddhism)
REL 202	Religions of China and Japan (Taoism, Confucianism, Buddhism, and Shinto)
REL 203	Religions of the Middle East (Judaism, Christianity, and Islam)
REL 230	Christian Beginnings
REL 243	Nature, Religion, and Ecology
SOC 204	Introduction to Sociology
SOC 205	Social Stratification and Social Systems
SOC 206	Institutions and Social Change
SOC 207	Women and Work
SOC 208	Sport and Society
SOC 210	Marriage, Family and Intimate Relations
SOC 211	Social Deviance
SOC 213	Race and Ethnicity
SOC 215	Social Class
SOC 216	Global Social Movements
SOC 218	Sociology of Gender
SOC 225	Social Problems
WS 101	Introduction to Women's Studies

### Mathematics

#### Outcomes

As a result of taking General Education Mathematics courses, a student should be able to:

- Use appropriate mathematics to solve problems; and
- Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

#### Criteria

A collegiate level Mathematics course should require students to:

- 1) Use the tools of arithmetic and algebra to work with more complex mathematical concepts.
- 2) Design and follow a multi-step mathematical process through to a logical conclusion and judge the reasonableness of the results.
- 3) Create mathematical models, analyze these models, and, when appropriate, find and interpret solutions.
- 4) Compare a variety of mathematical tools, including technology, to determine an effective method of analysis.
- 5) Analyze and communicate both problems and solutions in ways that are useful to themselves and to others.
- 6) Use mathematical terminology, notation and symbolic processes appropriately and correctly.
- 7) Make mathematical connections to, and solve problems from, other disciplines.

### Science or Computer Science

#### Outcomes

As a result of taking General Education Science or Computer Science courses, a student should be able to:

- Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models and solutions and generate further questions;
- Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically evaluate existing or alternative explanations, solve problems, and make evidence-based decisions in an ethical manner; and
- Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

#### Criteria

A General Education course in either Science or Computer Science should:

- 1) Analyze the development, scope, and limitations of fundamental scientific concepts, models, theories, and methods.
- 2) Engage students in problem-solving and investigation, through the application of scientific and mathematical methods and concepts, and by using evidence to create and test models and draw conclusions. The goal should be to develop analytical thinking that includes evaluation, synthesis, and creative insight.
- 3) Examine relationships with other subject areas, including the ethical application of science in human society, and the relevance of science to everyday life.

**In addition,**

A General Education course in Science should:

Engage students in collaborative, hands-on and/or real-life activities that develop scientific reasoning and the capacity to apply mathematics, and that allow students to experience the exhilaration of discovery;

A General Education course in Computer Science should:

Engage students in the design of algorithms and computer programs that solve problems.

**Biological Sciences with laboratories**

BI 101,102,103	General Biology (See note below)
BI 112	Cell Biology for Health Occupations
BI 211	Principles of Biology (formerly BI 201, BOT 201 or Z 201)
BI 212	Principles of Biology (formerly BOT 202 or Z 202)
BI 231,232,233	Human Anatomy and Physiology 1,2,3
BI 234	Introductory Microbiology
BOT 213	Principles of Botany (formerly BOT 203)
Z 213	Principles of Zoology (formerly Z 203)

**Physical Sciences with laboratories**

ASTR 107	Astronomy
CH 104,105,106	Introductory Chemistry 1,2,3
CH 112	Chemistry for Health Occupations
CH 114	Introduction to Forensic Chemistry
CH 221,222,223	General Chemistry 1,2,3
CH 241,242,243	Organic Chemistry
CJA 214	Introduction to Forensic Science
ENVS 181	Terrestrial Environment
ENVS 182	Atmospheric Environment and Population
ENVS 183	Aquatic Environment
ENVS 184	Global Climate Change
G 101	Earth's Dynamic Interior
G 102	Earth's Dynamic Surface
G 103	Evolving Earth
G 146	Rocks and Minerals
G 147	National Parks
G 201	Earth Materials and Plate Tectonics
G 202	Earth's Surface Systems
G 203	Evolution of the Earth
GIS 245	Maps and Spatial Information
GIS 246	Introduction to GIS
GIS 248	Applications in GIS
GS 101	General Science (Nature of the Northwest)
GS 104,105,106	Physical Science
GS 142	Earth Science: Earth Revealed <b>+L</b>
GS 147	Oceanography <b>+L</b>
PH 101,102,103	Fundamentals of Physics
PH 201,202,203	General Physics
PH 211,212,213	General Physics with Calculus

**+L** must be taken for four credits to include lab

Note: Only one of the BI 101's, and one of the BI 102's, and one of the BI 103's can be used to meet the Science/Math/Computer Science requirements for any Lane degree. Any additional BI 101, 102, or 103 course credits will only be used as electives for a Lane degree. (See the course description section of this catalog for more information.)

**Other Science/Math/Computer Science Courses (non-laboratory)**

ANTH 101	Physical Anthropology
ASTR 121	Astronomy of the Solar System
ASTR 122	Stellar Astronomy
ASTR 123	Cosmology and the Large-Scale Structure of the Universe
CS 160	Orientation to Computer Science
CS 161,162	Computer Science 1,2
CS 233	Advanced Programming
CS 260	Data Structures 1
CS 271	Computer Architecture and Assembly Language
GEOG 141	Natural Environment
GIS 245	Maps and Spatial Information
GIS 246	Introduction to GIS
GIS 248	Applications in GIS
GS 142	Earth Science: Earth Revealed

GS 147	Oceanography
MTH 105	Introduction to Contemporary Mathematics
MTH 111	College Algebra
MTH 112	Trigonometry
MTH 211,212,213	Fundamentals of Elementary Math 1,2,3
MTH 231,232,233	Discrete Mathematics 1,2,3
MTH 241,242	Elementary Calculus 1,2
MTH 243	Introduction to Probability and Statistics
MTH 251	Calculus 1 (Differential Calculus)
MTH 252	Calculus 2 (Integral Calculus)
MTH 253	Calculus 3 (Infinite Series and Sequences)
MTH 254	Vector Calculus 1 (Introduction to Vectors and Multi dimensions)
MTH 255	Vector Calculus 2 (Introduction to Vector Analysis)
MTH 256	Applied Differential Equations
MTH 261	Introduction to Linear Algebra
PSY 212	Introduction to Learning
PSY 213	Intro Physiological Psychology
PSY 217	Introduction to Experimental Psychology

**Cultural Literacy**

Cultural Literacy outcomes will be included in courses that meet the outcomes and criteria of a Discipline Studies requirement.

**Outcomes**

As a result of taking a designated Cultural Literacy course, learners would be able to:

- Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

**Criteria**

A course with the Cultural Literacy designation will:

- 1) Explore how culturally-based assumptions influence perceptions, behaviors, and policies.
- 2) Examine the historical bases and evolution of diverse cultural ideas, behaviors, and issues.

Each course may also do one or more of the following:

- Critically examine the impact of cultural filters on social interaction so as to encourage sensitivity and empathy toward people with different values or beliefs.
- Investigate how discrimination arises from culturally defined meanings attributed to difference.
- Analyze how social institutions perpetuate systems of privilege and discrimination.
- Explore social constructs in terms of power relationships.

The following courses fulfill the Cultural Literacy Requirement for the AAOT degree. A course taken to meet the Cultural Literacy Requirement will also be used to satisfy Discipline Studies Requirements. The credits for such courses will only be counted once toward the 90 credits required to complete the degree.

**Arts and Letters**

ART 207,208,209	History of Asian Art: India; China; Japan
ART 217	Islamic Art
ENG 107,108,109	Survey of World Literature
ENG 151	Black American Literature
ENG 213	Survey of Asian Literature
ENG 215	Latino/a Literature
ENG 222	Literature and Gender
ENG 232	Native American Literature
ENG 243	Native American Autobiography
ENG 244	Asian American Literature
ENG 250	Introduction to Folklore and Mythology
ENG 257	The American Working Class in Fiction and Non-Fiction
ENG 260	Introduction to Women Writers
ES 244	Native American Story Telling
FA 264	Women Make Movies
FA 265	African-American Film Images
MUS 108	Music in World Cultures
MUS 205	Introduction to Jazz History
SP 115	Introduction to Intercultural Communication
SP 220	Communication, Gender and Culture

**Social Science**

ANTH 103	Cultural Anthropology
ANTH 227,228	Prehistory of Mexico; Cultures of Mexico
ANTH 229	Chicano Culture
ANTH 231,232,233	American Indian Studies
ECON 250/ES 250	Class, Race and Gender in the U.S. Economy
ES 101	Historical Racial and Ethnic Issues
ES 102	Contemporary Racial and Ethnic Issues
ES 211	Chicano/Latino Experience: Historical and Ideological Perspectives
ES 212	Chicano/Latino Experience: Political and Ideological Perspectives
ES 213	Chicano/Latino Experience: Contemporary Identity and Cultural Issues
ES 221	African American Experience: Down From the Pyramids, Up From Slavery 10,000 BCE-1877
ES 222	African American Experience: Aspiration 1877-1945
ES 223	African American Experience: A Luta Continua: The Struggle Continues 1945 to Present
ES 231	Asian American Experience: First and Second Generation
ES 232	Asian American Experience: Social Movements of the 20th Century
ES 233	Asian American Experience: Contemporary Issues in Asian America
ES 241	Native American Experience: Consequences of native American and European Contact
ES 242	Native American Experience: Nineteenth Century Federal-Indian Relations
ES 243	Native American Experience: Contemporary Native American Issues
GEOG 142	Introduction to Human Geography
HST 104,105,106	World History
HST 195	History of the Vietnam War
HST 266	U.S. Women's History
PSY 218	Multicultural Psychology
REL 201	Religions of India (Hinduism, Buddhism)
REL 202	Religions of China and Japan (Taoism, Confucianism, Buddhism, and Shinto)
REL 203	Religions of the Middle East (Judaism, Christianity, and Islam)
SOC 207	Women and Work
SOC 208	Sport and Society
SOC 213	Race and Ethnicity
SOC 215	Social Class
SOC 216	Global Social Movements
SOC 218	Sociology of Gender
WS 101	Introduction to Women's Studies

**Science/Math/Computer Science**

BI 102J	Ethnobotany
BI 103G	General Biology: Global Ecology

**Writing****Outcomes**

As a result of completing the General Education Writing sequence, a student should be able to:

- Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences;
- Locate, evaluate, and ethically utilize information to communicate effectively; and
- Demonstrate appropriate reasoning in response to complex issues.

**Criteria**

A course in Writing should:

- 1) Create a learning environment that fosters respectful and free exchange of ideas.
- 2) Include college-level readings that challenge students and require the analysis of complex ideas.
- 3) Provide guided discussion and model practices that help students listen to, reflect upon, and respond to others' ideas.
- 4) Foster students' ability to summarize and respond in writing to ideas generated by reading and discussion.
- 5) Require a substantial amount of formal and informal writing.

- 6) Emphasize writing as a recursive process of productive revision that results in complete, polished texts appropriate to audience needs and rhetorical situations.
- 7) Foreground the importance of focus, organization, and logical development of written work.
- 8) Guide students to reflect on their own writing, to provide feedback on peers' drafts, and to respond to peer and instructor comments.
- 9) Direct students to craft clear sentences and to recognize and apply the conventions of Edited Standard Written English.
- 10) Provide students with practice summarizing, paraphrasing, analyzing, synthesizing, and citing sources using a conventional documentation system.
- 11) Require appropriate technologies in the service of writing and learning.

**Information Literacy**

Information Literacy outcomes and criteria will be embedded in the Writing Foundational Requirements courses.

**Outcomes**

As a result of taking General Education Writing courses infused with Information Literacy, a student who successfully completes should be able to:

- Formulate a problem statement;
- Determine the nature and extent of the information needed to address the problem;
- Access relevant information effectively and efficiently;
- Evaluate information and its source critically; and
- Understand many of the economic, legal and social issues surrounding the use of information.

**Criteria**

A Writing course infused with Information Literacy should include:

- 1) Instruction and practice in identifying gaps in knowledge and recognizing when information is needed.
- 2) Instruction and practice in finding information efficiently and effectively, using appropriate research tools and search strategies.
- 3) Instruction and practice in evaluating and selecting information using appropriate criteria.
- 4) Instruction and practice in research strategies that are recursive and involve multiple stages such as modification of the original strategy and revision of the topic.
- 5) Instruction and practice in the ethical and legal use of information and information technologies.
- 6) Instruction and practice in creating, producing and communicating understanding of a subject through synthesis of relevant information.

**Speech/Oral Communication****Outcomes**

As a result of taking General Education Speech/Oral Communication courses, a student should be able to:

- Engage in ethical communication processes that accomplish goals;
- Respond to the needs of diverse audiences and contexts; and
- Build and manage relationships.

**Criteria**

A course in Speech/Oral Communication should provide:

- 1) Instruction in fundamental communication theories.
- 2) Instruction and practice of appropriate oral communication techniques.
- 3) Instruction and practice in the listening process.
- 4) Instruction and practice in comprehension, interpretation, and critical evaluation of communication.
- 5) Instruction and practice in adapting verbal and non-verbal messages for the listener and communication contexts.
- 6) Instruction in the responsibilities of ethical communicators.
- 7) Instruction in the value and consequences of effective communication.

**Speech/Oral Communication**

- SP 100 Basic Communication
- SP 111 Fundamentals of Public Speaking
- SP 112 Persuasive Speech
- SP 130 Business and Professional Speech
- SP 218 Interpersonal Communication

**Health/Wellness/Fitness**

- HE 125 Workplace Health and Safety (summer 1997 or later)
- HE 152 Drugs, Society and Behavior
- HE 209 Human Sexuality
- HE 222 Consumer Health
- HE 240 Holistic Health
- HE 250 Personal Health
- HE 252 Personal Health (summer 1997 or later)
- HE 255 Global Health

HE 262 First Responder  
HE 275 Lifetime Health and Fitness

**Or a combination of 3 credits of PE Activity classes**

PE 181C Combination Aerobics  
PE 181D Dance Aerobics  
PE 181K Kickboxing Aerobics  
PE 181S Step Aerobics  
PE 181SB Body Sculpt  
PE 181SS Step and Sculpt  
PE 181Y Yogilates  
PE 183A Conditioning  
PE 183B Exercise and Weight Control  
PE 183C Exercise Walking  
PE 183CG Group Cycling  
PE 183E Fitness Circuits  
PE 183F Fitness Education: Introduction  
PE 183G Fitness Education: Returning  
PE 183J Jogging  
PE 183R Stability Ball Fitness  
PE 183S Strength Training  
PE 183U Strength Training for Women

PE 183W Therapeutic Exercise and Rehabilitation  
PE 185M Meditation  
PE 185T Tai Chi Chuan  
PE 185Y Yoga Beginning  
PE 185YG Gentle Yoga  
PE 185Z Yoga Intermediate  
PE 191A Cross Country Conditioning 1  
PE 191C Cross Country Conditioning 2  
PE 192I Soccer Conditioning 1  
PE 192J Soccer Conditioning 2  
PE 193A Basketball Conditioning 1  
PE 193C Basketball Conditioning 2  
PE 195A Basketball Women's Conditioning 1  
PE 195C Basketball Women's Conditioning 2  
PE 196A Track & Field Conditioning 1  
PE 196D Track & Field Conditioning 2  
PE 197A Baseball Conditioning 1  
PE 197C Baseball Conditioning 2

**Sustainability-focused courses**

BI 103M General Biology: Biodiversity & Sustainability  
HE 255 Global Health and Sustainability

## Associate of Science Oregon Transfer: Business

PS 297 Environmental Politics  
REL 243 Nature, Religion and Ecology

For students who intend to transfer within Oregon, the Associate of Science/Oregon Transfer in Business (ASOT: Business) offers a degree accepted statewide with business-focused general education requirements and electives. Any student with an ASOT: Business degree conforming to the guidelines below, and who transfers to any institution in the Oregon University System (OUS), will have met the lower-division general education requirements of that institution's baccalaureate degree programs. Students transferring with this degree will have junior standing for registration purposes.

Each student must contact the specific OUS business school/program early in the first year of an ASOT: Business degree to be advised about additional requirements and procedures for admission consideration to the OUS institution and the Business school/program.

Admission to the Business school/program of any OUS institution is not guaranteed upon completion of the Associate of Science/Oregon Transfer in Business (ASOT: Business) degree.

### I. Foundational Skills

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

**Writing:**

A minimum of 8 credits of college-transfer writing courses with a grade of "C" or better. Designated courses are: WR 121, WR 122, WR 227.

**Oral Communications:**

A minimum of 3 credits with a grade of "C" or better: SP100, 105, 111, 112, 115, 130, 218, 219, 220, 262.

**Mathematics:**

A minimum of 12 credits with a grade of "C" or better: MTH 111 or above, 4 credits of which must be MTH 243.

**Computer Applications:**

3 to 6 credits with a grade of "C" or better: proficiency in word-

processing, spreadsheet, database, and presentation software as demonstrated by successful completion of appropriate courses. Each student must see an advisor or counselor to determine which course(s) will best meet the requirements of an intended transfer institution. CIS 101, CIS 131, CS 120.

### II. Discipline Studies

Note: Courses must be at least 3 credits each.

**Arts and Letters:**

A minimum of 12 credits, from approved list on page 42 chosen from at least two disciplines.

**Social Sciences:**

A minimum of 12 credits from approved list, with a minimum of eight credits of "principles of economics" (to include microeconomics and macroeconomics) at the 200 level. The courses in economics must be completed with a grade of "C" or better.

**Science:**

A minimum of 12 credits of laboratory courses in the biological or physical sciences from approved list on pages 44.

### III. Business-Specific Requirements

Note: The minimum is 14cr so that 3cr courses will be included. Each course in this section must be completed with a grade of "C" or better.

BA 101 Introduction to Business, 4 credits

BA 211 Fundamentals of Financial Accounting and

BA 213 Decision Making with Accounting Information, 8 credits

BA 226 Business Law 1 (or other advisor-approved Business course from the list below), 4 credits

Check with a business advisor if you intend to substitute one of the courses below for BA 226 Business Law. Some OUS institutions require BA 226.

BA 206 Management Fundamentals

BA 223 Marketing

BA 224 Human Resource Management

BA 227 Law of Business Transactions

BA 242 Fundamentals of Investments

BA 249 Retailing

BA 278 Leadership and Team Building

BA 280 Cooperative Education

BA 281 Personal Finance



#### IV. Electives and University-Specific Prerequisites

as required to bring total credits to 90, depending on choice of transfer institution. Consult Lane's Counseling and Advising department for list of university-specific prerequisites and recommended coursework. Please note: Prerequisites and recommendations of specific institutions may change without notice.

#### Notes and Limitations

For transfer students graduating from high school in 1997 and thereafter, the Oregon University System has a second language admission requirement: two terms of a college-level second language with an average grade of C- or above, OR two years of the same high school-level second language with an average grade of C- or above, OR satisfactory performance on an approved second language assessment of proficiency.

Demonstrated proficiency in American Sign Language meets this second language admission requirement.

Lower-division courses taken at the community college may not meet the requirements of an upper-division course with a similar title and content offered by an Oregon University System Business School/Program. In such cases, the courses in question will normally transfer as electives.

The ASOT: Business degree may include up to 12 approved career technical credits as electives.

**Important:** Each student is encouraged to contact an advisor or counselor to determine how to match career goals with an appropriate program. Careful advising especially is needed for this degree program, as requirements at OUS institutions vary, and elective choices will differ depending on the intended transfer institution.

## Associate of Science Degree

For some transfer majors, the AS degree best matches some pre-major requirements of four-year colleges or universities. Requirements include a rigorous general education program balanced with electives. Students must work closely with an advisor or counselor (at Lane and the intended transfer institution) to determine which courses best suit plans for transfer. Award of this degree does not guarantee all lower division general education requirements have been met at an OUS institution, nor does it ensure junior status at a state four-year institution.

### I. Foundational Skills:

Students must complete all General Education requirements in this section with a minimum grade of C- or "P" (Pass).

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

#### English Composition

**Eight credits** – complete two courses (minimum):

WR 115 (summer 1999 or after), WR 121, 122, 123, 227

#### Mathematics

**Four credits** – MTH 105 or higher

#### Physical Education

**Three credits** – activity courses completed over at least two terms; PE 181-197 and Dance (limited to 1 credit from Dance prefix). One course must be in a different activity.

#### Health

**Three credits** – HE 152, 209, 222, 240, 250, 255, 262 or 275; or HE 125, 252 (summer 1997 or later)

### II. Discipline Studies:

In addition to courses used for foundational skills in section 1, students must select additional courses in the areas identified below.

Some courses may be repeatable (see the course description). Repeatable courses may be used once for this requirement and up to two additional times as electives.

Choose courses numbered 100 or higher; excluding developmental courses listed below. No courses numbered 198,

199, 298 or 299 may be used for distribution areas.

**Developmental Courses** may not be used. Course numbers 001-099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: ENG 110, 116, 117; RD 115; WR 110, 115 (taken before summer 1999) or 120.

#### Arts/Letters

**Ten credits** – Choose from the following: Art, Dance, Effective Learning, Film Arts, Foreign Language, Humanities, Journalism, Literature, Music, Speech, Theater Arts, Writing

#### Social Science

**Nine credits** – Choose from the following: Anthropology, Economics, Ethnic Studies, Geographic Information Science (GIS), Geography, History, Human Relations (CG and HS prefixed courses), Philosophy, Political Science, Psychology, Religion, Sociology, Women's Studies.

#### Science/Math/Computer Science

**Thirty-six credits** – Choose from the following: Biology (see page 43 for restriction), Astronomy, Botany, Chemistry, Computer Science (CS prefix courses only, not CIS), Engineering, Geographic Information Science (GIS), Geology (G or ENVS), Mathematics (MTH105 and higher), The Natural Environment (GEOG101), Physical Anthropology (ANTH101), Physical Science (GS prefix), Physics, Zoology; Advanced Technology courses: ET 129, 130, 131, 145, 146, 151, 152; DRF 207, 205; FT 113.

### III. Electives

**Twenty credits** – numbered 100 or above with the following limitations:

**Developmental courses** may not be used.

**Career Technical courses** – a maximum of 12 additional credits may be used. Courses are identified by prefixes listed on page 41.

**Physical Education activity courses** – a maximum of 9 credits from courses PE 181-197

**Cooperative Education** – a maximum of 18 credits. See list, page 192.

**Individual Music Lessons (MUP)** – a maximum of 12 credits

**Additional Information:** See "Degrees and Certificates," page 38.

## Associate of General Studies

For students not pursuing specific transfer or professional programs, the AGS degree provides an alternative to meet individual goals, balancing general education and elective transfer or career and technical coursework. Students must work closely with an advisor or counselor (at Lane or the intended transfer institution) to determine which courses best suit their plans. Award of this degree does not guarantee all lower division general education requirements have been met at an OUS institution, nor does it ensure junior status at a state four-year institution.

### I. Foundational Skills:

Students must complete all requirements in this section with a minimum grade of C- or "P" (Pass).

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

#### English Composition

**Eight credits** – complete two courses (minimum):

WR 115 (summer 1999 or after), WR 121, 122, 123, 227

#### Mathematics

**Four credits** – complete one of the following options:

MTH 105 or higher

OR

MTH 052 or higher and one of the following: CIS 101, CIS 131, or CS 120 (all credits are counted in this area).

#### Physical Education

**Three credits** – activity classes completed over at least two terms; PE 181-197 and Dance (limited to 1 credit from Dance prefix). One course must be in a different activity.

#### Health

**Three credits** – HE 152, 209, 222, 240, 250, 255, 262 or 275; or HE 125, 252 (summer 1997 or later)

### II. Discipline Studies:

In addition to courses used in section 1, students must select additional courses in the areas identified below.

Some courses may be repeatable (see the course description). Repeatable courses may be used once to fulfill this requirement.

Choose courses numbered 100 or higher; excluding developmental courses listed below. No courses numbered 198, 199, 298 or 299 may be used for distribution areas.

**Developmental Courses** may not be used. Course numbers 001-099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: ENG 110, 116, 117; RD 115; WR 110, 115 (before summer 1999) or WR 120.

#### Arts/Letters

**Twelve credits** – Choose from the following: Art, Dance, Effective Learning, Film Arts, Foreign Language, Humanities, Journalism, Literature, Music, Speech, Theater Arts, Writing.

#### Social Science

**Twelve credits** – Choose from the following: Anthropology, Economics, Ethnic Studies, Geographic Information Science (GIS), Geography, History, Human Relations (CG and HS prefixed courses), Philosophy, Political Science, Psychology, Religion, Sociology, Women's Studies.

#### Science/Math/Computer Science

**Fourteen credits** – Choose from the following: Biology (see page 43 for instruction) Astronomy, Botany, Chemistry, Computer Science (CS prefix courses only, not CIS), Engineering, Geographic Information Science (GIS), Geology (G or ENVS), Mathematics (MTH 105 and higher), The Natural Environment (GEOG 101), Physical Anthropology (ANTH 101), Physical Science (GS prefix), Physics, Zoology; Advanced Technology courses: ET 129, 130, 131, 145, 146, 151, 152; DRF 207, 205; FT 113.

### III. Electives

**Thirty-six credits** – with the following limitations:

**Developmental courses** may not be used.

**Physical Education activity courses** – a maximum of 9 additional credits from courses PE 181-197

**Cooperative Education** – a maximum of 18 credits. See list, page 192.

**Individual Music Lessons (MUP)** – a maximum of 12 credits

**Additional Information:** See "Degrees and Certificates," page 38.



# Associate of Applied Science Degree

The goal of AAS programs is to train graduates for immediate employment and direct entry into the workforce. Many career and technical programs require cooperative education or internships and may require licensure exams or certifications.

Career and Technical courses do not necessarily transfer to other institutions. See course prefixes listed on page 41.

Some programs offer certificates of completion for certificate requirements, see program listing pages.

## I. Foundational Skills:

Students must complete all General Education requirements in this section with a minimum grade of C- or "P" (Pass), unless otherwise noted by the sponsoring department that the course requires a letter grade or a higher grade.

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

### English Composition

**Three credits** (one class) – specified by the program, or if not specified, WR 115

### Mathematics

**One course, minimum three credits** – as specified by the program, or if not specified: MTH 025 (Math courses must be completed for the full number of credits offered. For example, all four credits of MTH 060 must be completed.)

### Physical Education/Health

**Physical Education: Three credits** – activity classes completed over at least two terms; PE 181-197 and Dance (limited to 1 credit from Dance prefix). One course must be in a different activity.

### OR

**Health: Three credits** – HE 152, 209, 222, 240, 250, 255, 262 or 275; or HE 125, 252 (summer 1997 or later)

## II. Discipline Studies:

**A minimum of twelve credits is required** with at least three credits in each discipline area.

See the individual programs for specific course requirements. If no specific courses are listed, see the information below.

Some courses may be repeated (see course description). Repeatable courses may be used once as a distribution requirement.

Choose courses numbered 100 or higher; excluding developmental courses listed below. Course numbers 001-099 identify these courses (e.g., RD 090 or WR 080). Additionally, the following courses are considered developmental: ENG 110, 116, 117; RD 115; WR 110, 115 (before summer 1999) or WR 120.

No courses numbered 198, 199, 298 or 299 may be used for distribution areas.

### Arts/Letters

**Three credits minimum from one subject prefix** – specified by program, or if not specified, chosen from: Art, Dance, Effective Learning, English, Film Arts, Foreign Language, Humanities, Journalism, Literature, Music, Speech, Theater Arts, Writing

### Human Relations/Social Science

**Three credits minimum from one subject prefix** – specified by program, or if not specified, chosen from the approved list in the next column. Additional social science credits may be from any of the social science areas as follows: Anthropology, Economics, Ethnic Studies, Geographic Information Science (GIS), Geography, History, Human Relations (CG, formerly HD and HS prefixed courses), Philosophy, Political Science, Psychology, Religion, Sociology, or Women's Studies.

### Science/Math/Computer Science

**Three credits minimum from one subject prefix** – specified by program, or if not specified, chosen from: Astronomy, Biology, Botany, Chemistry, Computer Science (CS prefix only, not CIS), Engineering, Geographic Information Science (GIS), Geology (G or ENVS), Mathematics (must be a higher level course than the minimum required by the program), GEOG 101, ANTH 101, Physical Science (GS prefix), Physics, Zoology or Advanced Technology courses: ET 129, 130, 131, 145, 146, 151, 152; DRF 205, 207; FT 113.

## III. Program Core Requirements

Core course work varies from program to program. Not all programs offer a degree. See the individual program descriptions for specific requirements and limitations, pages 70 - 169.

**Additional Information:** See "Additional Information" under Certificate, page 50.

### Human Relations\*

Three credits from this list will meet the Human Relations component for the AAS degrees and certificates.

ANTH 103	Cultural Anthropology
BA 278	Leadership and Team Dynamics
BT 146	Team Building Skills
CG 100	College Success
CG 140	Career and Life Planning
CG 144	Introduction to Assertive Behavior
CG 145	Coping Skills for Stress and Depression
CG 203	Human Relations at Work
CG 204	Eliminating Self-Defeating Behavior
CG 211,212	Dreikursian Principles of Child Guidance 1,2
CG 213	Improving Parent-Child Relations
CPSY 200	Understanding Addictive Behavior
GEOG 142	Introduction to Human Geography
HO 102	Diversity Issues in Healthcare
PHL 201	Ethics
PHL 205	Contemporary Moral Issues
PS 204	Introduction to Comparative Politics
PS 213	Peace and Conflict Studies: Local
PSY 110	Exploring Psychology
PSY 205	Applied Psychology
SP 218	Interpersonal Communication
SP 219	Small Group Discussion
SOC 108A	Selected Topics in Women's Studies
SOC 204	Introduction to Sociology
SOC 205	Social Stratification and Social Systems
SOC 206	Institutions and Social Change
SOC 207	Women and Work
SOC 210	Marriage, Family and Intimate Relations
SOC 211	Social Deviance
SOC 225	Social Problems
WS 101	Introduction to Women's Studies

\* Note: If additional Social Science courses are needed in addition to the three credits of Human Relations as required, see the list of Social Science courses on page 42-43.



## Certificate (One-Year and Two-Year)

Students are encouraged to contact an advisor or counselor to determine which certificate is appropriate to meet their goals.

Lane awards certificates to students who meet the listed certificate requirements for Lane's career and technical programs. Refer to the individual programs for more specific requirements.

### I. Foundational Skills:

Students must complete all General Education requirements in this section with a minimum grade of C- or "P" (Pass), unless otherwise noted by the sponsoring department that the course requires a letter grade and/or a higher grade.

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

#### English Composition

**Three credits** (one class) as specified by the program, or if not specified, WR 115W

#### Mathematics

**Three Credits or more** (one class) - as specified by the program, or if not specified: MTH 025 or higher (Math classes must be completed for the full number of credits offered. For example, MTH 060 is four credits and all four credits must be taken.)

#### Human Relations

**Three credits** (one class) - specified by program, or if not specified from the approved list on page 49.

### II. Program Core Requirements

Core course work varies from program to program. Not all programs offer a certificate. See the individual program descriptions for specific requirements and limitations, pages 70 - 169. See Degree and Certificate Limitations, pages 39.

**Additional Information:** See "Degrees and Certificates," page 38.

- The requirements listed in Section I are minimums. Some career and technical programs may have higher general education course and/or grade requirements. Only the Academic Requirements Review Committee may waive a college General Education requirement. Petitions are available from Enrollment and Student Financial Services at [lanecc.edu/es/forms/html](http://lanecc.edu/es/forms/html).
- Programs may have specific courses listed to fulfill the General Education Requirements in Section I. For the Human Relations area, a department may substitute another course from the approved course list.
- A maximum of 18 credits of Cooperative Education listed on page 192 may be used.
- A maximum of 12 credits of Physical Education listed on pages 244 - 248 may be used.
- Developmental courses may be used only when listed specifically by certificate program requirements. Course numbers 001 through 099 usually identify these courses. However, WR 115 taken prior to summer 1999 may not be used.

## Oregon Transfer Module

### A state-approved Transcription Notation (not a degree or certificate)

For students who intend to transfer within Oregon, the Oregon Transfer Module offers a program of general education requirements and elective credits accepted statewide, and ensures sophomore status for registration purposes.

Any student holding an Oregon Transfer Module that conforms to the guidelines below will have met the requirements for the Transfer Module at any Oregon community college or institution in the Oregon University System. Upon transfer, the receiving institution may specify additional course work that is required for a major or for degree requirements or to make up the difference between the Transfer Module and the institution's total General Education requirements. Oregon Transfer Module credits also may not match program requirements in the receiving school—students are encouraged to meet with a counselor or advisor for planning their courses. The Oregon Transfer Module includes 45 credits of course work, equivalent to 3 academic quarters.

### I. Foundational Skills:

Note: Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or advisor.

**Writing** – Two courses of college-level composition (WR 121, WR 122, WR 123, or WR 227)

**Oral Communications** – One course of fundamentals of speech or communication (SP 100, SP 111 or SP 112)

**Mathematics** – One course of college-level mathematics, for which at least MATH 095 is a prerequisite (MTH 105 or higher)

### II. Discipline Studies: (must be at least 3 credits each)

**Arts and Letters** – 3 courses from approved list, page 42

**Social Sciences** – 3 courses from approved list, pages 42-43

**Science/Math/Computer Science** – 3 courses from the approved list on pages 43-44 including at least one biological or physical science with a lab

### III. Additional Requirements:

**Electives** – As required to bring the total credits to 45. Courses must be from the Introduction to Disciplines areas (Arts and Letters, Social Sciences, or Science/Math/Computer Science). No developmental courses may be used.

**Grades** – All courses must have a grade of "C-" or better. Students must have a minimum cumulative GPA of 2.0 at the time the module is posted to the students transcript.

**Developmental Courses** – Courses that are designed to prepare students for college transfer courses are not applicable to the Oregon Transfer Module.

### Notes and Limitations

When choosing courses in science and mathematics, students/advisors should check specific requirements at receiving schools. Courses that include a lab component, or that deal with specific subjects, may be required for majors or degrees.

All Oregon community colleges and Oregon University System institutions will offer students the opportunity to complete an Oregon Transfer Module and the OTM designation will be posted on the transcript by the issuing institution upon request. Regionally accredited private colleges and universities within the state may also offer and issue Transfer Modules, which will be accepted at any Oregon public college or university.



## Transfer

Lane Community College offers courses for students who wish to pursue a four-year degree at a public or private college or university. A student who attends Lane can complete lower division general education requirements of the four-year colleges and begin work on the requirements for a specific major. The advantages of beginning college studies at Lane include small classes, lower costs, individual help from instructors, and an opportunity to improve writing, reading, math, and study skills.

### Planning to Transfer

General education and graduation requirements for specific majors vary among colleges and universities.

Lane's Counseling is a complete resource for students who plan to transfer credit from Lane. The center has information on colleges and universities and the degree programs they offer. Counselors and advisors are available to help students with academic planning to ensure that course work is appropriate for programs at the four-year colleges they plan to attend. In addition, Counseling offers several transfer workshops each term to help students obtain up-to-date transfer information.

Planning is important because it helps students prepare for further studies in their programs. For instance, it may be important that a student begin mathematics studies as early as possible. For certain majors, students need to be attending the four-year school after the first year of study because specific major requirements are part of the second-year curriculum. Students who have taken advantage of Lane's advising opportunities have a smooth transfer process and continue on to complete their bachelor's degrees. Students have eight choices for transfer planning:

**Direct Transfer** This option is for any student who has selected a transfer school, major and degree and who wishes to satisfy the specific requirements for that college or university. It is especially important that a student who chooses this option works closely with a counselor or advisor at Lane.

It is the responsibility of students to learn the program requirements of their intended transfer school. Students should periodically contact Counseling for academic advising and to learn of any possible changes in a program.

**Dual Enrollment Program/Lane Community College and University of Oregon** Students may take advantage of this agreement between the two institutions to take classes concurrently. Students must be admitted to both institutions and complete an additional application insert that is available at the Admissions Office at the UO and in the Counseling/Advising Center at Lane.

Dual Enrollment admission will allow students to use financial aid to take courses at both campuses. For students with 0-89 eligible credits, the financial aid award is administered by Lane; for students with 90 or more eligible credits, the financial aid award is administered by the University of Oregon.

**Degree Partnership Program (DPP)/Lane Community College and Oregon State University** Students can be Jointly admitted and enrolled at Lane and OSU. Students must be admitted to both institutions and complete an additional application for DPP available through OSU.

DPP will allow students to use financial aid to take courses at both campuses. For students with 0-89 eligible credits, the financial aid reward is administered by Lane; for students with 90 or more eligible credits, the financial aid is administered by OSU.

**Oregon Transfer Module (OTM)** For students intending to transfer within a year to an Oregon University System Institution, this transcript notation ensures the 45 credits of specific general education requirements and electives will be accepted at any state institution, and ensures sophomore status for registration purposes. Upon transfer, the receiving institution may specify additional course work required for a major or for degree requirements or to make up the difference between the Transfer Module and the institution's total General Education requirements.

**Associate of Art: Oregon Transfer Degree (AAOT)** This degree is designed for students who wish to obtain an associate of arts degree and want the flexibility to attend any school in the Oregon University System. Institutions in the Oregon University System accept the associate of arts Oregon transfer degree to meet that university's lower division general education requirements. (See the AAOT degree requirements on page 40.) A student selecting this transfer option still must meet that university's grade point average admission requirement and complete the coursework required for a major and degree with junior standing.

**Associate of Science Oregon Transfer: Business (ASOT: Bus)** For students who intend to transfer to an Oregon University System Institution, this degree offers business-focused general education requirements and electives. Students who meet the transfer institution's admission requirements and transfer to an Oregon University System with this degree are guaranteed to have met that institution's lower-division general education requirements. They will have junior status for registration purposes.

**Associate of Science (AS) (Transfer)** For some transfer majors, this degree best matches pre-major requirements of specific colleges or universities. Requirements include a rigorous general education program balanced with electives. However, this degree does not carry the same transfer guarantees of meeting all lower-division general education requirements as the OTM, AAOT, or ASOT: Business described above. It does not ensure junior status upon transfer to a state four-year institution. Students seeking this degree must work closely with advisors at Lane and the intended transfer institution to determine which courses best match plans for transfer majors.

**Associate of General Studies (AGS) (Transfer)** For students not pursuing specific transfer or professional programs, this degree provides an alternative to meet individual goals, including general education and elective transfer or career and technical coursework. However, this degree does not carry the same transfer guarantees of meeting all lower-division general education requirements as the OTM, AAOT, or ASOT: Business described above. It does not ensure junior status upon transfer to a state four-year institution.

### Degrees

For information about degrees and limitations, see pages 38-40.

**Transfer Majors** Students can begin preparing for many careers at Lane. The following is a list of majors and the counselor/advisor for Lane courses that may transfer to a university in the Oregon University System. (Not all majors are offered at every university.)

Major	Counselor/Academic Advisor
Agriculture .....	Debby Ganser/Gerry Meenaghan
Anthropology .....	Anthony Hampton/Cindy Lott
Architecture .....	Christina Salter
Area and Ethnic Studies .....	Anthony Hampton/Cindy Lott
Art .....	Christina Salter
Biology .....	Debby Ganser/Gerry Meenaghan
Business Administration .....	Marva Solomon/Deb Hupcey
Chemistry.....	Debby Ganser/Gerry Meenaghan
Computer and Information Sciences.....	Debby Ganser/Gerry Meenaghan
Criminal Justice .....	Anthony Hampton/Cindy Lott
Dance .....	Christina Salter
Dental Hygiene.....	See Counseling Dept.
Dentistry.....	Debby Ganser/Gerry Meenaghan
Drama, see Theatre Arts	
Economics.....	Anthony Hampton/Cindy Lott
Elementary Education .....	Marva Solomon/Deb Hupcey
Engineering; Engineering Tech. ....	Debby Ganser/Gerry Meenaghan
English .....	Anthony Hampton/Cindy Lott
Environmental Sciences.....	Debby Ganser/Gerry Meenaghan
Exercise Sci/Movement.....	See Counseling Dept.
Foreign Languages.....	Anthony Hampton/Cindy Lott
Forestry .....	Debby Ganser/Gerry Meenaghan
General Physical Science.....	Debby Ganser/Gerry Meenaghan
General Social Science .....	Anthony Hampton/Cindy Lott
Geographic Information Science.....	Anthony Hampton/Cindy Lott
Geography.....	Anthony Hampton/Cindy Lott
Geology.....	Debby Ganser/Gerry Meenaghan
Health and Health Education; Health Care Administration.....	See Counseling Dept.
History.....	Anthony Hampton/Cindy Lott
Home Economics.....	See Counseling Dept.
Hotel, Restaurant and Tourism Management .....	Carolyn Litty/Lisa Stegall
Journalism.....	Christina Salter
Law (pre-professional) .....	Anthony Hampton/Cindy Lott
Life Sciences (biology, botany, zoology).....	Debby Ganser/Gerry Meenaghan
Literature (English).....	Anthony Hampton/Cindy Lott
Mathematics .....	Debby Ganser/Gerry Meenaghan
Medicine (pre-professional).....	Debby Ganser/Gerry Meenaghan
Medical Technology (pre-professional) .....	Debby Ganser/Gerry Meenaghan
Music.....	Christina Salter
Nursing (four-year degree).....	See Counseling Department
Occupational Therapy (pre-professional) .....	Debby Ganser/Gerry Meenaghan

### Major

### Counselor/Advisor

Performing Arts (dance, music, theatre).....	Christin Salter
Pharmacy (pre-professional) .....	Debby Ganser/Gerry Meenaghan
Philosophy.....	Anthony Hampton/Cindy Lott
Physical Education.....	See Counseling Dept.
Physical Therapy (pre-professional program) .....	Debby Ganser/Gerry Meenaghan
Physics .....	Debby Ganser/Gerry Meenaghan
Political Science.....	Anthony Hampton/Cindy Lott
Psychology .....	Anthony Hampton/Cindy Lott
Public Administration.....	Anthony Hampton/Cindy Lott
Recreation.....	See Counseling Dept.
Religion.....	Anthony Hampton/Cindy Lott
Secondary Education .....	Counseling Staff
Social Science .....	Anthony Hampton/Cindy Lott
Sociology.....	Anthony Hampton/Cindy Lott
Speech .....	Anthony Hampton/Cindy Lott
Sustainability.....	See Counseling Dept.
Theatre Arts.....	Christina Salter
Veterinary Medicine (pre-professional program) .....	Debby Ganser/Gerry Meenaghan

**Transfer Hotline** If a student has a problem in transferring classes to a college or university, the student should first try to resolve it with his or her advisor. If the problem cannot be solved at that point, the student may call the Transfer Problem Hotline at the Oregon Department of Education for additional help. The hotline number is 541.378.8609.

**Counselors for “Undeclared” Students** A counselor is assigned to each academic department and to each student who is undecided about or is exploring a major. Students can receive guidance in taking initial courses, using career center resources, and setting educational goals.

A list of counselors for students who are undecided is located in Counseling. Students can make an appointment with a counselor at the appointment desk in Counseling or by calling 541.463.3200. Or, students may drop in without an appointment during the counselor’s office hours. Counselor schedules for each term are posted in Counseling, and on the door to the counselor’s office.



## Career and Technical Programs

The career and technical programs described on the following pages appear in alphabetical order on the list below. Curriculum requirements are listed for each program and descriptions of required and elective courses can be found in the Course Descriptions section of this catalog. Curriculum information for Lane programs is updated annually. The most current information is available from a Lane counselor/advisor or the department offering a particular program. Current counselors/ advisors for each program are listed with each program.

Depending on the career and technical program in which they are enrolled, students can earn a two-year Associate of Applied Science degree or a one- or two-year certificate of completion.

Lane offers noncredit opportunities for career training and continuing education. These are described on page 261.

The notations next to each program indicate the following:

AAS—Two-year Associate of Applied Science Degree Program

1-yr cert—One-year Certificate of Completion Program

2-yr cert—Two-year Certificate of Completion Program

CPC—Career Pathways Certificate

Accounting (AAS).....Marva Solomon/Deb Hupcey  
 Accounting Clerk (CPC) .....Marva Solomon/Deb Hupcey  
 Bookkeeper (CPC) .....Marva Solomon/Deb Hupcey  
 Payroll Clerk (CPC).....Marva Solomon/Deb Hupcey  
 Administrative (AAS).....Marva Solomon/Deb Hupcey  
 Legal Office Skills (CPC).....Marva Solomon/Deb Hupcey  
 Office Software Specialist (CPC) .....Marva Solomon/Deb Hupcey  
 Small Business Ownership (CPC).....Marva Solomon/Deb Hupcey  
 Auto Body and Fender Technology  
 (AAS and 2-yr cert) .....Carolyn Litty/Lisa Stegall  
 Auto Paint Option (AAS) .....Carolyn Litty/Lisa Stegall  
 Auto Collision Option (AAS) .....Carolyn Litty/Lisa Stegall  
 Automotive Technology  
 (AAS and 2-yr cert) .....Carolyn Litty/Lisa Stegall  
 Aviation Maintenance Technician  
 (AAS and 2-yr cert) .....Carolyn Litty/Lisa Stegall  
 Business Assistant (1-yr cert).....Marva Solomon/Deb Hupcey  
 Computer Information Systems -  
 Health Informatics (AAS).....See Counseling Dept.  
 Computer Network  
 Operations (AAS) .....Debby Ganser/Gerry Meenaghan  
 Network Security (CPC)  
 Computer Programming (AAS).....Debby Ganser/Gerry Meenaghan  
 Geographic Information  
 Science (CPC).....Debby Ganser/Gerry Meenaghan  
 Web Programming (CPC) .....Debby Ganser/Gerry Meenaghan  
 Computer Simulation and Game  
 Development (CPC).....Debby Ganser/Gerry Meenaghan  
 Computer Game Programming in  
 C++ (CPC) .....Debby Ganser/Gerry Meenaghan  
 Computer Specialist  
 (1-yr cert) .....Debby Ganser/Gerry Meenaghan  
 Construction Technology  
 (AAS and 1-yr cert) .....Carolyn Litty/Lisa Stegall  
 Construction Trades, General Apprenticeship  
 (AAS, Certificate) .....Colleen Cairney  
 Culinary Arts and Food Service  
 Management (AAS).....Carolyn Litty/Lisa Stegall  
 Baking and Pastry (CPC) .....Carolyn Litty/Lisa Stegall  
 Dietary Manager (CPC)  
 Food Preparation and  
 Production (CPC) .....Carolyn Litty/Lisa Stegall  
 Dental Assisting (1-yr cert).....See Counseling Dept.

Dental Hygiene (AAS) .....See Counseling Dept.  
 Diesel Technology (AAS, 2-yr cert) .....Carolyn Litty/Lisa Stegall  
 Lift Truck/Material Handling Equipment Technician Option (AAS)  
 Drafting (AAS, 1-yr cert) .....Carolyn Litty/Lisa Stegall  
 Early Childhood Education  
 (AAS and 1-yr cert).....Marva Solomon/Deb Hupcey  
 Electrician Apprenticeship  
 Technologies (AAS, cert) .....Colleen Cairney  
 Limited Electrician Apprenticeship Technologies (cert)  
 Electronic Technology (AAS) .....Carolyn Litty/Lisa Stegall  
 Emergency Medical Technician  
 (1-yr cert) .....See Counseling Dept.  
 Emergency Medical Technology - Paramedic  
 (AAS).....See Counseling Dept.  
 Employment Skills Training (less than 1-yr cert) .....Co-op  
 Energy Management  
 Technician (AAS) .....Debby Ganser/Gerry Meenaghan  
 Renewable Energy Technician  
 Option (AAS).....Debby Ganser/Gerry Meenaghan  
 Resource Conservation  
 Management Option (AAS).....Debby Ganser/Gerry Meenaghan  
 Exercise and Movement Science (AAS)  
 Fitness Specialist (2-yr cert) .....See Counseling Dept.  
 Fitness Technician (1-yr cert) .....See Counseling Dept.  
 Fabrication/Welding Technology  
 (AAS and 1-yr cert).....Carolyn Litty/Lisa Stegall  
 Welding Processes (1-yr cert).....Carolyn Litty/Lisa Stegall  
 Flight Technology (AAS).....Carolyn Litty/Lisa Stegall  
 Graphic Design (AAS and 2-yr cert) .....Christina Salter  
 Health Records Technology (1-yr cert) .....See Counseling Dept.  
 Medical Coding (CPC).....See Counseling Dept.  
 Medical Transcriptionist (CPC) .....See Counseling Dept.  
 Hospitality Management (AAS).....Carolyn Litty/Lisa Stegall  
 Food Service  
 Management (1-yr cert) .....Carolyn Litty/Lisa Stegall  
 Restaurant Ownership (CPC).....Carolyn Litty/Lisa Stegall  
 Human Services (AAS) .....Anthony Hampton/Cindy Lott  
 Adult Development and  
 Aging (CPC) .....Anthony Hampton/Cindy Lott  
 Human Services:  
 Criminal Justice (AAS) .....Anthony Hampton/Cindy Lott  
 Human Services: Juvenile  
 Corrections (1-yr cert).....Anthony Hampton/Cindy Lott  
 Industrial Mechanics and Maintenance Technology (AAS, Cert)  
 Manufacturing Technology  
 (AAS and 2-yr cert) .....Carolyn Litty/Lisa Stegall  
 Computer Numerical Control Technician Option (AAS)  
 Massage Therapy (Certificate of Completion) .....Kathy Calise  
 Medical Office Assistant (1-yr cert) .....See Counseling Dept.  
 Multimedia Design (AAS and 1-yr cert) .....Christina Salter  
 Nursing (AAS) .....See Counseling Dept.  
 Occupational Skills Training (1-yr cert) .....Co-op  
 Physical Therapist Assistant (AAS)  
 (pending accreditation candidacy) .....See Counseling Dept.  
 Professional Truck Driver (CPC).....Carolyn Litty/Lisa Stegall  
 Respiratory Care (AAS) .....See Counseling Dept.  
 Retail Management  
 (AAS and 1-yr cert) .....Marva Solomon/Deb Hupcey  
 Retail Management (CPC).....Marva Solomon/Deb Hupcey  
 Sustainability Coordinator (AAS).....See Counseling Dept.  
 Water Conservation Technician  
 (AAS).....Debby Ganser/Gerry Meenaghan

### Noncredit Programs

#### Business Development Center

Farm Business Management  
 Non-Profit Management  
 Small Business Management

#### Continuing Education

Massage Therapist  
 Nursing Assistant



## Procedures and Policies

### Definitions

**Academic Requirements Review Committee** The Academic Requirements Review Committee is commissioned to act in an advisory capacity to the Vice President for Academic and Student Affairs on the subject of academic rules and regulations for Lane Community College. Part of the responsibility of the council is to insure that a high academic standard is maintained. The Academic Requirements Review Committee will not accept petitions solely for the purpose of improving a Grade Point Average or other cosmetic reasons. Typically, the Academic Requirements Review Committee meets once during fall, winter and spring terms to review student petitions. However, meetings may be held as needed throughout the year. Examples of petitions that will be considered by the Academic Requirements Review Committee include:

- substitutions to requirements for AAOT, AS, or AGS degrees
- waiver of requirements for AAS degrees and certificates
- grade appeals will be referred to the Grade Appeal Committee for further investigation

Academic Requirements Review Committee petitions are available from Enrollment and Student Financial Services at [lanecc.edu/es/forms/html](http://lanecc.edu/es/forms/html).

**Academic Standards and Probation** A student who does not achieve satisfactory academic progress according to administrative regulations will be placed on academic probation. Students on academic probation will be encouraged to meet with a counselor or advisor. Students who are on academic dismissal will need to seek the help of a counselor or advisor for readmission to the college. Lane's Academic Standards and Alert System are described on page 58.

**Attendance** Instructors will announce the attendance policy for each class. Students entering late who may have missed this announcement should contact the instructor for the attendance rules. Students are required to be in attendance during the first week of class unless they have contacted the instructor and received permission for the absence. Otherwise, their place in the class may be given to another student who is waiting for space in the class, and the original student may not be permitted to continue in the class. Sitting in on classes without registering is a violation of college policy.

Students will be held accountable for attending each class in which they have enrolled. A grade or a withdrawal notation will be assigned for each class unless the student drops the course during the refund period.

**Class Schedule** The quarterly class schedule is available on the web at [lanecc.edu](http://lanecc.edu) about one week before Advance Registration begins. Advance Registration usually begins the fourth week of the preceding term except fall term, which occurs the preceding spring term.

The print version of the quarterly class schedule, *Aspire Magazine*, also is mailed to homes in the college district approximately one week before registration begins each term. Centers at Cottage Grove and Florence also mail schedules specific to those centers.

**Transfer of Credit** Student's transfer college courses are officially reviewed and accepted when the student applies for their Lane degree or certificate. Students are eligible to apply for their degree or certificate when they are within three terms of completing their program or course of study and have completed 12 credits at Lane. Please see "transfer Limitations for Degrees and Certificates," page 39 for information on the transfer documents accepted at Lane Community College.

Students are encouraged to use the Transfer Equivalency Look-up tool ([lanecc.edu/es/transferringcredits.html](http://lanecc.edu/es/transferringcredits.html)) in order to see how their prior college classes transfer to Lane. The evaluations provided by the Look-up tool are unofficial and not binding. Transfer equivalent information is updated regularly; some transfer partners will have more extensive listings than others. A review for a specific course may be requested by an e-mail to [degreerevaluators@lanecc.edu](mailto:degreerevaluators@lanecc.edu). Any e-mail should include your name, student "L" number, name of the college, specific course number and title, and year course was completed. An official transcript must be on file for the request to be addressed. Students may request an instructional department review of any transfer course work. Please provide an unofficial copy of your transcript showing the grade received and a course syllabus from the academic year you completed the course to the instructional department.

Counselors and advisors are also available at Lane campus sites to assist students with planning their courses at Lane. All students are encouraged to refer to the college catalog for degree and certificate requirements and academic policies.

**Miscellaneous Training and Credit** Credit also may be granted for military training as listed on the ACE/AARTS report or work completed at regionally accredited schools. Institutions that are not regionally accredited, such as business colleges, art schools, beauty colleges, and so on may be reviewed using the Credit-by-Assessment process. Applications for Credit by Assessment are available in online at [lanecc.edu/es/](http://lanecc.edu/es/). The student may be asked to submit certificates of completion, school records or other documentation. The student will be notified of the credit granted and a record kept in his or her file. A veteran student will be granted 3 credits of PE (either required or 3 cr. in open electives) by providing the college with a copy of a DD214 with an Honorable Discharge.

**Cooperative Education** Cooperative education provides students with the opportunity for on-the-job education while offering college credit for the experience.

Students enrolled in co-op receive help locating part-time and full-time jobs and internships, guidance about career expectations and demands, instruction in resume preparation and job interviewing skills, and financial benefit from paid positions. Unless prior approval is received from the Cooperative Education Division Chair, students must enroll in a minimum of three credits of co-op per term.

**Course** A course is any class or subject (e.g., English Composition WR 121, Biology BI 101) for which a student may register.

**Course Numbers** Course numbers at Lane help students identify which courses count toward degrees and financial aid.

- **Credit courses** have a course ID that consists of a prefix of letters that identify the subject area followed by digits that identify the level of the course. In the example of WR 121, WR identifies the subject of writing and the 100-level number identifies it as a first year college level course. All credit courses, including pre-college courses, may count toward the minimum course load for financial aid, provided the student meets financial aid criteria.
- **Pre-college credit courses** have numbers below 100. Pre-college courses may be required as prerequisites to college level courses or as part of a career and technical certificate or applied degree. Pre-college courses do not transfer.
- **College level transfer credit courses** count toward completion of a degree or certificate and are generally accepted for transfer by other institutions.
- **Career and technical credit courses** count toward Associate of Applied Science degrees or certificates. With some limits, career and technical courses may count as electives for transfer degrees. Career and technical courses are not automatically accepted for transfer by other institutions. Prefixes for career and technical courses are listed on page 41.
- **Noncredit courses** have numbers in the format XART 5785. The "X" before the discipline in the prefix and the four-digit numbers identify the course as noncredit. Noncredit course offerings are listed and described each term in the class schedule. Under the state's definition, a noncredit course "does not offer college credit for completion and generally cannot be used as part of a credit based degree or certificate program. No assessment of learning generally takes place." Noncredit courses will not be counted for financial aid, and will not transfer to another institution.

**Credits** Credits are granted in recognition of work successfully completed in specific courses. The average load for a full-time student is 12-15 credits per quarter. Part-time students carry fewer than 12 credits per quarter.

**Degree/Certificate Evaluation** Degree/certificate evaluation is the final evaluation done when the student is within **3 terms** of completing a program. The student fills out the "Application for Diploma" form. See page 39 for additional information on application for degree/certificate. After the evaluation is complete, the results will be mailed to the student. There is a \$10 fee for duplicate diplomas or second copies of diploma parchment.

**Oregon Transfer Module** The Oregon Transfer Module and OTM designation will be posted in the student's transcript by request and upon completion. Students must submit the form "Application for Diploma" to verify completion of the requirements. There is a \$20 processing fee for the OTM.

**Direct Transfer Evaluation** Direct transfer evaluation is done by Counseling when a student is in transit to another institution. Unofficial copies of transcripts may be used. Students must take copies of transcripts to Counseling for their review of transfer course work.

**Enrollment and Student Financial Services** Building 1, First Floor, 541.463.3100, (877) 520-5391, or TTY 541.463.4722

Process online admissions, provides registration and billing assistance to all students, and responds to all questions and issues regarding financial aid. Hours are Monday, Tuesday and Thursday 9 a.m.-5 p.m., Wednesday 10 a.m.-5 p.m., Friday 9 a.m.-2 p.m.

**ExpressLane/myLane** Lane Community College students use web registration on ExpressLane/myLane. Using the web, students register for classes from any computer connected to the Internet. For information about ExpressLane/myLane, visit Lane's website at [lanec.edu](http://lanec.edu).

**Full-Time Student** A full-time student is anyone carrying 12 or more credit hours per term at Lane. The Social Security Administration defines full-time as 12 or more credit hours per term. Veterans are required to carry 12 credit hours per term to receive full benefits. In most cases, students receiving scholarships are required to complete 12 credit hours per term.

**Half-Time Student** A half-time student is anyone carrying between six and 11 credits hours per term at Lane. It is important to know that the definition of a half-time student varies with different institutions. Also, it is important to know that a majority of student loans require a student be registered for at least six credits or more per term.

**Honor Lists** Lane honors students who achieve high academic standards. Honor list requirements are:

- **President's List:** A student must complete a minimum of 12 graded (A,B,C,D,F) credit hours with a term GPA of 4.00.
- **Vice President's List:** A student must complete a minimum of 12 graded (A,B,C,D,F) hours with a term GPA of 3.55 through 3.99.

Students wishing to receive a letter reflecting this honor should make request to Student Records, Enrollment and Student Financial Services by calling 541.463.3100.

**Hybrid** A course combining traditional classroom activities with online learning so that time spent in the classroom is reduced but not eliminated. Hybrid courses have traditional class sessions, but some classroom hours are replaced by online interactions, assignments and projects. The ratio of classroom activities and online interactions in hybrid courses may vary, but the expectation is that each credit will require approximately 33 hours of student involvement during the quarter, including class time, homework, research projects, studying for exams, online work in hybrid courses, or other out-of-class activities. Hybrid sections of a course are coded with *hyb* in the term schedule and technical requirements for class participation are clearly explained in notes in the schedule.

**"L" Number (User ID)** Lane provides all students with a computer generated "user ID" for ExpressLane/myLane. This number begins with an uppercase "L" followed by eight digits. The "L" number used with a PIN number will give students access to their student information in ExpressLane/myLane, including registration, account payments, schedules, grades, and financial aid information. Refer to each term's class schedule for information about obtaining an "L" number.

**Program** A program is state approved curriculum arranged to provide career and technical training leading toward an Associate of Applied Science degree or certificate of completion. The courses required for each program are listed under Programs in this catalog.

**Student Grades** Students access term grades through ExpressLane/myLane. See the section on grades in each term's class schedule for more information on grade availability. An unofficial copy of student grades can be printed from ExpressLane/myLane for advising purposes. Students can request an official transcript through ExpressLane/myLane or in person from Enrollment and Student Financial Services for a \$5 transcript fee plus an additional \$5 **rush service fee** for each transcript requested.

**Term** A term, or quarter, is approximately an eleven-week period of study. The academic year is summer term through the end of spring term with fall, winter and spring terms being the primary terms. Summer term begins the third week of June and lasts until the second week of September and consists of several sessions. Fall term begins the last week of September and lasts until mid-December. Winter term begins around the second week of January and lasts until approximately the middle of March. Spring term begins the last week of March and lasts until the middle of June. (See the academic calendar in the front of the catalog.)

## Procedures

Lane publishes regulations in addition to those in this catalog (class schedule, course syllabus, etc.). Students are responsible for knowing these regulations.

**Schedule Changes** Students may change their schedule after their original registration by using ExpressLane/myLane. The deadline to make schedule changes to full-term classes (adds/drops, pass/nopass, audit options) is midnight Friday of the eighth week of the term. A "full term" is 11 to 12 weeks. Exceptions to this policy are classes that begin and end at times other than the first and last day of the term. Contact Enrollment and Student Financial Services for deadline information for classes shorter than 11 weeks. Students who drop classes after the first week of the term (refund period) will have a withdrawal notation recorded for the class.

Students registered in variable credit courses may add or drop credits through midnight Friday of the last week of classes (before finals week begins).

Course grade options for students after the eight-week deadline are: 1) the grade earned, 2) "NC" (no credit), or 3) "I" Incomplete with instructor approval.

**Dropping Classes** When a student does not attend classes, it is the student's responsibility to drop the classes using ExpressLane/myLane. To drop from classes, use ExpressLane/myLane by midnight Friday of the eighth week of a full-term class.

**Administrative Withdrawal** Students may be administratively withdrawn for **nonattendance** or failure to meet prerequisites. Instructors have the right to administratively withdraw/drop students who do not attend at least 50 percent of the class meetings the first week of the term. This period coincides with the refund period.

**Do not assume that an instructor will administratively drop you from your class. Students are still responsible for dropping classes they do not plan to attend by using ExpressLane/myLane.** To receive a refund of paid tuition or a cancellation of tuition not yet paid, students must complete the drop procedure within the refund period. If the class is not dropped during the refund period, the student is responsible for paying the tuition and fees even if he or she did not attend the class. Students who plan to remain enrolled but have attendance difficulties during the first part of the course should notify the instructor to avoid administrative withdrawal.

**Prerequisites Not Met** Students enrolled in classes for which they do not have prerequisite skills, test scores, or courses may be administratively withdrawn prior to the start of the term or after grades have been submitted for the previous term.

### Social Security Number

**Generally, social security number disclosure is voluntary.** The college no longer uses social security numbers as a student identification number. Refer to Enrollment and Student Financial Services for further information.

Lane provides all students with a nine digit "L" number as user ID for ExpressLane/myLane. This number begins with an uppercase L followed by eight computer generated numbers. A student's "L" number with a PIN (personal ID number) will be used for ExpressLane/myLane functions.

**Students who apply for financial aid must supply their social security number on the Free Application for Federal Student Aid (FAFSA).** For web access on ExpressLane/myLane, financial aid students will be able to use their "L" number and PIN.

### Disclosure Statement

Required for use in collecting social security numbers  
See OAR 581-41-460(2)  
Department of Community Colleges and Workforce Development  
Revised, January 2001

Providing your social security number is voluntary. If you provide it, the college will use your social security number for keeping records, doing research, reporting, extending credit, and collecting debts. The college will not use your number to make any decision directly affecting you or any other person. Your social security number will not be given to the general public. If you choose not to provide your social security number, you will not be denied any rights as a student. Please refer to the Disclosure Statement listed under the social security heading in your class schedule which describes how your number will be used. Providing your social security number means that you consent to the use of your number in the manner described.

On the back of the same form, or attached to it, or in the schedule of classes, the following statement shall appear:

OAR 589-004-0400 authorizes Lane Community College to ask you to provide your social security number. The number will be used by the college for reporting, research and record keeping. Your number also will be provided by the college to the Oregon Community College Unified Reporting System (OCCURS), which is a group made up of all community colleges in Oregon,



the State Department of Community Colleges and Workforce Development, and the Oregon Community College Association. OCCURS gathers information about students and programs to meet state and federal reporting requirements. It also helps colleges plan, research and develop programs. This information helps the college support the progress of students and their success in the workplace and other education programs. OCCURS and the college may provide your social security number to the following agencies or match it with records from the following systems:

- state and private universities, colleges and vocational schools, to find out how many community college students go on with their education and to find out whether community college courses are a good basis for further education
- Oregon Employment Department, which gathers information, including employment and earnings, to help state and local agencies plan education and training services to help Oregon citizens get the best jobs available
- Oregon Department of Education, to provide reports to local, state and federal governments used to learn about education, training and job market trends for planning, research and program improvement
- Oregon Department of Revenue and Collection agencies only for purposes of processing debts and only if credit is extended to the student by the college

State and federal law protects the privacy of student records. Social security numbers will be used for the purposes listed above.

#### **Student Records/Enrollment and Student Financial Services**

Student Records maintains and processes academic records for Lane. This includes but is not limited to online applications for admission, transfer institution transcripts, course substitution forms, grade change forms, student identification documentation, evaluations, and degree/certificate applications. Academic Requirements Review Committee petitions and Progress Review petitions are processed through Student Records along with registration and graduation records, refund petitions, and probation/dismissal documentation.

Except for the Lane transcript record and current registration, most of this material is archived digitally for all Lane students. Lane transcripts are available on ExpressLane/myLane for current students. Most records will be kept indefinitely. If you are a former student and do not know your identification number, you may order your transcripts through the National Student Clearinghouse at [studentclearinghouse.org](http://studentclearinghouse.org).

**Release of Records** In accord with Federal Law (The Family Education Rights and Privacy Act, Public Law 93-380) "FERPA", students may see and review all official records, files, and data pertaining to themselves with these exceptions: confidential financial information reported by the parent/guardian unless the parent/guardian has explicitly granted permission for the student's review; and medical, psychiatric, or similar records used for treatment purposes. Access to a student's own records will be provided as early as possible, but no longer than 45 days from the time of the student's official request.

A student may challenge the content of a record that she or he considers inaccurate, misleading or in violation of the student's privacy or other rights. If such a challenge is not resolved with the custodian of the records, the student has the right to an

appeal. Further information is available in the Enrollment and Student Financial Services/Student Records Office.

**Release of Records/Student Information** Per a federal privacy law, called the Family Educational Rights and Privacy Act of 1974 (FERPA), the college has identified "directory" information that can be released without the student's written permission. The following information is considered "directory information" and may be released without written permission from a student:

- Student name(s)
- Dates of attendance (not daily)
- Degree program/major field of study
- Honors
- Enrollment status (half-time/full-time only)
- Date of graduation
- E-mail address
- Participation in official activities/sports
- Most recent previous school attended
- Weight/height of athletic team members

If you do not want this "directory" information released, you must access the student information release links within Expresslane/mylane. Completing this process will place a confidential block indicator on your records at lane. This block will:

- When you call Lane, the person answering will say "There is no information available on that person"
- If you come for service in person, you will be asked for a photo identification to verify your identity
- Your name will not appear on honor roll listings or in the graduation booklets
- When employer or other individuals use the National Clearinghouse service to verify attendance or degrees, your information will not be available

If you would like some individuals to access limited information such as your account information, you may also use the Student Information Release process within Expresslane/mylane to provide Lane with a password that you can share with others. Individuals with these passwords must offer these when contacting Enrollment and Student Financial Services and the password must match exactly what you have provided. We can not assist individuals without this password or without having the exact amount owed given.

Information necessary to determine student eligibility for athletic participation and for financial aid granted by state or federal agencies which provide a student's tuition will be released for those purposes only. This may include term schedules, grades, credit hours of enrollment, and past academic records. A written request from the aid-granting agency is required.

**Transcript Records** Official transcripts may be ordered using ExpressLane/myLane at [lanecc.edu](http://lanecc.edu), or through the National Student Clearinghouse at [studentclearinghouse.org](http://studentclearinghouse.org). The fee is \$5 per transcript through Expresslane/mylane and \$7.25 through the National Student Clearinghouse. Official transcripts can also be requested via mail by providing name, student identification number, period of enrollment, where the transcript is to be sent, student's signature and payment of the \$5 fee per transcript ordered.

No other person may receive a copy of the student's transcript or undertake to pick it up for the student unless the student authorizes release of records in writing. Transcripts mailed to

other colleges may be ordered via ExpressLane/myLane, by mail or in person at Enrollment and Student Financial Services.

**The college reserves the right to withhold official transcripts from students who owe monies to Lane.** If an official transcript is requested by a student who owes monies, the student is notified that there is a balance owing and given information on how to resolve the issue.

**Transfer Transcripts** If a student has taken course work at another college that applies to a program at Lane, the student must see that Enrollment and Student Financial Services receives an official (sealed) transcript of that work. Only official transcripts from regionally accredited institutions and international institutions recognized by their country's Ministry of Education or other government body will be considered by Student Records, with possible assistance of the department head or coordinator of the program. If the course work is not obviously or directly comparable, a course substitution form from the instructional department is required. Once received, transcripts become the property of Enrollment and Student Financial Services. Lane cannot provide anyone, including the student, a copy of a transcript from another school. Students should order an unofficial copy from their transfer institution for their use.

**Courses from other schools and colleges are never part of a student's Lane Community College transcript.** Transfer institutions may be noted on the Lane transcript. Such records are not required for admission to Lane, but may be required for financial aid, veterans' reporting, admission to a special program, or meeting a course prerequisite.

**Grades** At the end of each term, grades are recorded and made available to students using ExpressLane/myLane. Unofficial advising transcripts also may be printed from ExpressLane/myLane.

**Grade Changes** If an error has been made in recording or reporting grades, the instructor may initiate a grade change. If a student believes an error occurred, the student should contact the instructor. If the number of credits is increased or a course is added, **the additional tuition, fees and any other charges will be charged to the student's account and the student will be billed at current tuition rates.** Late add fees may be applied. Refer to class the schedule for more information. If the student owes money to Lane, the added grade will not be processed until the balance is paid in full.

### ExpressLane/myLane

Use ExpressLane/myLane to apply for admission, registration, account payments, viewing schedules, class details, and grades. Check each term's class schedule for information on registration dates, getting your "L" number and going on-line in ExpressLane/myLane.

**Grades and Notations** The following grades and notations are recorded on transcripts and grade records at Lane:

Grade	Points	Definition
A	4.0	Excellent Performance
B	3.0	Good Performance
C	2.0	Satisfactory Performance
D	1.0	Less than Satisfactory Performance
F	0.0	Unsatisfactory Performance
+ or -		Plus or minus 0.30 points, effective July 1, 1999
P	0.0	Pass (equal to A- thru C-)
NP		No Pass (D and below)
I		Incomplete
U		Audit
W		Withdrawal (Prior to 1991)
Y		No Basis for Grade (Prior to 1997)
NC		Not Completed (no credit)
XN		Enrolled
EN		Enrolled
CM		Completed
NCM		Not Completed
XCG		Conversion Grade

Immediately following the grade:

@	Credit By Assessment or CEU By Assessment
<	Academic Renewal (not calculated in cumulative GPA)
*	Withdrawal after Refund Deadline (no grade recorded)
E	Repeated Course Points earned not included in the cumulative grade point average (GPA)
~	Credit by Exam or CEU By Exam

Please Note: @ Credit by Assessment and ~ Credit by Exam are limited to 25 percent of a degree or certificate. Students may do more than 25 percent, but only 25 percent may be used toward requirements.

**Plus (+) and Minus (-) grades** Issuing a "+" or "-" is at the instructor's discretion. Students with questions regarding an instructor's grading policy, must contact the instructor.

**NC (No Credit)** Issuing a "NC" is at the instructor's discretion when the instructor believes the student has not participated enough in the class to earn a grade. It is not meant to and should not be used to replace an "F" grade or an "I."

**Academic Standards and Alert System** The college believes it has an obligation and a responsibility to help students meet their educational goals. To meet this responsibility, the college will provide assistance to students who, for whatever reason, fail to meet the academic standards necessary to meet their educational goals.

**Academic Standards** Academic standards will be determined based on the total credits you have earned. As the number of credits earned increases, the cumulative GPA and percent of credits completed increases as well, according to the charge below:

Cumulative Credit Hours Earned	Cumulative GPA	Percent of Credits
0 - 36	1.70	50%
37 - 100+	2.00	50%

In addition to the cumulative grade point average, students must complete 50 percent of their enrolled credits as of the eighth week.

Following is the resulting action for each consecutive term in which a student fails to meet academic standards:

- A student who fails to meet the academic standards will receive an Academic Warning letter. That letter will provide information covering the services of the college that might be helpful.

- A student who fails to meet the academic standards a second consecutive term will be placed on Academic Probation 1, and a letter will be sent encouraging a counselor/advisor conference.
- A student who fails to meet the academic standards a third consecutive term will be placed on Academic Probation 2, and again a letter will be sent encouraging a counselor/advisor conference.
- A student who fails to meet the academic standards a fourth consecutive term will be dismissed from college credit classes and programs for one calendar year.

**Petitions to the Academic Progress Review Committee** The student is provided the opportunity to petition the Academic Progress Review Committee for reinstatement into the college earlier than the one year dismissal period. Petitions are available from Enrollment and Student Financial Services at [lanec.edu/es/forms/html](http://lanec.edu/es/forms/html) and must be turned in with a student planner by the sixth week of the subsequent term of dismissal.

**Removal of Probation** A student who is placed on probation can be removed by exceeding the cumulative grade point average standard. Once removed from probation, students who do not meet the academic standards start again at the warning step.

**Pass/No Pass** When a P/NP option has been selected, the instructor still grades on the regular ABCDF system. If the instructor records an A+ or A, the student will receive the A+ or A grade and it will be calculated in the Grade Point Average (GPA). If the grade is A-, B+, B, B- or C+, C, C-, the student will receive a grade of P. If the grade is D+, D, D- or F, the student will receive a grade of NP. Pass and No Pass grades are not calculated in the student's GPA. A P/NP option must be chosen in ExpressLane/myLane by the end of the eighth week of the term for full-term classes. Information on limitations is listed with the individual degree and certificate outlines.

**Audit** The audit option allows the student the right to sit in the class, but the instructor has no obligation to grade or record the student's work. The only grade or mark granted is U (audit). An audit option may be requested during registration and through the eighth week of the term for full-term classes. Audit rates are the same as the tuition rates.

**Request for Incomplete** A student and instructor may fill out a Request for Incomplete form when a student has completed satisfactorily 75 percent or more of the work in a course, but is unable to finish the remaining required, scheduled work due to circumstances beyond the control of the student (serious illness, death in family, and natural disaster are common examples). Some departments may establish a work completed guideline other than 75 percent. An incomplete is not used to avoid a failing grade in a course, or when the remaining scheduled work is not time convenient for the student. A Request for Incomplete is a contract between the student and the instructor which indicates the work to be finished, the time limit within which the work must be completed, and the grade earned if the work is not completed. A student does not need to reregister to finish course work the next term. Sitting in on a class without registering is a violation of college policy. General college policy limits the time for finishing an Incomplete to one year, but the instructor may require a shorter time period. An Incomplete that is over one year old must be approved by the Vice President before it can be changed to a grade

with the exception of the grade earned if the work is not completed. When the work has been completed and given to the instructor for evaluation, it is the instructor's responsibility to see that a grade change form is sent to Student Records, changing the student's record from Incomplete to the grade earned. If no grade change form is received from the instructor, the grade remains an Incomplete or the instructor may assign a grade if the work is not completed. If the instructor with whom the student completed the Request for Incomplete form is no longer available, the department may assign someone else to evaluate the work and complete the change of grade.

**Petition to Absolve for Repeated Courses** A student can have the grade points removed from the cumulative grade point average if the first grade was B, B-, C+, C, C-, D+, D, D- or F and the class has been repeated at Lane. A course can be retaken only once for this purpose. If a course is retaken more than once, only the oldest course credits will be removed from the grade point average under this policy. The repeated course credits must all be taken in one term at Lane, be taken for a letter grade, and must be equal to or greater than the number of credits completed in the original course.

Upon completion of a course, a student can exercise this option by filling out a Petition to Absolve Credit from the Cumulative Grade Point Average form. The form is available at [lanec.edu/forms/html](http://lanec.edu/forms/html). The Student Records Office will mark the student's record, noting the repeated course, and remove the credits and grade points of the original course from the cumulative grade point average. The original course and grade will remain on the student's transcript. This cannot be reversed once it is applied to the student's record.

## Academic Renewal Policy

**Academic Renewal** Academic renewal is an opportunity for students whose initial effort at Lane resulted in poor grades. After an absence of at least four years, a student who maintains a 2.5 or higher G.P.A. may request that prior grade records be removed from the calculation of the cumulative grade point average. This policy applies only to Lane transcripts and is on a one-time only basis. See the criteria and procedures listed below.

To be eligible for academic renewal, a student must:

- have been absent from Lane for four or more years.
- have completed 24 credits with a GPA of 2.5 upon returning to Lane.
- have completed the academic renewal application.
- not have been granted academic renewal in the past.

Application of the academic renewal policy results in the following:

- All course and grade information will remain on the transcript along with a notation about being granted academic renewal.
- All applicable course work including courses that have been excluded from the GPA will be used to meet graduation requirements if course work meets current degree/certificate standards.
- None of the excluded grades will be calculated in the GPA.

The Academic Renewal cannot be reversed once applied to the student's record.

Note: Many institutions will not recognize the Academic Renewal process when calculating a GPA for admission purposes.



**Grade Point Average (GPA):** Computation included in GPA computation are grades of A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, and F. Grades of P are included in earned credit, but not in GPA credit. I, NC, Y, U, \*, EN, and W are considered administrative marks rather than grades and have no effect on a student's earned credit or GPA credit. The grades included in the computation have the following weights:

A+ = 4.30	B+ = 3.30	C+ = 2.30	D+ = 1.30
A = 4.00	B = 3.00	C = 2.00	D = 1.00
A- = 3.70	B- = 2.70	C- = 1.70	D- = 0.70
			F = 0.00

The total points for a class are calculated by multiplying the points for the grade times the credits for the class. The GPA is then computed by adding all GPA credits, adding all points, and dividing the total points by the total credits. Example:

	credits	grade	points
BA 226-Business Law	3	A	12
PE 170-Beginning Tennis	1	B	3
EL 115-Effective Learning	3*	P	0*
FE 207 Coop Ed	2	C+	4.60
<b>TOTAL GPA Credit</b>	<b>6</b>	<b>TOTAL POINTS</b>	<b>19.60</b>
			$19.60 \div 6 = 3.264$ GPA

\* Points are not included in calculation, because of P grade. Total credits earned in this example are nine.

**Term GPAs are calculated using grade points earned only during that term. Cumulative GPA is calculated using all grade points from all terms.**

**Credit Hour** Credit granted at Lane is in terms of quarter hours, since Lane is on a quarter-system calendar. Three quarter hours are equal to two semester hours. The average amount of credits for a full-time student is 12 to 15 per term.

One credit hour equates to approximately thirty hours of student involvement over the quarter. For lecture classes, this means ten hours of instruction and twenty hours of preparation on the student's part. For lab classes, thirty hours in the lab are required per credit.

**Classroom Hours** There are 12 classroom hours per lecture (credit) hour, 24 classroom hours per lecture/lab (credit) hour and 36 classroom hours per lab (credit) hour.

**Graduation** There is one college graduation ceremony held each year in June. See the Academic Calendar on page 2. All graduates and prospective graduates for the year are invited to attend and bring their friends and relatives. Contact Student Life and Leadership Development for ceremony details.

Since grades have not yet been recorded at the time of graduation, it is not known at that time whether students have completed their programs. Students receive one empty binder during the graduation ceremony. The actual parchments are mailed after degree/certificates have been verified, in eight to ten weeks. Students applying for degrees or certificates and completing their programs fall or winter terms will receive their degrees earlier in the year.

To be considered a Lane graduate, students must complete all program requirements. See page 38-39 for more information.

Students who do not attend the graduation ceremony may pick up a binder at the Student Life and Leadership office anytime after the graduation ceremony.

## Student Policies and Complaint Procedures

Lane Community College policies and procedures are subject to change without prior notice.

### Board Policies Directly Affecting Lane Students

#### Treatment of Learners—A.020

With respect to interactions with learners, the president shall assure that procedures and decisions are safe, respectful and confidential.

Accordingly, the president shall assure that:

1. The institution represents itself accurately and consistently to prospective students through its catalogs, publications and official statements.
2. Admissions information forms avoid eliciting information for which there is no clear necessity.
3. Methods of collecting, reviewing, transmitting, or storing information about learners will be protected against improper access in compliance with federal and state regulations.
4. Facilities provide a reasonable level of privacy, both visual and aural.
5. The college environment is welcoming and accepting to all learners.
6. Learners have a clear understanding of what may be expected from the services offered.
7. Learners are informed of their rights and responsibilities and are provided a process to address grievances.
8. There is adequate provision for the safety and security of learners.

#### Harassment Policy—D.020

Lane has a zero tolerance policy regarding all forms of harassment. Any proven harassment will result in immediate and appropriate action to stop the harassment and prevent its recurrence, including employee discipline consistent with collective bargaining agreements, or student sanctions. Remedial action will be designed to stop the harassing behavior. Any remedial action will be in keeping with the educational mission of the college. Whether or not the alleged harassing behavior is sufficiently severe or pervasive to be judged a violation of this policy, the college may take action to address a complainant's concerns and to ensure that Lane, as a workplace and as an academic institution, maintains a respectful environment. All forms of harassment, including student-to-student harassment, are covered by Lane's harassment policies. Incidents of harassment may bring about sanctions up to and including termination of employment or expulsion from the college.

#### Sexual Harassment

Sexual discrimination in the form of sexual harassment is prohibited. Sexual harassment is defined as unwanted sexual advances, requests for sexual favors, and/or other verbal, written, visual, or physical sexual conduct that makes the terms or conditions of employment contingent on the acceptance of unwanted sexual advances, that negatively affects employment or educational opportunities, or that creates an intimidating, hostile, or offensive environment for one of the parties.

**Harassment Based on Race/Ethnicity or National Origin**

Harassment based on race, ethnicity or national origin is defined as unwelcome verbal, written or physical conduct based on a person's actual or perceived race, ethnicity or national origin that unreasonably interferes with an individual's work or academic performance, adversely affects the targeted individual's or others' work or learning opportunities, or creates an intimidating, hostile or offensive environment.

**Possession of Firearms—D.030**

No person, including students, employees, college patrons and vendors may bring, possess, conceal, brandish, use or be in possession of a firearm, destructive device, or other dangerous weapons as defined by law, or give the appearance of being in possession on college-owned or controlled property or at activities under the jurisdiction or sponsorship of the college, except as provided by ORS 166.370 and federal law. As authorized by ORS 659A.001(4), the exceptions provided by state and federal law do not apply to Lane employees while engaged in work activities. Permitted exceptions include use in conjunction with approved instructional demonstration.

**Gambling—D.040**

Illegal gambling of any form, whether played for money, check or any item or service representative of value, is prohibited on the Lane Community College campus or facilities under its direction and control.

**Use of Intoxicants and Controlled Substances—D.050**

No person may bring onto college property or into any college-owned facility or to any college-sponsored class or activity any intoxicating beverage, controlled substances, volatile inhalants, for the purpose of mind or mood alteration, except in the situations specified in this policy. No person may appear on college property or in any college-owned facility or in any college-sponsored class or activity under the influence of any of the above mentioned substances.

Exceptions to this policy are as follows:

1. Alcohol may be used/served
  - a. for cooking and/or instructional purposes in food preparation labs or classes related to the science and/or service of alcohol; or
  - b. at college-sponsored activities using procedures specified in administrative rules; or
  - c. at college activities catered by legally licensed and insured businesses or agencies, using procedures specified in administrative rules (see [lanecc.edu/cops/foodalc.htm](http://lanecc.edu/cops/foodalc.htm)); or
  - d. under no circumstances shall alcohol be served at college-sponsored activities to underage minors as defined by state law.
2. With appropriate documentation, medical marijuana, prescription opiates, or other psychoactive medications, may be used as legally prescribed by a licensed practitioner. However, according to statute, marijuana may not be ingested on campus even with a medical marijuana card.
3. Glue and thinners may be used in class-related lab environments and in facilities construction and maintenance.

**Equality of Opportunity in Admissions—D.070**

Anyone who is at least 18 years of age for credit classes and at least 16 years of age for continuing education classes may enroll at Lane Community College. Under no circumstances shall an

applicant who is otherwise qualified be denied admission or given a preference for admission to the college based on an individual's race, color, national origin, sex, age, marital status, familial relationship, sexual orientation, gender identity, pregnancy, disability, religion, expunged juvenile record, or veteran's status.

Also, see general Equal Opportunity statement on the inside back cover of this catalog.

**Tuition—D.110**

In order to maintain a constant tuition rate relative to inflation each December, the board will adjust the per credit tuition rate to reflect changes in an appropriate index for two-year public colleges since the last tuition adjustment. The rate will be rounded to the nearest half-dollar and become effective the following academic year (summer term).

Periodically and as needed, the board will review Lane's tuition rates to ensure: a) that tuition revenues are appropriate for the needs of the district and, b) that Lane's tuition is comparable with other Oregon community colleges that are similar to Lane in terms of student FTE and instructional programs.

**Student Complaint Procedures and Accommodations**

Lane Community College is committed to providing a respectful working and learning environment that is free from discrimination, harassment and retaliation. Lane Community College is committed to equal opportunity, affirmative action, cultural diversity and compliance with the Americans with Disabilities Act. The college prohibits discrimination in admissions, employment and access to college programs, activities and services. Sexual harassment and other conduct which creates a hostile, intimidating or offensive environment is prohibited by the college.

For assistance, support or help in resolving problems or information about complaint procedures, please contact the following people:

**Harassment**

- Jill Bradley, Women's Center, Bldg. 1/Rm. 202, 541.463.5353
- Barbara Delansky, Student Life and Leadership, Bldg. 1/Rm. 206, 541.463.5337
- Mark Harris, Counseling, Bldg. 1/Rm. 226, 541.463.5178
- Jim Garcia\*, Multicultural Center, Bldg. 1/Rm. 201, 541.463.5144
- Jerry deLeon\*, Counseling, Bldg. 1/Rm. 103A, 541.463.5870

\* bilingual in Spanish

**Employment Discrimination**

- Dennis Carr, Human Resources, Bldg. 3/Rm. 114, 541.463.5585

**Disability Issues**

- **Student disability accommodations, assistance and disability related problems:** Lynn Lodge, Disability Resources, Building 1, Room 218, 541.463.5059, TDD 541.463.3079
- **Problems with access to Lane's facilities:** Dave Willis, Director, Facilities Management and Planning, Building 7, Room 204B, 541.463.5566
- **Employee workplace accommodations:** Mary Glenn, Human Resources, Building 3, Room 114, 541.463.5583
- **Disability related complaints/Section 504 Coordinators:** Nancy Hart, Disability Resources, Building 1, Room 218, 541.463.3010, TDD 541.463.3079 (student and program issues); Dennis Carr, Human Resources, Building 3, Room 114, 541.463.5585 (staff and employment issues)

- **Student rights, responsibilities and conduct:** Executive Dean of Student Affairs, ASA, second floor, Administration Building, 541.463.5732, Barbara Delansky, Student Life and Leadership, Building 1, Room 206, 541.463.5337.
- For any other issues, including those covered by board of education policy, use the student complaint process. For copies of the complete student code and complaint process and for more information, visit or call the Office of Academic and Student Affairs, second floor, Administration Building, main campus, phone 541.463.5732.

### Substance Abuse Statement

In keeping with the intent of U.S. Public Law 101-226, Section 22: Drug-Free Schools and Campuses, it is Lane's obligation to inform you of the health risks associated with use of various illicit drugs and abuse of alcohol. Any substance used through needle-sharing increases risk of AIDS and Hepatitis B.

#### Type of Drug and Possible Health Risks

**Stimulants** – Speed up action of central nervous system. (A.) Amphetamines (“speed,” “crank,” “uppers”) – heart problems; paranoia; death. Affects fetus. (B.) Cocaine (“coke,” “crack”) – confusion; physical tolerance; dependency; damage to lungs and nasal membranes; heart problems; paranoia; convulsions; death. Affects fetus.

**Depressants** – Relax the central nervous system. (A.) Barbiturates (“downers”). (B.) Tranquilizers (valium, librium). (C.) Methaqualone (“ludes”) – confusion; loss of coordination; tolerance; dependency; seizures, coma; death. In combination with alcohol, especially dangerous.

**Cannabis** – Alters perception and mood. (A.) Marijuana (“grass,” “pot”). (B.) Hashish – lung damage; dependence; tolerance; confusion, loss of coordination; decreased sex drive.

**Hallucinogens** – Distort reality. (A.) Lysergic Acid Diethylamide (“LSD,” “Acid”), Mescaline, MDA, MDMA, DMT, STP, Psilocybin – hallucinations; panic; tolerance; “flashbacks”; possible birth defects in user's children. (B.) Phencyclidine (“PCP,” “Angel Dust”) – depression; irrational behavior; confusion; convulsions; hallucinations; coma; death.

**Narcotics** – Lowers pain perception. (A.) Heroin. (B.) Morphine. (C.) Codeine. (D.) Opium – lethargy; apathy; loss of judgment and self-control; tolerance; dependence; convulsions; coma; death.

**Deliriant**s – Mental confusion. (A.) Aerosol products (B.) Lighter Fluid (C.) Paint Thinner and other Inhalants – damage to brain, lungs; convulsions; death.

**Alcohol** – A sedative drug – tolerance; dependence; depression; coma; death. Alcohol abuse is linked to cancer, heart and liver damage. Fetal alcohol syndrome.

#### School Policy

For Student Code of Conduct, including drug and alcohol violations and sanctions, see code above.

#### State Laws

The trend in the State of Oregon is toward stiffer drug penalties. The following describes the penalties for POSSESSION of key drugs:

Schedule I – Class B Felony (heroin, LSD, marijuana, others) –

Max. prison time is 10 years. Max. fine is \$100,000.

Schedule II – Class C Felony (amphetamine, cocaine, morphine) – Max. prison time is 5 years. Max. fine is \$100,000.

Schedule III – Class A Misdemeanor (other stimulants, some depressants) – Max. prison time is 1 year. Max. fine is \$2,500.

Schedule IV – Class C Misdemeanor (valium-type tranquilizers, others) – Max. prison time is 30 days. Max. fine is \$500.

Schedule V – Violation (dilute mixtures, compounds with small amounts of controlled drugs) – No max. prison time. Max. fine is \$1,000.

Delivery of less than 5 grams or possession of less than one ounce of Marijuana is a violation. Oregon HB 2479 established mandatory evaluation, education and treatment services for those under 18 years old. If services are successfully completed, the charge will be dropped. Oregon also has strong new laws allowing cars, boats, etc., that transport illegal drugs to be seized and forfeited.

Alcohol is an illegal drug for those under 21 years of age. For drivers under 18, ANY detectable amount of alcohol (above .00 BAC) is grounds for losing their license until they are 18.

There are many more laws pertaining to alcohol and other drugs. This is a sample to demonstrate that the penalties for illegal drug involvement are real, and criminal conviction may bar a student from his or her chosen career path.

#### Where to Get Help

For help or more information, contact the Substance Abuse Prevention Office, Building 1, Room 226, 541.463.5178. Counselors are available to any student who may be experiencing alcohol/drug problems. Contact or referral can also be made through Counseling or the Health Clinic. Besides offering support, assessment and referral, these counselors have information on community treatment programs, support groups, private counselors as well as information regarding Lane's on-campus 12-step meetings (A.A., N.A., ALANON, etc.). Students also can call “INFO LINE” at 541 342-4357 for referral suggestions. Lane offers classes on addiction and related topics. See class schedule index under “drugs.” In addition, the Substance Abuse Prevention program conducts weekly support groups, classes and seminars to interested students.

## Student Rights and Responsibilities and Student Code

### Student Rights and Responsibilities

#### I. Freedom of Access to Higher Education

Lane Community College is open to all persons who are qualified according to its admission and good standing requirements.

Anyone age 18 or older may enroll. No high school diploma is necessary. Individuals younger than 18 may attend if they obtain approval from their high school principal or if they have already received their high school diploma. Community education classes generally are open to anyone 16 or older.



Under no circumstances will an applicant be denied admission to the College because of age; sex; race; color; religion; physical or mental disability; national origin; marital status; sexual orientation; gender identity; pregnancy; veteran's status; familial relationship; expunged juvenile record; association with anyone of a particular race, color, sex, national origin; nor will preference for admission be based on economic status.

#### **A. Financial Aid**

A student applying for or receiving financial aid has the right to know:

- The financial aid assistance available
- The procedures and deadlines for applying
- The cost of attendance
- The criteria used in awarding aid and how financial need is determined
- The terms and conditions of any aid accepted
- How and when aid will be disbursed
- The College's refund policy
- The repayment consequences of withdrawing from the College
- How satisfactory academic progress is evaluated and what happens if it is not maintained
- How to appeal decisions concerning aid

A student applying for or receiving financial aid has the responsibility to:

- Complete applications accurately and on time
- Read and follow instructions when submitting information
- Read and retain copies of all signed forms
- Choose an academic program and understand the requirements for such program
- Comply with the terms of any Federal Work Study job accepted
- Maintain satisfactory academic progress

For more information about financial aid, go to [lanecc.edu/financialaid](http://lanecc.edu/financialaid)

#### **B. Admissions**

The College will be open within budgetary limitations to all applicants who are qualified according to its admission requirements. Students who enroll for high school or alternative school credit must comply with the Oregon Compulsory School Attendance Laws. While previous academic status at other institutions will not constitute criteria for denial of admission, not every program is open to every student. Priority to enter classes of limited enrollment will be given to indistrict students who have finished high school and/or are at least 18 years of age. However, the College will assist each student to develop a program of study which meets his or her individual needs and is consistent with feasible College operation. The College is committed to equality of opportunity, affirmation action, and nondiscrimination in admissions. No applicant shall be denied admission to the college because of protected class status.

#### **C. Financial Responsibility**

It is the student's responsibility to pay monies owed the college in a timely manner. The College's policies regarding payment of tuition and fees are described in the term schedule as well as the College catalog.

## **II. Evaluation Criteria**

### **A. Academic**

Lane Community College instructors will encourage free discussion, inquiry and expression where relevant and appropriate to the educational objectives of the course. It is the instructor's responsibility to publish educational objectives and to make available to each class the criteria to be used in evaluating student success in that class. It is the responsibility of the students to become aware of these objectives and criteria as published and set forth by the College. Student opinions and behavior outside of class will not be the basis for determining class grades unless such evaluation is specifically related to course requirements.

### **B. Protection of Freedom of Expression**

Students are responsible for learning the substance of any course of study for which they are enrolled. However, students are free to state any reasoned exception to data or views offered in any course of study and to reserve judgment about matters of opinion.

### **C. Protection Against Improper Academic Evaluation**

Students have protection through orderly procedures against unfair academic evaluation. Students' grades will be based solely on academic achievement, unless otherwise specified by the professor in writing at the first class meeting. Complaints about class requirements and grades must first go through the instructor and the department division dean. Students may appeal grades received by following the Grade Appeals process. Grade appeals are filed with the Academic Requirements Review Committee. Contact Enrollment and Student Financial Services, Building 1, 541.463.3100.

### **D. Protection Against Improper Disclosure**

Information which staff acquire in the course of their work as instructors, advisors and counselors about student views, beliefs and political associations should be considered confidential. Protection of the student against improper disclosure is a serious staff obligation.

### **E. Utilization of Special Aids for Study**

Disability Resources is committed to providing opportunities to all students with disabilities in order for them to have meaningful access to College programs and services in a barrier-free environment.

Lane's Disability Resources offers advocates for the removal of attitudinal and architectural barriers, and provides in-class accommodations, advising, resource/referral information, and adaptive equipment. These services are available to students with disabilities who are attending credit courses, Adult High School, Adult Basic Education, and Continuing Education classes on any of the LCC campuses. Students must request services at least two weeks in advance.

### F. Academic Dishonesty

Students are expected to conduct their academic affairs in a forthright and honest manner. In the event that students are suspected of classroom cheating, plagiarism or otherwise misrepresenting their work, they will be subject to due process as outlined in the Student Code of Conduct.

### G. Standards of Academic Progress

Lane Community College has established standards for academic progress which are applicable to all students. Failure to maintain satisfactory academic progress will result in loss of financial aid and warning, probation, suspension, or dismissal from the College.

### H. Complaint Procedures

See page 61.

### I. Additional Rights of Petition and Appeal

For grade and academic appeals process, contact Enrollment and Student Financial Services, Building 1, 541.463.3100.

## III. Student Records

Lane Community College will abide by federal and state regulations regarding the privacy of student records and comply with the law regarding access procedures. The condition of access to records is set forth in explicit statements.

Transcripts of academic records contain only information about academic status. Information from disciplinary or counseling files will not be available to unauthorized persons on campus or any person off campus without the express written consent of the student involved, except under legal compulsion or in cases where the safety of persons or property is involved. Administrative staff and faculty members will respect confidential information about students which they acquire in the course of their work.

With regard to official documents and student records, information acquired by Lane Community College employees about a student's views, beliefs, and political associations is confidential and is not to be disclosed unless required by state or federal law. All student records will be maintained in strict compliance with state and federal regulations and Lane personnel procedures defining privacy and confidentiality.

## IV. Student Affairs

The College has the responsibility and obligation to establish certain standards in order to preserve the freedom of students.

### A. Freedom of Association

Students will be free to organize and join associations to promote their common interests as long as they do not disrupt the College or violate its rules and regulations.

1. Procedures for recognition of student organizations – Students who would like to start a new organization, or to join an existing organization should contact the ASLCC (student government) offices for information. The process is simple and, once student groups receive official recognition from ASLCC, they are eligible to reserve space on campus, conduct activities, and co-sponsor events.
2. Advisors – All student organizations must have a staff advisor. Upon approval of the Associate Dean, any Lane staff member is eligible to serve as advisor for student organizations.

3. Non-discrimination policies – Student organizations must abide by existing College and ASLCC policies and may not restrict membership or participation in events.
4. A recognized club or organization may lose its official recognition and be suspended if actions of its officers or members, or activities of the organization as a whole, violate College policy and procedures.

### B. Freedom of Inquiry and Expression

Students and student organizations will be free to examine and discuss all items of interest and to express opinions publicly and privately. Students will always be free to support causes by orderly means, in ways which do not disrupt the operation of the institution or violate College policies and procedures.

### C. Use of Facilities

The facilities and services of the College will be open to all of its enrolled students, provided the facilities and services are used in a manner appropriate to the academic community and in compliance with College procedures. The Office of Student Activities reserves table space and assists student organizations in scheduling space with the College.

### D. Student Participation in College Policies

Students are free to express their views, individually and collectively, on issues of institutional policy and on matters of general interest to the student body. Student representatives are welcome on College committees and councils, and the ASLCC president represents student interests to the Board.

### E. Student Publications

With respect to student publications, the Media Commission, as established under board policy, shall be responsible for the appointment of editors, dismissal of editors for cause, recommendation of policies, professional advice, and informal guidance.

The Media Commission is the board of first appeal and review for all questions concerning publications policy and operation. Final appeal is through the President and then the Board.

The student press is to be free of censorship and advance approval of copy. The editors and managers shall not be arbitrarily suspended, suppressed or intimidated because of student, student government, employee, alumni, or community disapproval of editorial policy or content. Similar freedom is assured for oral statements of views on College-controlled and/or student-operated radio or television stations and student-produced programs. This editorial freedom entails a corollary obligation under the canons of responsible journalism and applicable regulations of the Federal Communications Commission.

Neither the Commission nor the President is involved in day-to-day decisions or operations of the student media. Responsibility for the content of publications and for compliance with established policies rests with the student editors and their staffs. Editors and their staffs are guided by the Professional Standards of the Oregon Code of Journalistic Ethics, and by state and federal laws. Advisors are not responsible for content of student publications.

Guidelines for the Media Commission shall be contained in administrative rules and procedures.

### **F. Distribution of Literature**

First Amendment freedom of the press is applicable to the campus of Lane Community College. Therefore, students, off-campus publications, and the distribution of these publications are protected on the main campus and outreach centers. Distribution may be restricted only if it can be shown that such activity would cause a disturbance or disruption of normal College activities.

Materials to be posted require authorization for such distribution from the Associate Dean, Student Life and Leadership Development. Once authorized, distribution will take place in the prescribed locations on campus, should not disrupt the normal operation of the institution, and should not cause a litter problem.

In case a student, employee, or organization is denied the right to distribute materials on campus, the decision is subject to appeal. All appeals or complaints are subject to the College complaint procedure.

The College reserves the right to designate specific areas for the distribution of printed materials. A listing of these areas is maintained by the Associate Dean, Student Life and Leadership Development on the main campus and by the designated building administrator at each of the following outreach centers: Downtown Center, LCC at Florence and LCC at Cottage Grove.

### **G. Visiting Speakers**

The College has the responsibility to develop informed, critical, and objective thinking; and such thinking can best be encouraged in an atmosphere assuring a free interchange of ideas. Therefore, Lane Community College students may invite to the campus and hear any person(s) of their choosing in compliance with administrative regulations governing scheduling, publicity, and management of campus activities.

The education of students is not limited to classroom activities. Students have the right to hear a variety of outside speakers. The Student Activities Office and ASLCC are the primary program sources for outside speakers. Individual students or student organizations may request that ASLCC sponsor speakers or may contact Student Activities about other possibilities. All outside speakers must be scheduled through the Student Activities Office to insure that there is proper scheduling of facilities and other preparations for the event and that the event is conducted in an orderly manner appropriate to the academic community. Institutional control of campus facilities will not be used to censor activities. Sponsorship of guest speakers may be withheld if there are reasonable concerns that the controversial nature of the speaker or content of the speech would lead to disruptions on campus. It is the responsibility of the students sponsoring the event to make it clear to the campus community and the local community that all views expressed are not necessarily those of the students, staff or administration of Lane Community College.

### **H. Grievance Procedures for Alleged Discrimination or Harassment**

Students who feel they have been discriminated against or treated in some unfair manner have access to formal and informal grievance procedures. See specific procedures outlined in the complete student code: General Student Complaint Process. Contact Office of Academic and Student Affairs, 541.463.5732.

### **V. Discipline**

The Student Code of Conduct applies to anyone accepted for admission, registered for one or more classes, and/or enrolled in any special program approved by Lane Community College.

Students are required to provide identification such as a photo identification card, current registration receipt or class schedule on demand to campus safety personnel, faculty or administrators.

Students deserve fair and equal treatment, so instructors and administrators must employ discretion when initiating disciplinary actions and procedures. Action is warranted for protection of individuals, property and a positive learning climate.

Faculty members may dismiss a student from the class for the day for in-class behavior they judge to be disruptive or inappropriate. Such actions include, but are not limited to: racial, sexual or religious slurs; verbal or physical interruption; offensive language; chewing tobacco or spitting; smoking; and littering or creating unsanitary conditions.

If a student is dismissed for inappropriate behavior, faculty must submit a written report to their Division Dean and to the Executive Dean, Student Affairs detailing the student's name, date and time of class, and the improper behavior.

Students may be dismissed only for the day of the misbehavior, but may be dismissed from subsequent classes for a new or repeated behavioral offense. Dismissal as a result of faculty action is counted toward the maximum number of absences allowed in the class.

Campus Public Safety may be called to assist in any disciplinary situation. The assisting security officer must file a report on all situation involvement with the Office of Academic and Student Affairs.

Instructors, administrators and classified staff are authorized to employ physical restraint when immediate restraint will prevent injury to the student or others. Physical restraint is not considered a form of physical discipline. The instructor, administrator or classified staff should send a reliable person to the nearest telephone to request emergency assistance from campus safety.

### **VI. Off-Campus Students**

Students enrolled at Lane Community College satellite campuses (Cottage Grove, Florence, Downtown Center, and community outreach sites) will enjoy the same rights and responsibilities as the students at the main campus and must comply with the Student Code of Conduct and any additional rules for conduct which are specific to the site.



## Student Code of Conduct

The purpose of this Code of Conduct is to protect the individual rights of students and staff and to control those actions that go beyond the exercising of such rights.

The College recognizes its obligation to develop intellectual curiosity as well as social and cultural awareness. Further, Lane Community College responsibly provides for the safety and well-being of students and staff, property protection, record security, and other education-related services.

Through this Code of Conduct, Lane Community College describes conduct interfering with the responsibilities and obligations of the College. This document also outlines the penalties imposed for prohibited conduct and explains the procedural due process for alleged student violations and the protection of student rights.

Students charged with code violations are entitled to due process as described in this code and students may appeal certain penalties imposed for violations.

### Article I: Definitions

1. The term "College" means Lane Community College.
2. The term "student" includes all persons taking courses at the College, both full-time and part-time, pursuing credit or noncredit classes or enrolled in any special program approved by the college. Persons who are not officially enrolled for a particular term, but who have a continuing relationship with the College, are considered "students."
3. The term "faculty member" means any person hired by the College to conduct classroom activities.
4. The term "College official" includes any person employed by the College, performing administrative or professional responsibilities.
5. The term "judicial advisor" means a College official authorized by the Executive Dean, Student Affairs on a case-by-case basis to impose sanctions upon students found to have violated the Code of Conduct. The Executive Dean, Student Affairs or designee may serve as the judicial advisor or authorize a judicial advisor to serve simultaneously as a judicial advisor and sole member or one of the members of a judicial body. Nothing shall prevent the Executive Dean from authorizing the same judicial advisor to impose sanctions in all cases.
6. The term "member of the College community" includes any student, faculty member, College official, or any other person employed by the College. A person's status in a particular situation shall be determined by a judicial advisor.
7. The term "College premises" includes all land, buildings, facilities, and other property in the possession of, or owned, used, or controlled by the College (including adjacent streets and sidewalks).
8. The term "organization" means any number of persons who have complied with the formal requirements for College recognition.
9. The term "judicial body" means any person or persons authorized by the judicial advisor to determine whether a student has violated the Code of Conduct and to recommend imposition of sanctions.
10. The term "appellate board" means any person or persons authorized by the Executive Dean, Student Affairs to consider an appeal from a judicial body's finding that a student has violated the Code of Conduct, or from sanctions imposed by the judicial advisor.
11. The term "shall" is used in the imperative sense.
12. The term "may" is used in the permissive sense.
13. The Executive Dean, Student Affairs is that person designated by the College President and Vice President to be responsible for the administration of the Code of Conduct.

14. The term "policy" is defined as the written regulations of the College as found in, but not limited to, the Code of Conduct, College board policies, the ASLCC Constitution and By-Laws, and the College Catalog.
15. The term "cheating" includes, but is not limited to: 1) use of any unauthorized assistance in taking quizzes, tests, or examinations; 2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or 3) the acquisition, without permission, of a test or other academic material belonging to a member of the College faculty or staff.
16. The term "plagiarism" includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person, without full and clear acknowledgment. It also includes the unacknowledged use of materials such as term papers or other academic materials prepared by a person other than the submitting student.

### Article II: Judicial Authority

1. The Executive Dean, Student Affairs or designee shall determine the composition of judicial bodies and appellate boards, determining which judicial body, judicial advisor and appellate board shall be authorized to hear each case.
2. The Executive Dean, Student Affairs or designee shall develop policies for the administration of the judicial program and the procedural rules for the conduct of hearings which are consistent with the provisions of the Lane Community College Student Code of Conduct.
3. Decisions made by a judicial body and/or judicial advisor shall be final, pending the normal appeal process.
4. A judicial body may be designated as an arbiter of disputes within the student community in cases which do not involve a violation of the Code of Conduct. All parties must agree to arbitration, and to be bound by the decision, with no right of appeal.

### Article III: Proscribed Conduct

#### A. Jurisdiction of the College

Generally, College jurisdiction and discipline shall be limited to conduct which occurs on College premises and College-sponsored activities which take place off-campus including placements and internships. This code applies to all students.

#### B. Conduct - Rules and Regulations

Any student found to have committed the following misconduct is subject to the disciplinary sanctions outlined in Article IVB:

1. Acts of dishonesty, including but not limited to the following:
  - a. Cheating, plagiarism, or other forms of academic dishonesty.
  - b. Furnishing false information to any College official, faculty member or office.
  - c. Forgery, alteration or misuse of any College document, record or instrument of identification.
  - d. Tampering with the election of any College recognized student organization.
2. Disruption or obstruction of teaching, research, administration, other College activities, including public-service functions on or off campus, or other authorized activities, when the act occurs on College premises.
3. Sexual assault, physical abuse, verbal abuse, threats, intimidation, harassment, coercion and/or other conduct which threatens or endangers the health or safety of any member of the College community.
4. Attempted or actual theft of and/or damage to property of the College or property of a member of the College community or other personal or public property.
5. Hazing, defined as an act which endangers the mental or physical health or safety of a student, or which destroys or

removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition of continued membership in, a group or organization.

6. Failure to comply with orders or directions of College officials or law enforcement officers acting in performance of their duties and/or failure to identify oneself to these persons when requested to do so.
7. Unauthorized possession, duplication or use of keys to any College premises or unauthorized entry to, or use of, College premises.
8. Violation of published College policies, rules or regulations.
9. Violation of federal, state, or local law on College premises, or at College sponsored and supervised activities including but not limited to:
  - a. Use, possession or distribution of narcotic or other controlled substances except as expressly permitted by law.
  - b. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals on College premises.
10. Public intoxication, use, possession or distribution of alcoholic beverages except as expressly permitted by law and College regulations.
11. Participation in a campus demonstration which disrupts the normal operations of the College and infringes on the rights of other members of the College community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area; intentional obstruction which unreasonably interferes with freedom of movement, either pedestrian or vehicular, on campus.
12. Obstruction of the free flow of pedestrian or vehicular traffic on College premises or at College sponsored or College supervised functions.
13. Conduct which is disorderly, lewd, or indecent; breach of peace; or aiding, abetting or procuring another person to breach the peace on College premises or at functions sponsored or participated in by the College.
14. Sexual discrimination in the form of sexual harassment is prohibited. Sexual harassment is defined as unwanted sexual advances; requests for sexual favors; and/or other verbal, written, visual, or physical sexual conduct that makes the terms or conditions of employment contingent on the acceptance of unwanted sexual advances, that negatively affects employment or educational opportunities, or that creates an intimidating, hostile, or offensive environment for one of the parties.
15. Theft, or other abuse of computer time, including but not limited to:
  - a. Unauthorized entry into a file to use, read, or change contents, or for any other purpose.
  - b. Unauthorized transfer of a file.
  - c. Unauthorized use of another individual's identification and password.
  - d. Use of computing facilities to interfere with the work of another student or College official.
  - e. Use of computing facilities to send obscene or abusive messages.
  - f. Use of computing facilities to interfere with normal operation of the College computing system.
16. Abuse of the judicial system, including but not limited to:
  - a. Failure to obey the summons of a judicial body or College official.
  - b. Falsification, distortion, or misrepresentation of information before a judicial body.
  - c. Disruption or interference with the orderly conduct of a judicial proceeding.
  - d. Knowingly initiating a judicial proceeding without cause (i.e., filing a false report).
  - e. Attempting to discourage an individual's proper participation in, or use of, the judicial system.
  - f. Attempting to influence the impartiality of a member of a

judicial body prior to, and/or during, the course of a judicial proceeding.

- g. Harassment (verbal or physical) and/or intimidation of a member of a judicial body prior to, during, or after the course of a judicial proceeding.
- h. Failure to comply with the sanction(s) imposed under the Code of Conduct.
- i. Influencing or attempting to influence another person to abuse the judicial system.

### **C. Violation of Law and College Discipline**

1. College disciplinary proceedings may be instituted against a student charged with violation of a law which is also a violation of this Code of Conduct. This would apply if both violations result from the same factual situation, without regard to pending civil litigation in court, or criminal arrest and prosecution. Proceedings under the Student Code of Conduct may be carried out prior to, simultaneously with, or following civil or criminal proceedings off campus.
2. When a student is charged by federal, state or local authorities with a violation of law, the College will not request, or agree, to special consideration for that individual because of his or her status as a student. If the alleged offense is also the subject of a proceeding before a judicial body under the Code of Conduct, the College may advise off-campus authorities of the existence of the Code of Conduct and of how such matters will be handled internally within the College community. The College will cooperate fully with law enforcement and other agencies in enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators. Individual students and staff members, acting in their personal capacities, remain free to interact with governmental representatives as they deem appropriate.

## **Article IV: Judicial Policies**

### **A. Charges and Hearings**

1. Any member of the College community may file charges against any student for misconduct. Students should deal with their concerns either through Campus Public Safety or by filing a student complaint. Staff should prepare charges in writing and direct them to the Executive Dean, Student Affairs and/or designee. Charges shall be submitted within 90 days after the incident.
2. The judicial advisor may conduct an investigation to determine the merit of the charges and/or if they can be disposed of administratively by mutual consent of the parties involved on a basis acceptable to the judicial advisor (see Informal Report and Resolution Process). If the charges cannot be disposed of by mutual consent, the judicial advisor may later serve in the same manner as the judicial body or a member thereof (see Formal Complaint Process).
3. All charges shall be presented to the accused student in written form. A time of not less than five nor more than fifteen calendar days after the student notification shall be set for a hearing. Time limits for scheduling a hearing may be extended at the discretion of the judicial advisor.
4. Hearings shall be convened by the judicial advisor and conducted by a judicial body according to the following guidelines:
  - a. Hearings shall be conducted in private. Hearings will be chaired by the judicial advisor or his or her designee.
  - b. Admission of any person to the hearing shall be at the discretion of the judicial body and/or its judicial advisor.
  - c. In hearings involving more than one accused student, the chairperson of the judicial body, at his or her discretion, may permit separate hearings for each student.
  - d. The complainant and the accused have the right to be assisted by any advisor they choose, at their own expense. The advisor may be an attorney. The complainant and/or the accused is responsible for presenting his or her own case. Therefore, advisors are not permitted to speak or to participate directly in any hearing before a judicial body.

- e. The complainant, the accused and the judicial body shall have the right of presenting witnesses, subject to the right of cross examination by the judicial body.
  - f. Pertinent records, exhibits and written statements may be accepted as evidence for consideration by a judicial body at the discretion of the chairperson.
  - g. All procedural questions are subject to the final decision of the judicial body chairperson.
  - h. After the hearing, the judicial body shall determine (by majority vote if the body consists of more than two people) whether the student has violated the code(s) of conduct as charged.
  - i. The judicial body's determination shall be made on the basis of whether it is more likely than not that the accused student violated the Code of Conduct.
  - j. The judicial body shall report its findings to the judicial advisor who will impose sanctions.
5. There shall be a single record of all hearings before a judicial body. The record shall be the property of the College.
  6. Except in the case of a student charged with failing to obey the summons of a judicial body or College official, no student may be found to have violated the Code of Conduct solely because the student failed to appear before a judicial body. In all cases, the evidence in support of the charges shall be presented and considered.

#### B. Sanctions

1. The following sanctions may be imposed by the judicial advisor upon any student, group or organization found to have violated the Code of Conduct.
  - a. Counseling, educational activities, and/or training - For violations involving substance abuse the student will be required to work with the Substance Abuse Prevention Coordinator.
  - b. Warning - A notice in writing to the student that the student is violating or has violated institutional regulations.
  - c. Probation - A written reprimand for violation of specified regulations. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to be violating any institutional regulation(s) during the probationary period.
  - d. Loss of Privileges - Denial of specified privileges for a designated period of time.
  - e. Fines - Fines may be imposed.
  - f. Restitution - Compensation for loss, damage or injury. This may take the form of appropriate service and/or monetary or material replacement.
  - g. Discretionary Sanctions - Work assignments, service to the College or other related discretionary assignments.
  - h. Deactivation - Loss of all privileges, including College recognition, for a specified period of time (applies to student groups or organizations).
  - i. College Suspension Separation of the student from the College for a definite period of time, after which the student is eligible to return. Conditions for re-admission may be specified.
  - j. College Expulsion - Permanent separation of the student from the College.
2. More than one of the sanctions listed above may be imposed for any single violation.
3. Disciplinary sanctions shall not be made part of the student's permanent academic record, but shall become part of the student's confidential record. Upon graduation, the student's confidential record may be expunged of disciplinary actions other than College suspension or expulsion, upon application to the Executive Dean, Student Affairs. Cases involving the imposition of sanctions other than College suspension or expulsion shall be expunged from the student's confidential record, consistent with the College's schedule of record disposition.
4. In each case in which a judicial body determines that a student has violated the Code of Conduct, the sanction(s) shall be determined by the judicial advisor. In cases in which persons other than, or in addition to, the judicial advisor have been authorized to serve as the judicial body, the recommendation of all members of the judicial body shall be considered by the judicial advisor in determining and imposing sanctions. The judicial advisor is not limited to sanctions recommended by members of the judicial body. Following the hearing, the judicial body and the judicial advisor shall advise the accused in writing of its determination and any sanction(s) imposed.

#### C. Interim Suspension

In certain circumstances, the Executive Dean, Student Affairs or designee may impose a College suspension pending a hearing before a judicial body, or imposition of sanctions.

1. Interim suspension may be imposed only: a) to ensure the safety and wellbeing of members of the College community or the preservation of college property; b) to ensure the student's own physical or emotional safety and well-being; or c) if the student poses a threat of disruption to, or interference with, the normal operations of the College.
2. During interim suspension, students shall be denied access to the campus (including classes) and/or all other College activities or privileges for which the student might otherwise be eligible, as the Executive Dean, Student Affairs or designated judicial advisor determines appropriate.

#### D. Appeals

1. A decision reached by a judicial body, or a sanction imposed by the judicial advisor, may be appealed by the accused student or complainant to an appellate board within five (5) school days of the decision. Such appeals shall be in writing and shall be delivered to the Executive Dean, Student Affairs or designee.
2. Appeals shall be limited to review of the record of the initial hearing and supporting documents, except as required to explain the basis of new evidence for any of the following:
  - a. To determine whether the original hearing was conducted fairly in light of the charges and evidence presented and in conformity with the prescribed procedures, giving the complaining party a reasonable opportunity to prepare and present evidence that the Code of Conduct was violated, and giving the accused student a reasonable opportunity to prepare and to present a rebuttal of those allegations.
  - b. To determine whether the decision reached regarding the accused student was based on substantial evidence; that is, whether the facts in the case were sufficient to establish the fact that a violation of the Code of Conduct had occurred.
  - c. To determine whether the sanction(s) imposed were appropriate for the violation of the Code of Conduct which the student was found to have committed.
  - d. To consider new evidence sufficient to alter a decision or other relevant facts not brought out in the original hearing because such evidence and/or facts were not known to the person appealing at the time of original hearing.
3. The appellate board will submit a written report of its findings and recommendations to the Executive Dean, Student Affairs or designee within 20 working days. The appellate board's report may include both majority and dissenting opinions. The Executive Dean, Student Affairs or designee will make the final decision on the appeal and notify the accused student and/or complainant in writing within 10 working days. If the Executive Dean, Student Affairs was the judicial advisor in the original complaint, the appellate board's report will be submitted to the Vice President for Academic and Student Affairs for final decision.
4. In cases involving appeals by a student accused of violating the Code of Conduct, review of the sanction by an appellate board may not result in more sanction(s) for the accused student. Instead, following an appeal, the Executive Dean, Student Affairs may upon review of the case, reduce, but not increase, the sanctions imposed by the judicial advisor.
5. In cases involving appeals by persons other than the student accused of violating the Code of Conduct, the Executive Dean, Student Affairs may, upon review of the case, reduce or increase the sanctions imposed by the judicial advisor or remand the case to the original judicial body and judicial advisor.



## Article V: Interpretation and Revision

### A. Code Interpretation

Any question of interpretation regarding the Code of Conduct shall be referred to the Executive Dean, Student Affairs or designee for final determination.

### B. Code Revision

The Code of Conduct shall be reviewed every five years under the directions of the Executive Dean, Student Affairs.

### Smoking Policy

1. Effective the beginning of Fall term, 2010, the College smoking policy shall be amended as follows:  
Smoking and other tobacco use is prohibited in all core areas of LCC campuses; smoking and tobacco use may be allowed in some designated peripheral areas.
2. The College Council will as soon as feasible determine an implementation team to develop proposed related policy changes and definitions; education, signage, and other implementation plans; and the determination of the core and peripheral boundaries, all to be considered by the College Council.

## Security and Safety at Lane

The Federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, requires colleges to publish information about crime on their campuses. A copy of Lane's Clery Report is located on the Public Safety web page at [lanec.edu/psd/cleryreport2007/htm](http://lanec.edu/psd/cleryreport2007/htm) or may be obtained in writing at the Public Safety office. At Lane, security and safety are college-wide efforts. With students, faculty and staff committed to prevention, crime can be minimized.

The Lane Community College Public Safety department provides direct services to the 30th Avenue campus and to the Downtown Center and Wildish Building. All other college centers — including Cottage Grove, Florence and the community learning centers — are served by their local law enforcement agencies, which report incidents at college sites to the college's Public Safety department.

Lane Community College Public Safety Officers are Private Security Professionals certified under Oregon Department of Public Safety Standards and Training. Campus Public Safety Officers utilize citizen's arrest powers under ORS 133.225 and are supported by the college in the enforcement of all college regulations and applicable federal, city and county laws and ordinances on college property. Officers are granted peace officer authority pertaining to traffic and parking enforcements under ORS 341.300. They maintain an atmosphere conducive to education, contribute to a safe campus environment, enforce parking and traffic regulations, conduct investigations of reported crimes, and make reports to local law enforcement agencies.

### Preventing Crimes

**Education** The majority of criminal incidents on campus result from leaving property unattended, lockers unlocked and valuable property visible in cars. Taking basic common-sense precautions will greatly reduce these crimes. The college Public Safety department provides speakers on crime prevention.

**Firearms and Intoxicants** No firearms, drugs or intoxicants are permitted on campus, except under very specific circumstances which are spelled out in detail in the Student Policies section.

**Lighting and Landscaping** College staff work constantly to maintain good lighting and to clear undergrowth to improve visual access on campus.

### Emergency Assistance

There is always a Public Safety Officer on campus. To contact Public Safety:

**Red Telephones** Use one of the 40 red telephones on main campus and at the Downtown Center and Wildish Building. These emergency phones automatically ring in the Public Safety department when the receiver is lifted.

**Dial 5555** Dial or ask a staff member to dial 541.463.5555 for emergencies from other college phones to reach Public Safety.

**Non-emergency** Dial 541.463.5558 for non-emergency calls.

**After Hours** From 5 p.m. to 8 a.m. Monday through Friday, on weekends and holidays, the college's emergency after-hours Junction City Police Department will answer. Give your name, location and phone number, and the service will contact the on-site officer to return your call and respond to your location.

**Emergency Car Services** Emergency car booster pack service is offered 24 hours a day. Call or visit Public Safety. Public Safety does not assist in vehicle entry, but will assist in contacting local locksmiths or other help.

**Emergency Escorts** If your safety is threatened, contact Public Safety and an officer will be dispatched.

### Reporting and Response

Anyone knowing of or suspecting a crime should promptly report it to Public Safety in Building 13, Room 107. When a suspect is apprehended, the suspect may be served an order to appear at a Student Conduct Code hearing, given into custody of a law enforcement agency or both. Public Safety Officers may facilitate contact between victim and local law enforcement agencies.

### Services

**Counseling and the Women's Program** Counseling provides limited services to crime victims and/or makes referrals to other resources in the community. The Women's Program provides services and referral to victims of sex and domestic violence offenses.

### Reported Crimes

The number of crimes reported to Public Safety and local law enforcement in the categories set forth in the Crime Awareness and Clery Act may be found at the Public Safety web site: [lanec.edu/psd/main/htm](http://lanec.edu/psd/main/htm).

For more information about Lane's Public Safety Department, contact 541.463.5558.

## Career and Technical Programs

### Accounting

Offered by the Business Department

**Two-Year Associate of Applied Science Degree, Accounting**

**Career Pathway Certificate of Completion, Accounting Clerk**

**Career Pathway Certificate of Completion, Bookkeeper**

**Career Pathway Certificate of Completion, Payroll Clerk**

**Purpose** To prepare students to enter the field of accounting. The program offers three directed elective sequences. The student can choose to prepare for employment in full-cycle bookkeeping, specialize in payroll accounting or prepare to transfer to a four-year institution. Upon successful completion of first year courses, students will be prepared for employment as an accounts receivable or payable clerk, and will be eligible for the Business Assistant One-Year Certificate of Completion.

**Learning Outcomes** The graduate of the Associate of Applied Science program will be able to:

- understand accounting as the “language of business.”
- use computerized and manual systems to record data and prepare accounting statements and reports.
- organize and manage the daily business functions of an organization.
- use research and analytical skills to support the activities of the organization.
- apply critical thinking and analytical skills in decision-making and problem solving.
- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.
- apply accounting theory to analyze accounting information.
- anticipate and actively explore innovative solutions to technological and organizational challenges.
- use software including word processing, spreadsheets, and databases to input, manage, and interpret information to meet organizational needs.
- provide basic training and technical support for users of office equipment and software systems.
- create professional, accurate documents.
- make effective presentations to internal and external audiences.
- work independently within diverse business environments; apply individual strengths and critical thinking to collaborative efforts.
- engage customers and co-workers in a purposeful manner – listening to and accurately interpreting their responses within diverse cultural contexts.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.

**Employment Trends** For bookkeeping and accounting clerks, the state of Oregon projects 982 annual openings, with approximately 86 in Lane County, including openings resulting from growth and the need to replace those who retire or transfer to other occupations. Employers increasingly seek applicants with proficiency in accounting software or expertise in specialized areas such as payroll or tax accounting. Because many businesses may require working on teams with others from different backgrounds, communicating accounting and financial information clearly and concisely is essential.

**Wages** Statewide wages for bookkeeping and accounting clerks average \$16.75 hourly and \$34,826 annually plus benefits. Lane County wages average \$15.94 hourly and \$33,152 annually plus benefits.

**Costs in Addition to Tuition (estimate)\***

Books and fees..... \$2,550  
Some Business courses have a one-time fee of \$5 per term to help support the Student Resource Center. See the Business Department for details.

\* Subject to change without notice.

**Prerequisites** The entering student must have a basic knowledge of the Windows operating system, and place at least into WR 121 and MTH 065, or take classes to reach these levels before enrolling in program courses. Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 108 Business Proofreading and Editing. Before enrolling in BT 120 MS WORD for Business or BT 123 MS EXCEL for Business, students are expected to have the ability to type 30 words per minute accurately and key 130-132 strokes per minute on an electronic calculator (or numeric keypad). The Business Department offers free placement tests to assist students in determining their skill levels. Students who are unable to meet the minimum requirements should consider completing BT 010 Computer Keyboarding and/or BT 020 10-Key Calculators before enrolling in MS Word or Excel. Additional testing information and schedule details are available at: [lanecc.edu/business/testing](http://lanecc.edu/business/testing)

All Business Department majors must have a computer that meets minimum system requirements; contact the department or advisor for details.

**Cooperative Education (Co-op)** Co-op offers students graded college credit for on-the-job work experience related to educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for future employment. Three credits of Co-op are required for the AAS degree. Additional Co-op credit is strongly recommended as an elective. Contact Jamie Kelsch, Accounting Co-op Coordinator, Bldg. 2, Rm. 143, 541.463.5540.

**Program Advisor** Deb Hupcey, Bldg. 2, Rm. 135, 541.463.5635, [hupceyd@lanecc.edu](mailto:hupceyd@lanecc.edu)

**Program Counselor** Marva Solomon, Bldg. 1, Rm. 103B, 541.463.5625, [solomonm@lanecc.edu](mailto:solomonm@lanecc.edu)

### Accounting

**Two-Year Associate of Applied Science Degree**

First Year	Fall
BT 112 Team Building Skills <sup>D,G,H</sup> .....	3
BT 120 MS WORD for Business <sup>*,D,G</sup> .....	3
CS 120 Concepts of Computing: Information Processing <sup>D,G</sup>	4
WR 121 Composition: Introduction to Academic Writing <sup>*,D,G,W</sup> .....	4
<b>Total Credits</b>	<b>14</b>

	<b>Winter</b>	
BA 101 Introduction to Business <sup>D,G</sup> .....	4	
BT 123 MS EXCEL for Business <sup>*,B,D,G</sup> .....	4	
BT 165 Introduction to the Accounting Cycle <sup>B,D,G</sup> .....	4	
MTH 065 Elementary Algebra or higher <sup>*,D,G,S</sup> .....	4	
Total Credits	16	

	<b>Spring</b>	
BA 195 Professional Service and Development <sup>*,D,G</sup> .....	2	
BA 206 Management Fundamentals <sup>*,D,G</sup> .....	3	
BA 214 Business Communications <sup>*,D,G</sup> .....	4	
BA 281 Personal Finance <sup>D,G</sup> .....	4	
BT 163 QuickBooks <sup>*,3,D,G</sup> .....	4	
Total Credits	17	

	<b>Second Year</b>	
BA 211 Financial Accounting <sup>*,3,D,G</sup> .....	4	
Directed elective <sup>3,4,D,G</sup> .....	3-4	
Directed elective <sup>3,4,D,G</sup> .....	3-4	
Directed elective <sup>3,4,D,G</sup> .....	3-4	
Choice of: .....	3	
Physical Education Activity requirement <sup>1,2,R</sup>		
Health requirement <sup>2,R</sup>		
Total Credits	16-19	

	<b>Winter</b>	
Directed elective <sup>3,4,D,G</sup> .....	3-4	
Directed elective <sup>3,4,D,G</sup> .....	3-4	
Speech course <sup>A,D</sup> .....	4	
Total Credits	10-12	

	<b>Spring</b>	
BA 226 Business Law <sup>D,G</sup> .....	4	
BA 278 Leadership and Team Dynamics <sup>D,G,H</sup> .....	4	
BA 280AC Co-op Ed: Accounting <sup>D,G</sup> .....	3	
Directed elective <sup>3,4,D,G</sup> .....	3-5	
Total Credits	14-16	

- 1 PE Activity requirement, credits must be taken in at least two terms to satisfy degree requirement.
- 2 Can be taken any term.
- 3 Must be passed with grade of "B-" or better to satisfy program requirement.
- 4 Students must choose one of the Directed Elective sequences below for a total of 18-25 elective credits. Courses are generally offered in the term listed in the sequence, not necessarily the term directed electives are listed in the program.

	<b>Bookkeeper Elective Sequence</b>	
BT 170 Payroll Records and Accounting <sup>*,3,B,D,G</sup> .....	4	
BT 223 MS EXCEL for Business – Expert <sup>*,3,D,G</sup> .....	3	
BT 272 Tax Concepts and Preparation <sup>*,3,D,G</sup> .....	4	

	<b>Winter</b>	
BT 276 Automated Accounting Systems <sup>*,3,B,D,G</sup> .....	4	
BT 286 Professional Bookkeeping Course <sup>*,3,D,G</sup> .....	4	

	<b>Spring</b>	
BT 296 Applied Financial Accounting <sup>*,3,D,G</sup> .....	5	

	<b>Payroll Elective Sequence</b>	
BT 170 Payroll Records and Accounting <sup>*,3,B,D,G</sup> .....	4	
BT 272 Tax Concepts and Preparation <sup>*,3,D,G</sup> .....	4	

	<b>Winter</b>	
BA 224 Human Resource Management <sup>*,3,D,G</sup> .....	3	

	<b>Spring</b>	
BT 163 QuickBooks <sup>*,3,D,G</sup> .....	4	
BT 171 Payroll Laws and Regulations <sup>3,D,G</sup> .....	4	

	<b>Transfer Elective Sequence</b>	
ECON 200 Principles of Economics: Introduction to Economics <sup>3,D,G</sup> .....	3	<b>Fall</b>

	<b>Winter</b>	
BA 213 Managerial Accounting <sup>*,3,D,G</sup> .....	4	
BT 276 Automated Accounting Systems <sup>*,3,B,D,G</sup> .....	4	

ECON 201 Principles of Economics: Introduction to Microeconomics <sup>*,3,D,G</sup> .....	3	
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	<b>Spring</b>	
BA 217 Budgeting for Managers <sup>*,3,D,G</sup> .....	4	
ECON 202 Principles of Economics: Introduction to Macroeconomics <sup>*,3,D,G</sup> .....	3	

## Accounting Clerk

### Career Pathway Certificate of Completion

**Purpose** This Career Pathway Certificate is designed for professional office personnel who are interested in career enhancement, or for current Business students who wish to expand their options to enter the field of accounting as Accounts Payable or Accounts Receivable clerks.

**Learning Outcomes** The graduate of the Accounting Clerk Certificate of Completion will be able to:

- understand accounting as the "language of business."
- use computerized and manual systems to record data and prepare accounting statements and reports.
- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.
- use software including spreadsheets and databases to input, manage, and interpret information to meet organizational needs.
- create professional, accurate spreadsheets.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.

	<b>Fall</b>	
BT 165 Introduction to the Accounting Cycle <sup>D,G</sup> .....	4	
BT 170 Payroll Records and Accounting <sup>*,D,G</sup> .....	4	

	<b>Winter</b>	
BT 123 MS EXCEL for Business <sup>*,B,D,G</sup> .....	4	
BT 163 QuickBooks <sup>*,D,G</sup> .....	4	

Total Credits 16

## Bookkeeper

### Career Pathway Certificate of Completion

**Note** The Bookkeeper Career Pathway Certificate of Completion is under review for the 2010-2011 academic year. Students interested in this field of study should consider the Two-Year Accounting program with the Bookkeeper elective sequence. For additional information, contact Deb Hupcey in the Counseling Department, 541.463.5635 or [hupceyd@lanec.edu](mailto:hupceyd@lanec.edu)

**Standard footnotes:**

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B-" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement



## Payroll Clerk

### Career Pathway Certificate of Completion

**Purpose** This Career Pathway Certificate of Completion is designed for professional office personnel who are interested in career enhancement, or for current Business students with office experience who wish to expand their options to enter the field of accounting as payroll clerks. The program provides the foundation necessary to prepare for the Fundamental Payroll Certification Test (FPC) offered by the American Payroll Association.

**Learning Outcomes** The graduate of the Payroll Clerk Certificate of Completion will be able to:

- understand accounting as the “language of business.”
- use computerized and manual systems to record data and prepare accounting statements and reports.
- use research and analytical skills to support the activities of the organization.
- apply critical thinking and analytical skills in decision-making and problem solving.
- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.
- use software including word processing, spreadsheets, and databases to input, manage, and interpret information to meet organizational needs.
- provide basic training and technical support for users of office equipment and software systems.
- create professional, accurate documents.
- make effective presentations to internal and external audiences.
- work independently within diverse business environments, apply individual strengths and critical thinking to collaborative efforts.
- engage customers and co-workers in a purposeful manner – listening to and accurately interpreting their responses within diverse cultural contexts.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.

	<b>Fall</b>	
BT 123 MS EXCEL for Business * <sup>3</sup> ,B,D,G .....	4	
BT 165 Introduction to the Accounting Cycle <sup>D,G</sup> .....	4	
BT 170 Payroll Records and Accounting * <sup>3</sup> ,B,D,G .....	4	
	<b>Winter</b>	
BA 224 Human Resource Management * <sup>3</sup> ,D,G .....	3	
BT 163 QuickBooks * <sup>3</sup> ,D,G .....	4	
	<b>Spring</b>	
BA 226 Business Law <sup>D,G</sup> .....	4	
BT 171 Payroll Laws and Regulations <sup>3</sup> ,D,G .....	4	
Total Credits	27	

3 Must be passed with grade of “B-” or better to satisfy program requirement.

## Administrative Office Professional

### Offered by the Business Department

#### Two-Year Associate of Applied Science Degree, Administrative Office Professional

#### Career Pathway Certificate of Completion, Legal Office Skills

#### Career Pathway Certificate of Completion, Office Software Specialist

#### Career Pathway Certificate of Completion, Small Business Ownership

**Purpose** To train administrative office professionals for a wide variety of office support duties. They may handle correspondence, maintain electronic and manual files, assist with financial record keeping, operate a variety of office equipment, assist customers, answer telephones, act as a receptionist, perform general office duties, and use personal computers for internet research, word processing, and financial analysis.

Administrative office professionals can work effectively as a member of a team, as well as provide high-level administrative support by conducting research, preparing statistical reports, and handling information requests. Administrative office professionals will have high proficiency in document production and the use of computer software programs, including the ability to assist others with computer problem solving. They are capable of assuming some executive decision-making responsibilities. This program provides the foundation necessary to prepare for the Certified Professional Secretary examination. Upon successful completion of the first year courses, students will be eligible for the Business Assistant One-Year Certificate of Completion.

**Learning Outcomes** The graduate of the Associate of Applied Science program will be able to:

- organize and manage the daily business functions of an organization.
- use software including word processing, spreadsheets, databases, and presentation tools to input, manage, and interpret information to meet organizational needs.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.
- create professional, accurate documents.
- anticipate and actively explore innovative solutions to technological and organizational challenges.
- provide basic training and technical support for office equipment and software systems.
- understand accounting as the “language of business.”
- engage customers and co-workers in a purposeful manner – listening to and accurately interpreting their responses within diverse cultural contexts.
- use research and analytical skills to support the activities of the organization.
- work independently within diverse business environments, apply individual strengths and critical thinking to collaborative efforts.
- make effective presentations to internal and external audiences.
- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision-making and problem solving.

- perform administrative, management, financial, and Web support functions using technology.
- apply and integrate advanced computer software applications to complete complex projects and documents.
- use communication, teamwork, and interpersonal skills for internal and external customer support.
- perform in office management level positions after additional office experience.
- have enhanced employment opportunities based on selection of directed electives, such as accounting, E-Business, legal, and medical.
- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.
- use good keyboarding skills to prepare documents quickly and accurately according to employer standards.

**Employment Trends** For administrative office professionals, the projected number of annual openings for the state of Oregon is 583, with approximately 51 in Lane County. Employers particularly seek employees with good communication, teamwork, and interpersonal skills, as well as those who present themselves in a professional manner. Workers with postsecondary training have a competitive advantage in the labor market.

**Wages** Statewide wages for administrative office professionals average \$19.93 hourly and \$41,444 annually plus benefits. Lane County wages average \$19.45 hourly and \$40,465 annually plus benefits.

**Costs in Addition to Tuition (estimate)\***

Books and fees..... \$2,550  
 Some Business courses have a one-time fee of \$5 per term to help support the Student Resource Center. See the Business department for details.

\* Subject to change without notice.

**Prerequisites** The entering student must have a basic knowledge of the Windows operating system, and place at least into WR 121 and MTH 065, or take classes to reach these levels before enrolling in program courses. Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 108 Business Proofreading and Editing. Before enrolling in BT 120 MS WORD for Business or BT 123 MS EXCEL for Business, students are expected to have the ability to type 30 words per minute accurately and key 130-132 strokes per minute on an electronic calculator (or numeric keypad). The Business Department offers free placement tests to assist students in determining their skill levels. Students who are unable to meet the minimum requirements should consider completing BT 010 Computer Keyboarding and/or BT 020 10-Key Calculators before enrolling in MS Word or Excel. Additional testing information and schedule details are available at: [lanecc.edu/business/testing](http://lanecc.edu/business/testing)

All Business Department majors must have a computer that meets minimum system requirements; contact the department or advisor for details.

**Cooperative Education (Co-op)** Co-op offers students graded college credit for on-the-job work experience related to educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for future employment. Three credits of Co-op are required for the AAS degree. Additional Co-op credit is strongly recommended as an elective. Contact Jamie Kelsch, Administrative Assistant Co-op Coordinator, Bldg. 2, Rm. 143, 541.463.5540.

**Program Advisor** Deb Hupcey, Bldg. 2, Rm. 135, 541.463.5635, [hupceyd@lanecc.edu](mailto:hupceyd@lanecc.edu)

**Program Counselor** Marva Solomon, Bldg. 1, Rm. 103B, 541.463.5625, [solomonm@lanecc.edu](mailto:solomonm@lanecc.edu)

**Administrative Office Professional**

**Two-Year Associate of Applied Science Degree**

<b>First Year</b>	<b>Fall</b>
BT 112 Team Building Skills <sup>D,G,H</sup> .....	3
BT 120 MS WORD for Business <sup>*,D,G</sup> .....	3
CS 120 Concepts of Comput: Information Processing <sup>D,G</sup> .	4
WR 121 Composition: Introduction to Academic Writing <sup>*,D,G,W</sup> .....	4
<b>Total Credits</b>	<b>14</b>

	<b>Winter</b>
BA 101 Introduction to Business <sup>D,G</sup> .....	4
BT 123 MS EXCEL for Business <sup>*,B,D,G</sup> .....	4
BT 165 Introduction to the Accounting Cycle <sup>B,D,G</sup> .....	4
MTH 065 Elementary Algebra or higher <sup>*,D,G,S</sup> .....	4
<b>Total Credits</b>	<b>16</b>

	<b>Spring</b>
BA 195 Professional Service and Development <sup>*,D,G</sup> .....	2
BA 206 Management Fundamentals <sup>*,D,G</sup> .....	3
BA 214 Business Communications <sup>*,D,G</sup> .....	4
BT 144 Administrative Procedures <sup>*,D,G</sup> .....	4
BT 163 QuickBooks <sup>*,D,G</sup> .....	4
<b>Total Credits</b>	<b>17</b>

<b>Second Year</b>	<b>Fall</b>
BA 224 Human Resource Management <sup>*,D,G</sup> .....	3
BT 220 MS WORD for Business – Expert <sup>*,D,G</sup> .....	3
Directed Elective <sup>3,D,G</sup> .....	4-8
Speech course <sup>A,D</sup> .....	4
Choice of:.....	3
Physical Education Activity requirement <sup>1,2,R</sup>	
Health requirement <sup>2,R</sup>	
<b>Total Credits</b>	<b>17-21</b>

	<b>Winter</b>
BA 226 Business Law <sup>D,G</sup> .....	4
BT 228 Integrated Office Applications <sup>*,D,G</sup> .....	4
BT 230 Paperless Office Practices <sup>*,D,G</sup> .....	4
Directed Elective <sup>3,D,G</sup> .....	4-8
<b>Total Credits</b>	<b>16-20</b>

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

	<b>Spring</b>
BA 278 Leadership and Team Dynamics <sup>D,G,H</sup> .....	4
BA 280AA Co-op Ed: Administrative Assist <sup>D,G</sup> .....	3
Directed Elective <sup>3,D,G</sup> .....	4-8
BT 271 Administrative Professional Practicum <sup>*,D,G</sup> .....	4
<b>Total Credits</b>	<b>15-19</b>

- 1 PE Activity, credits must be taken in at least two terms to satisfy degree requirement.
- 2 Can be taken any term.
- 3 Students must choose a minimum of 12 credits in one or more areas from the following Directed Electives list (can be from more than one category):

#### Accounting Directed Electives

BA 215 Acctg: Language of Business Decisions <sup>*,D,G</sup> .....	4
BT 170 Payroll Records and Accounting <sup>*,B,D,G</sup> .....	4
BT 171 Payroll Laws and Regulations <sup>D,G</sup> .....	4
BT 223 MS EXCEL for Business – Expert <sup>*,D,G</sup> .....	3

#### E-Business Directed Electives

BT 150 Business Web Pages <sup>D,G</sup> .....	3
BT 251 E-Business Fundamentals <sup>*,D,G</sup> .....	3
BT 252 Web Tools: Photoshop and Dreamweaver <sup>D,G</sup> .....	4
BT 253 Internet Marketing <sup>D,G</sup> .....	4

#### Legal Office Directed Electives

BA 280L Co-op Ed: Legal Assist <sup>D,G</sup> .....	3
LA 100 Legal Procedures <sup>*,D,G</sup> .....	4
LA 101 Introduction to Paralegal Studies <sup>*,D,G</sup> .....	3
LA 102 Legal Terminology <sup>D,G</sup> .....	3
LA 105 Civil Litigation <sup>*,D,G</sup> .....	3
LA 128 Legal Procedures 2 <sup>*,D,G</sup> .....	4
LA 132 Ethics for the Legal Professional <sup>*,D,G</sup> .....	3

#### Medical Office Directed Electives

HIT 196 Medical Transcription 2 <sup>*,D,G</sup> .....	2
HO 100 Medical Terminology <sup>1 D,G</sup> .....	3
HO 110 Medical Filing and Records Mgmt <sup>D,G</sup> .....	3
HO 112 Medical Insurance Procedures <sup>*,D,G</sup> .....	3
HO 195 Medical Transcription 1 <sup>*,D,G</sup> .....	2

#### Additional Electives

BA 281 Personal Finance <sup>D,G</sup> .....	4
BA 223 Marketing <sup>*,D,G</sup> .....	4
BA 250 Small Business Management <sup>*,D,G</sup> .....	4
BA 280AA Cooperative Education: Admin Assist <sup>D,G</sup> .....	3
BA 280L Cooperative Education: Legal Assist <sup>D,G</sup> .....	3
BT 015 Keyboard Skillbuilding 1 <sup>*,D,G</sup> .....	3
BT 016 Keyboard Skillbuilding 2 <sup>*,D,G</sup> .....	3
BT 017 Keyboard Skillbuilding 3 <sup>*,D,G</sup> .....	3
BT 122 MS POWERPOINT for Business <sup>*,D,G</sup> .....	3
BT 124 MS ACCESS for Business <sup>*,D,G</sup> .....	3

## Legal Office Skills

### Career Pathway Certificate of Completion

**Purpose** This Career Pathway Certificate of Completion is designed for professional office personnel who have a minimum of two years' experience in office administration and are interested in career enhancement, or for current Business students with equivalent office experience who wish to expand their options for career choices. Legal office courses provide opportunities for mobility and advancement. Career possibilities include office positions in law firms, courts, insurance companies, human resource departments, banks, and other law-related business and government offices.

**Learning Outcomes** The graduate of the Legal Office Skills Certificate of Completion will be able to:

- use and understand basic legal terminology and concepts.

- understand the role of lawyers in the legal system and the importance of client confidentiality and the attorney-client privilege in the legal profession.
- prepare professional accurately formatted legal documents, letters, and pleadings and compose correspondence commonly used in legal settings.
- distinguish between primary and secondary sources of law and identify one law library publication containing each source.
- understand the purposes and many of the functions of court rules, schedules, and procedures.
- understand the differences and similarities between criminal law and procedure and civil law and procedure.

	<b>Fall</b>
BA 226 Business Law <sup>D,G</sup> .....	4
LA 100 Legal Procedures <sup>*,D,G</sup> .....	4
LA 102 Legal Terminology <sup>D,G</sup> .....	3
	<b>Winter</b>
LA 101 Introduction to Paralegal Studies <sup>*,D,G</sup> .....	3
LA 128 Legal Procedures 2 <sup>*,D,G</sup> .....	4
	<b>Spring</b>
LA 105 Civil Litigation <sup>*,D,G</sup> .....	3
LA 132 Ethics for the Legal Professional <sup>*,D,G</sup> .....	3
BA 280L Co-op Ed: Legal Assist <sup>D,G</sup> .....	3
<b>Total Credits</b>	<b>27</b>

## Office Software Specialist

### Career Pathway Certificate of Completion

**Purpose** This Career Pathway Certificate of Completion is designed for professional office personnel who are interested in career enhancement, or for current Business students with office experience who wish to expand their software proficiency. In today's competitive job market, Office Software Specialist certification can bring employment opportunities, greater earning potential and career advancement, and increased job satisfaction.

**Learning Outcomes** The graduate of the Office Software Specialist Certificate of Completion will be able to:

- navigate the Windows operating environment.
- create, format, save, edit, paginate, and print documents.
- create and apply character and paragraph styles, generate and update document indexes, tables of contents, and captions, and demonstrate mastery in working with document sections, templates, and mail merge.
- create, run, and save macros.
- use cell, row and column, and worksheet formatting techniques to create professional-looking spreadsheets.
- use sophisticated Excel functions to perform sensitivity analysis to solve business problems.
- plan and develop a worksheet to solve complex business problems by using named cells and ranges, complex logical and nested logical functions, and relative, absolute, and mixed cell references in creating formulas and functions.
- work with arrays, iteration, multisheet data, form controls, look up functions, date and time functions, and math and statistical functions in a business problem-solving context.
- create presentations from a template, from existing slides, or by using the AutoContent Wizard and apply appropriate design principles to design, create, and present an original slide show using PowerPoint software.
- customize color schemes, apply slide transitions and animation effects, create a custom background, add animated clip art, link slides within the presentation, resize and scale objects, add action buttons, hide slides, and set automatic slide timings.



- enter, edit, move, and delete information in established databases with accuracy.
- sort, index, and search databases, create custom forms and reports, link tables, and import/export information.

	<b>Fall</b>	
BT 120 MS WORD for Business * <sub>D,G</sub> .....	3	
BT 122 MS POWERPOINT for Business * <sub>D,G</sub> .....	3	
	<b>Winter</b>	
BT 123 MS EXCEL for Business * <sub>B,D,G</sub> .....	4	
BT 220 MS WORD for Business – Expert * <sub>D,G</sub> .....	3	
	<b>Spring</b>	
BT 124 MS ACCESS for Business * <sub>D,G</sub> .....	3	
BT 223 MS EXCEL for Business – Expert * <sub>D,G</sub> .....	3	
Total Credits	19	

## Small Business Ownership

### Career Pathway Certificate of Completion

**Purpose** This Career Pathways Certificate is designed for individuals who may want to own and operate a business in the near term or sometime in the future. This includes, but is not limited to, trade and professional students, community members and former graduates with skills that are marketable in the business environment; individuals with skill sets that are commonly delivered in a “freelancer” or independent contractor capacity; and service providers, small retailers and food service providers that may potentially organize as a business. The program includes two courses in accounting and one course in each of the follow: Intro to Business, Business Law, Excel, Marketing, Management Fundamentals, QuickBooks, and Small Business Management.

**Learning Outcomes** The graduate of the Small Business Ownership Certificate of Completion will be able to:

- understand his or her motivations and the reality of owning a small business, and understand the legal implications of being a business owner.
- determine the appropriate type of business entity for various business endeavors, and understand, outline and evaluate the components of a business plan.
- use cell, row and column, and worksheet formatting techniques to create professional-looking spreadsheets for analyzing business decisions.
- use sophisticated Excel functions to perform sensitivity analysis to solve business problems.
- understand the role of accounting in planning, operating, and reporting an organization’s activities and management’s fiduciary responsibility to safeguard assets and be able to discuss the adequacy of internal controls.
- recognize how the major elements of the marketing process apply to small business marketing situations.
- design and utilize QuickBooks as a tool to efficiently meet an organizations accounting and tax compliance responsibilities.
- understand the link between accounting data and the underlying business reality, and use the accounting equation for analyzing business transactions and creating financial statements.
- understand the historical role and evolving trends in small business including: transitions to paperless environments, globalization, role of e-commerce, and sustainability.

	<b>Fall</b>	
BA 101 Introduction to Business <sup>D,G</sup> .....	4	
BT 123 MS EXCEL for Business * <sub>B,D,G</sub> .....	4	
BT 165 Introduction to the Accounting Cycle <sup>B,D,G</sup> .....	4	
	<b>Winter</b>	
BA 223 Marketing * <sub>D,G</sub> .....	4	
BA 226 Business Law <sup>D,G</sup> .....	4	
BT 163 QuickBooks * <sub>D,G</sub> .....	4	
	<b>Spring</b>	
BA 206 Management Fundamentals * <sub>D,G</sub> .....	3	
BA 215 Accting: Language of Business Decisions * <sub>D,G</sub> .....	4	
BA 250 Small Business Management * <sub>D,G</sub> .....	4	
Total Credits	35	

## American Indian Experience

### Offered by Multiple Departments

### Suggested Course of Study

Lane Community College offers students courses with focus on American Indian Languages, Art, Anthropology, Biology, Cooperative Education, Ethnic Studies, and Literature. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education.

These courses provide needed credits for graduation and transfer, and a supportive and community environment.

Students who directly benefit from these offerings include:

- students who wish to study an American Indian language as their language requirement at a four-year college or university.
- students who plan to study Native American (or American Indian) Studies at a four-year college or university.
- students who prefer that their educational experience be less institutional and more in keeping with American Indian culture and tradition.
- anyone who has a strong interest in American Indian cultures, histories, languages, or literatures.

A notable feature of this course of study is the opportunity to participate in three excellent Learning Communities. Learning Communities link subjects and classes to integrate assignments and ideas. Students work closely with and learn from both faculty and peers to gain deeper understanding of the combined subject matter. These Learning Communities are:

**Ecotrails** BI 103G Global Ecology and WR 122; Multicultural study of ecological and social communities, including American Indian perspectives.

**Native Circles** An entry for students into career planning and college success accomplished in an American Indian cultural context.

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of “B” or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of “C-” or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

**Reconnecting with Nature** BI 103G Global Ecology; REL 243 Nature, Religion, and Ecology; and PS 297 Environmental Politics. Exploration of reconnecting with nature from the perspectives of science, spirituality, and political activism.

This suggested course of study offers the following disciplines and course sequences:

#### American Indian Languages

AIL 100	Foundations of American Indian Languages
AIL 101	Chinuk Wawa – first year
AIL 102	Chinuk Wawa – first year
AIL 103	Chinuk Wawa – first year

Successful completion of two terms of first-year courses fulfills the Oregon University System's requirements for admission to state universities.

AIL 201	Chinuk Wawa – second year
AIL 202	Chinuk Wawa – second year
AIL 203	Chinuk Wawa – second year

Successful completion of this second-year series of courses will fulfill the Oregon University System's language requirement for graduation.

AIL 280	Cooperative Education, integrates classroom learning with field experience
ART 203	Survey of American Indian Art and Architecture: North and Central America

#### Anthropology

ANTH 231	American Indian Studies, northeastern and southeastern states
ANTH 232	American Indian Studies, central and southwestern states
ANTH 233	American Indian Studies, west of the Rockies

#### Biology

BI 103G	Global Ecology, examine nature through Indian eyes and western science
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#### Ethnic Studies

ES 211	Chicano/Latino Experience: Historical and Ideological
ES 241	Native American Experience, Consequences of Native Americans and European Contact
ES 242	Native American Experience, 19th Century Federal-Indian Relations
ES 243	Native American Experience, Contemporary Native American Issues

#### History

HST 257	American Indian History
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#### Literature

ENG 232	Native American Literature
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#### Human Relations

CG 101	Native Circles: College Success Native American Style
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Important American Indian support at Lane Community College is provided by:

- Native American Program, a program dedicated to counseling Lane's American Indian and Alaska Native students, and the
- Native American Student Association (NASA), an American Indian student organization or club that fosters traditional values and unity among students
- Long House: Lane Community College began construction in 2006 of an American Indian long house on campus for Native programs and activities
- Rites of Passage: Umista is a Summer Academy for Native American youth in middle and high schools

For more information, contact:

Drew Viles, Bldg 17/Rm 313, 541.463.5480, [vilesa@lanecc.edu](mailto:vilesa@lanecc.edu)  
 Carol Watt, CEN 442, 541.463.5749, [wattc@lanecc.edu](mailto:wattc@lanecc.edu)  
 James Florendo, 541.463.5238, [florendoj@lanecc.edu](mailto:florendoj@lanecc.edu)  
 Jeff Harrison, 541.463.5145, [harrisonj@lanecc.edu](mailto:harrisonj@lanecc.edu)

## Auto Body and Fender Technology

Offered by the Advanced Technology Division

Two-Year Associate of Applied Science Degree

Auto Collision Option

Auto Paint Option

Two-Year Certificate of Completion

**Purpose** To train technicians in the latest paint and collision technology, and provide substantial practical experience essential to becoming proficient in this industry, for careers in car dealerships, independent body and paint shops, heavy-duty truck shops, or with jobbers selling paint and collision equipment and materials.

Auto Collision Option prepares students for specialization in the auto collision industry, for careers in auto dealerships, custom repair shops, independent body shops, motor home manufacturing, employment with collision jobbers, auto collision repair estimators, and auto collision manufacturers.

Auto Paint Option prepares students for specialization in the auto paint industry, for careers in auto dealerships, custom paint shops, independent paint shops, heavy-duty truck shops, the motor home industry, and with paint jobbers and paint equipment manufacturers.

**Learning Outcomes** The student who successfully completes all Auto Body and Fender AAS or 2-year certificate program requirements will:

- adhere to OSHA and industry safety standards.
- effectively use the latest collision repair equipment as well as refinishing procedures.
- repair and refinish automobile bodies to industry standards.
- access library, computing, and communications services and obtain information and data from regional and national networks.
- interpret the concepts of a problem-solving task and translate them into mathematical equations.

In addition to the outcomes for Auto Body and Fender, the student who successfully completes all Auto Collision Option program requirements will:

- effectively use state-of-the-art measuring and collision repair equipment.
- demonstrate a thorough knowledge of advances in technology in auto collision.
- enter the workforce with substantial practical experience in collision repair.
- repair and reconstruct automobile bodies to industry standards.

In addition to the outcomes for Auto Body and Fender, the student who successfully completes all Auto Paint Option program requirements will:

- demonstrate thorough knowledge of advances in technology in auto paint.
- effectively use state-of-the-art equipment and materials as well as refinishing procedures.
- enter the workforce with substantial practical experience.

**Employment Trends** Statewide, 100 annual openings for auto paint and collision are projected in Oregon and 20 openings are projected annually in Lane County. Those with an associate degree in one of the program options will have a competitive advantage in the labor market.

**Wages** Statewide average, \$19.50 hourly, \$47,000 annually (\$50,000+ with experience). Lane County average, \$20 hourly, \$47,000 annually.

**Costs in Addition to Tuition and Registration Fees (estimate)\***

Books .....	600
Tools .....	\$550
Differential Fees* .....	\$2,987
Class Fees .....	\$1,224
<b>Total .....</b>	<b>\$5,361</b>

\*This is the total of all the differential fees attached to Auto Body and Fender courses. These and other fees may change during the year - see the online credit class schedule for fees assigned to courses.

**Licensing or Other Certification** Exams Required Completion of this program may substitute for one year of the two years of work experience required for taking written exams for ASE certification.

**Prerequisites** Minimum placement score of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

**Criteria Used for Admission** Students may enter this program fall, winter or spring term. For consent to enroll in major courses, students must attend a program orientation for fall terms (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor in winter and spring terms.

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Auto Body and Fender Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits in AB 280 may be earned in lieu of required Auto Body and Fender course credits. Contact Marv Clemons, Auto Body Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158.

**Program Advisor** Lisa Stegall, Bldg. 12, Rm. 203, 541.463.5378, [stegall@lanec.edu](mailto:stegall@lanec.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202, 541.463.5236, [litty@lanec.edu](mailto:litty@lanec.edu)

**Two-Year Associate of Applied Science Degree**

<b>First Year</b>	<b>Fall</b>
AB 132 Beginning Auto Paint <sup>*,D,G</sup> .....	6
AB 134 Paint and Collision <sup>*,D,G</sup> .....	6
MTH 060 Beginning Algebra <sup>*,D,G,M</sup> or higher mathematics .....	4
<b>Total Credits</b>	<b>16</b>

	<b>Winter</b>
AB 132 Beginning Auto Paint <sup>*,D,G</sup> .....	6
AB 134 Paint and Collision <sup>*,D,G</sup> .....	6
EL 115 Effective Learning <sup>A</sup> .....	3
Art elective .....	2
<b>Total Credits</b>	<b>17</b>

	<b>Spring</b>
AB 133 Beginning Auto Collision <sup>*,D,G</sup> .....	6
AB 134 Paint and Collision <sup>*,D,G</sup> .....	6
CS 120 Concepts of Computing: Information Processing <sup>S</sup> or higher computer science .....	4
<b>Total Credits</b>	<b>16</b>

<b>Second Year</b>	<b>Fall</b>
AB 133 Beginning Auto Collision <sup>*,D,G</sup> .....	6
AB 261 Intermediate Auto Collision <sup>*,D,G</sup> .....	6
MTH 076 Applied Geometry for Technicians <sup>*</sup> or higher mathematics .....	4
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing .....	3
<b>Total Credits</b>	<b>19</b>

	<b>Winter</b>
AB 260 Intermediate Auto Paint <sup>*,D,G</sup> .....	3
AB 261 Intermediate Auto Collision <sup>*,D,G</sup> .....	9
PE/Health requirement <sup>D,R</sup> .....	3
Arts/Letters requirement <sup>R</sup> .....	3
<b>Total Credits</b>	<b>18</b>

	<b>Spring</b>
AB 260 Intermediate Auto Paint <sup>*,D,G</sup> .....	12
Business elective .....	3
Human Relations requirement <sup>R</sup> .....	3
<b>Total Credits</b>	<b>18</b>

**Elective** AB 280 Co-op Ed: Auto Body Repair (optional)

Note: Recommended courses prior to entering major core courses—Effective Learning, Basic Mathematics Applications, and Introduction to College Writing: Workplace Emphasis.

**Auto Collision Option**

**Two-Year Associate of Applied Science Degree**

<b>First Year</b>	<b>Fall</b>
AB 133 Beginning Auto Collision <sup>*,D,G</sup> .....	6
AB 134 Paint and Collision <sup>*,D,G</sup> .....	6
MTH 060 Beginning Algebra <sup>*,D,G,M</sup> or higher mathematics .....	4
<b>Total Credits</b>	<b>16</b>

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement



	<b>Winter</b>
AB 133 Beginning Auto Collision <sup>*</sup> ,D,G .....	6
AB 134 Paint and Collision <sup>*</sup> ,D,G .....	6
EL 115 Effective Learning <sup>A</sup> .....	3
Art elective .....	2
Total Credits	17

	<b>Spring</b>
AB 134 Paint and Collision <sup>*</sup> ,D,G .....	6
AB 261 Intermediate Auto Collision <sup>*</sup> ,D,G .....	6
CS 120 Concepts of Computing: Information Processing <sup>S</sup> or higher computer science.....	4
Total Credits	16

	<b>Fall</b>
<b>Second Year</b>	
AB 261 Intermediate Auto Collision <sup>*</sup> ,D,G .....	9
AB 263 Advanced Auto Collision <sup>*</sup> ,D,G .....	3
MTH 076 Applied Geometry for Technicians <sup>*</sup> or higher mathematics.....	4
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing.....	3
Total Credits	19

	<b>Winter</b>
AB 263 Advanced Auto Collision <sup>*</sup> ,D,G .....	12
PE/Health requirement <sup>D,R</sup> .....	3
Arts/Letters requirement <sup>R</sup> .....	3
Total Credits	18

	<b>Spring</b>
AB 132 Beginning Auto Paint <sup>*</sup> ,D,G .....	12
Business elective .....	3
Human Relations requirement <sup>R</sup> .....	3
Elective AB 280 Co-op Ed: Auto Body Repair (optional)	
Total Credits	18

## Auto Paint Option

### Two-Year Associate of Applied Science Degree

	<b>Fall</b>
<b>First Year</b>	
AB 132 Beginning Auto Paint <sup>*</sup> ,D,G .....	6
AB 134 Paint and Collision <sup>*</sup> ,D,G .....	6
MTH 060 Beginning Algebra <sup>*</sup> ,D,G,M or higher mathematics.....	4
Total Credits	16

	<b>Winter</b>
AB 132 Beginning Auto Paint <sup>*</sup> ,D,G .....	6
AB 134 Paint and Collision <sup>*</sup> ,D,G .....	6
EL 115 Effective Learning <sup>A</sup> .....	3
Art elective .....	2
Total Credits	17

	<b>Spring</b>
AB 134 Paint and Collision <sup>*</sup> ,D,G .....	6
AB 260 Intermediate Auto Paint <sup>*</sup> ,D,G .....	6
CS 120 Concepts of Computing: Information Processing <sup>S</sup> or higher computer science.....	4
Total Credits	16

	<b>Fall</b>
<b>Second Year</b>	
AB 260 Intermediate Auto Paint <sup>*</sup> ,D,G .....	9
AB 262 Advanced Auto Paint <sup>*</sup> ,D,G .....	3
MTH 076 Applied Geometry for Technicians <sup>*</sup> or higher mathematics.....	4
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing.....	3
Total Credits	19

	<b>Winter</b>
AB 262 Advanced Auto Paint <sup>*</sup> ,D,G .....	12
PE/Health requirement <sup>D,R</sup> .....	3
Arts/Letters requirement <sup>R</sup> .....	3
Total Credits	18

	<b>Spring</b>
AB 133 Beginning Auto Collision <sup>*</sup> ,D,G .....	12
Business elective .....	3
Human Relations requirement <sup>R</sup> .....	3
Total Credits	18

Note: Recommended courses prior to entering major core courses—  
Effective Learning, Basic Mathematics Applications, and Introduction to  
College Writing: Workplace emphasis.

## Auto Body and Fender Technology

### Two-Year Certificate of Completion

	<b>Fall</b>
<b>First Year</b>	
AB 132 Beginning Auto Paint <sup>*</sup> ,D,G .....	6
AB 134 Paint and Collision <sup>*</sup> ,D,G .....	6
EL 115 Effective Learning .....	3
Total Credits	15

	<b>Winter</b>
AB 132 Beginning Auto Paint <sup>*</sup> ,D,G .....	6
AB 134 Paint and Collision <sup>*</sup> ,D,G .....	6
Art elective .....	2
Total Credits	14

	<b>Spring</b>
AB 133 Beginning Auto Collision <sup>*</sup> ,D,G .....	6
AB 134 Paint and Collision <sup>*</sup> ,D,G .....	6
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing.....	3
Total Credits	15

	<b>Fall</b>
<b>Second Year</b>	
AB 133 Beginning Auto Collision <sup>*</sup> ,D,G .....	6
AB 261 Intermediate Auto Collision <sup>*</sup> ,D,G .....	6
MTH 060 Beginning Algebra or MTH 076 Applied Geometry for Technicians <sup>*</sup> ,D,G,M or higher mathematics.....	4
Total Credits	16

	<b>Winter</b>
AB 260 Intermediate Auto Paint <sup>*</sup> ,D,G .....	3
AB 261 Intermediate Auto Collision <sup>*</sup> ,D,G .....	9
PE/Health Elective <sup>D</sup> .....	3
Total Credits	15

	<b>Spring</b>
AB 260 Intermediate Auto Paint <sup>*</sup> ,D,G .....	12
Human Relations requirement <sup>D</sup> .....	3
Total Credits	15

## Automotive Technology Fast Track

### Offered by the Advanced Technology Division

#### Suggested Course of Study

The curriculum outlined is a suggested course of study, an  
advising guide for students preparing to enter the work force as  
automotive technicians.

This advising guide allows students to complete the majority of the automotive classes in a one-year time frame and get into the work force in a short period of time. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. Students completing this curriculum may be eligible for a departmental recognition award that is not transcribed.

All of the following courses are state-approved for credit and may be applied to the Associate of Applied Science Degree in Automotive Technology. The courses are divided into groups of 20 credits per term with students attending classes 8 hours per day, 4 or 5 days per week. An application to the Fast Track program is required. New students may enter in fall terms only. Please contact Amy Bennett for program cost information, 541.463.5379.

<b>First Year</b>	<b>Fall</b>
AM 243 Electrical and Electronic Systems <sup>*,D,G</sup> .....	12
AM 143 Brakes <sup>*,D,G</sup> .....	8
Total Credits	20
	<b>Winter</b>
AM 145 Engine Repair <sup>*,D,G</sup> .....	12
AM 147 Suspension and Steering <sup>*,D,G</sup> .....	6
AM 280 Co-op Ed: Automotive <sup>D,G</sup> .....	2
Total Credits	20
	<b>Spring</b>
AM 244 Engine Performance <sup>*,D,G</sup> .....	12
AM 149 Manual Drive Trains and Axles <sup>*,D,G</sup> .....	6
AM 280 Co-op Ed: Automotive <sup>D,G</sup> .....	2
Total Credits	20

## Automotive Technology

Offered by the Advanced Technology Division

Two-Year Associate of Applied Science Degree

Two-Year Certificate of Completion

**Purpose** To prepare the graduate for employment as an automotive service technician working at company-owned repair stations, fleets, independent garages, gas stations, or new car dealerships.

**Learning Outcomes** The graduate of the Associate of Applied Science degree or the Two-Year Certificate of Completion will:

- use automotive service resources to complete lab projects and become familiar with computer accessed information, internet accessed information and information available in print related to automotive repair.
- be able to perform computations for gear ratios, engine displacement, electrical circuits, power output, vehicle alignment angles, conversion between the metric system and standard system, and use of precision measuring tools.
- diagnose and repair current vehicles using advanced diagnostic tools and equipment.

- successfully complete ASE certification tests.
- demonstrate and use industry safety standards.
- access library, computing, and communications services and obtain information and data from regional and national networks.
- interpret the concepts of a problem-solving task and translate them into mathematical equations.

**Employment Trends** Statewide, 300 annual openings for automotive technicians are projected in Oregon and 30 openings are projected annually in Lane County. Those with an associate degree have a competitive advantage in this labor market.

**Wages** Statewide average, \$18.50 hourly, \$40,000 annually (\$50,000+ with experience). Lane County average, \$17 hourly, \$35,000 annually.

**Costs in Addition to Tuition and Registration Fees (estimates)\***

Books .....	\$1,100
Tools.....	\$700-1,000
Differential Fees* .....	\$2,337
Class Fees .....	<u>\$525</u>
Total.....	\$4,662-4,962

\*This is the total of all the differential fees attached to Automotive Technology courses. These and other fees may change during the year - see the online credit class schedule for fees assigned to courses.

**Program Certification** National Automotive Technicians Education Foundation, a nonprofit foundation within the National Institute for Automotive Service Excellence.

**Prerequisites** Minimum placement score of 68 in Reading OR completion of RD 080 OR prior college. A high school diploma or equivalent is recommended for all applicants to this program.

**Program Application for Admission** New students to the Automotive program are required to:

1. Complete an application for admission to Lane Community College [available online] and complete placement testing in reading, writing, and mathematics;
2. Complete an application for admission to the Automotive Technology program, available in the Advanced Technology Division office; and
3. Submit your completed program application (including the \$25 non-refundable application fee) to the Advanced Technology Division office by the date noted on the application.

Students may enter this program fall, winter or spring terms. Students must attend the program orientation for fall term entry (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor for winter or spring term entry.

**Criteria for Admission** Students are selected based on a timely application to the program and a point allocation system.

NOTE: Contact the Division Office for information on the Fast Track curriculum (Fall term entry only).

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Automotive Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits in AM 280 may be earned in lieu of required Automotive Technology course credits. Contact Marv Clemons, Automotive Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158.

**Program Advisor** Lisa Stegall, Bldg. 12, Rm. 203, 541.463.5378, [stegalll@lanecc.edu](mailto:stegalll@lanecc.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202, 541.463.5236, [littyc@lanecc.edu](mailto:littyc@lanecc.edu)

**Two-Year Associate of Applied Science Degree**

<b>First Year</b>	<b>Fall</b>
AM 145 Engine Repair <sup>*,D,G</sup> .....	12
MTH 076 Applied Geometry for Technicians <sup>*,D,G,M</sup> or higher mathematics .....	4
Total Credits	16

	<b>Winter</b>
AM 149 Manual Drive Trains and Axles <sup>*,D,G</sup> .....	6
AM 147 Suspension and Steering <sup>*,D,G</sup> .....	6
WLD 121 Shielded Metal Arc Welding 1 * .....	4
PE/Health requirement <sup>D,R</sup> .....	3
Total Credits	19

	<b>Spring</b>
AM 242 Automatic Transmissions/Transaxles <sup>*,D,G</sup> .....	12
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing.....	3
Total Credits	15

<b>Second Year</b>	<b>Fall</b>
AM 243 Electrical and Electronic Systems <sup>*,D,G</sup> .....	12
CS 120 Concepts of Computing: Information Processing <sup>S</sup> or higher computer science.....	4
Choice of:.....	4
Science or Computer Science course <sup>*,S</sup>	
ET 129 Electrical Theory 1 <sup>*,S</sup>	
Total Credits	20

	<b>Winter</b>
AM 244 Engine Performance <sup>*,D,G</sup> .....	12
CG 203 Human Relations at Work <sup>H</sup> .....	3
Choice of:.....	4
SP 100 Basic Communications <sup>A</sup>	
SP 105 Listening and Critical Thinking <sup>A</sup>	
SP 218 Interpersonal Communications <sup>A</sup>	
Total Credits	19

	<b>Spring</b>
AM 143 Brakes <sup>*,D,G</sup> .....	8
AM 246 Heating and Air Conditioning <sup>*,D,G</sup> .....	4
AM 280 Co-op Ed: Automotive <sup>D,G</sup> .....	3
Total Credits	15

**Two-Year Certificate of Completion**

<b>First Year</b>	<b>Fall</b>
AM 145 Engine Repair <sup>*,D,G</sup> .....	12
MTH 076 Applied Geometry for Technicians <sup>*,D,G,M</sup> or higher mathematics .....	4
Total Credits	16

	<b>Winter</b>
AM 149 Manual Drive Trains and Axles <sup>*,D,G</sup> .....	6
AM 147 Suspension and Steering <sup>*,D,G</sup> .....	6
WLD 121 Shielded Metal Arc Welding 1 * .....	4
Total Credits	16

	<b>Spring</b>
AM 242 Automatic Transmissions/Transaxles <sup>*,D,G</sup> .....	12
PE/Health elective <sup>D,R</sup> .....	3
Total Credits	15

<b>Second Year</b>	<b>Fall</b>
AM 243 Electrical and Electronic Systems <sup>*,D,G</sup> .....	12
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing.....	3
Total Credits	15

	<b>Winter</b>
AM 244 Engine Performance <sup>*,D,G</sup> .....	12
CG 203 Human Relations at Work <sup>H</sup> .....	3
Total Credits	15

	<b>Spring</b>
AM 143 Brakes <sup>*,D,G</sup> .....	8
AM 246 Heating and Air Conditioning <sup>*,D,G</sup> .....	4
AM 280 Co-op Ed: Automotive <sup>D,G</sup> .....	3
Total Credits	15

**Aviation Maintenance Technician**

**Offered by the Lane Aviation Academy**

**Two-Year Associate of Applied Science Degree**

**Two-Year Certificate of Completion**

**Purpose** To prepare technicians for Federal Aviation Administration (FAA) certification exams (written, oral and practical) for the airframe and powerplant airman’s certificate. Federal regulations direct the following minimum number of hours of instruction for rating shown.

- Airframe is 1150 hours (400 General, plus 750 Airframe).
- Powerplant is 1150 hours (400 General, plus 750 Powerplant).
- Combined Airframe and Powerplant is 1900 hours (400 General, plus 750 Airframe and 750 Powerplant).

**Learning Outcomes** The graduate will:

- repair and maintain the operating condition of aircraft.
- pass the FAA written, oral and practical exams for licensing.
- demonstrate and use industry safety standards.
- access library, computing, and communications services and obtain information and data from regional, national, and international networks.
- interpret the concepts of a problem-solving task and translate them into mathematics.

**Employment Trends** Employment opportunities are favorable for trained aircraft mechanics. Annual new openings are expected



to be at about the state average. Reasonable employment opportunities exist for trained workers. Those with an associate degree have a competitive advantage in this labor market.

**Wages** Statewide, \$16-21 hourly, \$25 median hourly, and \$52,783 average annually.

**Costs in Addition to Tuition (estimates)\***

Books .....	\$500
Tools .....	\$750-1,000
Fees .....	\$1,143
Total .....	\$2,393-2,643

\* Subject to change without notice.

**Program Approval** The program is approved under Part 147 of the Federal Aviation Regulations of the Federal Aviation Administration.

**Licensing or Other Certification** Exams Required FAA oral, practical, and written certification exams are required.

**Prerequisites** Minimum placement score of 68 in Reading or completion of RD 080 or prior college. A high school diploma or equivalent is recommended for all applicants to this program. Procedures for crediting and guidelines for the determination of documented military or field experience are available through application with the FAA liaison.

**Note** See a counselor or advisor to learn what entry-level skills are suggested for successful completion of this program.

**Criteria Used for Admission** Students may enter major courses fall term. For consent to enroll in major courses, students must attend a program orientation for fall terms (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor for possible entry in winter and spring terms.

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Aviation Maintenance Co-op Coordinator and as approved by the FAA Liaison and Return to Service instructor, a maximum of six Co-op credits in AV 280 may be authorized in lieu of the final Return to Service course. Co-op may be taken summer term. Contact Marv Clemons, Aviation Maintenance Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158.

**Program Advisor** Lisa Stegall, Bldg. 12, Rm. 203, 541.463.5378, [stegall@lanecc.edu](mailto:stegall@lanecc.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202, 541.463.5236, [litty@lanecc.edu](mailto:litty@lanecc.edu)

**Two-Year Associate of Applied Science Degree**

**Required Prior to Beginning of First Year**

MTH 076 Applied Geometry for Technicians * <sup>D,G,M</sup> or equivalent.....	4
WR 115W Introduction to College Writing: Workplace Emphasis <sup>1,D,W</sup> or higher writing .....	3

**First Year**

AV 192 General 101 * <sup>D,G</sup> .....	6	<b>Fall</b>
AV 193 General 102 * <sup>D,G</sup> .....	6	
Science/Computer Science requirement <sup>1,R</sup> .....	3	
Total Credits	15	

**Winter**

AV 196 General 105 * <sup>D,G</sup> .....	6
AV 194 General 103 * <sup>D,G</sup> .....	6
MTH 086 Applied Algebra for Technicians * <sup>2,D,G,S</sup> or higher mathematics.....	4
PE/Health requirement <sup>1,3,D,R</sup> .....	3
Total Credits	19

**Spring**

AV 279 Airframe (Section 3, and 4) * <sup>D,G</sup> .....	12
AV 195 General 104 * <sup>D,G</sup> .....	6
Total Credits	18

**Second Year**

AV 281 Powerplant (Section 1 and 2) * <sup>D,G</sup> .....	12	<b>Fall</b>
AV 279 Airframe (Section 1) *.....	6	
Total Credits	18	

**Winter**

AV 281 Powerplant (Section 3 and 4) *.....	12
Arts/Letters requirement <sup>1,R</sup> .....	3
Human Relations requirement <sup>1,R</sup> .....	3
Total Credits	18

**Spring**

AV 283 Powerplant Return to Service * <sup>D,G</sup> .....	6
AV282 Airframe Return to Service * <sup>D,G</sup> .....	6
AV 279 Airframe (Section 2) * <sup>D,G</sup> .....	6
Elective AV 280 Co-op Ed: Aviation Maintenance (optional)	
Total Credits	18

**Two-Year Certificate of Completion**

**Required Prior to Beginning of First Year**

MTH 076 Applied Geometry for Technicians * <sup>D,G,M</sup> or equivalent.....	4
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**First Year**

AV 192 General 101 * <sup>D,G</sup> .....	6	<b>Fall</b>
AV 193 General 102 * <sup>D,G</sup> .....	6	
WR 115W Introduction to College Writing: Workplace Emphasis <sup>1,D,W</sup> or higher writing.....	3	
PE/Health elective <sup>1,3,D</sup> .....	3	
Total Credits	18	

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

PROGRAMS

	<b>Winter</b>	
AV 196 General 105 * <sub>D,G</sub> .....	6	
AV 194 General 103 * <sub>D,G</sub> .....	6	
MTH 086 Applied Algebra for Technicians * <sub>2,D,G,M</sub> or higher mathematics.....	4	
Total Credits	16	
	<b>Spring</b>	
AV 279 Airframe (Section 3, and 4) * <sub>D,G</sub> .....	12	
AV 195 General 104 * <sub>D,G</sub> .....	6	
Total Credits	18	
<b>Second Year</b>	<b>Fall</b>	
AV 281 Powerplant (Section 1 and 2) * <sub>D,G</sub> .....	12	
AV 279 Airframe (Section 1).....	6	
Total Credits	18	
	<b>Winter</b>	
AV 281 Powerplant (Section 3 and 4) * <sub>D,G</sub> .....	12	
Human Relations requirement <sup>1,H</sup> .....	3	
Total Credits	15	
	<b>Spring</b>	
AV 283 Powerplant Return to Service * <sub>D,G</sub> .....	6	
AV 282 Airframe Return to Service * <sub>D,G</sub> .....	6	
AV 279 Airframe (Section 2) * <sub>D,G</sub> .....	6	
Total Credits	18	

- 1 Not required for two-year FAA Airframe and Powerplant airman's certificate exams.
- 2 MTH 065 or MTH 070 or higher mathematics may substitute for MTH 086.
- 3 PE activity courses must be completed over at least 2 terms.

Students interested in completing the FAA Airway Science requirements for two-year institutions should:

**Substitute:**

- WR 121 English Composition: Exposition and Introduction to Argument for WR 115W Introduction to College Writing: Workplace Emphasis.
- SP 111 Fundamentals of Public Speaking for Arts/Letters requirement.
- MTH 111 College Algebra for Science/Computer Science requirement.

**Add:**

- WR 227 Technical Writing
- SP 130 Business and Professional Speech
- J 205 Public Relations
- Arts/Letters Elective (3 credits)
- Any 200 level Psychology course (3 credits)
- PH 101 or PH 102 Fundamentals of Physics
- AV 179 General Aviation

## Aviation Technology

Offered by Lane Aviation Academy

**Suggested Course of Study**

The curriculum outlined is a suggested course of study for students preparing for a transfer degree and aviation careers. Examples of aviation career fields are professional pilots, managers, airways sciences (air traffic control) or air transportation security.

A suggested course of study is not the same as a state-approved vocational program. Completion of these courses leads to an Associate of Arts Oregon Transfer Degree, with coursework appropriate for a baccalaureate major in aviation fields. Students intending to transfer to an Oregon university should consult with their career counselors for a specific course of study.

### Two-Year Core Curriculum

<b>First Year</b>	<b>Fall</b>
FT 102 General Aviation Careers .....	1
FT 103 Aircraft Development * .....	4
FT 115 Aircraft Systems and Structures.....	3
PSY 201 General Psychology or .....	3
SOC 204 Introduction to Sociology (3)	
WR 121 Composition: Introduction to Academic Writing * .....	4
HE 275 Lifetime Health and Fitness .....	3
AS 111 Air Force Today (optional) .....	(1)
Total Credits	18-19

	<b>Winter</b>
ECON 201 Principles of Economics: Microeconomics * .....	3
GEOG 142 Introduction to Human Geography .....	4
SP 111 Fundamentals of Public Speaking .....	4
WR 122 English Composition: Argument, Style and Research * .....	4
CG 203 Human Relations at Work .....	3
AS 120 Leadership Laboratory (optional).....	(1)
Total Credits	18-19

	<b>Spring</b>
ECON 202 Principles of Economics: Macroeconomics * .....	3
SP 112 Persuasive Speech .....	4
FT 113 Aviation Science.....	4
FT 130 Primary Flight Brief * .....	3
WR 123 Composition: Research * .....	4
Total Credits	18

<b>Second Year</b>	<b>Fall</b>
BA 211 Financial Accounting .....	4
PH 101 Fundamentals of Physics * .....	4
MTH 111 College Algebra * .....	5
WR 227 Technical Writing * .....	4
AS 211 Development of Air Power (optional).....	(1)
Total Credits	17-18

	<b>Winter</b>
PH 102 Fundamentals of Physics * .....	4
MTH 243 Introduction to Probability and Statistics * .....	4
FT 254 Aerodynamics.....	3
GS 109 Meteorology.....	5
Arts and Letters Elective .....	3
Total Credits	19

	<b>Spring</b>
PH 103 Fundamentals of Physics * .....	4
BA 254 General Aviation Management .....	3
SP 218 Interpersonal Communication.....	4
Arts and Letters Elective** .....	3
Social Science Elective** .....	3
AS 220 Leadership Laboratory (optional).....	(1)
Total Credits	17-18

- \* Prerequisite required.
- \*\* Choose from list for Cultural Diversity requirement if this requirement has not been met.

# Business Assistant

**Offered by the Business Department**

**One-Year Certificate of Completion**

**Purpose** To train business and office assistants for a wide variety of duties. They may handle correspondence, maintain electronic and manual files, assist with financial record keeping, operate a variety of office equipment, assist customers, answer telephones, act as a receptionist, act as an accounts receivable or payable clerk, perform general office duties, and use personal computers for internet research, word processing, and financial analysis. This Certificate of Completion may fulfill the first year requirements of the Accounting and Administrative Office Professional Two-Year Associate of Applied Science degrees. See program listings, or contact the Business Department office, counselor, or advisor for details.

**Learning Outcomes** The graduate will be able to:

- organize and manage the daily business functions of an organization.
- use software including word processing, spreadsheets, databases, and presentation tools to input, manage, and interpret information to meet organizational needs.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.
- create professional, accurate documents.
- anticipate and actively explore innovative solutions to technological and organizational challenges.
- provide basic training and technical support for office equipment and software systems.
- understand accounting as the “language of business.”
- engage customers and co-workers in a purposeful manner – listening to and accurately interpreting their responses within diverse cultural contexts.
- use research and analytical skills to support the activities of the organization.
- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.
- work independently within diverse business environments, apply individual strengths and critical thinking to collaborative efforts.
- make effective presentations to internal and external audiences.
- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision-making and problem solving.
- use good keyboarding skills to prepare documents quickly and accurately according to employer standards.

**Employment Trends** For business/office assistants, the projected number of annual openings for the state of Oregon is 1,598, with approximately 134 in Lane County. Employers particularly seek employees with good communication, teamwork, and interpersonal skills, as well as those who present themselves in a professional manner. Workers with postsecondary training have a competitive advantage in the labor market.

**Wages** Statewide wages for business/office assistants average \$14.09 hourly and \$29,311 annually plus benefits. Lane County wages average \$13.68 hourly and \$28,457 annually plus benefits.

**Costs in Addition to Tuition (estimate)\***

Books and fees..... \$1,350  
 Some Business courses have a one-time fee of \$5 per term to help support the Student Resource Center. See the Business department for details.

\* Subject to change without notice.

**Prerequisites** The entering student must have a basic knowledge of the Windows operating system, and place at least into WR 121 and MTH 065, or take classes to reach these levels before enrolling in program courses. Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 108 Business Proofreading and Editing. Before enrolling in BT 120 MS WORD for Business or BT 123 MS EXCEL for Business, students are expected to have the ability to type 30 words per minute accurately and key 130-132 strokes per minute on an electronic calculator (or numeric keypad). The Business Department offers free placement tests to assist students in determining their skill levels. Students who are unable to meet the minimum requirements should consider completing BT 010 Computer Keyboarding and/or BT 020 10-Key Calculators before enrolling in MS Word or Excel. Additional testing information and schedule details are available at: [lanec.edu/business/testing](http://lanec.edu/business/testing)

All Business Department majors must have a computer that meets minimum system requirements; contact the department or advisor for details.

**Program Advisor** Deb Hupcey, Bldg. 2, Rm. 135, 541.463.5635, [hupceyd@lanec.edu](mailto:hupceyd@lanec.edu)

**Program Counselor** Marva Solomon, Bldg. 1, Rm. 103B, 541.463.5625, [solomonm@lanec.edu](mailto:solomonm@lanec.edu)

	<b>Fall</b>
BT 112 Team Building Skills <sup>D,G,H</sup> .....	3
BT 120 MS WORD for Business <sup>*,D,G</sup> .....	3
CS 120 Concepts of Comput: Information Processing <sup>D,G</sup> .....	4
WR 121 Composition: Introduction to Academic Writing <sup>*,D,G,W</sup> .....	4
<b>Total Credits</b>	<b>14</b>

	<b>Winter</b>
BA 101 Introduction to Business <sup>D,G</sup> .....	4
BT 123 MS EXCEL for Business <sup>*,B,D,G</sup> .....	4
BT 165 Introduction to the Accounting Cycle <sup>B,D,G</sup> .....	4
MTH 065 Elementary Algebra or higher <sup>*,D,G,S</sup> .....	4
<b>Total Credits</b>	<b>16</b>

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of “B” or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of “C-” or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement



	Spring
BA 195 Professional Service and Development * <sub>D,G</sub> .....	2
BA 206 Management Fundamentals * <sub>D,G</sub> .....	3
BA 214 Business Communications * <sub>D,G</sub> .....	4
BT 163 QuickBooks * <sub>D,G</sub> .....	4
Choice of:.....	4
BT 144 Administrative Procedures * <sub>D,G</sub>	
BA 281 Personal Finance <sub>D,G</sub>	
Total Credits	17

## Computer Information Systems - Health Informatics

Offered by the Computer Information Technology Department

### Two-Year Associate of Applied Science Degree

**Purpose** Health Informatics is the study of how health data are collected, stored and communicated; how those data are processed into health information suitable for administrative and clinical decision making; and how computer technology, communications technology, and other information management skills can be applied to support these processes. Graduates may be employed as health information professionals by clinics and offices of health care providers, hospitals, health maintenance organizations, insurance companies, government agencies, law firms, mental health programs, community health programs, researchers, consulting firms, and information systems vendors. The purpose of the program is to educate individuals to be effective developers, users and managers of health information resources.

**Learning Outcomes** The graduate will:

- develop and evaluate health care system requirements.
- design, implement and deploy a healthcare system.
- evaluate, test, debug and troubleshoot a health care system.
- apply operational health care knowledge in addressing Health Informatics system needs.
- create effective databases and user interfaces.
- query a database using advanced SQL concepts.
- develop small programs.
- select appropriate technology tools by recognizing tool capabilities and limitations.
- communicate effectively in both oral and written form.
- work effectively in teams.
- manage time, tasks and projects.
- take ownership of Health Informatics career by adapting and learning new skills.
- explain concepts, components, and processes of a health care system.
- plan and control total cost of ownership (TCO) for a health care system.
- install, manage and troubleshoot issues in a network environment.
- provide technical support to desktop clients.
- identify and evaluate network requirements for a health care organization.
- specify and purchase hardware and software for a local area network.
- assemble hardware, install software, and configure a local area network.
- operate a reliable and secure local area network.
- establish and maintain connections between/among local area networks and wide area networks.

- use network concepts and terminology to communicate with vendors and users.
- work with users, managers and associates in helping to define systems requirements for new projects.
- assist in management of small to medium-size projects using project management software and practices.
- use accounting principles to increase profitability and decrease cost in a project.
- use micro and macroeconomics knowledge to understand their effect on the economy.
- use library resources for research and written tasks.
- perform advanced mathematical functions as necessary to prepare health data reports.

**Employment Trends** The US Department of Labor estimates a 49% growth in the demand for trained individuals prepared to be administrators, specialists, technicians, consultants, educators, and researchers in the health information technology (HIT) field. Reasonable employment opportunities exist for trained workers.

**Wages** Statewide average wages in 2008 were \$15.50 hourly, or \$34,000 annually, usually with excellent benefits. Lane County average wages were \$15 hourly or \$33,000 annually.

#### Costs in Addition to Tuition (estimate)\*

Books and supplies..... \$2,500\*

\* Subject to change without notice.

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Larry Scott, Cooperative Education Coordinator, Bldg. 19, Rm. 154, 541.463.5458.

**Program Lead** Larry Scott, Bldg. 19, Rm. 154, 541.463.5458, [scottl@lanec.edu](mailto:scottl@lanec.edu)

**Program Advisor** Jenna Clark Bldg 19, Rm. 149. 541.463.5258, [clarkj@lanec.edu](mailto:clarkj@lanec.edu)

**Program Counselor** Debby Ganser, Bldg. 16, Rm. 162L, 541.463.5034, [ganserd@lanec.edu](mailto:ganserd@lanec.edu)

### Two-Year Associate of Applied Science Degree

First Year	Fall
Choice of:.....	4-5
MTH 095 Intermediate Algebra * <sub>D,G,M</sub> (recommended)	
MTH 065 Elementary Algebra * <sub>D,G,M</sub>	
MTH 070 Introductory Algebra * <sub>D,G,M</sub>	
WR 121 Composition: Introduction to Academic Writing * <sub>D,G,W</sub> .....	4
CIS 125D Software Tools 1: Databases <sub>D,G</sub> .....	4
Directed Elective.....	3-5
Total Credits	15-18

	Winter
HO 100 Medical Terminology <sub>D,G</sub> .....	3
Choice of:.....	4
CIS 140 Operating Environments: Managing Windows <sub>D,G</sub>	
CIS 140U Introduction to Unix/Linux <sub>D,G</sub>	
Choice of:.....	4
CS 133JS Beginning Programming: JavaScript * <sub>D,G</sub>	
CS 133G Beginning C++ Programming for Games <sub>D,G</sub>	
CS 161 Computer Science 1 * <sub>D,G</sub>	

CIS 122 Software Design * <sub>D,G,1</sub>	
CIS 133B Introduction to Visual Basic.NET Programming * <sub>D,G,1</sub>	
Choice of:.....	4
BI 102I Human Biology (recommended) <sub>D,G,S</sub>	
or other Science/Computer Science requirement <sup>R</sup>	
Total Credits	15

**Spring**

CS 179 Introduction to Computer Networks* <sub>D,G</sub> .....	4
HIM 110 Health Information Technology * <sub>D,G,1</sub> .....	4
Choice of:.....	4
CS 162 Computer Science 2 * <sub>D,G</sub>	
CS 233G Intermediate C++ Programming for Games * <sub>D,G</sub>	
CIS 135T XML, Data Transformation and Objects * <sub>D,G,1</sub>	
CIS 233B Visual Basic.NET Programming * <sub>D,G,1</sub>	
Choice of recommended Social Science: .....	4
ECON 201 Introduction to Microeconomics	
ECON 202 Introduction to Macroeconomics	
PSY 201 General Psychology	
SOC 218 Sociology of Gender	
or other Social Science requirement <sup>R</sup>	
Total Credits	16

**Second Year**

CIS 244 Systems Analysis * <sub>D,G</sub> .....	4
CS 275 Database Program Development * <sub>D,G</sub> .....	4
HIM 182 Health Care Delivery Systems * <sub>D,G,1</sub> .....	3
Choice of recommended Speech classes: .....	4
SP 111 Fundamentals of Public Speaking <sub>D,G,A</sub>	
SP 219 Small Group Discussion <sub>D,G,A</sub>	
SP 220 Communication, Gender, and Culture <sub>D,G,A</sub>	
or other Arts and Letters requirement <sup>R</sup>	
Total Credits	15

**Winter**

CIS 276 Advanced SQL * <sub>D,G,1</sub> .....	4
HIM 283 Health Information Systems * <sub>D,G,1</sub> .....	4
Choice of: .....	4
BA 211 Financial Accounting * <sub>D,G</sub>	
BA 205 Solving Communication Problems with Technology * <sub>D,G,1</sub>	
Directed Elective .....	3-5
Total Credits	15-17

**Spring**

Choice of:.....	4
CS 280H Coop Ed: Health Informatics * <sub>D,G</sub> .....	
CIS 277H Introduction to Health Informatics <sub>D,G,1</sub>	
CIS 245 Project Management * <sub>D,G</sub> .....	4
HIM 285 Healthcare Financing and Compliance * <sub>D,G,1</sub> .....	3
Directed Elective .....	3-5
Total Credits	14-16

**Directed Electives - consider prerequisites when choosing:**

BA 224 Human Resource Management.....	3
BA 255 Project Management <sup>1</sup> .....	4
BI 112 Cell Biology for Health Occupations.....	3
BI 121 Intro to Human Anatomy & Physiology 1 <sup>1</sup> .....	4
BI 122 Intro to Human Anatomy & Physiology 2 <sup>1</sup> .....	4
BI 231 Human Anatomy & Physiology 1.....	4
BI 232 Human Anatomy & Physiology 2.....	4
BI 233 Human Anatomy & Physiology 3.....	4

CIS 140 Operating Systems: Managing Windows (if not taken as an alternative to CIS 140U).....	4
CIS 140U Introduction to Unix/Linux (if not taken as an alternative to CIS 140).....	4
CIS 189 Wireless Security <sup>1</sup> .....	4
CIS 225 Computer End-User Support .....	4
CIS 277D DB Security <sup>1</sup> .....	4
CIS 2770 Advanced Database Concepts in Oracle <sup>1</sup> .....	4
CIS 277T Web Business Intelligence Development <sup>1</sup> .....	4
CIS 278 Data Communications Concepts 2 <sup>1</sup> .....	4
CIS 279L Linux Network Administration <sup>1</sup> .....	4
CIS 284 Network Security <sup>1</sup> .....	4
CIS 288M Microsoft Network Administration <sup>1</sup> .....	4
CIS 289M Microsoft Active Directory Administration <sup>1</sup> .....	4
CS 188 Wireless Networking .....	4
CS 240U Advanced Unix/Linux: Server Management.....	4
CS 279W Windows Server Administration.....	4
ET 287 Microcomputer Hardware .....	4
HIM 271 Quality Improvement in Healthcare <sup>1</sup> (Co-requisite with HIM 274).....	3
HIM 274 Quality Improvement in Healthcare – Lab <sup>1</sup> .....	1
HIM 281 Data Management & Analysis <sup>1</sup> <sup>1</sup> (Co-requisite with HIM 286).....	3
HIM 286 Data Management & Analysis 1 – Lab <sup>1</sup> .....	2
MP 110 Medical Terminology <sup>1</sup> .....	2
MP 111 Medical Terminology <sup>1</sup> .....	4
MSD 279 Project Management <sup>1</sup> .....	4
OS 220 Business Editing Skills <sup>1</sup> .....	4
WR 122 Composition: Style & Argument.....	4
WR 227 Technical Writing .....	4

<sup>1</sup> This course available online through other Health Informatics Education Consortium Institutions

## Computer Network Operations

Offered by the Computer Information Technology Department

Two-Year Associate of Applied Science Degree

Career Pathway Certificate of Completion, Computer Network Security

**Purpose** To train entry-level network support technicians and more advanced network administrators in specific computer networking skills and general troubleshooting of hardware and software related problems.

**Learning Outcomes** The graduate will:

- install and configure workstations, servers and networked printers.
- install and configure internetworking devices such as switches and routers.
- install and configure a variety of network operating systems and provide for interoperability between them.
- administer an organization's computer network infrastructure.
- understand network security issues and use appropriate tools to insure network integrity.
- understand the critical features of wireless networking.
- understand fundamental networking theory, terminology, and industry recognized standards.
- interpret the concepts of a computer network related problem-solving task.
- use appropriate library and information resources to research network management issues and tools and support lifelong technical learning.

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

**Employment Trends** The Oregon Labor Market Information System projects statewide 359 annual openings for network and computer systems administrators and computer support specialists, and 37 annual openings in Lane County. For the decade ending in 2016, the statewide projected increase is 20% annually, and for Lane County 21% annually.

**Wages** Statewide average hourly wage for network and computer systems administrators is \$32.35, and annually \$67,282. Lane County average hourly wage is \$29.13, and annually \$60,590.

**Costs in Addition to Tuition (estimate)\***

Books and lab fees ..... \$2,500-3,000  
 Students taking courses using CIT labs are assessed a one-time fee up to \$28 per term. See the CIT department for details.

\* Subject to change without notice.

**Prerequisites** Students must qualify for WR 121, either by placement testing or completing prerequisite courses, and by the third term, qualify to begin MTH 095. Each student should consult with a counselor or advisor to plan a program of study.

**Computer Network Security** Students who complete the Computer Network Operations degree are well positioned to continue their studies in computer network security by completing the curriculum for the Network Security Certificate of Completion offered by the CIT department. See the following Computer Network Security Certificate of Completion description or contact the certificate coordinator Ron Little, 541.463.5464, [little@lanec.edu](mailto:little@lanec.edu)

**Cooperative Education (Co-op)** Co-op is a required and important part of the Computer Network Operations program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the computer network field. Contact Larry Scott, Computer Network Operations Co-op Coordinator, Bldg. 19, Rm. 154, 541.463.5458, [scott@lanec.edu](mailto:scott@lanec.edu)

**Program Lead** Gary Bricher, Bldg. 19, Room 148, 541.463.5294, [bricherg@lanec.edu](mailto:bricherg@lanec.edu)

**Program Advisor** Gerry Meenaghan, Bldg. 16, Room 162M, 541.463.3244, [meenaghan@lanec.edu](mailto:meenaghan@lanec.edu)

**Program Counselor** Debby Ganser, Bldg. 16, Rm. 162L, 541.463.5034, [ganserd@lanec.edu](mailto:ganserd@lanec.edu)

**Note** Students completing the curriculum for the Computer Network Operations degree will also satisfy the requirements for the Computer Specialist certificate. In addition, students taking CS 296P Web Development 2: PHP as the fall term, second-year elective will satisfy the requirements for the Web Programming certificate. Students taking CS 188 Wireless Networking, and CS 285 Operating System Hardening as the winter and spring term, second-year electives would need to complete only one additional course, CS 286 Firewalls and VPNs, to qualify for the Computer Network Security certificate.

**Note** The first-year networking curriculum is known as the “CIT Core.” These courses provide a solid foundation in information technology.

**Note** Students with an interest in Geographic Information Systems could take GIS 245 Maps and Spatial Information, GIS 246 Introduction to GIS, and GIS 248 Applications in GIS, as their three electives and then be left with just one class, CIS 247 Information Analysis and Visualization, to qualify for the GIS certificate.

<b>First Year</b>		<b>Fall</b>
CIS 100 Computing Careers Exploration <sup>D,G</sup> .....		2
CIS 102 Problem Solving with Computers <sup>D,G</sup> .....		4
CS 195 Web Authoring 1 <sup>4,D,G</sup> .....		3
CIS 140 Operating Systems: Managing Windows <sup>D,G</sup> .....		4
WR 121 Composition: Introduction to Academic Writing <sup>*,W</sup> .....		4
	<b>Total Credits</b>	<b>17</b>

		<b>Winter</b>
ART 288 Introduction to Web Design <sup>4,D,G</sup> .....		2
CS 133JS Beginning Programming: JavaScript <sup>*,4,D,G,S</sup> ....		4
CIS 125D Software Tools 1: Databases <sup>D,G</sup> .....		4
CS 179 Introduction to Computer Networks <sup>*,D,G</sup> .....		4
ET 287 Microcomputer Hardware <sup>D,G</sup> .....		4
	<b>Total Credits</b>	<b>18</b>

		<b>Spring</b>
CS 206A Coop Ed: Computer Networks Seminar 1 <sup>D</sup> .....		1
CS 295P Web Development 1: PHP <sup>*,4,D,G</sup> .....		4
CG 203 Human Relations at Work <sup>H</sup> .....		3
CIS 227N Systems Support: Network and Operating Systems <sup>*,D,G</sup> .....		4
MTH 095 Intermediate Algebra or higher <sup>*,M</sup> .....		5
	<b>Total Credits</b>	<b>17</b>

<b>Second Year</b>		<b>Fall</b>
CS 279W Windows Server Administration <sup>*,D,G,S</sup> .....		4
CIS 140U Introduction to Unix/Linux <sup>D,G</sup> .....		4
CS/CIS/GIS Elective <sup>1,3,D,G</sup> .....		4
WR 227 Technical Writing <sup>*,A</sup> .....		4
	<b>Total Credits</b>	<b>16</b>

		<b>Winter</b>
CS 206B Coop Ed: Computer Networks Seminar 2 <sup>*,D</sup> .....		1
CS 284 Network Security Fundamentals <sup>*,D,G,S</sup> .....		4
CIS 225 Computer End-User Support <sup>*,D,G</sup> .....		4
CS 240U Advanced Unix/Linux: Server Management <sup>*,D,G</sup> .....		4
CS/CIS/GIS Elective <sup>1,3,D,G</sup> .....		4
	<b>Total Credits</b>	<b>17</b>

		<b>Spring</b>
CS 289 Cisco Router and Switch Administration <sup>*,D,G,S</sup> .....		4
CS 280CN Coop Ed: Computer Networks <sup>D,G</sup> .....		3
PE/Health requirement <sup>R</sup> .....		3
CS/CIS/GIS Electives <sup>1,3,G</sup> or Speech Elective <sup>2</sup> .....		4-8
	<b>Total Credits</b>	<b>14-18</b>

1 The Computer Network Operations degree contains three second-year CS/CIS/GIS electives. Students may want to consider using CS/CIS/GIS electives to take a sequence of courses from the Network Security certificate curriculum, or from one of the other degree or certificate programs, such as, Computer Programming, Computer Simulation and Game Development, Geographic Information Systems, or Computer Science transfer area. For more specific information about electives, students should contact the program academic advisor or program counselor to help determine what elective courses best fit their goals.



- 2 List of approved speech electives:  
 SP 100 Basic Communication  
 SP 111 Fundamentals of Public Speaking  
 SP 112 Persuasive Speech  
 SP 130 Business and Professional Speech  
 SP 219 Small Group Discussion
- 3 Students planning to pursue a bachelor's degree in Computer Science are advised to also complete the following courses in mathematics: MTH 111 College Algebra and MTH 231, 232, 233 Discrete Mathematics 1, 2, 3
- 4 Instead of the Web programming courses: ART 288, CS 195, and CS 295P, these Game-programming courses may be taken: ART 245, CIS 125G, and CS 133G, respectively. Also, instead of the Web programming courses: ART 288, CS 195, CS 133JS, and CS 295P, these Game-programming courses may be taken: ART 245, CIS 125G, CS 133G, and CS 233G, respectively. In addition, instead of the Web programming courses: CS 133JS and CS 295P, these programming courses may be taken: CS 133C# and CS 233C#, respectively.

## Computer Network Security

### Career Pathway Certificate of Completion

**Purpose** To train those who already have networking skills to secure workstations, servers, and other networking devices.

**Learning Outcomes** The certificate recipient will:

- understand the security fundamentals required to help safeguard computer networks.
- implement wireless network security protections.
- identify and counteract attacks on workstations, servers, and other networking devices.
- identify vulnerabilities, discuss their resolutions, and generate vulnerability reports.
- install and utilize various security industry accepted tools.
- install and configure firewalls and VPNs.
- troubleshoot security issues and implement and test resolutions.

**Employment Trends** The Oregon Labor Market Information System projects statewide 359 annual openings for network and computer systems administrators and computer support specialists, and 37 annual openings in Lane County. For the decade ending in 2016, the statewide projected increase is 20% annually, and for Lane County 21% annually.

**Wages** Statewide average hourly wage for network and computer systems administrators is \$32.35, and annually \$67,282. Lane County average hourly wage is \$29.13, and annually \$60,590.

#### Costs in Addition to Tuition (estimate)\*

Books and lab fees ..... \$200-300  
 Students taking courses using CIT labs are assessed a one-time fee up to \$28 per term. See the CIT department for details.

\* Subject to change without notice.

**Prerequisites** The courses in this Certificate of Completion are designed to be taken with the Computer Network Operations Associate of Applied Science degree program offered by the CIT department. There are specific prerequisites for each of the four courses required for this certificate. Each of the prerequisites is a requirement in the Network Operations degree. For details see the course description of each of the

four required courses. Prerequisites can be waived for current IT network technicians with the appropriate background.

**Certificate Lead** Ron Little, Bldg. 19, Room 156, 541.463.5464, [little@lanecc.edu](mailto:little@lanecc.edu)

**Program Advisor** Gerry Meenaghan, Bldg. 16, Rm. 162M, 541.463.3244, [meenaghan@lanecc.edu](mailto:meenaghan@lanecc.edu)

**Program Counselor** Debby Ganser, Bldg. 16, Rm. 162L, 541.463.5034, [ganserd@lanecc.edu](mailto:ganserd@lanecc.edu)

Courses required	Credits
CS 188 Wireless Networking <sup>*,D,G</sup> .....	4
CS 284 Network Security Fundamentals <sup>*,D,G</sup> .....	4
CS 285 Operating System Hardening <sup>*,D,G</sup> .....	4
CS 286 Firewalls and VPNs <sup>*,D,G</sup> .....	4
Total Credits	16

## Computer Programming

**Offered by the Computer Information Technology Department**

**Two-Year Associate of Applied Science Degree, Computer Programming**

**Career Pathway Certificate of Completion, Web Programming**

**Career Pathway Certificate of Completion, Geographic Information Systems**

**Purpose** To prepare technicians for entry-level positions as web developers.

**Learning Outcomes** The graduate will:

- design, implement, test, debug and document web based computer programs using a variety of current tools and technologies.
- design, implement, test, debug and document at least one other type of computer program such as: game program, database program, object-oriented program.
- understand the relationship between computer programs and organizational processes.
- interpret the mathematical concepts of a programming related problem-solving task and translate them into programming logic and expressions.
- use appropriate library and information resources to research programming tools and technologies and support lifelong technical learning.

**Employment Trends** The Oregon Labor Market Information System projects statewide 132 annual openings for Computer Programmer, and 11 annual openings for Lane County. For the decade ending in 2016, the statewide projected increase is 14.2% and for Lane County 15.4%. Related job categories such as Software Engineer, Web Developer, Systems Analyst, and Database Programmer show projected increases statewide and for Lane County of 20-25%.

**Wages** Statewide average hourly wage is \$35.53 and \$73,901 annually. Lane County average hourly wage is \$27.17 and \$56,527 annually.

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

**Costs in Addition to Tuition (estimates)\***

Books and Materials .....	\$2,500
CIT Lab Fees .....	\$ 168
Total.....	\$2,668

Students taking courses using CIT labs are assessed a one-time fee up to 28 per term. See the CIT department for details.

\* Subject to change without notice.

**Prerequisites** Students must qualify for WR 121, either by placement testing or completing prerequisite courses, and by the third term, qualify to begin MTH 095. Each student should consult with a counselor or advisor to plan a program of study.

**Cooperative Education (Co-op)** Co-op is a required and important part of the Computer Programming Degree program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the computer programming field. Contact Larry Scott, Computer Programming Co-op Coordinator, Bldg. 19, Rm. 154, 541.463.5458, [scottl@lanec.edu](mailto:scottl@lanec.edu)

**Program Lead** Mari Good, Bldg. 19, Rm. 158, 541.463.5838, [goodm@lanec.edu](mailto:goodm@lanec.edu)

**Program Advisor** Gerry Meenaghan, Bldg. 16, Rm. 162M, 541.463.3244, [meenaghan@lanec.edu](mailto:meenaghan@lanec.edu)

**Program Counselor** Debby Ganser, Bldg. 16, Rm. 162L, 541.463.5034, [ganserd@lanec.edu](mailto:ganserd@lanec.edu)

<b>First Year</b>	<b>Fall</b>
CIS 100 Computing Careers Exploration <sup>D,G</sup> .....	2
CIS 102 Problem Solving with Computers <sup>D,G</sup> .....	4
CIS 140 Operating Systems: Managing Windows <sup>D,G</sup> .....	4
WR 121 Composition: Introduction to Academic Writing <sup>*,W</sup> .....	4
PE/Health requirement <sup>R</sup> .....	3
Total Credits	17

	<b>Winter</b>
ART 288 Introduction to Web Design <sup>D,G</sup> .....	2
CS 125D Software Tools 1: Databases <sup>D,G</sup> .....	4
CS 195 Web Authoring 1 <sup>D,G</sup> .....	3
CS 133C# Beginning Programming: C# <sup>*,D,G,S</sup> .....	4
CS 179 Introduction to Computer Networks <sup>*,D,G,S</sup> .....	4
Total Credits	17

	<b>Spring</b>
CG 203 Human Relations at Work <sup>H</sup> .....	3
CS 133JS Beginning Programming: JavaScript <sup>*,D,G,S</sup> .....	4
CS 233C# Intermediate Programming: C# <sup>*,D,G,S</sup> .....	4
MTH 095 Intermediate Algebra or higher <sup>*,M</sup> .....	5
Total Credits	16

<b>Second Year</b>	<b>Fall</b>
CIS 244 Systems Analysis <sup>*,D,G</sup> .....	4
CS 296A Web Development 2: ASP.NET <sup>*,1,G,S</sup> .....	4
Speech Elective <sup>2</sup> (see approved list below) .....	4
CS/CIS/GIS Elective <sup>1,D,G</sup> (see below).....	4
Total Credits	16

	<b>Winter</b>
CS 275 Database Program Development <sup>*,D,G</sup> .....	4
CS 295A Web Development 1: ASP.NET <sup>*,D,G</sup> .....	4
CS/CIS/GIS Elective <sup>1,D,G</sup> (see below).....	4
WR 227 Technical Writing <sup>*,A</sup> .....	4
Total Credits	16

	<b>Spring</b>
CIS 297 Programming Capstone <sup>*,D,G</sup> .....	5
CS 280PR Co-op Ed: Computer Programming (second-year standing required) <sup>D,G</sup> .....	3
CS/CIS/GIS Elective <sup>*,1,D,G</sup> (see below) .....	4
Open Elective .....	4
Total Credits	16

1 For more specific information about the Fall/Winter/Spring CS/CIS/GIS elective sequences please contact the Program Academic Advisor (Gerry Meenaghan) or the Program Counselor (Debbie Ganser) to help determine which elective sequence best fits your goals. Programming majors are strongly advised to take CS 295P Web Development 1: PHP and CS 296P Web Development 2: PHP as electives.

- 2 **List of approved speech electives:**
- SP 100 Basic Communication
  - SP 111 Fundamentals of Public Speaking
  - SP 112 Persuasive Speech
  - SP 130 Business and Professional Speech
  - SP 219 Small Group Discussion

## Web Programming

### Career Pathway Certificate of Completion

**Purpose** To prepare technicians for entry-level positions as web programmers.

**Learning Outcomes** The certificate recipient will:

- design, implement, test, debug and document web based computer programs using a variety of current tools and technologies.
- understand the use of web programming to support organizational processes.
- interpret the mathematical concepts of a programming related problem-solving task and translate them into programming logic and expressions.
- use appropriate library and information resources to research programming tools and technologies and support lifelong technical learning.

**Employment Trends** The Oregon Labor Market Information System projects 132 annual openings statewide for Computer Programmer, and 11 annual openings for Lane County. For the decade ending in 2014, the statewide projected increase is 15.4% and for Lane County 14.2%. Related job categories such as Software Engineer, Web Developer, Systems Analyst, and Database Programmer show projected increases statewide and for Lane County of 20-25%.

**Wages** Statewide average hourly wage is \$35.53 and \$73,901 annually. Lane County average hourly wage is \$27.17 and \$56,527 annually.

**Costs in Addition to Tuition (estimate)\***

Books and lab fees .....	\$200-300
Students taking courses using CIT labs are assessed a one-time fee up to \$28 per term. See the CIT department for details.	
* Subject to change without notice.	

**Prerequisites** Students are expected to be comfortable working on a computer, including the ability to create files with a text editor and manage file folders.

**Program Lead** Mari Good, Bldg. 19, Rm. 158, 541.463.5838, [goodm@lanec.edu](mailto:goodm@lanec.edu)

**Program Advisor** Gerry Meenaghan, Bldg. 16, Rm. 162M, 541.463.3244, [meenaghan@lanec.edu](mailto:meenaghan@lanec.edu)

**Program Counselor** Debby Ganser, Bldg. 16, Rm. 162L, 541.463.5034, [ganserd@lanecc.edu](mailto:ganserd@lanecc.edu)

Courses required	Credits
CS 195 Web Authoring 1 <sup>D,G</sup> .....	3
CS 133JS Beginning Programming: JavaScript <sup>*,D,G,S</sup> .....	4
CS 295P Web Development 1: PHP <sup>*,D,G</sup> .....	4
CS 296P Web Development 2: PHP <sup>*,D,G</sup> .....	4
Total Credits	15

## Geographic Information Systems

**Offered by the Social Science Department**

**Career Pathway Certificate of Completion**

**Purpose** This sequence of courses provides a foundation in geospatial concepts while developing workforce skills. The focus on collaborative projects using real-world data to solve problems makes the GIS course sequence relevant and dynamic. The classes, Introduction to Maps and Spatial Concepts, Introduction to GIS, Information Analysis and Visualization, and Applications in GIS have been accepted to satisfy GIS course requirements at the University of Oregon, Oregon State University, and Portland State University. GIS field experience is available as an optional elective through Cooperative Education.

**Learning Outcomes** The graduate will understand:

- basic cartographic principles of global reference and coordinate systems, maps and generalization.
- types of maps including reference, thematic, topographic, aerial photography.
- skills and techniques used to create, analyze, and display spatial data using geographic information system software.
- principles of information analysis including how information is designed, organized, analyzed, visualized, used and misused.
- use of software tools to communicate information effectively through descriptive statistics and narratives, graphical visualization and mapping applications.
- project management of basic GIS tasks such as data management, cartographic design, and document conversion and analysis.

Courses required	Credits
GIS 245 Maps and Spatial Information <sup>*,D,G</sup> .....	4
GIS 246 Introduction to GIS <sup>*,D,G</sup> .....	4
GIS 248 Applications in GIS <sup>*,D,G</sup> .....	4
CIS 247 Information Analysis and Visualization <sup>*,D,G,S</sup> .....	4
Total Credits	16

### Elective

GIS 280 Co-op Ed: GIS (optional)

## Computer Science Transfer

**Offered by the Computer Information Technology Department**

### Suggested Course of Study

This is a suggested course of study for students interested in pursuing a bachelor's degree in computer science. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education.

Lane Community College offers the first two years of college core computer science and general education courses needed for computer science major disciplines. The AAOT course of study shown below includes lower division general education requirements accepted for a degree at a 4-year state institution in Oregon. Certain computer science degree options may require additional courses. Most Lane students transfer to the University of Oregon or Oregon State University, but many have continued successfully at other well-known schools. At the earliest opportunity, an interested student should meet with one of Lane's Computer Science program advisors. A well-planned course of study at Lane is essential to ensure a smooth transition to a university. In addition, it is very important for a transfer student to consult the computer science advisor at the specific intended transfer college or university.

### Suggested Course of Study

CS 160 Orientation to Computer Science <sup>5,G</sup> .....	4
CIS 125D Software Tools 1: Databases .....	4
CS 161 Computer Science 1 <sup>*,1,G</sup> .....	4
CS 162 Computer Science 2 <sup>*,1,G</sup> .....	4
CS 260 Data Structures <sup>*,4,5,G</sup> .....	4
CS 271 Comp. Architecture and Assembly Language <sup>*,5,G</sup> .....	4
CS 275 Database Program Development <sup>*,5,G</sup> .....	4
MTH 111 College Algebra*.....	5
MTH 097 Geometry*.....	4
MTH 112 Trigonometry*.....	4
MTH 231 Discrete Mathematics <sup>*,1,G</sup> .....	4
MTH 232 Discrete Mathematics <sup>*,2,G</sup> .....	4
MTH 233 Discrete Mathematics <sup>*,3,4,G</sup> .....	4
MTH 251 Calculus 1 <sup>*,G</sup> .....	5
MTH 252 Calculus 2 <sup>*,G</sup> .....	5
MTH 253 Calculus 3 <sup>*,G</sup> .....	5
PH 211 General Physics w/Calculus <sup>*,2,5,G</sup> .....	5
PH 212 General Physics w/Calculus <sup>*,2,5,G</sup> .....	5
PH 213 General Physics w/Calculus <sup>*,2,5,G</sup> .....	5
WR 121 Composition: Introduction to Academic Writing.....	4
WR 122 English Composition: Style and Argument <sup>*,5</sup> .....	4
WR 227 Technical Writing <sup>*,G</sup> .....	4
SP 111 Fundamentals of Public Speaking <sup>5</sup> .....	4
Health/Wellness/Fitness requirement .....	3
General Education requirements <sup>3</sup> .....	21-28
Total Credits	123-129

- 1 UO also allows CS 133G, CS 233G in place of CS 161, CS 162
- 2 UO also allows other science sequences, including CH 221, CH 222, CH 233 or BI 211, BI 212, BOT/Z 213
- 3 See UO "Direct Transfer Plan" or OSU "Baccalaureate Core Requirements" for list of approved General Education courses. These lists are available at the Lane Counseling and Advising Center, in Bldg. 1 on main campus.
- 4 Discrete Math 3 is not required at OSU.
- 5 See the Lane academic advisor for more specific information.

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

# Computer Simulation and Game Development

Offered by the Computer Information Technology Department

Two-Year Associate of Applied Science Degree, Computer Simulation and Game Development

Career Pathway Certificate of Completion, Computer Game Programming in C++

**Purpose** To prepare students for entry-level positions in the simulation and game development industries or to transfer to a four-year school for additional education.

**Learning Outcomes** The graduate will:

- develop programming knowledge and skills with a current commercial programming language.
- design, program, test, debug and document computer simulation or game programs using a variety of current tools and technologies.
- create computer simulations or games using industry standard development tools.
- develop skills and knowledge in computer animation using industry standard tools.
- learn mathematical concepts related to simulation and game development and use those concepts in class projects.
- use appropriate library and information resources to research simulation and game development issues, programming tools and technologies and to support lifelong technical learning.

**Employment Trends** The Oregon Labor Market Information System projects statewide 132 annual openings for Computer Programmer, and 11 annual openings for Lane County. For the decade ending in 2014, the statewide projected increase is 15.4% and for Lane County 14.2%. Related job categories such as Software Engineers show similar employment trends.

**Wages** Statewide average hourly wage is \$35.53 and \$73,901 annually. Lane County average hourly wage is \$27.17 and \$56,527 annually.

#### Costs in Addition to Tuition (estimates)\*

Books and Materials .....	\$1,500
Laptop Computer .....	\$1,500
CIT Lab Fees .....	\$ 355
Total .....	\$3,355

\* Subject to change without notice.

**Prerequisites** Students must qualify for MTH 111 and WR 121 either by placement testing or completing prerequisite courses. Students should consult with a counselor or advisor to plan a program of study.

**Second Year Requirements** A personal laptop is required for 2nd-year students in the Computer Simulation and Game Programming degree program. If you receive financial aid, some of those funds may be used for this purchase. Please contact the CIT Department or go to [lanecc.edu/cit](http://lanecc.edu/cit) for options and system requirements.

**Cooperative Education (Co-op)** Co-op is a required and important part of the Computer Simulation and Game Development Degree program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the computer

programming field. Contact Larry Scott, Computer Simulation and Game Development Co-op Coordinator, Bldg. 19, Rm. 154, 541.463.5458, [scottl@lanecc.edu](mailto:scottl@lanecc.edu)

**Program Lead** Jim Bailey, Bldg. 19, Rm. 146, 541.463.3148, [baileyj@lanecc.edu](mailto:baileyj@lanecc.edu)

**Program Advisor** Gerry Meenaghan, Bldg. 16, Rm. 162M, 541.463.3244, [meenaghan@lanecc.edu](mailto:meenaghan@lanecc.edu)

**Program Counselor** Debby Ganser, Bldg. 16, Rm. 162L, 541.463.5034, [ganserd@lanecc.edu](mailto:ganserd@lanecc.edu)

## Computer Simulation and Game Development

### Two-Year Associate of Applied Science Degree

First Year	Fall
CIS 100 Computing Careers Exploration <sup>D,G</sup> .....	2
CIS 125G Software Tools 1: Game Development <sup>D,G</sup> .....	4
CS 133G Beginning C++ Programming for Games <sup>D,G,S</sup> .....	4
ART 245 Drawing for Media <sup>D,G</sup> .....	4
Total Credits	14

Winter	
FA 221 Computer Animation <sup>*,D,G</sup> .....	3
CS 233G Intermediate C++ Programming for Games <sup>*,D,G,S</sup> .....	4
MTH 111 College Algebra <sup>*,D,S</sup> .....	5
Elective <sup>1</sup> .....	3
Total Credits	15

Spring	
FA 222 Computer Animation 2 <sup>*,D,G</sup> .....	3
CS 253 Computation for Computer Graphics <sup>*,D,G,S</sup> .....	4
CS 260 Data Structures <sup>*,D,G,S</sup> .....	4
PE/Health requirement <sup>R</sup> .....	3
Elective <sup>1</sup> .....	3
Total Credits	17

Second Year	Fall
CIS 135G Software Tools 2: Game Development <sup>*,D,G,S</sup> .....	4
CS 234G Advanced C++ Program for Games <sup>*,D,G,S</sup> .....	4
WR 121 Composition: Introduction to Academic Writing <sup>*,W</sup> .....	4
MTH 231 Discrete Math <sup>1 *D,G,S</sup> .....	4
Total Credits	16

Winter	
CS 235G Software Tools 3: Game Development <sup>*,D,G,S</sup> .....	4
Speech course <sup>2</sup> .....	4
FA 261 Writing for Interactive Media <sup>*,D,G</sup> .....	3
MTH 232 Discrete Math 2 <sup>*,D,G,S</sup> .....	4
Total Credits	15

Spring	
CS 297G Simulation and Game Development Capstone <sup>*,D,G,S</sup> .....	4
CS 280SGD Co-op Ed: Simulation and Game Development (second-year standing required) <sup>D,G</sup> .....	3
Human Relations requirement <sup>R</sup> .....	3-4
CG 203 Human Relations at Work <sup>H</sup> (Recommended)	
MTH 233 Discrete Math 3 <sup>*,D,G,S</sup> .....	4
Total Credits	14-15

**1. Elective courses:** See program counselor or advisor for course suggestions.

**2. Speech course:** See program counselor or advisor for course suggestions.



## Computer Game Programming in C++

### Career Pathway Certificate of Completion

**Purpose** To provide students with the knowledge and skills required to program in C++, specifically focused on simulation and game programming.

**Learning Outcomes** The certificate recipient will:

- understand the syntax and semantics of C++ programming.
- demonstrate the ability to solve programming projects using an object-oriented methodology.
- understand and use common data structures to solve programming problems.
- design, develop, test, debug, and document solutions to simulation and computer game problems using a variety of current tools.
- demonstrate the knowledge of common software engineering methodologies.
- develop a portfolio of programs working in a team-oriented environment.

**Employment Trends** The Oregon Labor Market Information System project statewide 132 annual openings for Computer Programmer, and 11 annual openings for Lane County. For the decade ending in 2014, the statewide projected increase is 15.4% and for Lane County 14.2%. Related job categories such as Software Engineer, Web Developer, Systems Analyst, and Database Programmer show projected increases statewide and for Lane County of 20-25%.

**Wages** Statewide average hourly wage is \$35.53 and \$73,901 annually. Lane County average hourly wage is \$27.17 and \$56,527 annually.

#### Costs in Addition to Tuition (estimates)\*

Books and lab fees ..... \$150-\$200  
Students taking courses using CIT labs are assessed a one-time fee up to \$28 per term. See the CIT department for details.  
\* Subject to change without notice.

**Prerequisites** Students are expected to be comfortable working on a computer, including the ability to create files with a text editor and manage file folders. CS 260 has a prerequisite of MTH 111.

**Certificate Lead** Jim Bailey, Bldg. 19, Rm. 146, 541.463.3148, [baileyj@lanecc.edu](mailto:baileyj@lanecc.edu)

**Program Advisor** Gerry Meenaghan, Bldg. 16, Rm. 162M, 541.463.3244, [meenaghan@lanecc.edu](mailto:meenaghan@lanecc.edu)

**Program Counselor** Debby Ganser, Bldg. 16, Rm. 162L, 541.463.5034, [ganserd@lanecc.edu](mailto:ganserd@lanecc.edu)

#### Courses required

	Credits
CS 133G Beginning C++ Programming for Games <sup>D,G</sup> .....	4
CS 233G Intermediate C++ Program for Games <sup>*,D,G</sup> .....	4
CS 260 Data Structures <sup>*,D,G</sup> .....	4
CS 234G Advanced C++ Programming for Games <sup>*,D,G</sup> .....	4

Total Credits 16

## Computer Specialist

**Offered by the Computer Information Technology Department**

### One-Year Certificate of Completion

**Purpose** To prepare specialists in the use of computer information systems. Specialists use a computer's capabilities as a problem-solving tool for positions that require end-user knowledge of computer hardware, software, and operating procedures.

**Learning Outcomes** The graduate will:

- have a broad range of skills necessary to be an effective user of information systems.
- have core skills in the use of computers, as well as the related skill areas of mathematics and writing.
- use appropriate library and information resources to research user support issues, concepts, and tools and support lifelong technical learning.
- install and configure operating system software.
- interpret the concepts of a problem-solving task.
- manipulate variables using computer software applications.
- collect and display data as lists, tables, and charts using computer software.
- design web pages and post them to the internet.

**Employment Trends** The state economist forecasts 12 openings annually for Lane County over the next decade and 114 statewide in Oregon.

**Wages** Average wages in Lane County are \$21.93 per hour and \$45,631 annually; statewide in Oregon, average wages are \$20.34 per hour and \$44,492 annually.

#### Costs in Addition to Tuition (estimate)\*

Books and lab fees ..... \$1,800  
Students taking courses using CIT labs are assessed a one-time fee up to \$28 per term. See the CIT department for details.  
\* Subject to change without notice.

**Prerequisites** Students must qualify for WR 121, either by placement testing or completing prerequisite courses, and by the third term, qualify to begin MTH 095. Each student should consult with a counselor or advisor to plan a program of study.

**Cooperative Education (Co-op)** Co-op is an important part of the Computer Applications Specialist program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the field. Contact Larry Scott, Computer Specialist Co-op Coordinator, Bldg. 19, Rm. 541.463.5458, [scottl@lanecc.edu](mailto:scottl@lanecc.edu)

**Program Lead** Ron Little, Bldg. 19, Room 156, 541.463.5464, [littlel@lanecc.edu](mailto:littlel@lanecc.edu)

**Program Advisor** Gerry Meenaghan, Bldg. 16, Rm. 162M, 541.463.3244, [meenaghan@lanecc.edu](mailto:meenaghan@lanecc.edu)

**Program Counselor** Debby Ganser, Bldg. 16, Rm. 162L, 541.463.5034, [ganserd@lanecc.edu](mailto:ganserd@lanecc.edu)

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

**Note** The curriculum for the Computer Specialist certificate is known as the "CIT Core." These courses provide a solid foundation in information technology. The first-year curriculum for the Computer Programming and Computer Network Operations degrees share these core courses. This means that students pursuing either of these degrees may change their degree goals during the first year with very little extra course work required.

	<b>Fall</b>
CIS 100 Computing Careers Exploration <sup>D,G</sup> .....	2
CIS 102 Problem Solving with Computers <sup>D,G</sup> .....	4
CS 195 Web Authoring <sup>1 D,G</sup> .....	3
CIS 140 Operating Systems: Managing Windows <sup>D,G</sup> .....	4
WR 121 Composition: Introduction to Academic Writing <sup>*,W</sup> .....	4
<b>Total Credits</b>	<b>17</b>
	<b>Winter</b>
ART 288 Introduction to Web Design <sup>D,G</sup> .....	2
CIS 125D Software Tools 1: Databases <sup>D,G</sup> .....	4
CS 179 Introduction to Computer Networks <sup>*,D,G,S</sup> .....	4
Choice of: .....	4
CS 133C# Beginning Programming: C# <sup>*,D,G,S</sup>	
ET 287 Microcomputer Hardware <sup>D,G</sup> .....	4
<b>Total Credits</b>	<b>14</b>
	<b>Spring</b>
CS 133JS Beginning Programming JavaScript <sup>*,D,G,S</sup> .....	4
CG 203 Human Relations at Work <sup>H</sup> .....	3
Choice of: .....	4
CIS 227N Systems Support: Network and Operating Systems <sup>*,D,G</sup>	
CS 233C# Intermediate Programming: C# <sup>*,D,G</sup>	
MTH 095 Intermediate Algebra or higher <sup>*,M</sup> .....	5
<b>Total Credits</b>	<b>16</b>

## Computer User Support

**Offered by the Computer Information Technology Department**

**Two-Year Associate of Applied Science Degree**

**Note** The Computer User Support curriculum is under review for the 2010-11 academic year. Students interested in this area of study should consider taking the CIT Core, described under Computer Specialist. For additional information, contact Gerry Meenaghan in the Counseling Department, 541.463.3244, or the CIT department, 541.463.5826.

## Construction Technology

**Offered by the Advanced Technology Division**

**Two-Year Associate of Applied Science Degree**

**One-Year Certificate of Completion**

**Purpose** To train students in the technical skills and knowledge of the construction industry. The graduate of this program can expect to work in the residential and commercial building construction field.

**Learning Outcomes** The graduate will:

- demonstrate basic carpentry skills for the construction industry.
- cut, fit, and assemble wood and other materials for building construction.
- demonstrate and use industry safety standards.
- use blueprint reading skills necessary to the profession.
- demonstrate knowledge of laser level and field elevations.
- be adequately prepared to enter the workforce in the field of construction.
- use appropriate library and information resources to research professional issues.
- interpret the concepts of a problem-solving task and translate them into mathematics.

**Employment Trends** Statewide, 476 annual openings for construction are projected in Oregon and 40 openings are projected annually in Lane County. Those with formal training and related work experience have a competitive advantage in this labor market.

**Wages** Statewide average, \$18 hourly, \$41,500 annually (\$45,000+ with experience). Lane County average, \$21 hourly, \$46,000 annually.

**Costs in Addition to Tuition and Registration Fees (estimates)\***

Books .....	\$700
Class Fees .....	\$210
Tools .....	\$100-200
<b>Total</b> .....	<b>\$1,010-1,110</b>

\* Subject to change without notice.

**Prerequisites** Minimum placement score- of 68 in Reading or completion of RD 080 or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

**Criteria Used for Admission** Students may enter this program fall, winter or spring term. Students should attend a program orientation in fall terms (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor in winter and spring terms.

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Construction Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits may be earned in lieu of required Construction Technology course credits. Contact Marv Clemons, Construction Technology Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158.

**Program Advisor** Lisa Stegall, Bldg. 12, Rm. 203, 541.463.5378, [stegalll@lanec.edu](mailto:stegalll@lanec.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202, 541.463.5236, [littyc@lanec.edu](mailto:littyc@lanec.edu)

**Two-Year Associate of Applied Science Degree**

**First Year**

	<b>Fall</b>	
CIS 101 Computer Fundamentals.....	3	
CST 110 Blueprint Reading 1 <sup>*,D,G</sup> .....	3	
CST 111 Construction Orientation and Environment <sup>*,1,D,G</sup> .....	2	
CST 118 Building Construction <sup>*,D,G</sup> .....	5	
MTH 076 Applied Geometry for Technicians or higher mathematics <sup>*,D,G,M</sup> .....	4	
<b>Total Credits</b>	<b>17</b>	

**Winter**

CST 118 Building Construction <sup>*,D,G</sup> .....	5
CST 122 Construction Codes <sup>D,G</sup> .....	2
CST 211 Blueprint Reading 2 <sup>*,D,G</sup> .....	3
PE/Health requirement <sup>D,R</sup> .....	3
WR 121 Composition: Introduction to Academic Writing <sup>*,D,W</sup> .....	4
<b>Total Credits</b>	<b>17</b>

**Spring**

CST 116 Construction Estimating <sup>D,G</sup> .....	4
CST 118 Building Construction <sup>*,D,G</sup> .....	5
CST 119 Building Construction Surveying <sup>D,G</sup> .....	3
Human Relations requirement <sup>R</sup> .....	3
<b>Total Credits</b>	<b>15</b>

**Second Year**

**Fall**

Arts and Letters requirement <sup>R</sup> .....	3
CST 280 Co-op Ed: Construction <sup>D,G</sup> .....	3
DRF 142 Graphic Concepts.....	2
DRF 167 CAD 1 <sup>*</sup> .....	4
Directed electives (see list below).....	3
<b>Total Credits</b>	<b>15</b>

**Winter**

CST 280 Co-op Ed: Construction <sup>D,G</sup> .....	3
DRF 208 Residential Buildings <sup>*</sup> .....	4
Science or Computer Science course <sup>R</sup> .....	3
Directed electives (see list below).....	6
<b>Total Credits</b>	<b>16</b>

**Spring**

CST 280 Co-op Ed: Construction <sup>D,G</sup> .....	3
Directed electives (see list below).....	9
Choice of:.....	3
Arts/Letters, Science or Computer Science course, or Social Science/Human Relations requirement <sup>R</sup>	
<b>Total Credits</b>	<b>15</b>

**Directed Electives (18 credits required for AAS degree)**

**Apprenticeship/Electronics Courses**

APPR 101 Trade Skills Fundamentals.....	4
ET129 Electrical Theory 1.....	4
ET130 Electrical Theory 2.....	4

**Business Courses**

BA 101 Introduction to Business.....	4
BT 165 Introduction to Accounting Cycle.....	3

**Drafting Courses**

DRF 137 Architectural Drafting – Plans <sup>*</sup> .....	4
DRF 168 CAD 2 <sup>*</sup> .....	4

DRF 205 Drafting: Structures <sup>*</sup> .....	4
DRF 207 Drafting: Strength of Materials <sup>*</sup> .....	4

**Skill Development Courses**

LAT 131 Landscape Construction.....	3
LAT 141 Principles of Nursery Operations.....	2
LAT 155 Landscape Plants 1.....	4
LAT 156 Landscape Plants 2.....	4
LAT 157 Landscape Plants 3.....	4
WLD 121 Shielded Metal Arc Welding 1 <sup>*</sup> .....	4
WLD 122 Shielded Metal Arc Welding 2 <sup>*</sup> .....	4

**Mathematics Courses, Choice of:**

MTH 070 Introductory Algebra <sup>*</sup> .....	5
MTH 086 Applied Algebra for Technicians <sup>*</sup> .....	4
MTH 095 Intermediate Algebra or higher <sup>*</sup> .....	5

**One Year Certificate of Completion**

**Purpose** To train students in the technical skills and knowledge of the construction industry. The graduate of this program can expect to work in the residential and commercial building construction field.

**Learning Outcomes** The graduate of the two-year AAS will:

- demonstrate basic carpentry skills for the construction industry.
- cut, fit, and assemble wood and other materials for building construction.
- demonstrate and use industry safety standards.
- use blueprint reading skills necessary to the profession.
- demonstrate knowledge of laser level and field elevations.
- be adequately prepared to enter the workforce in the field of construction.

**Fall**

CST 118 Building Construction <sup>*,D,G</sup> .....	5
CST 110 Blueprint Reading 1 <sup>*,D,G</sup> .....	3
CST 111 Construction Orientation and Environment <sup>*,1,D,G</sup> MTH 076 Applied Geometry for Technicians <sup>*,D,G,M</sup> or higher mathematics.....	2
CIS 101 Computer Fundamentals.....	4
<b>Total Credits</b>	<b>17</b>

**Winter**

CST 118 Building Construction <sup>*,D,G</sup> .....	5
CST 122 Construction Codes <sup>D,G</sup> .....	2
CST 211 Blueprint Reading 2 <sup>*,D,G</sup> .....	3
PE/Health elective <sup>D</sup> .....	3
WR 121 Composition: Introduction to Academic Writing <sup>*,D,W</sup> .....	4
<b>Total Credits</b>	<b>17</b>

**Spring**

CST 116 Construction Estimating <sup>D,G</sup> .....	4
CST 118 Building Construction <sup>*,D,G</sup> .....	5
CST 119 Building Construction Surveying <sup>D,G</sup> .....	3
Human Relations requirement <sup>H</sup> .....	3
<b>Total Credits</b>	<b>15</b>

1 Corequisite requirement is CST 110 Blueprint Reading 1.

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

## Construction Trades, General Apprenticeship

**Offered by the Apprenticeship Program**

**Associate of Applied Science Degree, Construction Trades, General Apprenticeship**

**Certificate of Completion, Construction Trades, General Apprenticeship**

**Purpose** To provide a structured system of training leading to certification in the construction trades or occupations. Only apprentices registered with the State of Oregon Bureau of Labor and Industries may enroll in Construction Trades, General Apprenticeship courses. Individual employers sponsor students while they learn the technical and theoretical aspects of the construction trades. By working cooperatively with the employer to complete all related training classes and following the joint apprenticeship and training committee rules and policies, a student may achieve journey-level status.

**Learning Outcomes** The graduate will:

- perform the duties and responsibilities of the individual construction trade/occupation.
- apply theory as it relates to trade competencies.
- demonstrate and use industry safety standards.
- utilize recognized standard building codes guidelines as applicable.
- prepare and utilize isometric sketching and detailed drawings per individual trade.
- develop attitudes conducive to improved customer relations skills in the construction trades.
- demonstrate communication and critical thinking skills necessary for job development advancement.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- access library, computing, and communications services, and appropriately select information and data from regional, national, and international networks.
- represent, analyze and determine rules for finding patterns relating to linear functions, non-linear functions and arithmetic sequences with tables, graphs, and symbolic rules.
- adapt to new job requirements to qualify for advancement in becoming lead supervisors.
- complete 8000 hours State of Oregon-approved on-the-job-training.

**Employment Trends** Construction is a very seasonal industry in Oregon since workers may experience periods of unemployment, particularly when construction projects end and economic conditions dampen construction activity. Remodeling, maintenance, and repair of existing buildings and equipment continue during reduced construction activity, as individuals and businesses adopt more energy-efficient equipment to curb utility costs. For general construction trades average job growth, coupled with replacement needs, will create a number of openings each year. Job opportunities should be best for those who have apprenticeship training along with the most current training and skills, including welding certification in trades, such as plumbing or sheet metal workers. In addition, a retiring skilled workforce will create additional job openings for carpenters, HVAC technicians, plumbers and sheet metal workers.

**Wages** Journey-level construction trades wages range regionally for carpenters from \$22.22/hr to \$24.00/hr for plumbers.

Although wages vary, the average starting wage of an apprentice is about 50 percent of a journey worker's rate of pay.

Apprentices usually earn a five-percent raise every six months if training and school performance is satisfactory. Check the Bureau of Labor and Industries website: [boli.state.or.us](http://boli.state.or.us)

**Costs in Addition to Tuition and Registration Fees (estimates)\***

Estimated costs of books and tools for the required general education courses total approximately \$850-1,000 over a four-year period. Cost of books and tools for the related training classes in the construction trades programs vary with each individual trade/occupation.

**Program Certification** An apprenticeship "Award of Completion" issued by the Oregon Bureau of Labor and Industries Apprenticeship and Training Division certifies that an individual has been trained in all aspects of an occupation and has met the requirements for program completion. This certificate is recognized throughout Oregon and industry-wide as a valid indicator of high quality, standardized training, and it provides on-the-job training documentation for community college credit.

The Oregon community college Construction Trades, General Apprenticeship pathway provides statewide transfer opportunities, laddered certificates of completion, and an optional transfer path into Oregon Institute of Technology Bachelor of Science in their Operations Management degree. The Construction Trades, General Apprenticeship pathway includes an advising guide with a set of recommended courses that satisfy both the AAS and the Oregon Transfer Module (OTM). Students who complete the recommended set of OTM courses may apply for 45 credits of guaranteed block transfer to any other community college or Oregon University System institution.

**Licensing or Other Certification Exams** HVAC technician/installer and plumber trades require successful completion of trade-specific licensure examinations through the Oregon Building Codes Division.

**Admission Deadline** Varies; some joint apprenticeship and training committees only accept applications once a year.

**Pre-requisites** Minimum placement scores – Reading 68, Writing 64, and Math parts A, B, C with 7/10 score. Note: See the counselor or advisor to obtain the suggested entry-level skills for successful completion of these programs.

**Criteria Used for Admission** Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries and accepted by a Joint Apprenticeship Training Committee. Selection to the program is by a point system from a pool of qualified applicants. Information on the point system is available at the Oregon Bureau of Labor and Industries website: [boli.state.or.us](http://boli.state.or.us)

In most cases minimum qualifications to begin an apprenticeship include a minimum age of 18 years, a high school diploma with a GPA of 2.0 or higher or GED, and a minimum of a 'C' grade for one year of high school algebra (or equivalent).



**Program Advisor** Program Advisor Colleen Cairney, Bldg. 15, Rm. 201 541.463.5843, [cairneyc@lanecc.edu](mailto:cairneyc@lanecc.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202 541.463.5236, [litty@lanecc.edu](mailto:litty@lanecc.edu)

## Construction Trades, General Apprenticeship

### Associate of Applied Science

**To earn the degree, a student must**

- complete 8000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion
- demonstrate an equivalency of 90 credit hours, with a minimum of 24 credits at Lane, including the last term at Lane
- complete all requirements for an AAS degree as listed below
- earn a cumulative grade point average above 2.0 at Lane or transfer credits earned at other regionally accredited colleges or universities

Requirements	Credits
<b>1. General Education</b>	
WR 115W Intro to College Writing: Workplace Emphasis <sup>D</sup> or higher-level writing .....	3
MTH 070 Introductory Algebra <sup>D</sup> or equivalent or higher-level math .....	5
PE/Health Requirement <sup>R</sup> .....	3
Arts and Letters requirement <sup>R</sup> .....	3
Human Relations requirement <sup>R</sup> .....	3
Science/Math/Computer Science requirement <sup>R</sup> .....	3
Choice of: .....	3
Arts and Letters requirement <sup>R</sup>	
Human Relations/Social Science requirement <sup>R</sup>	
Science/Math/Computer Science requirement <sup>R</sup>	
<b>2. Journey-level card from Oregon Bureau of Labor and Industries Apprenticeship and Training Division, prior certification credits .....</b>	
	<b>22</b>
<b>3. Construction Trades Core-Related Training .....</b>	<b>36-46</b>
<b>(Choice of one of the following trades)</b>	

**Carpenter (36 credits)**

- APR 115 Carpenter Skill Fundamentals
- APR 116 Carpentry Framing Fundamentals
- APR 117 Carpentry Framing and Introduction to Concrete
- APR 118 Carpentry Framing and Finishing
- APR 119 Carpentry Commercial Plans and Exterior Finish
- APR 120 Carpentry Interior Finish
- APR 201 Carpentry Basic Rigging and Practices
- APR 202 Carpentry Concrete Practices
- APR 203 Carpentry Forms and Tilt-up Panels
- APR 204 Carpentry Advanced Layout and Building Systems
- APR 205 Carpentry Advanced Planning and Management
- APR 206 Carpentry Equipment and Site Layout

**HVAC Technician/Installer (41-44 credits)**

- APR 101A Trade Skills Fundamentals
- APR 172 Sheet Metal/HVAC Blueprint Reading
- APR 210 HVAC Systems 1
- APR 211 HVAC Systems 2
- APR 212 HVAC Systems 3
- APR 220A Electrical Code and Exam Prep
- APR 220B Electrical Code and Exam Prep
- APR 220C Electrical Code and Exam Prep
- ET 129 Electrical Theory 1

- ET 130 Electrical Theory 2
- ET 229 Motors
- ET 241 Electro-Mechanical Troubleshooting

**Plumber (36-39 credits)**

- APR 160 Plumbing Skill Fundamentals
- APR 161 Plumbing Materials and Fixtures
- APR 162 Plumbing Basic Waste Water Systems
- APR 163 Plumbing Calculations and Print Reading
- APR 164 Plumbing Basic Installation 1
- APR 165 Plumbing Basic Installation 2
- APR 260 Plumbing Water Supply Systems
- APR 261 Pipe Sizing and Systems
- APR 262 Plumbing Advanced Waste Systems
- APR 263A Plumbing Code and Test Prep
- APR 263B Plumbing Code and Test Prep
- APR 263 C Plumbing Code and Test Prep

**Sheet Metal Worker (46 credits)**

- APR 101A Trade Skills Fundamentals
- APR 170 Introduction to Sheet Metal Apprenticeship
- APR 171 Sheet Metal Basic Layout
- APR 172 Sheet Metal/HVAC Blueprint Reading
- APR 270 Architectural Sheet Metal
- APR 271 Sheet Metal Building Codes and Installation
- APR 272 Sheet Metal Duct Design
- APR 273 General Sheet Metal Fabrication
- APR 274 Sheet Metal Shop Fabrication
- APR 275 Sheet Metal Project Supervision
- MTH 076 Applied Geometry for Technicians
- WLD 121 Shielded Metal Arc Welding 1
- WLD 143 Wire Drive Welding 1

**4. Program Electives to complete 90 credits for degree:0-9**

- APR 101 Trade Skills Fundamentals
- CS 120 Concepts of Computing
- CST 110 Blueprint Reading
- CST 111 Construction Orientation and Environment
- CST 116 Construction Estimating
- CST 118 Building Construction
- CST 119 Building Construction Surveying
- DRF 167 CAD 1
- HE 252 First Aid
- MTH 076 Applied Geometry for Technicians
- MTH 095 Intermediate Algebra
- MTH 111 College Algebra
- MTH 112 Trigonometry
- NRG 103 Sustainability in the Built Environment
- NRG 121 Air Conditioning System Analysis
- NRG 124 Energy Efficient Methods
- NRG 158 Thermal Design and Installation 1
- NRG 159 Thermal Design and Installation 2
- WATR 101 Introduction to Water Resources
- WLD 121 Shielded Metal Arc Welding 1
- WLD 122 Shielded Metal Arc Welding 2
- WLD 143 Wire Drive Welding 1

## Construction Trades, General Apprenticeship

### Certificate of Completion

**Purpose** Students may earn a Certificate of Completion in Construction Trades, General Apprenticeship by successfully completing 36-46 core related training credits with a 'C' or better in all courses, and completing related instruction in communications, computation, and human relations.

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

**Learning Outcomes** The graduate will:

- Apply theory as it relates to trade competencies.
- Perform the duties and responsibilities of the individual construction trade/occupation.

**To earn the certificate, students must:**

- complete State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion
  - 8000-Hour BOLI-ATD Trade: Carpenter
  - 8000-Hour BOLI-ATD Trade: HVAC Technician/Installer
  - 8000-Hour BOLI-ATD Trade: Plumber
  - 8000-Hour BOLI-ATD Trade: Sheet Metal Worker
- complete related instruction (communication, computation, human relations)..... 9
- complete core-related training ..... 36-46

Total Credits 45-55

**Core Related Training requirements (Choice of one of the following trades)**

**Carpenter (36 Credits)**

- APR 115 Carpenter Skill Fundamentals
- APR 116 Carpentry Framing Fundamentals
- APR 117 Carpentry Framing and Introduction to Concrete
- APR 118 Carpentry Framing and Finishing
- APR 119 Carpentry Commercial Plans and Exterior Finish
- APR 120 Carpentry Interior Finish
- APR 201 Carpentry Basic Rigging and Practices
- APR 202 Carpentry Concrete Practices
- APR 203 Carpentry Forms and Tilt-up Panels
- APR 204 Carpentry Advanced Layout and Building Systems
- APR 205 Carpentry Advanced Planning and Management
- APR 206 Carpentry Equipment and Site Layout

**HVAC Technician/Installer (41-44 credits)**

- APR 101A Trade Skills Fundamentals
- APR 172 Sheet Metal/HVAC Blueprint Reading
- APR 210 HVAC Systems 1
- APR 211 HVAC Systems 2
- APR 212 HVAC Systems 3
- APR 220A Electrical Code and Exam Prep
- APR 220B Electrical Code and Exam Prep
- APR 220C Electrical Code and Exam Prep
- ET 129 Electrical Theory 1
- ET 130 Electrical Theory 2
- ET 229 Motors
- ET 241 Electro-Mechanical Troubleshooting

**Plumber (36-39 credits)**

- APR 160 Plumbing Skill Fundamentals
- APR 161 Plumbing Materials and Fixtures
- APR 162 Plumbing Basic Waste Water Systems
- APR 163 Plumbing Calculations and Print Reading
- APR 164 Plumbing Basic Installation 1
- APR 165 Plumbing Basic Installation 2
- APR 260 Plumbing Water Supply Systems
- APR 261 Pipe Sizing and Systems
- APR 262 Plumbing Advanced Waste Systems
- APR 263A Plumbing Code and Test Prep
- APR 263B Plumbing Code and Test Prep
- APR 263 C Plumbing Code and Test Prep

**Sheet Metal Worker (46 credits)**

- APR 101A Trade Skills Fundamentals
- APR 170 Introduction to Sheet Metal Apprenticeship
- APR 171 Sheet Metal Basic Layout
- APR 172 Sheet Metal/HVAC Blueprint Reading
- APR 270 Architectural Sheet Metal
- APR 271 Sheet Metal Building Codes and Installation
- APR 272 Sheet Metal Duct Design
- APR 273 General Sheet Metal Fabrication
- APR 274 Sheet Metal Shop Fabrication

- APR 275 Sheet Metal Project Supervision
- MTH 076 Applied Geometry for Technicians
- WLD 121 Shielded Metal Arc Welding 1
- WLD 143 Wire Drive Welding 1

## Culinary Arts and Food Service Management

**Offered by Culinary Arts and Hospitality Management**

**Two-Year Associate of Applied Science Degree**

**Career Pathway Certificate of Completion, Baking and Pastry**

**Career Pathway Certificate of Completion, Food Preparation and Production**

**Career Pathway Certificate of Completion, Dietary Manager**

**Purpose** To enable the transformation of students' passion for food and cooking into careers as future professional culinarians, restaurant owners, food and beverage managers, pastry chefs, dietary managers and other careers in food services. Focusing on classical culinary principles and techniques, the program's coursework is sequenced in building blocks of knowledge and skills competencies with an emphasis on learning by doing.

**Accreditation** The Culinary Arts two-year program (AAS degree) is accredited by the American Culinary Federation Foundation Accrediting Commission, a specialized accrediting commission recognized by the Council for Higher Education Accreditation. A student graduating from the program will receive national certification status as a Certified Culinarian.

**Learning Outcomes** The graduate of the two-year AAS will:

- develop a broad range of culinary and dining room service skills.
- operate equipment including cook tops, food processors, ovens (baking, convection, and conventional), dough mixers, meat slicers, espresso machines, cash register, point of sales (POS) systems and a variety of kitchen tools.
- develop supervisory and human relations skills.
- understand the fundamentals of financial analysis, purchasing and receiving, menu planning and costing, and food and beverage controls.
- access library, computer and communications services and obtain information and data from regional, national and international networks.
- develop essential baking and pastry knowledge and skills.
- perform mathematical functions related to food service operations.
- gain hands-on experience planning and preparing large events in the Center for Meeting and Learning.

**Employment Trends** Statewide projections report that there will be a 19-20% increase in culinary industry job openings through 2016, including Lane County. Statewide, 61 annual openings for Chefs and Head Cooks are projected in Oregon, and 3 openings are projected annually in Lane County; statewide, 88 annual openings for Food Service Managers are projected in Oregon, and 8 openings are projected annually in Lane County; statewide, 429 openings for First-Line Supervisors and Managers of Food Preparation and Serving Workers are projected in Oregon, and 38 openings are projected annually in Lane County; 731 annual openings for Restaurant Cooks are projected in Oregon, and 57 openings are projected

annually in Lane County; and statewide, 61 annual openings for Production Bakers are projected in Oregon, and 13 are projected annually in Lane County.

**Wages** Chefs and Head Cooks with an annual average hourly rate of \$15.88 in Lane County to \$18.75 statewide with an average annual salary of \$39,003; Food Service Managers range from \$19.73 an hour in Lane County to \$22.55 statewide with an annual average salary of \$46,899; First-Line Supervisors and Managers of Food Preparation and Serving Workers range from \$14.08 an hour in Lane County to \$15.87 statewide with an annual average salary of \$33,025; Restaurant Cooks' range from \$11.19 an hour to \$11.36 statewide with an annual average salary of \$23, 625; and Production Bakers range from \$12.37 an hour to \$13.15 statewide with an annual average salary of \$27,338.

**Costs in Addition to Tuition (2-year program estimate)\***

Program fee (non-refundable).....	\$325
Books, class fees, college fees, etc. ....	\$5,285
Differential Fees* .....	\$3,507
Total estimate.....	\$9,117

\*This is the total of all the differential fees attached to Culinary Arts courses. These and other fees may change during the year. See the online credit class schedule for fees assigned to courses.

**Licensing and Other Certification Exams Required** During the course of the program, students earn a Lane County Food Handlers Card and Serv-Safe National Certification. Students may be eligible to take National Restaurant Association Education Foundation (NRAEF) certificate examinations for various courses.

**Prerequisites** Students can enter the Culinary Arts sequence in fall term only. Complete college placement tests with the following minimum scores: writing 64, reading 68 and readiness for MTH 025 - taking Math Placement Test Parts A, B and C - 7 out of 10 in each part, and attach copies of test score sheets to application. Students with prior college credit may attach a copy of transcript(s). Math must be current within one year or a placement test will need to be taken.

**Admission Deadline** Student applications are accepted beginning March 1 and are reviewed and interviews are held spring and summer terms for fall admission. Steps to be completed for entry into the Culinary Arts program include the following:

1. Complete an application for admission to Lane Community College, available in Enrollment and Student Financial Services or online at [lanec.edu/es/admissions.html](http://lanec.edu/es/admissions.html)
2. Complete an application for admission to the Culinary Arts program, available from the Culinary Arts and Hospitality Management office or online at [lanec.edu/culinary](http://lanec.edu/culinary)
3. Submit the completed Culinary Arts application with supporting documentation to the Culinary Arts and Hospitality Management office. Applications are accepted March 1-June 30. Late applications accepted through August 30, if spaces are available.

**Number of New Students Admitted Annually** Facilities limit the number of students admitted to this program. Approximately 72 students enter the program in the fall.

**Criteria Used for Admission** Students are selected based on timely application to the program and a point allocation system. Students may be called for interviews.

**Cooperative Education (Co-op)** Students earn credit for on-the-job work experience related to educational and career goals. Through Co-op, students can develop and practice skills, expand career knowledge, and make contacts for future employment. For more information contact Joe McCully, Hospitality Cooperative Education Coordinator, Bldg. 19, Rm. 210, 541.463.3516.

**Program Advisor** Lisa Stegall, 541.463.5378

**Program Counselor** Carolyn Litty, 541.463.5236

**Program Contact** Julie Fether, 541.463.3518

**Note** All CA, FN, and HRTM courses required for this program must be taken for a grade, not pass/no pass, and must be passed with a grade of C- or better. MTH 025 or higher required for program.

**Two-Year Associate of Applied Science Degree**

**Courses recommended prior to beginning program:**

Arts and Letters requirement <sup>R</sup> .....	3
Science/Math/Computer Science requirement <sup>R</sup> .....	3
Choice of:.....	3
Arts and Letters requirement <sup>R</sup>	
Science/Math/Computer Science requirement <sup>R</sup>	
Total Credits	9

**First Year**

CA 160 Introduction to Cooking Theories 1 <sup>*,D,G</sup> .....	5
CA 175 Foodservice Sanitation and Safety .....	2
CG 203 Human Relations at Work <sup>H</sup> .....	3
HRTM 105 Restaurant Operations <sup>D,G</sup> .....	3
MTH 025 Basic Mathematics Applications or higher <sup>*,D,M</sup>	3
Total Credits	16

**Winter**

CA 162 Introduction to Cooking Theories 2 <sup>*,D,G</sup> .....	5
CA 184 Dining Room and Kitchen Lab 1 <sup>*,D,G</sup> .....	3
FN 105 Nutrition for Foodservice Professionals <sup>D,G</sup> .....	3
**Program Electives .....	2-3
Total Credits	13-14

**Spring**

CA 163 Introduction to Cooking Theories 3 <sup>*,D,G</sup> .....	5
CA 185 Dining Room and Kitchen Lab 2 <sup>*,D,G</sup> .....	4
CA 200 Restaurant and Menu Management <sup>D,G</sup> .....	3
WR 115W Introduction to College Writing: Workplace Emphasis or higher <sup>W</sup> .....	3
Total Credits	15

**Summer**

CA 280 Co-op Ed: Culinary Arts, Second Year <sup>D,G</sup> .....	9
Total Credits	9

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

**Second Year**

CA 186 Dining Room and Kitchen Lab 3 <sup>*,D,G</sup> .....	4
CA 279 Buffet and Banquet Planning <sup>*,D,G</sup> .....	2
CA 292 Advanced Cooking Theories 1 (Garde Manger) <sup>*,D,G</sup> .....	3
HRTM 265 Hospitality Financials 1 <sup>D,G</sup> .....	3
**Program Electives.....	2-5

Total Credits 14-17

**Winter**

CA 176 Concepts of Taste and Flavor <sup>*,D,G</sup> .....	2
CA 187 Dining Room and Kitchen Supervision <sup>*,D,G</sup> .....	4
CA 279 Buffet and Banquet Planning <sup>*,D,G</sup> .....	2
CA 293 Advanced Cooking Theories (International Cuisine) <sup>*,D,G</sup> .....	3
HRTM 275 Hospitality Financials 2 <sup>*,D,G</sup> .....	3
**Program Electives.....	2-3

Total Credits 16-17

**Spring**

CA 279 Buffet and Banquet Planning <sup>*,D,G</sup> .....	2
CA 294 Advanced Cooking Theories 3 (American Regional) <sup>*,D,G</sup> .....	3
CA 297 Culinary Leadership <sup>*,D,G</sup> .....	2
HE 252 First Aid <sup>D,P</sup> .....	3
**Program Electives.....	2-6

Total Credits 12-16

\*\*Program electives can be met at any time/term of the 2-Year Program.

**Program Electives**

BA 278 Leadership and Team Dynamics.....	4
BI 103H General Biology .....	4
BT 122 MS PowerPoint for Business .....	3
BT 123 MS Excel for Business.....	3
BT 120 MS Word for Business .....	3
BT 163 QuickBooks .....	4
CA 110 Local Guest Chef Series <sup>D,G</sup> .....	2
CA 120A Seasonal Baking and Pastry/Summer <sup>D,G</sup> .....	2
CA 120B Seasonal Baking and Pastry/Fall <sup>D,G</sup> .....	2
CA 120C Seasonal Baking and Pastry/Winter <sup>D,G</sup> .....	2
CA 120D Seasonal Baking and Pastry/Spring <sup>D,G</sup> .....	2
CA 121 The Composition of Cake <sup>D,G</sup> .....	2
CA 122 Artisan Breads <sup>D,G</sup> .....	2
CA 123 International Baking and Pastry <sup>D,G</sup> .....	2
CA 130 Oregon Wine Country <sup>D,G</sup> .....	2
CA 160A Food Preparation and Production .....	3
CA 163A Beginning Baking and Pastry.....	3
CA 163B Intermediate Baking and Pastry.....	3
CA 163C Advanced Baking and Pastry.....	3
CA 225 Catering Lab <sup>D,G</sup> .....	2
CA 277 Culinary Competition Lab <sup>D,G</sup> .....	2
ES 102 Contemporary Racial and Ethnic Issues .....	4
FN 206 Co-op Ed.: Dietary Manager Seminar.....	2
FN 255 Introduction to Medical Nutrition Therapy * .....	3
FN 280 Co-op Ed.: Dietary Manager .....	4
GEOG 201 World Regional Geography .....	3
HRTM 150 At Your Service .....	2
HRTM 281 Restaurant Ownership.....	3
HRTM 286 Fundamentals of Wine, Beer and Spirits <sup>D,G</sup> ....	3
HST 104, 105, or 106 World History .....	4
PHL 201 Ethics.....	4
SP 115 Introduction to Intercultural Communications .....	4
SP 130 Business and Professional Speech.....	4
SUST 101 Introduction to Sustainability.....	3
WR 121 Composition: Introduction to Academic Writing.....	4

**Baking and Pastry**

**Career Pathway Certificate of Completion**

**Purpose** The Career Pathways Certificate Program in Baking and Pastry is for students who want to gain entry into the food service industry as beginning bakers and pastry cooks. All of the classes offered in this Certificate Program apply directly to an Associate of Applied Science degree in Culinary Arts and Foodservice Management.

**Learning Outcomes** The graduate will:

- develop essential and advanced baking and pastry knowledge and skills.
- operate equipment including cook tops, food processors, ovens (baking, convection, and conventional), dough mixers and a variety of kitchen tools.
- perform mathematical functions related to food service operations.

**Admission** This program offers open enrollment, and there is no application process for admissions; only a Student Information sheet is required for admission. College placement tests scores are required with the following minimum scores: writing 64, reading 68 and readiness for MTH 025 - taking Math Placement Test Parts A, B and C - 7 out of 10 in each part, and attach copies of test score sheets to program application. Students with prior college credit may submit a copy of transcript(s). Math must be current within one year or a placement test will need to be completed.

**Summer**

*CA 120A Seasonal Baking and Pastry/Summer <sup>D,G</sup> .....	2
Total Credits	2

**Fall**

CA 163A Beginning Baking and Pastry <sup>D,G</sup> .....	3
CA 175 Foodservice Safety and Sanitation <sup>D,G</sup> .....	2
*CA 120B Seasonal Baking and Pastry/Autumn <sup>D,G</sup> .....	2
Total Credits	7

**Winter**

CA 163B Intermediate Baking and Pastry <sup>D,G</sup> .....	3
MTH 025 Basic Mathematics <sup>*,D,M</sup> .....	3
CA 123 International Baking <sup>D,G</sup> .....	2
*CA 120C Seasonal Baking and Pastry/Winter <sup>D,G</sup> .....	2
Total Credits	10

**Spring**

CA 163C Advanced Baking and Pastry <sup>D,G</sup> .....	3
CA 121 Composition of Cake <sup>D,G</sup> .....	2
*CA 120D Seasonal Baking and Pastry/Spring <sup>D,G</sup> .....	2
Total Credits	7

\*Choose only 2 terms of CA 120 Seasonal Baking and Pastry for Certificate of Completion

**Food Preparation and Production**

**Career Pathway Certificate of Completion**

**Purpose** The Career Pathways Certificate Program in Food Preparation and Production is for students who want to gain entry into the food service industry as entry-level food production cooks. Some of the classes offered in this Certificate Program apply directly to an Associate of Applied Science degree in Culinary Arts and Foodservice Management.



**Learning Outcomes** The graduate will:

- develop a broad range of culinary and dining room service skills.
- operate equipment including cook tops, food processors, ovens (baking, convection, and conventional), dough mixers, meat slicers, espresso machines, cash register, point of sales (POS) systems and a variety of kitchen tools.
- develop supervisory and human relations skills.
- understand the fundamentals of restaurant operations, menu planning and costing, and food and beverage controls.

**Admission** This program offers open enrollment, and there is no application process for admissions; only a Student Information sheet is required for admission. College placement tests scores are required with the following minimum scores: writing 64, reading 68 and readiness for MTH 025 - taking Math Placement Test Parts A, B and C - 7 out of 10 in each part. Copies of test score sheets must be attached to program application. Students with prior college credit may submit a copy of transcript(s). Math must be current within one year or a placement test will need to be taken.

	<b>Fall</b>
CA 160 A Food Preparation and Production <sup>D,G</sup> .....	3
CA 175 Foodservice Sanitation and Safety <sup>D,G</sup> .....	2
HRTM 105 Restaurant Operations <sup>D,G</sup> .....	3
<b>Total Credits</b>	<b>8</b>
	<b>Winter</b>
CA 160B Food Preparation and Production <sup>2 D,G</sup> .....	2
Program Elective <sup>D,G</sup> .....	2
CG 203 Human Relations at Work <sup>H</sup> .....	3
<b>Total Credits</b>	<b>7</b>

Check current class schedule for terms offered or go to: [lanecc.edu/culinary/careerpathways](http://lanecc.edu/culinary/careerpathways).  
Students may take Cooperative Education any term approved by the coordinator.

Students interested in transferring to a four-year institution should:

1. Substitute WR 121 classes for WR 115W.
2. Add MTH 111 and MTH 112.
3. Add a speech course.
4. Add WR 122 and WR 123.

## Dietary Manager

**Offered by Culinary Arts and Hospitality Management in partnership with the Health Professions Division Career Pathway Certificate of Completion**

**Purpose** To offer Culinary Arts and Hospitality Management students the opportunity to earn an additional industry credential in dietary services management to broaden their employability as part of a health professionals team.

According to the Dietary Manager Association, A Certified Dietary Manager (CDM®) has the education, training, and experience to competently perform the responsibilities of a dietary manager and has proven this by passing a nationally-recognized credentialing exam and fulfilling the requirements needed to maintain certified status...CDMs are experts at managing dietary operations. They are trained and qualified to

administrate menus, food purchasing, and food preparation; and to apply nutrition principles, document nutrition information, ensure food safety, manage work teams, and much more.

Students are eligible for Dietary Managers Association (DMA) student membership. Graduates are eligible for the credentialing exam and active DMA membership.

**Learning Outcomes** Graduates will be able to direct and control or assist with the dietary departments of hospitals, long-term care facilities, schools, correctional facilities, and many other settings, having skills for:

- menu planning
- food purchasing
- food service sanitation and safety
- financial management
- employee recruitment, training and supervision
- supervising the serving of special meals prescribed for medical purposes
- nutritional screening
- documentation of nutritional assessment data in the medical record

**Employment Trends** Employment projections for food service managers, of which Dietary Managers are a part, look very positive for the State of Oregon for the years 2006 to 2016. According to Oregon Employment Department forecasts, 2006 employment is estimated to be larger than the statewide average. This occupation is expected to grow somewhat faster than the statewide average. Total job openings are projected to be somewhat higher than the statewide average. Reasonable employment opportunities exist.

**Wages** The Dietary Managers Association conducted a national online survey in 2008 of wages. For our region (California, Oregon, Washington and Alaska), in areas of a population under 100,000 (88 responses), the average salary was \$45,833. In a major city or suburb in our region (113 responses), the average salary was \$60, 311.

**Costs in Addition to Tuition and Registration Fees (estimates)\***  
Books .....\$100-300

Subject to change without notice.

**Prerequisites** The courses in this Certificate of Completion are designed to be taken with the Culinary Arts Associate of Applied Science degree program offered by the CAHM division. There are specific prerequisites for each of the four courses required for this certificate. Each of the prerequisites is a requirement in Culinary Arts AAS degree. Please contact The Health Professions 1 Team, Building 1, Room 113.

**Cooperative Education (Co-op)** Students earn credit for on-the-job work experience related to educational and career goals. Through Co-op, students can develop and practice skills, expand career knowledge, and make contacts for future employment. Contact the Cooperative Education Office for more information, 541.463.5203, Building 19, Rm 231.

Standard footnotes:  
\* Prerequisite required  
A Meets Arts/Letters requirement  
B Must be passed with grade of "B" or better to use as a prerequisite  
D Degree or certificate requirement; must be passed with grade of "C-" or better  
G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement  
M Meets Mathematics requirement  
P Meets PE/Health requirement  
R Required for AAS degree—see page 49  
S Meets Science/Math/Computer Science requirement  
W Meets Written Communications or English Composition requirement

**Certificate Lead** Beth Naylor, 541.463.5533, [naylore@lanec.edu](mailto:naylore@lanec.edu)

**Program Counseling and Advising** The Health Professions 1 Team, Building 1, Room 103

<b>Required Courses</b>	<b>Winter</b>	
FN 105 Nutrition for Foodservice Professionals * <sub>D,G</sub> .....		3
FN 255 Introduction to Medical Nutrition Therapy * <sub>D,G</sub> .....	<b>Spring</b>	3
FN 206 Co-Op Ed: Dietary Manager Seminar * <sub>D,G</sub> .....	<b>Winter</b>	2
FN 280 Co-Op Ed: Dietary Manager * <sub>D,G</sub> .....	<b>Spring</b>	4
<b>Total Credits</b>		<b>12</b>

Culinary Arts students completing this certificate may take these Co-op hours as program elective credits for the AAS Degree.

## Dance

**Offered by Music, Dance and Theatre Arts**

**Suggested Course of Study: Major in Dance**

This curriculum is designed for the student who intends to complete requirements for a two-year associate of arts Oregon transfer degree and transfer to a four-year college or university as a major in dance. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education.

To prepare for transfer, students work toward the goal of achieving technical proficiency in dance equivalent to that of a third-year (junior) student, while completing the requirements for an AAOT degree. Though the following course of study is a general curriculum designed for the full-time student, part-time students may also use it as a guide. Individual technical progress will vary, but it is recommended that a student take a full year of Modern and Ballet at an appropriate level before moving up to a higher level. Group requirements vary with degree goals and college. Students interested in pursuing an associate's or bachelor's degree should see a Music, Dance and Theatre Arts advisor as well as dance program director Bonnie Simoa Reid, for information and advice.

<b>Beginning</b>	<b>Fall</b>	
D 185 Ballet 1 .....		2
Choice of: .....		2
D184 Hip Hop 1		
D175 Tap Dance		
Choice of: .....		2
D 152 Dance Basics		
D 177 Modern Dance 1		
Choice of: .....		2
D 183 Body Mind Stretch and Relaxation		
D 172 Dancing the Fluid Body		
D 153 Pilates Mat Work 1 or		
D 154 Pilates Mat Work 2		
Group requirements .....		9
<b>Total Credits</b>		<b>17</b>

	<b>Winter</b>	
D 185 Ballet 1 .....		2
Choice of: .....		2
D184 Hip Hop 1		
D175 Tap Dance		
D 177 Modern Dance 1 .....		2

Choice of: .....	2
D 183 Body/Mind Stretch and Relaxation	
D 153 Pilates Mat Work 1 or	
D 154 Pilates Mat Work 2	
D172 Dancing the Fluid Body	
D251 Looking at Dance 3 .....	4
Group requirements .....	6

**Total Credits 18**

	<b>Spring</b>	
D 185 Ballet 1 .....		2
D 257 Dance Improvisation .....		2
D 177 Modern Dance 1 .....		2
Choice of: .....		2
D 183 Body Mind Stretch and Relaxation		
D 153 Pilates Mat Work 1 or		
D 154 Pilates Mat Work 2		
D 176 Fluid Yoga <sup>3</sup>		
Group requirements .....		9

**Total Credits 17**

<b>Intermediate</b>	<b>Fall</b>	
D 186 Ballet 2 .....		2
D 178 Modern Dance 2 .....		2
D 188 Jazz Dance 1 .....		2
D 160 Dance Composition .....		3
D 256 Body Fundamentals/Body as Knowledge <sup>1,2,3</sup> .....		4
Group requirements .....		6

**Total Credits 19**

	<b>Winter</b>	
D 186 Ballet 2 .....		2
D 188 Jazz Dance 1 .....		2
D 260 Group Choreography .....		3
Choice of: .....		2
D 153 Pilates Mat Work 1 or		
D 154 Pilates Mat Work 2		
D 172 Dancing the Fluid Body		
Group requirements .....		9

**Total Credits 18**

	<b>Spring</b>	
D 186 Ballet 2 .....		2
D 178 Modern Dance 2 .....		2
D 189 Jazz Dance 2 <sup>3</sup> .....		2
D 261 Rehearsal and Performance .....		2
D 176 Fluid Yoga <sup>3</sup> .....		2
Choice of: .....		2
D 153 Pilates Mat Work 1 or		
D 154 Pilates Mat Work 2		
Group requirements .....		6

**Total Credits 18**

	<b>Summer</b>	
ED 225 Multiple Intelligence in Motion <sup>3</sup> .....		3

<b>Advanced</b>	<b>Fall</b>	
D 187 Ballet 3 .....		2
D 179 Modern Dance 3 .....		2
D 261 Rehearsal and Performance .....		2
Choice of: .....		2
D 153 Pilates Mat Work 1		
D 154 Pilates Mat Work 2		
D 172 Dancing the Fluid Body		
Group requirements .....		9

**Total Credits 17**

	<b>Winter</b>
D 187 Ballet 3 .....	2
D 179 Modern Dance 3.....	2
D 261 Rehearsal and Performance.....	2
Choice of:.....	2
D 153 Pilates Mat Work 1 or	
D 154 Pilates Mat Work 2	
D 176 Dancing the Fluid Body	
Group requirements.....	9
Total Credits	17

	<b>Spring</b>
D 187 Ballet 3 .....	2
D 179 Modern Dance 3.....	2
D 261 Rehearsal and Performance.....	2
Rehearsal and Performance.....	2
Choice of:.....	2
D 176 Fluid Yoga 3	
D 153 Pilates Mat Work 1 or	
D 154 Pilates Mat Work 2	
Group requirements.....	9
Total Credits	17-19

- 1 This course satisfies the U of O Dance Department requirement for such a course.
- 2 This course satisfies a U of O Arts and Letters "distribution" requirement.
- 3 Offered only once a year.

## Dental Assisting

**Offered by Health Professions Division**  
**One-Year Certificate of Completion**

For additional information, see [lanecc.edu/fhc/dental/da.htm](http://lanecc.edu/fhc/dental/da.htm)

**Purpose** To prepare graduates for employment in the dental setting, with emphasis on current concepts of clinical chairside assisting. Included classes also offer some cross-training and pathways to receptionist-bookkeeper, office manager or laboratory technician.

**Learning Outcomes** The graduate will:

- demonstrate knowledge and skills required to collect diagnostic data systematically.
- demonstrate knowledge and skills required to perform a variety of clinical supportive treatments.
- demonstrate knowledge and skill required to accurately expose, develop and mount diagnostic radiographs
- demonstrate knowledge and skills required for business office procedures.
- demonstrate knowledge and skills required to access information via dental journals and web sites.
- demonstrate knowledge and skills needed to compute mixing amounts for impression materials, cements, and disinfecting/sterilizing solutions, as well as calculate plaque indexing and inverse square law.

**Employment Trends** About 96 percent of graduates find employment in the Eugene/Springfield area. The remaining four percent are able to find employment in other parts of the state. The state economist projects 22 positions available annually in Lane County, and 265 openings annually

statewide. It is estimated that positions available in Oregon will increase by 1,316 between 2006 and 2016.

**Wages** Starting salary in the Eugene/Springfield area ranges from \$12.50-13.50 hourly or \$26,000-28,080 annually. Average 2008 wages in Lane County were \$17.23 hourly, or \$35,696 annually. Statewide average 2008 wages were \$17.30 hourly, or \$35,976 annually.

**Tuition (estimate)\*** ..... \$7,451  
 \* Miscellaneous costs could be up to \$2500, including national and state exams. The faculty strives to minimize costs for additional materials in classes. Students pay a differential fee for some Dental Assisting courses, which total \$932. These and other fees may change during the year - see the online credit class schedule for fees assigned to courses.

**Program Accreditation** American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Department of Education.

**Licensing or Other Certification** Exams Required Certificate of Radiological Proficiency, with proficiency examination administered by the Dental Assisting National Board. Students complete three National Board examinations each year and are also eligible to receive all state required credentials.

**Prerequisites** Dental Assisting is a concentrated program that requires good reading and study skills. Students are encouraged to take DA 110 Health Sciences and DA 103 Dental Law and Ethics prior to entry into the program. Evidence of a physical examination (within the previous nine months) must be submitted prior to admission to the program.

**Enrollment Academic Requirements**

MTH 025 Basic Math Applications (or higher) * <sup>M</sup> .....	3 credits
Human Relations requirement <sup>G,R</sup> .....	3 credits
Choice of: .....	3-4 credits
WR 115 Introduction to College Writing <sup>G,W</sup>	
WR 121 Composition: Introduction to Academic Writing <sup>G,W</sup>	
CIS 101 Computer Fundamentals or	
CS 120 Concepts of Computing: Information Processing	

All courses need to be taken for a letter grade of C- or higher, Grades of No-pass or lower than a C- will not be accepted. Attend the Mandatory Orientation. Both accepted and alternate students must attend the orientation session to be eligible for the program. Location will be announced in the notification of program acceptance and alternate acceptance.

**Admission Deadline** See on-line application for detailed information.

**Admission Information** Enrollment in this program is limited to 30 students per year. Students who have been accepted into the Dental Assisting program may arrange to complete the program over a two-year period. Beginning fall term, on-line applications with admission information are available at [lanecc.edu/hp/dental/daapplication.htm](http://lanecc.edu/hp/dental/daapplication.htm)

An applicant must:

- be an Oregon resident
- be admitted to Lane Community College as a credit student
- have a high school or GED diploma

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

- meet testing and/or proficiency requirements
- complete the Program On-line Application and payment
- submit transcripts, if needed, to Enrollment Services
- Document program/clinical requirements (to be paid by student) which will include:
  - physical exam and immunizations
  - CPR certification
  - proof of health insurance
- Background check may be required for national testing

**Continuing Education** The employed dental assistant may register for any course offered by contacting the Interim Program Coordinator, Leslie Greer 541.463.5616. Expanded functions are taught during Advanced Clinical Experiences in the spring term. This class is open to qualified working chairside assistants if space permits and if the working assistant meets state credentialing qualifications.

**Cooperative Education (Co-op)** Co-op is a required class for students enrolled in the Dental Assisting Program. Through Co-op, students spend a minimum of 24 hours a week during spring term working in at least two different professional dental offices. Co-op offers students the opportunity to gain skills, connect theory and practice, and make contacts for employment. Contact the Dental Assisting Co-op Coordinator, Leslie Greer 541.463.5638.

**Counseling and Advising** For assistance in meeting program or application requirements, please go to Counseling and Advising in Building 1, Room 103, or e-mail [DAProgram@lanecc.edu](mailto:DAProgram@lanecc.edu)

	Fall
DA 107 Dental Health Education 1 * <sup>2,3,G</sup> .....	1
DA 110 Health Sciences <sup>1,3,G</sup> .....	3
DA 115 Dental Anatomy * <sup>1,2,3,G</sup> .....	3
DA 192 Dental Materials 1 * <sup>2,3,G</sup> .....	3
DA 195 Chairside Procedures * <sup>2,3,G</sup> .....	6
DA 210 Dental Radiology * <sup>2,3,G</sup> .....	4
<b>Total Credits</b>	<b>20</b>

	Winter
DA 103 Dentistry, Law and Ethics 3 * <sup>1,3,4</sup> .....	2
DA 108 Dental Health Education 2 * <sup>2,3,G</sup> .....	3
DA 193 Dental Materials 2 * <sup>2,3,G</sup> .....	3
DA 196 Chairside Procedures 2 * <sup>2,3,G</sup> .....	7
DA 211 Dental Radiology 2 * <sup>2,3,G</sup> .....	2
<b>Total Credits</b>	<b>17</b>

	Spring
DA 102 Advanced Clinical Experiences * <sup>3,G</sup> .....	3
DA 194 Dental Office Procedures * <sup>2,3,G</sup> .....	3
DA 280 Co-op Ed: Dental Assisting * <sup>2,3,G</sup> .....	6
<b>Total Credits</b>	<b>12</b>

- 1 To be taken first year if program extended over two years.
- 2 Must be enrolled in Dental Assisting Program
- 3 Degree or certificate requirement. Must be passed with a grade of 75% or better to remain in the Dental Assisting program.
- 4 online class only

## Dental Hygiene

Offered by Health Professions Division

Two-Year Associate of Applied Science Degree

See [lanecc.edu/hp/dental/dh.htm](http://lanecc.edu/hp/dental/dh.htm) for additional information and the admission packet.

**Purpose** To prepare graduates for careers as licensed clinical dental hygienists providing preventive, therapeutic, restorative and educational methods for the control of oral disease and promotion of optimal oral health.

**Learning Outcomes** The graduate will:

- demonstrate ethics, values, knowledge and skills in the provision of evidence based dental hygiene practice.
- use critical thinking skills and self-evaluation in the provision of patient care, disease prevention and exposure control.
- select and plan educational and clinical services for periodontal diseases using appropriate interpersonal communication, comprehensive data collection, knowledge of periodontal conditions and therapies, and educational strategies.
- demonstrate application of refined instrumentation skills for periodontal, restorative and therapeutic interventions.
- initiate and assume responsibility for health promotion and disease prevention activities.
- use assessment, planning, implementation and evaluation in the provision of dental hygiene services for the general dental patient, special needs populations and community groups.
- use mathematical and statistical concepts to calculate dosages and assess dental research/literature for application to clinical and preventive dental care strategies.
- use appropriate library and information resources to research professional issues, community program planning and to support lifelong learning.

**Employment Trends** Job prospects in Eugene and surrounding counties are competitive. Statewide, projected annual openings are 122, with 28 openings annually in the Mid-Willamette region. This occupation is expected to grow faster than the statewide average.

**Wages** Mid-Willamette region averages between \$32-\$37 per hour; with up to \$77,000 annually.

**Estimated Program Costs** tuition, differential fees, program fees which include the instrument issue.\* Distance clinical sites will have program fees based on partner college contracts. Program costs are provided to students at required application review sessions, see application packet.

\*Students pay a differential fee for some Dental Hygiene courses which total \$5,115 for first-year courses and \$4,998 for second-year courses. These and other fees may change during the year - see the online credit class schedule for fees assigned to courses.

**Program Accreditation** The American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Department of Education. The Commission may be contacted at 312.440.4653 or 211 East Chicago Avenue, Chicago, Illinois 60611.

**Licensing or Other Certification Required** National Dental Hygiene Board and the Western Regional Examining Board for Local Anesthesia, Restorative Dentistry and Clinical Dental Hygiene. Examination fees estimated at \$2,100 are paid in January of the second year of the curriculum. Clinical sites may



require an application for licensure in Oregon ([oregondentistry.org](http://oregondentistry.org)) and a criminal background check.

**Admission Information and Deadline** Application information is available online at [lanecc.edu/fhc/dental](http://lanecc.edu/fhc/dental)

**Number of New Students Admitted Annually** Twenty on the main campus. Oregon distance learning clinical sites in partnership with LBCC and UCC have cohorts of 5-6 students. The LCSC Lewiston, Idaho clinical site has a cohort of 6 students. Distance learning sites are sponsored by Northwest Partnerships for Dental Hygiene Solutions from a Department of Labor Employment and Training Administration "President's Community Based Job Training Grant."

**Criteria Used for Admission** Selection to the program is by a point system from a pool of qualified applicants. Information on the point allocations system is available from the program website. Advanced placement information is available through the program coordinator. Oregon residents only may apply. Distance site openings for Oregon will be posted on the program web site when available. Admission to these sites will be available to applicants from sponsoring partner college regions. Out of state distance clinical sites and admission information will be posted on partner college web sites. International student applications are not accepted. In the admission process, completion of non-dental hygiene numbered courses is weighted heavily. The admission packet is found on the program website at [lanecc.edu/dental](http://lanecc.edu/dental)

**Prerequisites** In order to apply for entry, all applicants must complete the following minimum prerequisites with a grade of C or better. Other specialized program requirements will be described in acceptance materials.

The following courses or their equivalent are required in order to apply to the program.

BI 112 Cell Biology for Health Occupations * <sub>G,S</sub> .....	3
CH 112 Chemistry for Health Occupations * <sub>G,S</sub> .....	3
WR 121 Composition: Introduction to Academic Writing * <sub>G,W</sub> .....	4
BI 231 Human Anatomy and Physiology 1 * <sub>D,G,S</sub> .....	4
BI 232 Human Anatomy and Physiology 2 * <sub>D,G,S</sub> .....	4
FN 225 Nutrition <sup>1,D,G</sup> .....	4
Choice of:.....	3
SOC 204 Introduction to Sociology <sup>G,H</sup>	
SOC 205 Social Stratification and Systems <sup>G,H</sup>	
SOC 206 Institutions and Social Change <sup>G,H</sup>	
MTH 052 Math for Introductory Physical Sciences * <sub>G,M</sub> or higher mathematics .....	4
Choice of:.....	4
SP 100 Basic Communication <sup>A,D,G</sup>	
SP 111 Fundamentals of Public Speaking <sup>A,D,G</sup>	
Choice of:.....	3
PSY 201, 202, 203 General Psychology <sup>G</sup>	
Total Credits	36

**Admission** Information including a point allocation chart can be found at [lanecc.edu/dental](http://lanecc.edu/dental).

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Only students who have received their official program acceptance letter or who are currently enrolled in the dental hygiene program may take Dental Hygiene Co-op. Contact Leslie Greer, Dental Hygiene Co-op Coordinator, 541.463.5638.

**Counseling and Advising** For assistance in meeting program or application requirements, please go to Counseling and Advising in Building 1, Room 103, or e-mail [DAProgram@lanecc.edu](mailto:DAProgram@lanecc.edu)

First Year	Fall
DH 107 Dental Infection Control and Safety <sup>1,2,G</sup> .....	1
DH 113 Dental Anatomy and Histology * <sub>1,2,G</sub> .....	2
DH 118A Clinical Dental Hygiene 1 * <sub>1,2,G</sub> .....	4
DH 118B Clinical Dental Hygiene 1 Lab * <sub>1,2,G</sub> .....	2
DH 228 Oral Biology 1 * <sub>1,2,G</sub> .....	4
DH 243A Oral Roentgenology 1 * <sub>1,2,G</sub> .....	2
DH 243B Oral Roentgenology 1 Lab * <sub>1,2,G</sub> .....	1
Total Credits	16
	Winter
DH 119A Clinical Dental Hygiene 2 * <sub>1,2,G</sub> .....	3
DH 119B Clinical Dental Hygiene 2 Lab * <sub>1,2,G</sub> .....	4
DH 139 Special Needs Dental Patient <sup>1,2,G</sup> .....	2
DH 229 Oral Pathology for the Dental Hygienist * <sub>1,2,G</sub> .....	3
DH 244A Oral Roentgenology 2 * <sub>1,2,G</sub> .....	1
DH 244B Oral Roentgenology 2 Lab * <sub>1,2,G</sub> .....	1
Total Credits	14
	Spring
BI 233 Human Anatomy and Physiology 3 * <sub>2,G,S</sub> .....	4
BI 234 Introductory Microbiology * <sub>2,G,S</sub> .....	4
DH 120A Clinical Dental Hygiene 3 * <sub>1,2,G</sub> .....	3
DH 120B Clinical Dental Hygiene 3 Lab * <sub>1,2,G</sub> .....	4
DH 132 Dental Materials for the Dental Hygienist * <sub>1,2,G</sub> ....	2
DH 254 Pharmacology * <sub>1,2,G</sub> .....	3
Total Credits	20
	Summer
DH 280 Co-op Ed: Dental Hygiene (optional).....	(3)
Second Year	Fall
DH 220A Clinical Dental Hygiene 4 * <sub>1,2,G</sub> .....	2
DH 220B Clinical Dental Hygiene 4 Lab * <sub>1,2,G</sub> .....	5
DH 233 Local Anesthesia * <sub>2,G</sub> .....	3
DH 270 Periodontology 1 * <sub>1,2,G</sub> .....	2
DH 275 Dental Hygiene Restorative Functions 1 * <sub>2,G</sub> .....	2
Choice of:.....	4
WR 123 Composition: Research * <sub>A,2,G</sub>	
WR 227 Technical Writing * <sub>A,2,G</sub>	
Total Credits	18

Standard footnotes:  
 \* Prerequisite required  
 A Meets Arts/Letters requirement  
 B Must be passed with grade of "B" or better to use as a prerequisite  
 D Degree or certificate requirement; must be passed with grade of "C-" or better  
 G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement  
 M Meets Mathematics requirement  
 P Meets PE/Health requirement  
 R Required for AAS degree—see page 49  
 S Meets Science/Math/Computer Science requirement  
 W Meets Written Communications or English Composition requirement

	Winter
DH 221A Clinical Dental Hygiene 5 <sup>*,1,2,G</sup> .....	2
DH 221B Clinical Dental Hygiene 5 Lab <sup>*,1,2,G</sup> .....	6
DH 237 Community Dental Health <sup>1,2,G</sup> .....	3
DH 271 Periodontology 2 <sup>*,1,2,G</sup> .....	1
DH 276 Dental Hygiene Restorative Functions 2 <sup>*,2,G</sup> .....	1
Total Credits	13

	Spring
DH 222A Clinical Dental Hygiene 6 <sup>*,1,2,G</sup> .....	2
DH 222B Clinical Dental Hygiene 6 Lab <sup>*,1,2,G</sup> .....	5
DH 234 Trends and Issues in Dental Hygiene <sup>*,1,2,G</sup> .....	2
DH 238 Community Dental Health <sup>*,1,2,G</sup> .....	1
Total Credits	10

- 1 Must be accepted in Dental Hygiene Program
- 2 Must be passed with a grade of "C" or better

## Diesel Technology

**Offered by the Advanced Technology Division**

**Two-Year Associate of Applied Science Degree  
Lift Truck/Material Handling Equipment Technician Option**

**Two-Year Certificate of Completion**

**Purpose** To prepare the graduate for employment in occupations such as heavy equipment technician, highway truck technician, and lift truck and material handling technician. Possible job opportunities are available with truck fleets, logging fleets, heavy construction companies, OEM dealerships, road construction contractors, parts sales and service, and general heavy equipment repair shops.

**Learning Outcomes** The graduate will:

- be able to explain and identify various technologies used in the repair of on- and off-highway vehicles.
- use lab station simulators to diagnose and troubleshoot system components.
- demonstrate checks and adjustments on heavy equipment chassis and power trains, including on highway automatic transmissions.
- demonstrate diesel engine overhaul procedures using industry standard tooling and equipment including disassembly, failure analysis, assembly, and operation of engine on a dynamometer.
- demonstrate industry troubleshooting procedures to diagnose electrical systems including starting, charging, air conditioning, electronic control systems and lighting.
- demonstrate industry troubleshooting procedures to diagnose hydraulic systems used on off- and on-highway vehicles including forklifts, crawlers, excavators, backhoes, skidsteers, and powershift transmissions.
- demonstrate and use industry safety standards.
- access library, computing, and communications services and obtain information and data from regional and national networks.
- demonstrate basic math skills using formulas to find force, pressure, area, and volume.

The lift-truck material handling option graduate will also:

- demonstrate general maintenance, diagnosis, and testing of hydraulic systems on forklifts, loaders, and equipment with hydraulic assist transmissions.

**Employment Trends** Statewide, 164 annual openings for diesel technicians are projected in Oregon and 17 openings are projected annually in Lane County. Those with an associate degree have a competitive advantage in this labor market.

**Wages** Statewide average, \$20 hourly, \$42,000 annually (\$50,000+ with experience). Lane County average, \$21 hourly, \$43,000 annually.

**Costs in Addition to Tuition and Registration Fees (estimates)\***

Books .....	\$1,300
Tools .....	\$400
Class Fees .....	\$648
Differential Fees * .....	<u>\$2,352</u>
Total .....	\$4,700

\* This is the total of all differential fees attached to Diesel Technology courses. These and other course fees may change during the year -- see the online credit class schedule for fees assigned to courses.

**Program Accreditation** Association of Equipment Distributors Foundation (AEDF). Membership: Northwest Diesel Industry Council (NDIC).

**Prerequisites** Minimum placement score of 68 in Reading or completion of RD 080 or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Note: See counselor or advisor to learn what entry-level skills are suggested for successful completion of this program.

**Criteria Used for Admission** Students may enter this program fall, winter, or spring term. For consent to enroll in major courses, students must attend a program orientation for fall terms (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor in winter and spring terms.

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Diesel Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits in DS 280 may be earned in lieu of required Diesel Technology course credits. Contact Marv Clemons, Diesel Technology Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158.

**Program Advisor** Lisa Stegall, Bldg. 12, Rm. 203, 541.463.5378, [stegalll@lanec.edu](mailto:stegalll@lanec.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202, 541.463.5236, [littyc@lanec.edu](mailto:littyc@lanec.edu)

**Two-Year Associate of Applied Science Degree**

First Year	Fall
DS 155 Heavy Equipment Hydraulics <sup>*,D,G</sup> .....	12
MTH 060 Beginning Algebra <sup>*,D,G,M</sup> or higher mathematics .....	4
Total Credits	16

	Winter
DS 154 Heavy Duty Braking Systems <sup>*,D,G</sup> .....	12
WLD 121 Shielded Metal Arc Welding 1 * .....	4
PE/Health requirement <sup>D,R</sup> .....	3
Total Credits	19

	<b>Spring</b>
DS 158 Heavy Equipment Chassis and PowerTrains <sup>*,D,G</sup> .....	12
Human Relations requirement <sup>R</sup> .....	3
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing.....	3
Total Credits	18

<b>Second Year</b>	<b>Fall</b>
DS 256 Diesel and Auxiliary Fuel Systems <sup>*,D,G</sup> .....	12
MTH 076 Applied Geometry for Technicians <sup>*,S</sup> or higher mathematics.....	4
Choice of:.....	3-4
MFG 197 Manufacturing Technology <sup>*,D,G</sup>	
WLD 122 Shielded Metal Arc Welding 2 <sup>*</sup>	
Total Credits	19-20

	<b>Winter</b>
DS 257 Diesel Electrical Systems <sup>*,D,G</sup> .....	12
CS 120 Concepts of Computing: Information Processing <sup>S</sup> or higher computer science.....	4
WLD 143 Wire Drive Welding 1 <sup>*</sup> .....	4
Total Credits	20

	<b>Spring</b>
DS 259 Diesel Engines and Engine Overhaul <sup>*,D,G</sup> .....	12
Arts and Letters requirement <sup>R</sup> .....	3
Total Credits	15

**Elective** DS 280 Co-op Ed: Diesel (optional)

**Two-Year Certificate of Completion**

<b>First Year</b>	<b>Fall</b>
DS 155 Heavy Equipment Hydraulics <sup>*,D,G</sup> .....	12
MTH 060 Beginning Algebra or MTH 076 Applied Geometry for Technicians <sup>*,D,G,M</sup> or higher mathematics .....	4
Total Credits	16

	<b>Winter</b>
DS 154 Heavy Duty Braking Systems <sup>*,D,G</sup> .....	12
WLD 121 Shielded Metal Arc Welding 1 <sup>*</sup> .....	4
Total Credits	16

	<b>Spring</b>
DS 158 Heavy Equipment Chassis and PowerTrains <sup>*,D,G</sup> .....	12
Human Relations requirement <sup>H</sup> .....	3
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing.....	3
Total Credits	18

<b>Second Year</b>	<b>Fall</b>
DS 256 Diesel and Auxiliary Fuel Systems <sup>*,D,G</sup> .....	12
Choice of:.....	3-4
MFG 197 Manufacturing Technology <sup>*,D,G</sup>	
WLD 122 Shielded Metal Arc Welding 2 <sup>*</sup>	
Total Credits	15-16

	<b>Winter</b>
DS 257 Diesel Electrical Systems <sup>*,D,G</sup> .....	12
WLD 143 Wire Drive Welding 1 <sup>*</sup> .....	4
Total Credits	16

	<b>Spring</b>
DS 259 Diesel Engines and Engine Overhaul <sup>*,D,G</sup> .....	12
PE/Health elective <sup>D</sup> .....	3
Total Credits	15

**Diesel Technology: Lift Truck/Material Handling Equipment Technician Option**

**Two-Year Associate of Applied Science Degree**

<b>First Year</b>	<b>Fall</b>
DS 155 Heavy Equipment Hydraulics <sup>*,D,G</sup> .....	12
MTH 060 Beginning Algebra <sup>*,D,G,M</sup> or higher mathematics.....	4
Total Credits	16

	<b>Winter</b>
DS 257 Diesel Electrical Systems <sup>*,D,G</sup> .....	12
WLD 121 Shielded Metal Arc Welding 1 <sup>*</sup> .....	4
PE/Health requirement <sup>D,R</sup> .....	3
Total Credits	19

	<b>Spring</b>
DS 259 Diesel Engines and Engine Overhaul <sup>*,D,G</sup> .....	8
DS 260 Lift Truck/Material Handling Equipment (Electric) <sup>D,G</sup> .....	4
Human Relations requirement <sup>R</sup> .....	3
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing.....	3
Total Credits	18

<b>Second Year</b>	<b>Fall</b>
DS 260 Lift Truck/Material Handling Equipment (Mast/Upright) <sup>D,G</sup> .....	6
DS 256 Diesel and Auxiliary Fuel Systems <sup>*,D,G</sup> .....	6
MTH 076 Applied Geometry for Technicians <sup>*,S</sup> or higher mathematics .....	4
Choice of:.....	3-4
WLD 122 Shielded Metal Arc Welding 2 <sup>*</sup>	
MFG 197 Manufacturing Technology <sup>*,D,G</sup>	
Total Credits	19-20

	<b>Winter</b>
AM 244 Engine Performance <sup>*,D,G</sup> .....	4
CS 120 Concepts of Computing: Information Processing <sup>S</sup>	4
DS 260 Lift Truck/Material Handling Equipment (Electric) <sup>D,G</sup> .....	5
DS 154 Heavy Duty Braking Systems <sup>*,D,G</sup> .....	3
WLD 143 Wire Drive Welding 1 <sup>*</sup> .....	4
Total Credits	20

	<b>Spring</b>
DS 260 Lift Truck/Material Handling Equipment (Electric/ Maintenance/Schematics) <sup>D,G</sup> .....	9
DS 158 Heavy Equipment Chassis and PowerTrains <sup>*,D,G</sup> .....	3
Arts and Letters requirement <sup>R</sup> .....	3
Elective DS 280 Co-op Ed: Diesel (optional)	
Total Credits	16

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

# Drafting

**Offered by the Advanced Technology Division**

**Two-Year Associate of Applied Science Degree**

**One-Year Certificate of Completion**

**Purpose** To prepare students for careers in architectural and mechanical drafting. The profession requires attention to detail and the ability to learn mathematical, visual, and communication skills.

Architectural Drafters may work for a residential designer, a structural engineer, an architect, a cabinet shop, or a construction firm.

Mechanical Drafters may work in the manufacture of electronics, precision sheet metal, heavy equipment, steel fabrication, process piping, and plastics.

**Learning Outcomes** The graduate of the one-year program will:

- demonstrate basic competence in the use of at least one CAD software program. (Setup a drawing, create and modify text and geometry, use associative dimensioning correctly, create, store, and use blocks or symbols, manage object properties including linetype and layer, create objects in three dimensions, and print or plot drawings using a correct scale.)
- demonstrate basic graphical literacy.
- explain basic standard practices in architectural and mechanical drafting.
- interpret the concepts of a problem-solving task and translate them into mathematical language, and solve using mathematical operations.

In addition to the above outcomes, the graduate of the two-year program will:

- use graphic principles in the solution of problems relating to drafting and/or design.
- access information from public libraries, research libraries, online sources, appropriate codes and standards, professional organizations, and vendor catalogs.
- produce drawings in accordance with industry standards, e.g., ANSI/ASME, AIA, building codes.

**Employment Trends** Statewide, 267 annual openings for drafters are projected in Oregon and 23 openings are projected annually in Lane County. Those with an associate degree have a competitive advantage in this labor market.

**Wages** Statewide average, \$22 hourly (one-year certificate, \$9-12, hourly), \$42,000 annually. Lane County average, \$19 hourly, \$39,000 annually. Typical entry-level wages are between \$9-15 hourly. (This information is based on published data from the Oregon Department of Labor, 2008.)

**Costs in Addition to Tuition and Registration Fees (estimates)\***

Books .....	\$1,250
Tools.....	\$ 25
Class Fees.....	\$ 315
Total.....	\$1,590

\*Subject to change without notice.

**Prerequisites** Minimum placement score of 68 in Reading or completion of RD 080 or prior college. A high school diploma or equivalent is recommended for all applicants to this program. Basic computer literacy skills are a prerequisite to any CAD course.

**Criteria Used for Admission** Normal program entry is fall term. A program orientation is held for new students for fall term (dates available in Counseling or Enrollment and Student Financial Services). Contact advisor/counselor for assistance for winter and spring term entry.

**Cooperative Education (Co-op)** Co-op offers drafting students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Tamara Pinkas, Drafting Co-op Coordinator, Bldg. 19, Rm. 231D, 541.463.5011, pinkast@lanec.edu

**Program Advisor** Lisa Stegall, Bldg. 12, Rm. 203, 541.463.5378, stegalll@lanec.edu

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202, 541.463.5236, littyc@lanec.edu

**Two-Year Associate of Applied Science Degree**

First Year	Fall
DRF 142 Graphic Concepts <sup>*,D,G</sup> .....	2
DRF 167 CAD 1 <sup>*,D,G</sup> .....	4
CS 120 Concepts of Computing: Information Processing or higher computer science, <sup>S</sup> .....	4
MTH 076 Applied Geometry for Technicians <sup>*,D,G,M</sup> or higher mathematics.....	4
<b>Total Credits</b>	<b>14</b>

	Winter
CST 122 Construction Codes <sup>D,G</sup> .....	2
DRF 168 CAD 2 <sup>*,D,G</sup> .....	4
DRF 208 Residential Buildings <sup>*,D,G</sup> .....	4
Human Relations Requirement <sup>R</sup> .....	3
MTH 086 Applied Algebra for Technicians <sup>*,S</sup> or higher .....	4
<b>Total Credits</b>	<b>17</b>

	Spring
DRF 121 Mechanical Drafting <sup>*,D,G</sup> .....	4
DRF 137 Architectural Drafting - Plans <sup>*,D,G</sup> .....	4
DRF 206 Co-op Ed: Drafting Seminar <sup>D</sup> .....	2
DRF 245 Solid Modeling <sup>*,D,G</sup> .....	3
WR 121 Composition: Introduction to Academic Writing <sup>*,D,W</sup> .....	4
<b>Total Credits</b>	<b>17</b>

Second Year	Fall
DRF 205 Drafting: Structures <sup>*,D,G</sup> .....	4
DRF 210 Commercial Buildings <sup>*,D,G</sup> .....	4
DRF 232 Mechanical Design <sup>*,D,G</sup> .....	4
DS 155 Heavy Equipment Hydraulics <sup>*,D,G</sup> .....	1
PE/Health requirement <sup>D,R</sup> .....	3
<b>Total Credits</b>	<b>16</b>

	Winter
DRF 207 Drafting: Strength of Materials <sup>*,D,G</sup> .....	4
DRF 220 Building Information Modeling <sup>*,D,G</sup> .....	4
DRF 233 Geometric Tolerancing <sup>*,D,G</sup> .....	4
WR 227 Technical Writing <sup>*A</sup> .....	4
<b>Total Credits</b>	<b>16</b>



	<b>Spring</b>
DRF 211 Mechanical Systems and Environmental Design <sup>*,D,G</sup> .....	4
DRF 234 Power Trains <sup>*,D,G</sup> .....	4
DRF 203 Electrical Drafting <sup>*,D,G</sup> .....	2
ENGR 280D Co-op Ed: Drafting <sup>D,G</sup> .....	3
Total Credits	13

**One-Year Certificate of Completion**

	<b>Fall</b>
DRF 142 Graphic Concepts <sup>*,D,G</sup> .....	2
DRF 167 CAD 1 <sup>*,D,G</sup> .....	4
Choice of:.....	3-4
CIS 101 Computer Fundamentals	
CS 120 Concepts of Computing: Information Processing or higher computer science	
MTH 076 Applied Geometry for Technicians <sup>*,D,G,M</sup> or higher mathematics.....	4
Total Credits	13-14

	<b>Winter</b>
CST 122 Construction Codes <sup>D,G</sup> .....	2
DRF 168 CAD 2 <sup>*,D,G</sup> .....	4
DRF 208 Residential Buildings <sup>*,D,G</sup> .....	4
Human Relations Requirement <sup>D,H</sup> .....	3
MTH 086 Applied Algebra for Technicians <sup>*</sup> or higher mathematics <sup>*</sup> .....	4
Total Credits	17

	<b>Spring</b>
DRF 121 Mechanical Drafting <sup>*,D,G</sup> .....	4
DRF 137 Architectural Drafting-Plans <sup>*,D,G</sup> .....	4
DRF 206 Co-op Ed: Drafting Seminar <sup>D</sup> .....	2
DRF 245 Solid Modeling <sup>*,D,G</sup> .....	3
WR 121 Composition: Introduction to Academic Writing <sup>*,D,W</sup> or higher writing.....	4
Total Credits	17

## Early Childhood Education

Offered by the Child and Family Education Department

Two-Year Associate of Applied Science Degree

One-Year Certificate of Completion

**Purpose** To prepare students for successful careers as childcare professionals in a variety of settings such as for-profit and not-for-profit childcare centers, on-site childcare centers in the business community, university and community college laboratory programs, government sponsored programs such as Head Start and Even Start, and in a family childcare business operated from their own home. Visit the web for detailed information about the program and lab school.

**Learning Outcomes** The graduate will:

- plan and carry out developmentally appropriate curriculum activities for children, ages infants through kindergarten.
- choose age appropriate guidance methods to enhance the child's development of self-worth, self-esteem, problem-solving skills and abilities for day-to-day life.

- design and effectively use environments that maximize children's abilities to make choices, explore personal power, develop empathy and caring behaviors, learn responsible roles for the classroom and appropriate relationships with others.
- assist parents with skill building in the areas of guidance, nutrition, and appropriate activity choices, and work effectively in a variety of roles with children and families.
- facilitate the operation of childcare programs ranging from working with children and families to administration and management.
- develop research skills and confidence to access information using print and computer resources, specifically the Internet, the library's on-line catalog and basic library reference sources.
- master application of basic mathematics to use in everyday life and business transactions, including measurement, introduction of probability and statistics, reading graphs and tables, and signed numbers.

**Employment Trends** Childcare is a growth field due in part to the large number of working parents seeking out-of-home childcare. Individuals who have the appropriate training usually find immediate employment.

**Wages** The statewide average hourly wage varies from \$9-\$15. Early childhood administrative directors typically earn \$13-\$21 hourly.

**Costs in Addition to Tuition (estimates)\*** Students must buy books as well as have transportation to school. There are minimal program fees to cover required documentation for lab entry (\$100-125) as well as a supply fee for lab projects (\$20-25).

\*Subject to change without notice.

**Licensing or Other Certification** Exams Required Individuals are not issued a license, but must meet requirements as defined by the State of Oregon Child Care Division.

**Admission Deadline** Early Childhood Education is an open-entry, open-exit program. New students are admitted fall, winter and spring terms. The program coordinator does individual academic advising each term as well as scheduling of students.

**Number of New Students Admitted Annually** Approximately 50-70 students are enrolled in the program each term.

**Criteria Used for Admission** Lane placement tests in math, reading, and writing are required. Students must pass a State of Oregon criminal records check and have medical clearance, food handler's card, CPR card, and first aid card.

**Admission Information** Application information is available from the Early Childhood Education program coordinator Jean Bishop, Bldg. 24, Rm. 121, 541.463.5287 and Enrollment and Student Financial Services.

**Cooperative Education (Co-op)** Co-op offers sixth term Early Childhood Education students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Students are required to do one term of Co-op for five credits to earn the AAS degree and are eligible to enroll after they have reached sixth-term standing in the program. Contact the Cooperative Education office 541.463.5203 for more information about the program and lab school.

**Program Advisor** Deb Hupcey, Bldg. 1, Counseling Department, 541.463.5894; [hupceyd@lanec.edu](mailto:hupceyd@lanec.edu)

**Program Counselor** Marva Solomon, Bldg. 1, Counseling Department, 541.463.5802, [solomonm@lanec.edu](mailto:solomonm@lanec.edu)

**Two-Year Associate of Applied Science Degree**

**First Year**

ECE 120 Intro to Early Childhood Education <sup>D,G</sup> .....	<b>Fall</b>	2
ECE 130 Child Care and Guidance <sup>D,G</sup> .....		3
ECE 140 Theory and Supervised Teaching <sup>1 D,G</sup> .....		3
HDFS 226 Child Development <sup>D,G</sup> .....		3
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or other AAS equivalent <sup>R</sup> .....		3
<b>Total Credits</b>		<b>14</b>

**Winter**

ECE 110 Observing Children's Behavior <sup>D,G</sup> .....	1
ECE 150 Creative Activities for Children <sup>D,G</sup> .....	3
ECE 170 Infants and Toddlers <sup>D,G</sup> .....	4
ECE 140 Theory and Supervised Teaching <sup>1 *,D,G</sup> .....	3
MTH 025 Basic Math Applications <sup>G,M,D</sup> or higher level mathematics <sup>R</sup> .....	3
Program elective (refer to list below) <sup>1</sup> .....	3
<b>Total Credits</b>	<b>17</b>

**Spring**

ECE 160 Exploring Early Childhood Curriculum <sup>D,G</sup> .....	4
ECE 240 Theory and Supervised Teaching <sup>2 *,D,G</sup> .....	4
FN 230 Family, Food and Nutrition <sup>D,G</sup> .....	3
Choice of:.....	3-4
ANTH 103 Cultural Anthropology <sup>D,G,H</sup>	
CG 203 Human Relations at Work <sup>D,G,H</sup>	
<b>Total Credits</b>	<b>14-15</b>

**Second Year**

**Fall**

ECE 210 Applying Early Childhood Curriculum <sup>*, D,G</sup> .....	4
ECE 240 Theory and Supervised Teaching <sup>2 *,D,G</sup> .....	4
Program elective (refer to list below) <sup>1</sup> .....	3
Science/ Math/ Computer Science requirement <sup>R</sup> .....	4
<b>Total Credits</b>	<b>15</b>

**Winter**

ECE 230 Parent-School-Community Relations <sup>D,G</sup> .....	3
HDFS 227 Children Under Stress <sup>*, D,G</sup> .....	3
ECE 240 Theory and Supervised Teaching <sup>2 *,D,G</sup> .....	4
General Education requirement, choice of:.....	3-4
Arts/Letters <sup>R</sup>	
Social Science <sup>R</sup>	
Science/ Math/ Computer Science <sup>R</sup>	
<b>Total Credits</b>	<b>13-14</b>

**Spring**

ECE 260 Administration of Child Care Centers <sup>D,G</sup> .....	4
ED 280EC Co-op Ed: Early Childhood Ed <sup>D,G</sup> .....	5
Arts/Letters requirement <sup>R</sup> .....	3
ECE 250 Infant and Toddler Environments <sup>*, D,G</sup> .....	3
Choice of:.....	3
Health requirement <sup>R</sup>	
Physical Education Activity requirement <sup>2,R</sup>	
<b>Total Credits</b>	<b>18</b>

1 Program electives may be selected from the following list or be approved by the ECE Program Coordinator in advance:

- CG 191 Issues in Cultural Diversity
- CG 204 Eliminating Self-Defeating Behavior
- CG 205 Introduction to Assertive Behavior
- CG 206 Coping with Stress and Depression
- CG 211 Dreikursian Principles of Child Guidance 1
- CG 212 Dreikursian Principles of Child Guidance 2
- ECE 240 Infant Practicum (extra term)
- ED 209 Seminar Education Foundations Part 1
- ED 210 Seminar Education Foundations Part 2
- ED 225 Creative Dance for Children
- ENG 100 Children's Literature
- HDFS 228 Exceptional Child
- HDFS 229 Middle Childhood
- HDFS 233 Parenting
- HDFS 298 IS: Child Development
- HS 207 The Dysfunctional Family
- ECE 253 Diversity Issues In ECE

**One-Year Certificate of Completion**

**Purpose** To prepare students for successful careers as childcare professionals in a variety of settings such as for-profit and not-for-profit childcare centers, on-site childcare centers in the business community, university and community college laboratory programs, government sponsored programs such as Head Start and Even Start, and in a family childcare business operated from their own home.

**Learning Outcomes** The graduate will:

- choose age appropriate guidance methods to enhance the child's development of self-worth, self-esteem, problem-solving skills and abilities for day-to-day life.
- design and effectively use environments that maximize children's abilities to make choices, explore personal power, and develop empathy and caring
- master application of basic mathematics to use in everyday life and business transactions, including measurement, introduction of probability and statistics, reading graphs and tables, and signed numbers.

**Fall**

ECE 120 Intro to Early Childhood Education <sup>D,G</sup> .....	2
ECE 130 Child Care and Guidance <sup>D,G</sup> .....	3
ECE 140 Theory and Supervised Teaching <sup>1 D,G</sup> .....	3
HDFS 226 Child Development <sup>D,G</sup> .....	3
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or other AAS equivalent <sup>R</sup> .....	3

**Total Credits 14**

**Winter**

ECE 110 Observing Children's Behavior <sup>D,G</sup> .....	1
ECE 150 Creative Activities for Children <sup>D,G</sup> .....	3
ECE 170 Infants and Toddlers <sup>D,G</sup> .....	4
ECE 140 Theory and Supervised Teaching <sup>1 D,G</sup> .....	3
MTH 025 Basic Math Applications <sup>G,M</sup> or higher level mathematics <sup>R</sup> .....	3
Program elective (refer to list below) <sup>1</sup> .....	3

**Total Credits 17**

**Spring**

ECE 160 Exploring Early Childhood Curriculum <sup>D,G</sup> .....	4
ECE 240 Theory and Supervised Teaching <sup>2 D,G</sup> .....	4
FN 230 Family, Food and Nutrition <sup>D,G</sup> .....	3
Choice of:.....	3-4
ANTH 103 Cultural Anthropology <sup>D,G,H</sup>	
CG 203 Human Relations at Work <sup>D,G,H</sup>	

**Total Credits 14-15**

1 Program electives may be selected from the following list or be approved by the ECE Program Coordinator in advance:

- CG 191 Issues in Cultural Diversity
- CG 204 Eliminating Self-Defeating Behavior
- CG 205 Introduction to Assertive Behavior
- CG 206 Coping with Stress and Depression

CG 211 Dreikursian Principles of Child Guidance 1  
 CG 212 Dreikursian Principles of Child Guidance 2  
 ED 209 Seminar Education Foundations Part 1  
 ED 210 Seminar Education Foundations Part 2  
 ED 225 Creative Dance for Children  
 ENG 100 Children's Literature  
 HDFS 228 Exceptional Child  
 HDFS 229 Middle Childhood  
 HDFS 233 Parenting  
 HDFS 298 IS: Child Development  
 HS 207 The Dysfunctional Family

## Electrician Apprenticeship Technologies

**Offered by the Apprenticeship Program**

**Associate of Applied Science Degree, Electrician Apprenticeship Technologies**

**Certificate of Completion, Limited Electrician Apprenticeship Technologies**

**Certificate of Completion, Electrician Apprenticeship Technologies**

**Purpose** To provide a structured system of training leading to certification in the electrician trade or occupation. Only apprentices registered with the State of Oregon Bureau of Labor and Industries may enroll in Electrician Apprenticeship Technologies courses. Individual employers sponsor students while they learn technical and theoretical aspects of the electrician trade. By working cooperatively with the employer to complete all related training classes and following the joint apprenticeship and training committee rules and policies, a student may achieve journey-level status. The Oregon community college Electrician Apprenticeship Technologies pathway provides statewide transfer opportunities, ladder certificates of completion, and an optional transfer path into Oregon Institute of Technology Bachelor of Science in Operations Management degree. The Electrician Apprenticeship Technologies pathway includes an advising guide with a set of recommended courses that satisfy both the AAS degree and the Oregon Transfer Module (OTM). Students who complete the recommended set of OTM courses may apply for 45 credits of guaranteed block transfer to any other community college or Oregon University System institution.

**Learning Outcomes** The graduate will:

- perform the duties and responsibilities of the electrician trade/occupation.
- apply theory to electrical wiring.
- demonstrate and use industry safety standards.
- develop attitudes conducive to improve customer relations skills in the electrician trade.
- develop communication and critical thinking skills necessary for job advancement.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- access library, computing, and communications services, and appropriately select information and data from regional, national, and international networks.

- represent, analyze and determine rules for finding patterns relating to linear functions, non-linear functions and arithmetic sequences with tables, graphs, and symbolic rules.
- adapt to new job requirements to qualify for advancement in becoming lead supervisors.
- repair and install electrical wire devices according to licensure regulations to meet National Electrical Code and Oregon Building Codes Division for Inside Wire Electrician, Limited Energy Technician-License A and License B, Limited Maintenance Electrician, and Manufacturing Plant Electrician.
- complete 4000-8000 hours State of Oregon-approved on-the-job-training.

**Employment Trends** Job opportunities should be very good, especially for those with the broadest range of skills. Most electricians acquire their skills by completing an apprenticeship program lasting 4 to 5 years. About 4 out of 5 electricians work in the construction industry or are self-employed, but there also will be opportunities for electricians in other industries. Job prospects should be very good, particularly for workers with the widest range of skills, including voice, data, and video wiring. As the economy rehabilitates and the construction industry retrofits older structures, electrical improvements will usually be required to meet modern codes which will create additional jobs. In addition to jobs created by the increased demand for electrical work, many openings are expected over the next decade as a large number of electricians retire. Job openings for electricians vary by location and specialty, however, and will be best in the fastest growing regions of the country, especially those areas where power plants are being constructed. Employment of electricians, like that of many other construction workers, is sensitive to the fluctuations of the economy. Workers in these trades may experience periods of unemployment when the overall level of construction falls. On the other hand, shortages of these workers may occur in some areas during peak periods of building activity. The Oregon Employment Department predicts that the statewide demand for electricians will improve when construction returns to pre-recession peaks in the forecast period, which extends through 2015.

**Wages** Journey-level electrician wages range regionally from \$18.06/hr for Limited Energy Technician License B to \$28.39/hr for Inside Wire Electrician. Although wages vary, the average starting wage of an apprentice is about 50 percent of a journey worker's rate of pay. Apprentices usually earn a five-percent raise every six months if training and school performance is satisfactory. Check the Oregon Bureau of Labor and Industries website: [boli.state.or.us](http://boli.state.or.us) for further details regarding the Electrician trades.

**Costs in Addition to Tuition (estimate)** Estimated costs of books and tools for the required general education courses total approximately \$850-1,000 over a four-year period. Costs of books and tools for the related training classes in the electrician programs vary with each individual trade/occupation.

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

**Program Certification** An apprenticeship “Award of Completion” issued by the Oregon Bureau of Labor and Industries Apprenticeship and Training Division certifies that an individual has been trained in all aspects of an occupation and has met the requirements for program completion. This certificate is recognized throughout Oregon and industry-wide as a valid indicator of high quality, standardized training, and it provides on-the-job training documentation for community college credit.

**Licensing or Other Certification** Electrician trades require successful completion of trade-specific licensure examinations through the Oregon Building Codes Division.

**Admission Deadline** Varies; some joint apprenticeship and training committees only accept applications once a year. Openings for individual trades are also available through the Oregon Department of Employment.

**Pre-requisites** Minimum placement scores – Reading 68, Writing 64, and Math parts A, B, C with 7/10 score. Note: See the counselor or advisor to obtain the suggested entry-level skills for successful completion of these programs.

**Criteria Used for Admission** Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries and accepted by a Joint Apprenticeship Training Committee. Selection to the program is by a point system from a pool of qualified applicants. Information on the point system is available at the Oregon Bureau of Labor and Industries website: [boli.state.or.us](http://boli.state.or.us). In most cases minimum qualifications to begin an apprenticeship include a minimum age of 18 years, a high school diploma with a GPA of 2.0 or higher or GED, and a minimum of a ‘C’ grade for one year of high school algebra (or equivalent).

**Program Advisor** Colleen Cairney, Bldg. 15, Rm. 201  
541.463.5843, [cairneyc@lanecc.edu](mailto:cairneyc@lanecc.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202  
541.463.5236, [litty@lanecc.edu](mailto:litty@lanecc.edu)

## Electrician Apprenticeship Technologies

### Associate of Applied Science

To earn the degree, a student must:

- complete 4000-8000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion
- demonstrate an equivalency of 90 credit hours, with a minimum of 24 credits at Lane, including the last term at Lane
- complete all requirements for an AAS degree as listed below
- earn a cumulative grade point average above 2.0 at Lane or transfer credits earned at other regionally accredited colleges or universities

AAS requirements	Credits
<b>General Education</b>	<b>21</b>
WR 115W Intro to College Writing:	
Workplace Emphasis <sup>D</sup> or higher-level writing.....	3
MTH 070 Introductory Algebra <sup>D</sup> or equivalent	

or higher-level math .....	5
PE/Health Requirement <sup>R</sup> .....	3
Arts and Letters requirement <sup>R</sup> .....	3
Human Relations requirement <sup>R</sup> .....	3
Science/Math/Computer Science requirement <sup>R</sup> .....	3
Choice of: .....	3
Arts and Letters requirement <sup>R</sup>	
Human Relations/Social Science requirement <sup>R</sup>	
Science/Math/Computer Science requirement <sup>R</sup>	

**Journey-level card from Oregon Bureau of Labor and Industries Apprenticeship and Training Division** **22**  
Electrician Core-Related Training <sup>D</sup>  
(Choice of one of the following trades)..... 21-45

### Limited Maintenance Electrician (21 credits)

ET 129 Electrical Theory 1  
ET 130 Electrical Theory 2  
ET 229 Motors  
ET 241 Electro-Mechanical Troubleshooting  
APR 220 Electrical Code and Exam Prep or  
APR 228 Apprenticeship Blueprint Reading

### Limited Energy Technician License B (27 credits)

APR 101A Trade Skills Fundamentals  
APR 140 Electrical System Installation Methods  
APR 141 Limited Voltage Electrical Circuits  
APR 142 Testing Equipment and Specialized Applications  
APR 143 Limited Voltage Cabling  
APR 144 System Planning and Maintenance  
APR 220 Electrical Code and Exam Prep

### Limited Energy Technician License A (39 credits)

APR 101A Trade Skills Fundamentals  
APR 140 Electrical System Installation Methods  
APR 141 Limited Voltage Electrical Circuits  
APR 142 Testing Equipment and Specialized Applications  
APR 143 Limited Voltage Cabling  
APR 144 System Planning and Maintenance  
APR 220 Electrical Code and Exam Prep  
APR 240 Alarm Systems  
APR 241 Audio and Signaling Systems  
APR 242 Limited Voltage System Integration

### Manufacturing Plant Electrician (37 credits)

APR 220 Electrical Code and Exam Prep  
APR 228 Apprenticeship Blueprint Reading  
ET 129 Electrical Theory 1  
ET 130 Electrical Theory 2  
ET 229 Motors  
ET 232 Process Control Systems  
ET 234 Programmable Controllers  
ET 241 Electro-Mechanical Troubleshooting  
WLD 121 Shielded Metal Arc Welding

### Inside Wire Electrician (45 credits)

APR 130 Electrical Principles  
APR 131 Electrical Principles/Residential Wiring  
APR 132 Electrical Residential Wiring Lab  
APR 133 Electrical Generators, Transformers, and Motors 1  
APR 134 Electrical Generators, Transformers, and Motors 2  
APR 135 Electrical Generators, Transformers, and Motors Lab  
APR 220 Electrical Code and Exam Prep  
APR 225 Electrical Motor Controls  
APR 226 Electrical Grounding/Bonding and Blueprint Reading  
APR 227 Electrical System Troubleshooting

### Program Electives to complete 90 credits for degree: 0-25

APR 101 Trade Skills Fundamentals  
APR 105 Residential Wiring  
ET 129 Electrical Theory 1  
ET 130 Electrical Theory 2  
ET 234 Programmable Controllers  
CS 120 Concepts of Computing  
CST 110 Blueprint Reading  
CST 111 Construction Orientation and Environment  
CST 118 Building Construction  
DRF 167 CAD 1



HE 252 First Aid  
 MTH 076 Applied Geometry for Technicians  
 MTH 111 College Algebra  
 MTH 112 Trigonometry  
 WLD 121 Shielded Metal Arc Welding 1

## Electrician Apprenticeship Technologies

### Certificate of Completion

Students may earn a Certificate of Completion in Electrician Apprenticeship Technologies by successfully completing 36-45 core related training credits with a 'C' or better in all courses, and completing related instruction in communications, computation, and human relations.

#### Learning outcomes Graduates will:

- Apply theory to electrical wiring
- Repair and install electrical wire devices according to licensure regulations to meet NEC and OSC for Inside Electrician, Limited Energy Technician-License A, and/or Manufacturing Plant Electrician

To earn the certificate, student must:

- complete State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion:  
 6000-Hour BOLI-ATD Trade: Limited Energy Technician—License A  
 8000-Hour BOLI-ATD Trade: Inside Wire Electrician  
 8000-Hour BOLI-ATD Trade: Manufacturing Plant Electrician
- complete related instruction credits 9  
 (communication, computation, human relations)
- complete core-related training credits 37-45

Total Credits 46-54

#### Core Related Training requirements (Choice of one of the following trades)

##### Limited Energy Technician License A (39 credits)

APR 101A Trade Skills Fundamentals  
 APR 140 Electrical System Installation Methods  
 APR 141 Limited Voltage Electrical Circuits  
 APR 142 Testing Equipment and Specialized Applications  
 APR 143 Limited Voltage Cabling  
 APR 144 System Planning and Maintenance  
 APR 220 Electrical Code and Exam Prep  
 APR 240 Alarm Systems  
 APR 241 Audio and Signaling Systems  
 APR 242 Limited Voltage System Integration

##### Manufacturing Plant Electrician (37 credits)

APR 220 Electrical Code and Exam Prep  
 APR 228 Apprenticeship Blueprint Reading  
 ET 129 Electrical Theory 1  
 ET 130 Electrical Theory 2  
 ET 229 Motors  
 ET 232 Process Control Systems  
 ET 234 Programmable Controllers  
 ET 241 Electro-Mechanical Troubleshooting  
 WLD 121 Shielded Metal Arc Welding

##### Inside Wire Electrician (45 credits)

APR 130 Electrical Principles  
 APR 131 Electrical Principles/Residential Wiring  
 APR 132 Electrical Residential Wiring Lab  
 APR 133 Electrical Generators, Transformers, and Motors 1  
 APR 134 Electrical Generators, Transformers, and Motors 2  
 APR 135 Electrical Generators, Transformers, and Motors Lab

APR 220 Electrical Code and Exam Prep  
 APR 225 Electrical Motor Controls  
 APR 226 Electrical Grounding/Bonding and Blueprint Reading  
 APR 227 Electrical System Troubleshooting

## Limited Electrician Apprenticeship Technologies

### Certificate of Completion

Learning outcomes Graduates will:

- Repair or install electrical wire devices according to limited licensure regulations to meet National Electrical Code and Oregon Building Codes Division for Limited Energy Technician—License B, and/or Limited Maintenance Electrician

To earn the certificate, student must:

- complete 4000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion
- complete core related training of 21`-27 credits

#### Core Related Training requirements (Choice of one of the following trades)

Complete with a 'C' or better in all courses  
 (Choice of one of the following trades)

##### Limited Maintenance Electrician (21 credits)

ET 129 Electrical Theory 1  
 ET 130 Electrical Theory 2  
 ET 229 Motors  
 ET 241 Electro-Mechanical Troubleshooting  
 APR 220 Electrical Code and Exam Prep or  
 APR 228 Apprenticeship Blueprint Reading

##### Limited Energy Technician License B (27 credits)

APR 101A Trade Skills Fundamentals  
 APR 140 Electrical System Installation Methods  
 APR 141 Limited Voltage Electrical Circuits  
 APR 142 Testing Equipment and Specialized Applications  
 APR 143 Limited Voltage Cabling  
 APR 144 System Planning and Maintenance  
 APR 220 Electrical Code and Exam Prep

## Electronic Technology

### Offered by the Advanced Technology Division

#### Two-Year Associate of Applied Science Degree

**Purpose** To provide graduates with the basic principles of electronic theory and the associated lab skills needed for successful work in the electronics industry. A graduate qualifies for entry-level employment as an electronic engineering technician, electronic production technician, electronic instrument technician, industrial electronic technician, or for employment in the military.

**Learning Outcomes** The graduate will:

- learn systematic methods of problem solving.
- demonstrate the ability to operate electronic test equipment such as digital oscilloscopes, DMM, power supplies and function generators.

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

- demonstrate the ability to generate and read schematic drawings and apply that knowledge to understand the operation of a physical circuit.
- construct, modify, and test operational multistage digital or analog circuits.
- examine defective circuits, investigate possible causes of the defect, and determine how to troubleshoot and repair the circuit.
- follow the flow of an automated manufacturing process, recognize the transducers used to monitor a process and, using programmable controllers (PLCs), ladder logic, and robotics, create, test and troubleshoot an automated process.
- demonstrate the ability to use a microcontroller and PBASIC software to control electronic circuits
- assemble and troubleshoot a personal computer.
- access library, computing, and communications services and obtain information and data from regional, national, and international networks.

**Employment Trends** Statewide, 82 annual openings for electronic technicians are projected in Oregon and 3 openings are projected annually in Lane County. Workers must have postsecondary training to gain the necessary skills for this occupation. Those with an associate degree have a competitive advantage in this labor market.

**Wages** Statewide average, \$23 hourly, \$47,500 annually (\$50,000+ with experience). Lane County, \$27 hourly, \$56,000 annually.

**Costs in Addition to Tuition and Registration Fees (estimate)\***

Books .....	\$2,250
Tools.....	\$ 200
Fees .....	\$ 350
Total .....	\$2,800

\* Subject to change without notice.

**Prerequisites** Minimum placement score of 68 in Reading or completion of RD 080 or prior college. A high school diploma or equivalent is recommended for all applicants to this program. Recommend MTH 060 Beginning Algebra skills prior to entry into the program.

**Criteria Used for Admission** The courses are offered in sequence beginning with the fall term. For those that cannot begin in the fall term, many of the first year courses are offered each term in an online format. In addition, evening classes are offered in the summer and fall terms. A program orientation is held for new students for fall term (dates available in Counseling or Enrollment and Student Financial Services). Contact advisor/counselor for winter and spring term entry assistance.

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Marv Clemons, Electronics Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158.

**Program Advisor** Lisa Stegall, Bldg. 12, Rm. 203, 541.463.5378, [stegalll@lanecc.edu](mailto:stegalll@lanecc.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202, 541.463.5236, [littyc@lanecc.edu](mailto:littyc@lanecc.edu)

First Year	Fall
DRF 167 CAD 1 *	4
ET 129 Electrical Theory 1 * <sup>D,G</sup>	4
MTH 065 Elementary Algebra * <sup>D,G,M</sup> or higher level mathematics .....	4
Choice of:.....	4
CS 120 Concepts of Computing: Information Processing <sup>S</sup>	
CS 133 Beginning Programming * <sup>S</sup> or higher computer science	
Total Credits	16

Winter	
ET 130 Electrical Theory 2 * <sup>D,G</sup>	4
ET 145 Semiconductor Devices 1 * <sup>D,G</sup>	4
ET 151 Digital Electronics 1 * <sup>D,G</sup>	4
MTH 095 Intermediate Algebra * <sup>D,S</sup> or higher level mathematics .....	5
Total Credits	17

Spring	
DS 155 Heavy Equipment Hydraulics* <sup>D,G</sup>	2
ET 121 Shop Practices * <sup>D,G</sup>	2
ET 146 Semiconductor Devices 2 * <sup>D,G</sup>	4
ET 152 Digital Electronics 2 * <sup>D,G</sup>	4
WR 121 Composition: Introduction to Academic Writing * <sup>D,W</sup>	4
Total Credits	16

Second Year	Fall
ET 229 Motors 1* <sup>D,G</sup>	4
ET 234 Programmable Controllers 1 * <sup>D,G</sup>	4
ET 239 Microprocessor Applications * <sup>D,G</sup>	4
WR 227 Technical Writing * <sup>A</sup>	4
Total Credits	16

Winter	
ET 232 Programmable Controllers 2 * <sup>D,G</sup>	4
ET 241 Motors 2* <sup>D,G</sup>	4
ENGR 280E Cooperative Education: Electronic Technology <sup>D,G</sup>	3
Human Relations requirement <sup>R</sup>	3
Total Credits	14

Spring	
ET 201 Industrial Instrumentation * <sup>D,G</sup>	4
ET 281 Radiotelephone and Communications Equipment * <sup>D,G</sup>	4
ET 287 Microcomputer Hardware* <sup>D,G</sup>	4
PE/Health requirement <sup>D,R</sup>	3
Total Credits	15

## Emergency Medical Technology – Paramedic

Offered by the Health Professions Department

Two-Year Associate of Applied Science Degree

One-Year Certificate of Completion-Emergency Medical Technician

EMT-Basic

For additional information see the EMT web pages at [lanecc.edu/hp/emt](http://lanecc.edu/hp/emt)

**Purpose** To produce competent, entry level EMT-Basic and EMT-Paramedics to serve in career and volunteer EMS positions:

Two-Year Associate of Applied Science Degree graduates are qualified to apply for the Oregon EMT-Paramedic certification exam. Coursework includes lecture, lab, clinical time in the hospital and an internship on a 911 ambulance. All first year courses must be successfully completed with a minimum of a C- grade to qualify to apply into the second year of the AAS/EMT-P program.

EMT-Basic students seeking EMT-Basic certification need only take EMT 151 and EMT 152. Students who successfully complete are eligible to apply for the Oregon EMT-Basic certification exam. Admission is by application only. Please see the EMT-Basic application for details, [lanecc.edu/hp/emt](http://lanecc.edu/hp/emt)

Certificate of Completion was created as a statewide transfer tool. Some Oregon schools offer only the first year of the two year degree. The certificate of completion qualifies a student to participate in the process for entry into the second year (the “paramedic year”) of the AAS/EMT-P offered throughout the state. Not all Oregon EMT schools participate in the Certificate of Completion transferability. Those planning to take the first year at Lane, then transfer to another college, should check with the EMT program coordinator for guidance.

**Learning Outcomes** The graduate will:

- acquire the skills needed to be a safe and effective pre-hospital emergency medical provider
- work as a member of a 911 emergency medical response team
- transport sick and injured persons to medical facilities
- administer basic and advanced life support care
- document patient information, treatment plan, and patient progress
- understand and apply laws and rules relevant to emergency responders

**Employment Trends** Through 2016, Oregon Employment Department forecasts 53 annual openings, statewide, with 5 openings annually in Lane County. Reasonable employment opportunities exist for competitively trained workers.

**Wages** EMT-Paramedic average wages in Lane County are \$16.82 hourly or \$39,189 annually.

**Costs in Addition to Tuition (estimate)\***

Lab fees per year .....	\$200
Uniform .....	\$150
Books .....	\$450
CPR mask .....	\$ 10
Criminal Background Check.....	\$ 35
Personal Health Insurance .....	varies
Program Fee.....	\$225
Differential Fee* .....	\$1,632
<b>Total</b>	<b>\$2,702</b>

\* This is the total of all differential fees attached to EMT courses. These and other course fees may change during the year — see the online credit class schedule for fees assigned to courses. Students are advised to inquire about additional charges. Parking fees may be required at clinical facilities.

**Program Coursework** Approved by Department of Human Services, Emergency Medical Services and Trauma Systems, meeting the requirements of OAR 333-265-0010(2).

**Licensing or Other Certification Exams Required** Oregon State and/or National Registry EMT-Basic and EMT-Paramedic exams.

**Prerequisite requirements** Students must be 18 years of age to take EMT courses. Students must also have High School Diploma, GED or college degree. Students enrolled in EMT programs are required to have a tuberculin test, measles and rubella vaccinations, and hepatitis B vaccinations. Tuberculin tests must be current through three terms (fall, winter, spring). Once admitted into the program, students are required to carry their own health insurance. Applicants for the second year must have current, valid Oregon EMT-Basic or Oregon EMT-Intermediate certification, and maintain good standing with the Department of Human Services, EMS and Trauma Systems Section. EMT students will be submitting to a criminal background check.

**Admission Deadline** The EMT-Basic courses have their own application process. EMT Paramedic second year applications are screened in the summer preceding fall term enrollment. All required application materials must be presented to the Health Professions Division, Bldg. 4, (see instructions on the application) by the deadline date indicated in the packet.

There is no application process required to take any first year AAS/EMT-P courses except EMT-Basic: EMT 151 and EMT 152.

Students transferring into the associate degree program from another school must apply during the published application cycle.

**Number of New Students Admitted Annually** The number of applicants accepted will be based on state requirements, college budgetary and clinical and internship facility considerations.

**Criteria Used for Admission** EMT-Basic: Program admission is based on first applied and qualified, first admitted. The class size is limited. There will be designated alternates. An alternate is allowed to enter the program if an admitted student declines. Remaining alternates are given admission priority the following year.

EMT-Paramedic: Program admission is based on a point allocation system which includes an interview process. Points are awarded for grades earned in the first year AAS/EMT-P required courses. Please see EMT-Paramedic application for details: [lanecc.edu/hp/emt](http://lanecc.edu/hp/emt)

**Program Counselor** Leslie Soriano, Bldg. 1, Rm 103, 541.463.5512, [Soriano-CervantesL@lanecc.edu](mailto:Soriano-CervantesL@lanecc.edu)

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of “B” or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of “C-” or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

## Emergency Medical Technology - Paramedic

### Two-Year Associate of Applied Science Degree

First Year	Fall
BI 231 Human Anatomy and Physiology 1 <sup>*,2,D,G,S</sup> .....	4
EMT 151 Emergency Medical Technician Basic Part 1 <sup>D,G</sup> ..	5
EMT 175 Introduction to Emergency Medical Services <sup>D,G</sup>	3
HO 100 Medical Terminology 1 <sup>D,G</sup> .....	3
WR 121 Composition: Intro to Academic Writing <sup>*,G,W</sup> .....	4
<b>Total Credits</b>	<b>19</b>

Winter	
BI 232 Human Anatomy and Physiology 2 <sup>*,D,G</sup> .....	4
EMT 152 Emergency Medical Technician Basic Part 2 <sup>D,G</sup> ..	5
EMT 196 Crisis Intervention <sup>D,G</sup> .....	3
MTH 095 Intermediate Algebra <sup>1,G,M</sup> .....	5
<b>Total Credits</b>	<b>17</b>

Spring	
BI 233 Human Anatomy and Physiology 3 <sup>*,D,G,S</sup> .....	4
EMT 169 EMT Rescue <sup>*,D,G</sup> .....	3
EMT 170 Emergency Response Communication/Documentation <sup>*,D,G</sup> .....	2
EMT 171 Emergency Response Patient Transport <sup>*,D,G</sup> .....	2
PSY 110 Exploring Psychology <sup>G,H</sup> .....	3
<b>Total Credits</b>	<b>14</b>

Second Year	Fall
CIS 101 Computer Fundamentals <sup>G</sup> .....	3
EMT 270 EMT-Paramedic Part 1 <sup>*,D,G</sup> .....	10
EMT 271 EMT-Paramedic Part 1 Clinical <sup>*,D</sup> .....	1
SP 111 Fundamentals of Public Speaking or higher Speech course <sup>A,G</sup> .....	4
<b>Total Credits</b>	<b>18</b>

Winter	
EMT 272 EMT-Paramedic 2 <sup>*,D,G</sup> .....	10
EMT 273 EMT-Paramedic Clinical 2 <sup>*,D</sup> .....	3
Social Science/Human Relations elective <sup>G</sup> .....	3
<b>Total Credits</b>	<b>16</b>

Spring	
EMT 274 EMT-Paramedic 3 <sup>*,D,G</sup> .....	4
EMT 275 EMT-Paramedic Clinical 3 <sup>*,D,G</sup> .....	4
EMT 280P1 Co-op Ed: EMT Internship Part 1 <sup>*,D,G</sup> .....	3
HE 275 Lifetime Health and Fitness <sup>G,P</sup> .....	3
<b>Total Credits</b>	<b>14</b>

Summer	
EMT 280P2 Co-op Ed: EMT Internship Part 2 <sup>*,D,G</sup> .....	5
<b>Total Credits</b>	<b>5</b>

## Emergency Medical Technician

### One-Year Certificate of Completion

	Fall
BI 231 Human Anatomy and Physiology 1 <sup>*,2,D,G</sup> .....	4
EMT 151 Emergency Medical Technician Basic Part 1 <sup>D,G</sup> ..	5
EMT 175 Introduction to Emergency Medical Services <sup>D,G</sup>	3
HO 100 Medical Terminology 1 <sup>D,G</sup> .....	3
WR 121 Composition: Introduction to Academic Writing <sup>*,G,W</sup> .....	4
<b>Total Credits</b>	<b>19</b>

	Winter
BI 232 Human Anatomy and Physiology 2 <sup>*,D,G</sup> .....	4
EMT 152 Emergency Medical Technician Basic Part 2 <sup>D,G</sup> ..	5
EMT 196 Crisis Intervention <sup>D,G</sup> .....	3
MTH 095 Intermediate Algebra <sup>1,G,M</sup> .....	5
<b>Total Credits</b>	<b>17</b>

	Spring
BI 233 Human Anatomy and Physiology 3 <sup>*,D,G</sup> .....	4
EMT 169 EMT Rescue <sup>*,D,G</sup> .....	3
EMT 170 Emergency Response Communication/Documentation <sup>*,D,G</sup> .....	2
EMT 171 Emergency Response Patient Transportation <sup>*,D,G</sup>	2
PSY 110 Exploring Psychology <sup>G,H</sup> .....	3
<b>Total Credits</b>	<b>14</b>

1. Students pursuing a bachelor's degree need to complete a college level, transferable math course
2. See BI 231 course description for required prerequisites.

## Energy Management Technician

### Offered by the Science Division

### Two-Year Associate of Applied Science Degree

### Two-Year Associate of Applied Science Option, Renewable Energy Technician

### Two-Year Associate of Applied Science Option, Energy Management

**Purpose** To prepare students for careers in the Energy Management field, and optionally as Renewable Energy Systems Installers.

**Learning Outcomes** The graduate will:

- evaluate the energy use patterns for residential and commercial buildings and recommend energy efficiency and alternative energy solutions for high-energy consuming buildings.
- understand the interaction between energy consuming building systems and make recommendations based on that understanding.
- construct energy evaluation technical reports and make presentations for potential project implementation.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- access library, computing and communications services, and obtain information and data from regional, national and international networks.
- collect and display data as lists, tables and plots using appropriate technology (e.g., graphing calculators, computer software).
- develop and evaluate inferences and predictions that are based on data.
- determine an appropriate scale for representing an object in a scale drawing.
- interpret the concepts of a problem-solving task, and translate them into mathematics..

The graduate of the Renewable Energy Technician Option also will:

- appropriately size and recommend renewable energy system types for particular situations.
- understand and put into practice the installation protocol for Photovoltaic and Solar Domestic Hot Water Systems.

The graduate of the Resource Conservation Management Option also will:

- conduct a full sustainability assessment.
- understand the LEED Framework and green buildings



- make recommendations for materials management and solid waste management
- assess carbon footprints for climate action in complex organizations

**Employment Trends** Employment opportunities in the Energy Management Industry are excellent. Students must consider the entire Western United States when seeking employment, as those willing to relocate will have greater employment opportunities.

**Wages** Energy Management, \$38,000-45,000 annually. Renewable Energy Technician, \$25,000-35,000 annually, depending on the area. Resource Conservation Management, \$40,00-50,000 annually.

**Costs in Addition to Tuition (estimate)\***

Total ..... \$750

\* Subject to change without notice.

**Criteria Used for Admission into Program** This is a limited enrollment program. Students must apply to the program by completing an Energy Program application form. Complete a program application and have completed MTH 065 or 070. Students are required to attend an orientation meeting the first week of August prior to attending the program in the fall. The orientation is required and non-attendance may result in being dropped from the program. Must complete MTH 095 by the end of the first year.

**Admission Information** Science Department, Bldg. 16, Rm. 252/253, [youngg@lanecc.edu](mailto:youngg@lanecc.edu), [ebbager@lanecc.edu](mailto:ebbager@lanecc.edu) or advisor, counselor, [ganserd@lanecc.edu](mailto:ganserd@lanecc.edu) or [meenaghang@lanecc.edu](mailto:meenaghang@lanecc.edu)

**Cooperative Education (Co-op)** Co-op is a required and important part of the Energy Management program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the field. Students must complete six Co-op credits for the AAS degree. Students may use up to eighteen Co-op credits toward the degree requirements. Contact Larry Scott, Energy Management Co-op Coordinator, Bldg. 19, Rm. 154, 541.463.5458.

**Accreditation** Awarded Institute for Sustainable Power Quality accreditation credential from the Interstate Renewable Energy council, International Standard #0102,1 for accreditation and certification of renewable energy training programs and instructors.

**Program Director/Advisor** Roger Ebbage, Science 253, 541.463.3977, [ebbager@lanecc.edu](mailto:ebbager@lanecc.edu)

**Program Counselor** Debby Ganser, [ganserd@lanecc.edu](mailto:ganserd@lanecc.edu) or advisor Gerry Meenaghan, [meenaghang@lanecc.edu](mailto:meenaghang@lanecc.edu)

First Year	Fall
BT 123 MS Excel for Business <sup>*,D,G</sup> .....	4
NRG 102 Blueprint Reading: Residential and Commercial <sup>1,D,G</sup> .....	3
MTH 095 Intermediate Algebra <sup>*,2,M</sup> .....	5
NRG 101 Introduction to Energy Management <sup>1,D,G</sup> .....	3
NRG 103 Sustainability in the Built Environment <sup>1,D,G</sup> .....	3
PH 101 Fundamentals of Physics <sup>*,1,S</sup> .....	4
Total Credits	22

	Winter
NRG 111 Residential/Light Commercial Energy Analysis <sup>*,1,3,D,G</sup> .....	3
NRG 154 Alternative Energy Technologies <sup>1,D,G</sup> .....	3
WATR 101 Introduction to Water Resources <sup>1,D,G</sup> .....	3
NRG 206 Co-op Ed: Energy Management Seminar.....	1
PH 102 Fundamentals of Physics <sup>*,1,S</sup> .....	4
WR 121 Composition: Introduction to Academic Writing <sup>*,5,6,W</sup> .....	4
Total Credits	18

	Spring
NRG 121 Air Conditioning Systems Analysis <sup>*,1,D,G</sup> .....	3
NRG 124 Energy Efficient Methods <sup>*,1,D,G</sup> .....	3
NRG 131 Lighting Fundamentals <sup>*,1,D,G</sup> .....	3
CG 203 Human Relations at Work <sup>5,H</sup> .....	3
Total Credits	12

Second Year	Fall
NRG 122 Commercial Air Conditioning Systems Analysis <sup>*,1,D,G</sup> .....	3
NRG 132 Lighting Applications <sup>*,1,D,G</sup> .....	3
NRG 141 Energy Investment Analysis <sup>*,1,3,D,G</sup> .....	3
WR 227 Technical Writing <sup>*,5,6,A</sup> .....	4
Directed electives <sup>5</sup> .....	3
Total Credits	16

	Winter
NRG 112 Commercial Energy Use Analysis <sup>*,1,D,G</sup> .....	4
NRG 123 Energy Control Strategies <sup>*,1,D,G</sup> .....	4
NRG 206 Co-op Ed: Energy Management Seminar <sup>D</sup> .....	1
Choice of: <sup>4,5,6,R</sup> .....	3
Physical Education Activity requirement Health requirement	
Directed electives <sup>5</sup> .....	3
Total Credits	15

	Spring
NRG 113 Building Energy Simulations <sup>*,1,D,G</sup> .....	4
NRG 142 Energy Accounting <sup>*,1,3,D,G</sup> .....	3
NRG 280 Co-op Ed: Energy Management <sup>D,G</sup> .....	6
Total Credits	13

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

## Renewable Energy Technician Option

### First Year

BT 123 MS Excel for Business <sup>*,D,G</sup> .....	4
NRG 102 Blueprint Reading: Residential and Commercial <sup>*,1,D,G</sup> .....	3
MTH 095 Intermediate Algebra <sup>*,2,M</sup> .....	5
NRG 101 Introduction to Energy Management <sup>1,D,G</sup> .....	3
NRG 103 Sustainability in the Built Environment <sup>1,D,G</sup> .....	3
PH 101 Fundamentals of Physics <sup>*1,S</sup> .....	4

Total Credits 22

### Winter

NRG 111 Residential/Light Commercial Energy Analysis <sup>1,3,D,G</sup> .....	3
NRG 154 Alternative Energy Technologies <sup>*,1,D,G</sup> .....	3
WATR 101 Introduction to Water Resources <sup>1,D,G</sup> .....	3
NRG 206 Co-op Ed: Energy Management Seminar <sup>D</sup> .....	1
PH 102 Fundamentals of Physics <sup>*1,S</sup> .....	4
WR 121 Composition: Introduction to Academic Writing <sup>*,5,6,W</sup> .....	4

Total Credits 18

### Spring

NRG 121 Air Conditioning Systems Analysis <sup>*,1,D,G</sup> .....	3
NRG 124 Energy Efficient Methods <sup>*,1,D,G</sup> .....	3
NRG 131 Lighting Fundamentals <sup>*,1,D,G</sup> .....	3
CG 203 Human Relations at Work <sup>5, H</sup> .....	3

Total Credits 12

### Second Year

ET 129 Electrical Theory 1 <sup>*,D,G</sup> .....	4
NRG 141 Energy Investment Analysis <sup>*,1,3,D,G</sup> .....	3
NRG 155 Photovoltaic Design and Installation 1 <sup>*,1,D,G</sup> .....	4
NRG 157 Renewable Energy Systems <sup>*,1,D,G</sup> .....	3
WR 227 Technical Writing <sup>*,5,6,A</sup> .....	4

Total Credits 18

### Winter

ET 130 Electrical Theory 2 <sup>*,D,G</sup> .....	4
NRG 156 Photovoltaic Design and Installation 2 <sup>*,1,D,G</sup> .....	4
NRG 158 Solar Thermal Design and Installation 1 <sup>*,1,D,G</sup> .....	4
NRG 206 Co-op Ed: Energy Management Seminar <sup>D</sup> .....	1
Choice of: <sup>4,5,6,R</sup> .....	3

Physical Education Activity requirement  
Health requirement

Total Credits 16

### Spring

NRG 159 Solar Thermal Design and Installation 2 <sup>*,1,D,G</sup> ...	4
NRG 162 Solar Photovoltaics Systems Design and Installation <sup>*,1, 3,D,G</sup> .....	4
NRG 280 Co-op Ed: Energy Management <sup>D,G</sup> .....	6

Total Credits 14

- 1 Instructor permission required
- 2 Must be completed by the end of the first year
- 3 Contains computation instruction to meet industry requirements
- 4 PE Activity requirement credits must be taken in at least two terms to satisfy degree requirement.
- 5 Can be taken any term
- 6 See catalog for AAS requirements

### Directed Electives:

- DRF 167 CAD 1
- DRF 168 CAD 2
- BT223 MS EXCEL for Business - Expert
- SPAN 101 Spanish, First-Year
- SPAN 102 Spanish, First-Year
- MTH 111

- BA101 Introduction to Business
- ENVS184 Global Climate Change
- PS297 Environmental Politics
- PSY201 General Psychology
- SP100 Basic Communication
- SP105 Listening and Critical Thinking
- SP111 Fundamentals of Public Speaking
- SP112 Persuasive Speech
- SP218 Interpersonal Communication
- WATR105 Water Conservation: Residential
- WATR202 Fostering Sustainable Practices
- WATR215 Integrated Water Management
- WATR221 Water Mechanical Systems
- NRG 280 Coop Ed

## Resource Conservation Management Option

### First Year

BT 123 MS Excel for Business <sup>*,D,G</sup> .....	4
NRG 102 Blueprint Reading: Residential and Commercial <sup>*,1,D,G</sup> .....	3
MTH 095 Intermediate Algebra <sup>*,2,M</sup> .....	5
NRG 101 Introduction to Energy Management <sup>1,D,G</sup> .....	3
NRG 103 Sustainability in the Built Environment <sup>1,D,G</sup> .....	3
PH 101 Fundamentals of Physics <sup>*1,S</sup> .....	4

Total Credits 22

### Winter

NRG 111 Residential/Light Commercial Energy Analysis <sup>1,3,D,G</sup> .....	3
NRG 154 Alternative Energy Technologies <sup>*,1,D,G</sup> .....	3
WATR 101 Introduction to Water Resources <sup>1,D,G</sup> .....	3
PH 102 Fundamentals of Physics <sup>*1,S</sup> .....	4
NRG 206 Co-op Ed: Energy Management <sup>D</sup> .....	1

Total Credits 14

### Spring

NRG 121 Air Conditioning Systems Analysis <sup>*,1,D,G</sup> .....	3
NRG 124 Energy Efficient Methods <sup>*,1,D,G</sup> .....	3
NRG 131 Lighting Fundamentals <sup>*,1,D,G</sup> .....	3
WR 121 Composition: Introduction to Academic Writing <sup>*,5,6,W</sup> .....	4
CG 203 Human Relations at Work <sup>5, H</sup> .....	3

Total Credits 16

### Second Year

NRG 141 Energy Investment Analysis <sup>*,1,3,D,G</sup> .....	3
NRG 122 Commercial Air Conditioning Systems Analysis <sup>*,1,D,G</sup> .....	3
NRG 157 Renewable Energy Systems <sup>*,1,D,G</sup> .....	3
WR 227 Technical Writing <sup>*,D,G</sup> .....	4
PE/Health Requirements .....	3

Total Credits 16

### Winter

NRG 112 Commercial Energy Use Analysis <sup>*,1,3,D,G</sup> .....	4
NRG 171 Materials Management/Solid Waste Management <sup>1,D,G</sup> .....	3
NRG 173 Carbon Footprints for Climate Action in Complex Organizations <sup>1,D,G</sup> .....	4
WATR 202 Fostering Sustainable Practices <sup>1,D,G</sup> .....	3
NRG 206 Co-op Ed: Energy Management Seminar <sup>D</sup> .....	1

Total Credits 15

	Spring
WATR 210 Water Conservation: Industrial/Commercial <sup>1,D,G</sup> .....	4
NRG 142 Energy Accounting <sup>*,1,3,D,G</sup> .....	3
NRG 172 Understanding the LEED Framework and Green Buildings <sup>1,D,G</sup> .....	3
NRG 174 Conducting a Full Sustainability Assessment <sup>1,D,G</sup> .....	4
NRG 280 Co-op Ed: Energy Management <sup>D,G</sup> .....	6
Total Credits	20

## Engineering Transfer

### Offered by Mathematics

### Suggested Course of Study

This suggested course of study is for students interested in pursuing a bachelor's degree in engineering. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education.

Lane Community College offers the first two years of college core science, engineering, and general education courses needed for most engineering major disciplines. The AAOT course of study shown below includes lower division general education requirements needed for a degree at a state university in Oregon. Certain engineering disciplines may require additional courses that are not offered at Lane. See one of Lane's Engineering advisors for more information.

Most Lane engineering students transfer to Oregon State University (OSU), but many have continued successfully at other well-known professional schools. Students who wish to complete all of the lower division general education requirements for OSU before they transfer may wish to consider earning an Associate of Science (AS) degree while at Lane. In addition to the OSU general education and engineering core requirements, only a few additional credits are required to earn the AS degree from Lane. See one of Lane's Engineering advisors for more information.

At the earliest opportunity, an interested student should meet with one of Lane's Engineering advisors. Most engineering courses at Lane are offered only once each academic year, and they must be taken in sequence. A well-planned course of study at Lane is essential to ensure a smooth transition to a university. In addition, it is very important for a transfer student to consult the engineering advisor at the specific intended transfer university.

Students who need mathematics preparation before beginning calculus must complete preparatory course work (such as the One-Year Preparatory Curriculum listed below) before enrolling in most of the courses listed in the Two-Year Curriculum.

See the mathematics and science division counselors or advisors for assistance in term-by-term schedule planning and

for answers to questions about transfer requirements of various universities.

### One-Year Preparatory Curriculum – for students needing pre-calculus mathematics

This option allows the student to complete many of the general education requirements and the required freshman chemistry courses prior to beginning the Two-year Core Curriculum.

	Fall
MTH 111 College Algebra <sup>*</sup> .....	5
WR 121 Composition: Introduction to Academic Writing <sup>*,1,G</sup> .....	4
General Education requirements <sup>3</sup> and required electives.....	6-8
Total Credits	15-17

	Winter
MTH 097 Geometry <sup>*</sup> .....	4
CH 221 General Chemistry 1 <sup>*,1,G</sup> .....	5
General Education requirements <sup>3</sup> and required electives.....	6-8
Total Credits	15-17

	Spring
MTH 112 Trigonometry <sup>*</sup> .....	4
CH 222 General Chemistry 2 <sup>*,1,2,G</sup> .....	5
General Education requirements <sup>3</sup> or required electives.....	3
Choice of:.....	4
SP 111 Fundamentals of Public Speaking <sup>1,G</sup>	
SP 112 Persuasive Speech <sup>1,G</sup>	
Total Credits	16

### Two-Year Curriculum – for students ready to begin the Engineering studies with calculus

	Fall
MTH 251 Calculus 1 <sup>*,1,G</sup> .....	5
CH 221 General Chemistry 1 <sup>*,1,G</sup> .....	5
ENGR 101 Engineering Orientation <sup>*,2,G</sup> .....	3
WR 121 Composition: Introduction to Academic Writing <sup>*,1,G</sup> .....	4
Total Credits	17

	Winter
MTH 252 Calculus 2 <sup>*,1,G</sup> .....	5
CH 222 General Chemistry 2 <sup>*,2,G</sup> .....	5
ENGR 102 (199) Engineering Orientation 2 <sup>*,1,G</sup> .....	3
PH 211 General Physics w/Calculus <sup>*,1,G</sup> .....	5
Total Credits	18

	Spring
MTH 253 Calculus 3 <sup>*,1,G</sup> .....	4
MTH 261 Linear Algebra <sup>*,1,G</sup> .....	2
PH 212 General Physics w/Calculus <sup>*,1,G</sup> .....	5
ENGR 115 Engineering Graphics <sup>*,1,2,G</sup> .....	3
Total Credits	14

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

<b>Second Year</b>		<b>Fall</b>
MTH 254 Vector Calculus 1 <sup>*,1,G</sup> .....	4	
ENGR 211 Statics <sup>*,1,G</sup> .....	4	
PH 213 General Physics w/Calculus <sup>*,1,G</sup> .....	5	
Total Credits		13
		<b>Winter</b>
ENGR 221 Electrical Fundamentals <sup>*,1,G</sup> .....	4	
WR 227 Technical Writing <sup>*,2,G</sup> .....	4	
MTH 265 Statistics for Scientists and Engineers <sup>*,2,G</sup> .....	4	
Choice of:.....	4	
MTH 255 Vector Calculus 2 <sup>*,2,G</sup>		
ENGR 213 Strength of Materials <sup>*,1,2,G</sup>		
Total Credits		16
		<b>Spring</b>
MTH 256 Differential Equations <sup>*,1,G</sup> .....	4	
ENGR 212 Dynamics <sup>*,1,2,G</sup> .....	4	
Choice of:.....	4	
SP 111 Fundamentals of Public Speaking <sup>1,G</sup>		
SP 112 Persuasive Speech <sup>1,G</sup>		
General Education requirements <sup>3</sup> or required electives.....	3-4	
Total Credits		15-16

\* Prerequisite required

1 Will be used to meet requirements for OSU Engineering Core GPA. Must earn a grade of "C" or better, not P/NP. (OSU will not accept "C-")

2 Required for graduation in specific engineering majors. Must earn a grade of "C" or better, not P/NP. (OSU will not accept "C-")

3 See Math/Engineering academic advisor for course selection.

G Must be taken for a grade, not P/NP

### Associate of Science degree – with Core Engineering courses included

The following three-year plan for Engineering students satisfies the requirements for an Associate of Science degree from Lane Community College, including all required engineering courses and all necessary general education courses. Additionally, these general education courses will satisfy all of the lower division general education requirements for graduating from Oregon State University. Requirements can change, so it is critical that you see one of Lane's Engineering advisors for assistance in choosing these specific courses to ensure that they meet both Lane and OSU requirements.

#### Suggested Course of Study for Engineering students who want to earn an Associate of Science degree at Lane

<b>First Year</b>		<b>Fall</b>
MTH 111 College Algebra *.....	5	
WR 121 Composition: Introduction to Academic Writing <sup>*,1,G</sup> .....	4	
HE 275 Lifetime Health and Fitness.....	3	
Arts and Letters Elective (A.S. degree) <sup>3</sup> .....	3-4	
Total Credits		15-16
		<b>Winter</b>
MTH 097 Geometry *.....	4	
CH 221 General Chemistry 1 <sup>*,1,G</sup> .....	5	
Social Science Elective (A.S. degree) <sup>3</sup> .....	3-4	
Total Credits		12-13
		<b>Spring</b>
MTH 112 Trigonometry *.....	4	
CH 222 General Chemistry 2 <sup>*,2,G</sup> .....	5	
WR 227 Technical Writing <sup>*,1,G</sup> .....	4	
Physical Education Elective (A. S. degree).....	1	
Total Credits		14

<b>Second Year</b>		<b>Fall</b>
MTH 251 Calculus 1 <sup>*,1,G</sup> .....	5	
ENGR 101 Engineering Orientation <sup>*,2,G</sup> .....	3	
Social Science Elective (A.S. degree) <sup>3</sup> .....	3-4	
Choice of:.....	4	
SP 111 Fundamentals of Public Speaking <sup>1,G</sup>		
SP 112 Persuasive Speech <sup>1,G</sup>		
Total Credits		15-16

		<b>Winter</b>
MTH 252 Calculus 2 <sup>1</sup> .....	5	
PH 211 General Physics w/Calculus <sup>1</sup> .....	5	
Physical Education Elective (A.S. degree).....	1	
ENGR 102 (199) Engineering Orientation 2 <sup>1</sup> .....	3	
Total Credits		14

		<b>Spring</b>
MTH 253 Calculus 3 <sup>*,1,G</sup> .....	4	
MTH 261 Linear Algebra <sup>*,1,G</sup> .....	2	
PH 212 General Physics w/Calculus <sup>*,1,G</sup> .....	5	
ENGR 115 Engineering Graphics <sup>*,1,2,G</sup> .....	3	
Total Credits		14

<b>Third Year</b>		<b>Fall</b>
MTH 254 Vector Calculus 1 <sup>*,1,G</sup> .....	4	
ENGR 211 Statics <sup>*,1,G</sup> .....	4	
PH 213 General Physics w/Calculus <sup>*,1,2,G</sup> .....	5	
Physical Education Elective (A. S. degree).....	1	
Total Credits		14

		<b>Winter</b>
ENGR 221 Electrical Fundamentals <sup>*,1,G</sup> .....	4	
Biological Science Elective (A.S. degree) <sup>3</sup> .....	4	
MTH 265 Statistics for Scientists and Engineers <sup>*,2,G</sup> .....	4	
Choice of:.....	4	
MTH 255 Vector Calculus 2 <sup>*,1,2,G</sup>		
ENGR 213 Strength of Materials <sup>*,2,G</sup>		
Total Credits		16

		<b>Spring</b>
MTH 256 Differential Equations <sup>*,1,G</sup> .....	4	
ENGR 212 Dynamics <sup>*,1,2,G</sup> .....	4	
Social Science (A.S. degree) Elective 3.....	3-4	
Arts and Letters (A.S. degree) Elective 3.....	3-4	
Total Credits		14-16

\* Prerequisite required

1 Will be used to meet requirements for OSU Engineering Core GPA. Must earn a grade of "C" or better, not P/NP. (OSU will not accept "C-")

2 Required for graduation in specific engineering majors. Must earn a grade of "C" or better, not P/NP. (OSU will not accept "C-")

3 See Math/Engineering academic advisor for course selection.

G Must be taken for a grade, not P/NP

## Ethnic Studies

**Offered by Social Science Division**

### Suggested Course of Study

The National Association for Ethnic Studies defines the discipline as "an interdisciplinary voice for the continuing focused study of race and ethnicity." Ethnic Studies is concerned with how all ethnic and racial groups interact, but focuses primarily on those groups that have been largely ignored as having contributed to the creation and shaping of this country.



Ethnic Studies at Lane Community College was created 40 years ago. The discipline strives to provide for the interdisciplinary study of the histories and experiences of the four major racial minority groups in the United States: Americans of African and Asian descent, Chicanas/os and Latinas/os, and the indigenous peoples of the Americas, Caribbean, and Pacific Islands. In addition, Ethnic Studies provides space for students to critically analyze the intersections of race and ethnicity with other variables such as: gender identity, sexuality, disability, class, nationalism, and globalization.

As active scholars, the affiliated faculty members of Ethnic Studies at Lane are dedicated to an academic discipline that assists in the intellectual and humanistic development of students by helping them to combine critical thinking skills with an ability to understand and value difference from a social justice perspective. Because of the skills learned in class, students with a foundation in Ethnic Studies can be found pursuing a wide variety of occupational interests.

For those students interested in pursuing degrees with a focus in Ethnic Studies, there are many courses offered in alternate years from which to choose. All Ethnic Studies course offerings fulfill both the Social Science requirement of the AAOT and Cultural Diversity graduation requirements. For further information, contact Michael Sámano, Coordinator of Ethnic Studies at 541.463.5186 or [samanom@lanec.edu](mailto:samanom@lanec.edu)

**Cooperative Education (Co-op)** Ethnic Studies co-op is an important field placement opportunity that allows students to hone their cultural competency skills. Co-op students are encouraged to work with local service agencies that serve underrepresented minority communities, or organizations with a social justice perspective. Placement provides opportunities for students to explore their career options while gaining practical experience in the field. Students may participate on a full- or part-time basis.

## Exercise and Movement Science

**Offered by the Health, Physical Education and Athletics Division**

**Two-Year Associate of Applied Science Degree, Exercise and Movement Science**

**Two-Year Certificate of Completion, Fitness Specialist**

**One-Year Certificate of Completion, Fitness Technician**

**Purpose** To prepare students as fitness professionals for various careers in the fitness industry.

**Learning Outcomes** The graduate will:

- demonstrate interpersonal skills in the areas of leadership, motivation, management, and communication.
- understand and apply advanced exercise principles related to applied kinesiology, physiology, injury prevention, conditioning, resistance training, and functional training.

- understand and apply nationally recognized standards for fitness and health and describe the benefits and precautions associated with exercise.
- understand and apply advanced behavior modification strategies to enhance exercise and health behavior change with clients
- administer various advanced fitness assessments including the measurement of cardiovascular endurance, body composition, flexibility, muscular strength and endurance, power, speed, and balance in both a laboratory setting and a gym or health club setting.
- design and demonstrate safe and effective exercise programs for groups or individuals who are apparently healthy or modify exercise programs to enhance participation and meet the needs of those with medically controlled diseases under the care and supervision of a physician.
- utilize appropriate library and information resources to apply current fitness industry research and support lifelong professional education.
- apply and interpret more advanced algebraic formulas to fitness assessment data and exercise programming and critically analyze results and training implications.
- respond to the needs of a diverse clientele and demonstrate inclusive practices
- understand their scope of practice and role within the health and fitness field and the allied health care system and practice appropriate and ethical professional conduct

**Employment Trends** Statewide through 2016, 165 fitness openings are projected annually, with 23 of those in Lane County. According to the U.S. Department of Labor, “Employment of fitness workers is expected to increase much faster than the average for all occupations through 2014. An increasing number of people spend more time and money on fitness, and more businesses are recognizing the benefits of health and fitness programs and other services such as wellness programs for their employees. Aging baby boomers are concerned with staying healthy, physically fit, and independent. They have become the largest demographic group of health club members. The reduction of physical education programs in schools, combined with parents’ growing concern about childhood obesity, has resulted in rapid increases in children’s health club membership. Health club membership among young adults also has grown steadily, driven by concern with physical fitness... As health clubs strive to provide more personalized service to keep their members motivated, they will continue to offer personal training and a wide variety of group exercise classes.”

Individuals with formal training or experience will have the best chances to get these jobs.

**Wages** The 2009 statewide average is \$16.02 hourly, for an average annual salary of \$36,576. In Lane County, the average is slightly higher at \$18.73 per hour, for an average annual salary of \$38,804.

**Costs in Addition to Tuition (estimate)** Textbooks and minimal lab fees are required for most program core courses.

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of “B” or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of “C-” or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

**Program Certification** The American College of Sports Medicine (ACSM) endorses Lane Community College's Exercise and Movement Science program as providing training for the knowledge, skills and abilities as specified for ACSM certification. ACSM states: "The American College of Sports Medicine has endorsed the curriculum for Lane Community College's Associate of Applied Science program. This curriculum covers the knowledge, skills, and abilities expected of an ACSM Health/Fitness Specialist®. This curriculum has been reviewed for the educational content and has been endorsed by ACSM."

**Admission Deadline** Applications are reviewed annually for admission in fall term of each year. Interested candidates are invited to apply beginning in March. Please check with the Health and PE department for specific dates.

**Number of New Students Admitted Annually** A maximum of 30 students are admitted each year. Selection criteria can be found in the application packet.

**Criteria Used for Admission** Applicants must meet the following minimum qualifications:

- Complete application for admission to the college (new students only) and separate program application (all students). Only complete applications will be considered. Please see the Health and PE department for an application.
- Have a high school or college GPA of 2.5, or a 500 average standard score on the GED certificate. If a student has earned 12 or more college graded credits, the college GPA will be used to determine eligibility.
- Complete admission placement tests in Reading, Writing, and Mathematics meeting the minimum scores, or successfully complete qualifying classes as outlined in the program application packet.

Selection to the program is by a point allocation system from a pool of qualified applicants. Information about the point allocation system is available within the application packet. All applicants will be notified of program selection status.

**Admission Information** Program information sheets and application packets are available in the Division of Health, Physical Education and Athletics, Bldg. 5, Rm. 205 and the Counseling and Advising Center, Bldg. 1, Rm. 103.

**Program requirements** In addition to completing all required coursework, accepted students must meet the following criteria for program completion:

- attendance at a mandatory program orientation before fall term and advisee meetings with program advisor each term
- earned letter grade of C or higher AND earned accumulative G.P.A. of 3.0 or higher in all program core courses
- complete all required Cooperative Education credits (10 credit requirement)
- Knowledge, Skills, and Abilities Competency List
- acceptable evaluations from the instructors of professional core courses
- acceptable Cooperative Education work experience supervisor evaluations
- meet all program expectations and responsibilities
- exit interview with program advisor

**Cooperative Education (Co-op)** Co-op internships provide job-related experiences and are an integral component of the program. Students will complete on-campus internships in both the Fitness Education Center and the Therapeutic Exercise and Rehabilitation Center. Students will then have the opportunity to apply for off-campus intern experiences or additional on-campus opportunities. For information, contact Sue Thompson, Bldg. 5, Rm. 227, 541.463.5735, [thompsons@lanec.edu](mailto:thompsons@lanec.edu); or Shannon Gaul, Bldg. 5, Rm. 103, 541.463.5556, [gauls@lanec.edu](mailto:gauls@lanec.edu)

**Program Advisor** Marisa Hastie, Bldg. 5, Rm. 221, 541.463.5552, [hastiem@lanec.edu](mailto:hastiem@lanec.edu)

## Exercise and Movement Science

### Associate of Applied Science Degree

### Fitness Specialist

#### Two-Year Certificate of Completion

First Year	Fall
HE 275 Lifetime Health and Fitness <sup>D,P</sup> .....	3
Choice of:.....	1
PE 183A Conditioning	
PE 183F Fitness Education: Introduction	
PE 194F Professional Activity: Fitness Assessment and Exercise Prescription: Field Tech. <sup>*,1</sup> .....	3
PE 194S Professional Activity: Strength Training and Conditioning <sup>*,1</sup> .....	2
PE 196 Applied Anatomy and Kinesiology <sup>*,1</sup> .....	3
Choice of:.....	1
PE 280F Co-op Ed: Fitness <sup>G</sup>	
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>	
Choice of:.....	4
WR 115 Introduction to College Writing <sup>*,W</sup>	
WR 121 Composition: Introduction to Academic Writing <sup>*,W</sup>	
Total Credits	17
	<b>Winter</b>
PE 194T Professional Activity: Techniques of Leadership Training <sup>*,1</sup> .....	2
PE 295 Injury Prevention and Management <sup>*,1</sup> .....	3
PE 280F Co-op Ed: Fitness <sup>G</sup> .....	1
PE 280 RT Co-op Ed: Rehabilitation Therapies <sup>G</sup> .....	1
Physical Education Strength Training class <sup>2</sup> .....	1
Choice of:.....	4-6
BI 102D General Biology – Survey of Biology	
BI 102I General Biology – Human Biology	
BI 112 and CH 112 (co requisites) Bio-Bonds Learning Community (3 credits each) <sup>S</sup>	
CH 104 Introductory Chemistry <sup>S</sup>	
CH 110 Chemistry in Everyday Life	
Choice of:.....	4-5
MTH 070 Introductory Algebra (or equivalent) <sup>M</sup>	
MTH 095 Intermediate Algebra <sup>M,R</sup>	
MTH 105 Intro to Contemporary Mathematics <sup>M</sup>	
MTH 111 College Algebra <sup>M</sup>	
Total Credits	16-19
	<b>Spring</b>
Human Relations requirement <sup>R</sup> .....	3
FN 225 Nutrition.....	4
PE 135 Applied Exercise Physiology 1 <sup>*,1</sup> .....	3
Choice of:.....	1
PE 280F Co-op Ed: Fitness <sup>G</sup>	
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>	
Choice of:.....	4
SP 100 Basic Communication <sup>A</sup>	

SP 105 Listening and Critical Thinking <sup>A</sup>	
SP 111 Fundamentals of Public Speaking <sup>A</sup>	
SP 115 Introduction to Intercultural Communications	
SP 218 Interpersonal Communication <sup>A</sup>	
HE 252 First Aid <sup>D</sup> .....	3
Total Credits	18

**Second Year**

Ethnic/Gender/Cultural Diversity elective (from AA/OT requirement list in catalog).....	3
General electives .....	3
PE 235 Applied Exercise Physiology 2 <sup>*,1</sup> .....	3
Choice of: .....	1
PE 280F Co-op Ed: Fitness <sup>G</sup>	
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>	
PE 280 Co-op Ed: Physical Education	
PE 280AR Co-op Ed: Aerobics	
PE 280W Co-op Ed: Wellness	
PE 280M Co-op Ed: Fitness Management	
PE 280AT Co-op Ed: Athletic Training	
Physical Education Activity elective <sup>2</sup> .....	1
Choice of:.....	3
HE 125 Workplace Health and Safety	
HE 152 Drugs, Society and Behavior	
HE 209 Human Sexuality	
HE 222 Consumer Health	
HE 250 Personal Health	
HE 255 Global Health	
Total Credits	14

	<b>Fall</b>
PE 194L Professional Activity: Fitness Assessment and Exercise Prescription: Lab Techniques <sup>*,1</sup> .....	3
Physical Education Activity elective <sup>2</sup> .....	1
Choice of:.....	2
PE 280F Co-op Ed: Fitness <sup>G</sup>	
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>	
PE 280 Co-op Ed: Physical Education	
PE 280AR Co-op Ed: Aerobics	
PE 280W Co-op Ed: Wellness	
PE 280M Co-op Ed: Fitness Management	
PE 280AT Co-op Ed: Athletic Training	
Directed Electives <sup>3</sup> .....	7
Total Credits	13

	<b>Winter</b>
PE 294 Foundations of Fitness Management <sup>*,1</sup> .....	3
Directed Electives <sup>3</sup> .....	6
Choice of:.....	2
PE 280F Co-op Ed: Fitness <sup>G</sup>	
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>	
PE 280 Co-op Ed: Physical Education	
PE 280AR Co-op Ed: Aerobics	
PE 280W Co-op Ed: Wellness	
PE 280M Co-op Ed: Fitness Management	
PE 280AT Co-op Ed: Athletic Training	
Choice of:.....	4
WR 121 Composition: Introduction to Academic Writing <sup>*,A</sup>	
WR 122 English Composition: Argument, Style and Research <sup>*,A</sup>	
WR 123 Composition: Research <sup>*,A</sup>	
Total Credits	15

**Fitness Technician**

**One-Year Certificate of Completion**

**Purpose** To prepare students as fitness professionals for various careers in the fitness industry.

**Learning Outcomes** The graduate will:

- demonstrate interpersonal skills in the areas of leadership, motivation, and communication.
- understand and apply basic exercise principles related to applied kinesiology, physiology, injury prevention, conditioning, resistance training, and functional training.
- understand and apply nationally recognized standards for fitness and overall health and describe the benefits and precautions associated with exercise.
- understand and apply basic behavior modification strategies to enhance exercise and health behavior change with clients
- administer various basic fitness assessments including the measurement of cardiovascular endurance, body composition, flexibility, muscular strength and endurance in gym or health club settings.
- design and demonstrate safe and effective exercise programs for apparently healthy individuals and groups within current fitness industry standards and best practices.
- utilize appropriate library and information resources to apply current fitness industry research and support lifelong professional education.
- apply and interpret basic algebraic formulas to fitness assessment data and exercise programming
- respond to the needs of a diverse clientele and demonstrate inclusive practices
- understand their scope of practice and role within the health and fitness field and the allied health care system and practice appropriate and ethical professional conduct

	<b>Fall</b>
HE 275 Lifetime Health and Fitness <sup>D,P</sup> .....	3
Choice of:.....	1
PE 183A Conditioning	
PE 183F Fitness Education: Introduction	
PE 194F Professional Activity: Fitness Assessment and Exercise Prescription: Field Tech. <sup>*,1</sup> .....	3
PE 194S Professional Activity: Strength Training and Conditioning <sup>*,1</sup> .....	2
PE 196 Applied Anatomy and Kinesiology <sup>*,1</sup> .....	3
Choice of:.....	1
PE 280F Co-op Ed: Fitness <sup>G</sup>	
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>	
Choice of:.....	4
WR 115 Introduction to College Writing <sup>*,W</sup>	
WR 121 Composition: Introduction to Academic Writing <sup>*,W</sup>	
Total Credits	17

	<b>Winter</b>
PE 194T Professional Activity: Techniques of Leadership Training <sup>*,1</sup> .....	2
PE 295 Injury Prevention and Management <sup>*,1</sup> .....	3
PE 280F Co-op Ed: Fitness <sup>G</sup> .....	1
PE 280 RT Co-op Ed: Rehabilitation Therapies <sup>G</sup> .....	1
Physical Education Strength Training class <sup>2</sup> .....	1
Choice of:.....	4-6
BI 102D General Biology – Survey of Biology	
BI 102I General Biology – Human Biology	
BI 112 and CH 112 (co requisites) Bio-Bonds Learning Community (3 credits each) <sup>S</sup>	

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

CH 104 Introductory Chemistry <sup>S</sup>	
CH 110 Chemistry in Everyday Life	
Choice of:.....	4-5
MTH 070 Introductory Algebra (or equivalent) <sup>M</sup>	
MTH 095 Intermediate Algebra <sup>M,R</sup>	
MTH 105 Intro to Contemporary Mathematics <sup>M</sup>	
MTH 111 College Algebra <sup>M</sup>	

Total Credits	16-19
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**Spring**

Human Relations requirement <sup>R</sup> .....	3
FN 225 Nutrition .....	4
PE 135 Applied Exercise Physiology 1 <sup>*,1</sup> .....	3
Choice of:.....	1
PE 280F Co-op Ed: Fitness <sup>G</sup>	
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>	
Choice of:.....	4
SP 100 Basic Communication <sup>A</sup>	
SP 105 Listening and Critical Thinking <sup>A</sup>	
SP 111 Fundamentals of Public Speaking <sup>A</sup>	
SP 115 Introduction to Intercultural Communications	
SP 218 Interpersonal Communication <sup>A</sup>	
HE 252 First Aid <sup>D</sup> .....	3

Total Credits	18
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- Core curriculum requirement; must be passed with a grade of "C" or better
- PE Activity Electives Fitness-related activity courses to be selected from the following list:
  - PE 181B Cardio Core Conditioning
  - PE 181C Combination Aerobics
  - PE 181D Dance Aerobics
  - PE 181K Kickboxing Aerobics
  - PE 181S Step Aerobics
  - PE 181SB Body Sculpt
  - PE 181SS Step and Sculpt
  - PE 181Y Yogilates
  - PE 183A Conditioning
  - PE 183B Exercise and Weight Control
  - PE 183C Exercise Walking
  - PE 183CG Group Cycling
  - PE 183E Fitness Circuits
  - PE 183G Fitness Education: Continuing/Returning
  - PE 183J Jogging
  - PE 183R Stability Ball Fitness
  - PE 183S Strength Training
  - PE 183U Strength Training for Women
  - PE 183W Therapeutic Exercise and Rehabilitation Program
  - PE 184K Karate
  - PE 184P Personal Defense
  - PE 185T Tai Chi Chuan
  - PE 185Y or PE 185Z or PE 185YG Yoga
 Students may repeat PE 183G, PE 183W, PE 183S or PE 183U once for credit
- Directed Electives Courses to be selected from the following list:
  - BA 101 Introduction to Business
  - BA 226 Business Law
  - BA 278 Leadership and Team Dynamics
  - BI 101F General Biology - Survey of Biology
  - BI 102D General Biology - Survey of Biology
  - BI 102I General Biology: Human Biology
  - BI 112 Cell Biology for Health Occupations (co-requisite CH 112)
  - BI 231 Human Anatomy and Physiology 1
  - BI 232 Human Anatomy and Physiology 2
  - BI 233 Human Anatomy and Physiology 3
  - CG 140 Career and Life Planning
  - CH 104 Introductory Chemistry 1
  - CH 105 Introductory Chemistry 2
  - CH 112 Chemistry for Health Occupations (co requisite BI 112)
  - CH 221 General Chemistry 1
  - CH 222 General Chemistry 2
  - CIS 101 Computer Fundamentals
  - CS 120 Concepts of Computing: Information Processing
  - EL 115 Effective Learning
  - EL 115H Effective Learning: Health Science Majors
  - FN 230 Family, Food, and Nutrition
  - HE 125 Workplace Health and Safety

HE 152 Drugs, Society and Behavior	
HE 209 Human Sexuality	
HE 222 Consumer Health	
HE 250 Personal Health	
HE 255 Global Health	
HO 100 Medical Terminology	
HS 107 Gerontology and Aging	
HS 200 Understanding Addictive Behaviors	
MTH 111 College Algebra	
MTH 112 Trigonometry	
PH 101 Fundamentals of Physics	
PH 102 Fundamentals of Physics	
PH 103 Fundamentals of Physics	
PH 201 General Physics	
PSY 110 Exploring Psychology	
PSY 201 General Psychology	
PSY 202 General Psychology	
PSY 215 Lifespan Developmental Psychology	
PSY 218 Multicultural Psychology	
PSY 239 Introduction to Abnormal Psychology	
SOC 204 Introduction to Sociology	
SOC 207 Women and Work	
SOC 208 Sport and Society	
SP 105 Listening and Critical Thinking	
SP 111 Fundamentals of Public Speaking	
SP 112 Persuasive Speech	
SP 115 Introduction to Intercultural Communication	
SP 130 Business and Professional Speech	
SP 218 Interpersonal Communication	
SPAN 101 Spanish, First Year	
SPAN 102 Spanish, First Year	
SPAN 103 Spanish, First Year	
WR 122 English Composition: Argument, Style and Research	
WR 123 Composition: Research	
WR 227 Technical Writing	

## Fabrication/Welding Technology

Offered by the Advanced Technology Division

**Two-Year Associate of Applied Science Degree  
Fabrication/Welding Technology**

**One-Year Certificate of Completion  
Fabrication/Welding Technology**

**One-Year Certificate of Completion  
Welding Processes**

**Purpose** To prepare the graduate for employment for entry-level and higher positions in metal fabrication industries. The graduate typically begins work in light or heavy metal fabrication as welders and/or fabricators. Training and experience can lead to careers in technical sales, supervision, estimating, quality control, inspection, specialty welding, and teaching. The fabrication/welding certificate program (the first year of the two-year degree) prepares graduates for employment as welders/ fabricators. The welding processes certificate program prepares graduates for employment as welder-trainees or welders.

**Learning Outcomes** The graduate of the AAS degree program will:

- use blueprint-reading skills, cost estimating, applied science of materials, and mathematics necessary to the profession.
- apply knowledge of forming, fitting, and welding processes.
- develop manufacturing plans for commercially viable metal products.
- demonstrate advanced fabrication techniques and welding processes and application including GTAW, programmable, plasma cutting, structural and pipefitting, metallurgy, quality control procedures, and business operation.
- demonstrate and use industry safety standards.



- use appropriate library and information resources to research professional issues and support lifelong learning.
- use mathematical formulas to calculate area, volume, and weight of metal objects.

The graduate of the Fabrication/Welding Technology One-Year Certificate of Completion will:

- read and build metal products from simple blueprints
- use blueprints and other reference materials to calculate cost of materials necessary to the building of metal products
- apply mathematics necessary to fabricate metal products
- perform at entry-level typical industrial welding processes
- demonstrate at industry entry-level use of certain machine tools commonly found in industry
- demonstrate and use industry safety standards
- use appropriate library and information resources to research professional issues and support lifelong learning

The graduate of the Welding Processes One-Year Certificate of Completion will:

- read simple blueprints, interpret and apply industrial welding symbols
- demonstrate proficiency at an industry entry-level with Shielded Metal Arc Welding, various wire drive processes and Gas Tungsten Arc Welding
- weld and cut metal as is typical of circumstances found in industrial environments
- demonstrate and use industry safety standards

**Employment Trends** Statewide, 210 annual openings for welders/fabricators are projected in Oregon and 28 openings are projected annually in Lane County. Competitively trained workers should find reasonable employment opportunities. Those with an associate degree will have a competitive advantage in this labor market.

**Wages** Statewide average \$16 hourly, \$35,000 average annually (\$45,000 annually for fabricators). Lane County average, \$15 hourly, \$32,000 annually.

**Costs in Addition to Tuition and Registration Fees (estimates)\***

Books .....	\$ 750
Tools.....	\$ 405
Class Fees.....	\$ 1,680
	Total \$2,835

\* Subject to change without notice.

**Licensing or Other Certification Exams** Exams for Welder Qualification Certification - wire drive and arc welding processes

**Prerequisites** Minimum placement score- of 68 in Reading or completion of RD 080 or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

**Criteria Used for Admission** Normal program entry is fall term. A program orientation is held for new students for fall term (dates available in Counseling or Enrollment and Student Financial Services). Contact advisor/counselor for assistance for winter and spring term entry.

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. In certain circumstances, Co-op experience may be substituted for major course work. Contact Marv Clemons, Fabrication/Welding Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158.

**Program Advisor** Lisa Stegall, Bldg. 12, Rm. 203, 541.463.5378, [stegall@lanec.edu](mailto:stegall@lanec.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202, 541.463.5236, [littyc@lanec.edu](mailto:littyc@lanec.edu)

**Fabrication/Welding**

**Two-Year Associate of Applied Science Degree**

<b>First Year</b>		<b>Fall</b>
WLD 112 Fabrication/Welding 1 <sup>*,D,G</sup> .....		12
MTH 076 Applied Geometry for Technicians <sup>*,D,G,M</sup> or higher mathematics .....		4
	Total Credits	16
		<b>Winter</b>
WLD 113 Fabrication/Welding 2 <sup>*,D,G</sup> .....		12
CG 203 Human Relations at Work <sup>H</sup> .....		3
	Total Credits	15
		<b>Spring</b>
WLD 114 Fabrication/Welding 3 <sup>*,D,G</sup> .....		12
PE/Health requirement <sup>D,R</sup> .....		3
	Total Credits	15
<b>Second Year</b>		<b>Fall</b>
WLD 215 Fabrication/Welding 4 <sup>*,D,G</sup> .....		12
MFG 197 Manufacturing Technology <sup>*,G</sup> .....		3
Choice of:.....		3
Arts/Letters requirement <sup>R</sup>		
Social Science requirement <sup>R</sup>		
	Total Credits	18
		<b>Winter</b>
WLD 216 Fabrication/Welding 5 <sup>*,D,G</sup> .....		12
WR 115W Introduction to College Writing:		
Workplace Emphasis <sup>D,W</sup> or higher writing .....		3
Science or Computer Science course <sup>R</sup> .....		3
	Total Credits	18
		<b>Spring</b>
WLD 217 Fabrication/Welding 6 <sup>*,D,G</sup> .....		12
Arts and Letters requirement <sup>R</sup> .....		3
Welding elective <sup>D,G</sup> .....		3
	Total Credits	18

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

## Fabrication Welding

### One-Year Certificate of Completion

	<b>Fall</b>
WLD 112 Fabrication/Welding 1 <sup>*,D,G</sup> .....	12
MTH 076 Applied Geometry for Technicians <sup>*,D,G,M</sup> or higher mathematics .....	4
Total Credits	16

	<b>Winter</b>
WLD 113 Fabrication/Welding 2 <sup>*,D,G</sup> .....	12
WR 115W Introduction to College Writing: Workplace Emphasis <sup>W</sup> or higher writing .....	3
Total Credits	15

	<b>Spring</b>
WLD 114 Fabrication/Welding 3 <sup>*,D,G</sup> .....	12
CG 203 Human Relations at Work <sup>H</sup> .....	3
Total Credits	15

## Welding Processes

### One-Year Certificate of Completion

	<b>Fall</b>
MTH 076 Applied Geometry for Technicians <sup>*,D,G,M</sup> or higher mathematics .....	4
WLD 121 Shielded Metal Arc Welding 1 <sup>*,D,G</sup> .....	4
WLD 143 Wire Drive Welding 1 <sup>*,D,G</sup> .....	4
Total Credits	12

	<b>Winter</b>
CG 203 Human Relations at Work <sup>H</sup> .....	3
WLD 122 Shielded Metal Arc Welding 2 <sup>*,D,G</sup> .....	4
WLD 154 Wire Drive Welding 2 <sup>*,D,G</sup> .....	4
Total Credits	11

	<b>Spring</b>
WLD 159 Wire Drive Welding 3 <sup>*,D,G</sup> .....	4
WLD 160 Wire Drive Welding 4 <sup>*,D,G</sup> .....	4
WR 115W Introduction to College Writing: Workplace Emphasis <sup>W</sup> or higher writing .....	3
Total Credits	11

	<b>Fall</b>
WLD 111 Blueprint Reading for Welders <sup>*,D,G</sup> .....	3
WLD 165 Industrial Welding Practices <sup>*,D,G</sup> .....	3
WLD 242 Gas Tungsten Arc Welding 1 <sup>*,D,G</sup> .....	3
Total Credits	9

	<b>Winter</b>
WLD 256 Gas Tungsten Arc Welding 2 <sup>*,D,G</sup> .....	3
WLD 257 Gas Tungsten Arc Welding 3 <sup>*,D,G</sup> .....	3
Total Credits	6

### Welding Elective Courses:

ENGR 280W Co-op Ed: Welding	3
WLD 139 Welding Lab <sup>*</sup> [Available only as pass/no pass] .....	1-3
WLD 140 Welder Qualification (Certification): Wire Drive <sup>*</sup>	3
WLD 141 Welder Qualification (Certification): SMAW <sup>*</sup> .....	3
WLD 142 Pipe Welding Lab: Carbon Steel <sup>*</sup> .....	3

## Fitness – see Exercise and Movement Science

## Flight Technology

### Offered by the Lane Aviation Academy

### Two-Year Associate of Applied Science Degree

**Purpose** To prepare students for successful careers as pilots in the air transportation industry.

**Learning Outcomes** The graduate will:

- be certificated by the FAA as commercial pilot with an option for being FAA certified as a Flight Instructor.
- have FAA pilot certification and be legally qualified for an entry-level position in the commercial aviation industry.
- have knowledge and skills to serve in responsible positions in a corporate aviation department.
- be skilled in the use of multiple industry libraries and data base systems and be skilled as a researcher in the aviation industry.
- be skilled in the use of various systems of measure and conversion; be skilled in the use of performance tables and graphs; plot data manually and electronically to determine performance and trends.
- skillfully access a multitude of library accessible resources for applications information and topical research projects; be skilled in the use of local and national libraries and databases.
- accurately use systems of measure, skillfully perform unit conversions, and be skilled in computational analysis defining airplane operational performance; accurately use performance tables, charts and graphs; use interpolation to derive implied values; and be skilled in the use of aviation specific manual and electronic calculators to determine time, rate and trends.

Graduates may also transfer to a four-year university preparing for a professional degree.

**Employment Trends** Industry leaders are in general agreement that the industry is postured for substantial growth: through the year 2012, and the civil aviation industry is projected to grow by more than fifty-percent. Moreover, trends indicate the industry loses about twenty-percent of its senior pilots every seven years primarily due to retirement.

**Wages** Flight instructors earn from \$15,000-45,000. Entry-level commercial pilots earn \$25,000 through their probationary period. Air carrier line pilots earn \$45,000-250,000 annually.

### Costs in Addition to Tuition (estimates)\*

Certificates, flight lab and instruction fees.....	up to \$40,000
FAA Knowledge Exams (five required for degree) ..	\$500
FAA Physical.....	\$100
Books .....	\$1800
Supplies .....	\$300
<b>Total</b>	<b>\$42,700</b>

\* Subject to change without notice.

**Program Accreditation** All FAA certification courses are approved by the Federal Aviation Administration.

**Licensing and Other Certification Exams Required** All FAA certificates require certification testing.

**Number of New Students Admitted Annually** New students are admitted in the fall term and the spring term. Typically 40 students maximum are admitted in each of the two terms.

**Criteria Used for Admission** Current Lane Community College Admissions Information application on file and a Flight Technology Department application on file. Acceptance priority is based on application dates.

**Admission Information** An information packet may be requested by calling or visiting the Flight Technology Department at 28715 Airport, Eugene, Oregon 97402, 541.463.4195 or visiting our website at [lanecc.edu/flight.htm](http://lanecc.edu/flight.htm).

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Marv Clemons, Flight Technology Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158.

**Program Advisor** Lisa Stegall, Bldg. 12, Rm. 203, 541.463.5378, [stegalll@lanecc.edu](mailto:stegalll@lanecc.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202, 541.463.5236, [litty@c@lanecc.edu](mailto:litty@c@lanecc.edu)

**Note** For FT 239 Professional Pilot Flight Lab a student must have a total of 39 Flight Lab credits to fulfill the AAS Degree requirement.

**Prerequisites** An applicant should complete the following courses prior to program entry.

Arts and Letters requirement <sup>R</sup> .....	3
Human Relations requirement <sup>R</sup> .....	3
WR 121 Composition: Introduction to Academic Writing or higher writing <sup>*,D,W</sup> .....	4
<b>Total Credits</b>	<b>10</b>

**First Year**

FT 102 General Aviation Careers <sup>D</sup> .....	1
FT 103 Aircraft Development <sup>*,D,G</sup> .....	4
FT 130 Primary Flight Briefing <sup>*,D,G</sup> .....	3
FT 239 Professional Pilot Flight Lab <sup>*,D</sup> .....	6
FT 250 Private Pilot Ground School <sup>D,G</sup> .....	5
<b>Total Credits</b>	<b>19</b>

**Winter**

FT 239 Professional Pilot Flight Lab <sup>*,D</sup> .....	6
GS 109 Meteorology <sup>D,G,S</sup> .....	5
MTH 095 Intermediate Algebra or higher mathematics <sup>*,D,M</sup> .....	5
<b>Total Credits</b>	<b>16</b>

**Spring**

FT 113 Aviation Science <sup>D,G</sup> .....	4
FT 115 Aircraft Structures and Systems <sup>D,G</sup> .....	3
FT 239 Professional Pilot Flight Lab <sup>*,D</sup> .....	6
FT 251 Commercial Pilot Ground School <sup>D,G</sup> .....	5
<b>Total Credits</b>	<b>18</b>

**Second Year**

CS 120 Concepts of Computing S or higher computer science	4
FT 239 Professional Pilot Flight Lab <sup>*,D</sup> .....	7
FT 252 Instrument Ground School <sup>D,G</sup> .....	5
<b>Total Credits</b>	<b>16</b>

	<b>Winter</b>
FT 239 Professional Pilot Flight Lab <sup>*,D</sup> .....	7
FT 254 Aerodynamics <sup>D,G</sup> .....	3
FT 256 Flight Instructor–Airplane Ground School <sup>D,G</sup> .....	3
FT 280 Co-op Ed:	
Flight Technology (optional) <sup>D,G</sup> .....	(3)
Physical Education/Health requirement <sup>D, R,1</sup> .....	3
<b>Total Credits</b>	<b>16-19</b>

**Spring**

BA 254 General Aviation Management <sup>D,G</sup> .....	3
FT 228 Multiengine Ground School <sup>D,G</sup> .....	2
FT 239 Professional Pilot Flight Lab <sup>*,D</sup> .....	7
FT 255 Fundamentals and Flight Instructor–Instrument Ground School <sup>D,G</sup> .....	3
<b>Total Credits</b>	<b>15</b>

**Additional Ratings:**

FT 239 ATP.....	1-6 credits
FT 239 CFIA.....	1-6 credits
FT 239 CFIL.....	1-6 credits
FT 239 MEI.....	1-4 credits
FT 239 Multiengine.....	1-3 credits

1 PE Activity requirement credits must be taken in at least two terms to satisfy degree requirement.

## Graphic Design

**Offered by the Arts Division**

**Two-Year Associate of Applied Science Degree**

**Two-Year Certificate of Completion**

**Purpose** To prepare students for entry-level positions in the fields of graphic and digital design.

**Learning Outcomes** The graduate will:

- design a variety of graphic materials including advertising, corporate identity, publications, packaging, signage, marketing, and the internet.
- solve graphic communication problems through the use of computer technology used in the field.
- demonstrate understanding of fundamental art, communication, and marketing principles in the development of design solutions.
- demonstrate understanding of professional business standards and practices.
- demonstrate ability to design and produce materials that will meet professional standards for reproduction.
- use appropriate library and information resources to research design problems, issues, and technology as well as to support lifelong technical learning.

**Employment Trends** Reasonable employment opportunities exist for trained workers. Statewide, 107 job openings are projected annually through 2018, with 18 of those in Lane County.

Reasonable employment opportunities exist for trained workers. Statewide, 73 job openings are projected annually with 8 of those in Lane County.

**Wages** Statewide average \$19.28 hourly and \$43,249 annually. Lane County average \$17.01 hourly and \$37,468 annually.

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

**Costs in Addition to Tuition (estimate)\***

Average costs..... \$1,500

\* Subject to change without notice.

**Admission Deadline** Open admission for first year. Limited admission for second year. Second year admission dates: Transcripts, essay, and application are due the first Monday of May. Portfolios are due the third Friday of May. See Art and Applied Design Department for specific dates and information.

**Number of New Students Admitted Annually** First year unlimited. Second year, approximately 25-30.

**Criteria Used for Admission** Scores from three areas are weighted as follows: portfolio 60 percent, essay 20 percent, GPA 20 percent. Admission criteria are subject to change.

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. A minimum of six credits of Co-op in graphic design are required for completion of the graphic design program. Contact the Cooperative Education Division, 541.463.5203.

**Program Advisors:** Rick Simms, Bldg 17, Rm. 107, 541.463.5472 and Susan Lowdermilk, Bldg 11, Rm. 112, 541.463.5413, [lowdermilks@lanec.edu](mailto:lowdermilks@lanec.edu)

**Program Counselor** Christina Salter, Bldg. 1, Rm. 103E, 541.463.5813

**Note** Students must earn a grade of “B-” or better in all prerequisites and “C” or better in major requirements.

**Two-Year Associate of Applied Science Degree**

**First Year**

	<b>Fall</b>	
ART 131 Introduction to Drawing <sup>A,B,G</sup> .....	3	
ART 216 Digital Design Tools <sup>B,G</sup> .....	4	
ART 261 Photography 1 <sup>A,B,G</sup> .....	3	
Choice of:.....	4	
ART 115GD Basic Design Fundamentals <sup>A,B,G</sup> (4 credits) or		
ART 115 Basic Design: Fundamentals <sup>A,B,G</sup> (3 credits) and		
GD 110 Introduction to Graphic Design <sup>A,D,G</sup> (1 credit)		
Total Credits	14	

**Winter**

ART 119 Typography 1 <sup>*B,G</sup> .....	3
ART 200 Graphic Design History <sup>D,G</sup> .....	3
ART 225 Digital Illustration <sup>*B,G</sup> .....	3
CG 203 Human Relations at Work <sup>B,G,H</sup> .....	3
Science/Math/Computer Science requirement <sup>S</sup> .....	4
Total Credits	16

**Spring**

ART 116 Basic Design: Color <sup>*B,G</sup> .....	3
ART 231 Drawing: Intermediate <sup>*D,G</sup> .....	3
CIS 125H Software Applications: HTML <sup>B,G</sup> .....	3
MUL 212 Digital Imaging <sup>*B,G</sup> .....	3
WR 121 Composition: Introduction to Academic Writing <sup>*B,G,W</sup> .....	4
Total Credits	16

**Second Year**

	<b>Fall</b>
MUL 218 Business Practices for Media Arts <sup>D,G</sup> .....	2
Directed Elective .....	3
ART 218 Printing Technology <sup>*B,G</sup> .....	2
ART 221 Graphic Design 1 <sup>*B,G</sup> .....	4
ART 227 Graphic Design Production 1 <sup>*B,G</sup> .....	3

Choice of:.....	3
ART 280GD Co-op Ed: Graphic Design <sup>*D,G</sup>	
Directed elective <sup>*D,G</sup>	
Total Credits	17

**Winter**

ART 222 Graphic Design 2 <sup>*B,G</sup> .....	4
ART 228 Graphic Design Production 2 <sup>*B,G</sup> .....	4
ART 280GD Co-op Ed: Graphic Design <sup>*D,G</sup> .....	3
ART 289 Web Production <sup>*B,G</sup> .....	3
Choice of:.....	3
Physical Education Activity requirement	
Health requirement P	
Total Credits	17

**Spring**

ART 223 Graphic Design 3 <sup>*D,G</sup> .....	4
ART 229 Graphic Design Production 3 <sup>*D,G</sup> .....	4
ART 280GD Co-op Ed: Graphic Design <sup>*D,G</sup> .....	3
ART 290 Design Concepts for the Web <sup>*D,G</sup> .....	3
MTH 060 Beginning Algebra or higher mathematics <sup>*D,G,M</sup> .....	4
Total Credits	18

**Two-Year Certificate of Completion**

**First Year**

	<b>Fall</b>
ART 131 Introduction to Drawing <sup>A,B,G</sup> .....	3
ART 216 Digital Design Tools <sup>B,G</sup> .....	4
ART 261 Photography 1 <sup>A,B,G</sup> .....	3
Choice of:.....	4
ART 115GD Basic Design Fundamentals <sup>A,B,G</sup> (4 credits) or	
ART 115 Basic Design: Fundamentals <sup>A,B,G</sup> (3 credits) and	
GD 110 Introduction to Graphic Design <sup>D,G</sup> (1 credit)	
Total Credits	14

**Winter**

ART 119 Typography <sup>*B,G</sup> .....	3
ART 225 Digital Illustration <sup>*B,G</sup> .....	3
ART 231 Drawing: Intermediate <sup>*D,G</sup> .....	3
CG 203 Human Relations at Work <sup>B,G,H</sup> .....	3
Total Credits	12

**Spring**

ART 116 Basic Design: Color <sup>*B,G</sup> .....	3
CIS 125H Software Applications: HTML <sup>B,G</sup> .....	3
MUL 212 Digital Imaging <sup>*B,G</sup> .....	3
WR 121 Composition: Introduction to Academic Writing <sup>*B,G,W</sup> .....	4
Total Credits	13

**Second Year**

	<b>Fall</b>
ART 218 Printing Technology <sup>*B,G</sup> .....	2
ART 221 Graphic Design 1 <sup>*B,G</sup> .....	4
ART 227 Graphic Design Production 1 <sup>*B,G</sup> .....	3
MTH 060 Beginning Algebra or higher mathematics <sup>*D,G,M</sup> .....	4
Total Credits	13

**Winter**

ART 222 Graphic Design 2 <sup>*B,G</sup> .....	4
ART 228 Graphic Design Production 2 <sup>*B,G</sup> .....	4
ART 280GD Co-op Ed: Graphic Design <sup>*D,G</sup> .....	3
ART 289 Web Production <sup>*B,G</sup> .....	3
Total Credits	14

**Spring**

ART 223 Graphic Design 3 <sup>*B,G</sup> .....	4
ART 229 Graphic Design Production 3 <sup>*B,G</sup> .....	4
ART 280GD Co-op Ed: Graphic Design <sup>*D,G</sup> .....	3
ART 290 Design Concepts for the Web <sup>*D,G</sup> .....	3
Total Credits	14

1 PE Activity requirement credits must be taken in at least two terms to satisfy degree requirement.



**Direct Electives**

- Any other Art Class
- Any Multimedia Class

**Health Education**

**Offered by Health, Physical Education and Athletics Division**

**Suggested Course of Study**

As our world becomes more connected and the use of technology increases, individuals and societies can become negatively impacted. The number of illnesses and deaths from chronic diseases, such as heart disease, cancer, diabetes, and stroke are in part, outcomes of personal health behavior and choices.

In addition, new and emerging infectious diseases are stretching the available resources to combat them. Therefore, the achievement of attaining and nurturing all areas of health remains a worldwide priority in the twenty-first century. The primary role of a health educator is to act as an “agent of change” to help both individuals and society reach their fullest potential.

The Health Education course of study is designed for students who would like to further their career goals in any of the following health areas: Health, Public Health and Social Services, Health Care Administration, Health Promotion, Environmental Health and Occupational Health and related fields. These fields provide career opportunities that include, but are not limited to: Teacher/Educator, Administrator, Researcher, Epidemiologist (person who studies disease), Sanitarian, Occupational Health Specialist, Environmental Toxicologist, and Public Health Specialist.

This is a suggested course of study, which is not the same as a state-approved vocational program leading to a degree with a vocational major from the Lane Board of Education. Rather the courses below are appropriate electives for students interested in eventually pursuing a four-year degree in Health Education at a University or specialized institution.

**First Year**

- Fall**  
HE 275 Lifetime Health and Fitness

- Winter**  
HE 252 First Aid

- Spring**  
HE 250 Personal Health  
HE 222 Consumer Health

**Second Year**

- Fall**  
HE 152 Drugs Society and Behavior  
HE 209 Human Sexuality

- Winter**  
HE 125 Workplace Health and Safety

**Spring**

- HE 255 Global Health

**Health Informatics**

**Also see Computer Information Systems Health Informatics**

**Health Informatics**

**Offered by the Computer Information Technology Department**

**Suggested Course of Study**

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete courses that will be accepted in transfer to the health informatics program at Oregon Institute of Technology. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate in a vocational major issued by the Lane Board of Education. The guide below includes courses required for Oregon Institute of Technology’s Bachelor of Science degree in Information Technology – Health Informatics Option, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for a health informatics degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses completed within an AAOT degree satisfy lower division general education requirements for any of Oregon’s public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

**Suggested Course of Study:**

WR 121 Composition: Introduction to Academic Writing <sup>*,4</sup> .....	4
WR 122 Composition: Style and Argument <sup>*,3,4</sup> .....	4
WR 227 Technical Writing <sup>*,3,4</sup> .....	4
MTH 111 College Algebra <sup>*,4</sup> .....	5
AAOT Health requirement <sup>1</sup> .....	3-4
SP 111 Public Speaking <sup>3,4</sup> .....	4
SP 219 Small Group Discussion <sup>3,4</sup> .....	4
AAOT Arts and Letters requirement <sup>2,3,4</sup> .....	9
AAOT Social Science requirement <sup>2,3,4</sup> .....	6
ECON 201 Introduction to Microeconomics <sup>*,3,4</sup> .....	3
ECON 202 Introduction to Macroeconomics <sup>*,3,4</sup> .....	3
PSY 201 General Psychology <sup>3,4</sup> .....	3
Science with Labs <sup>1,3,4</sup> .....	12
BI 102I Human Biology <sup>3,4</sup> .....	4
BA 211 Financial Accounting <sup>*,3,4</sup> .....	4
BT 123 MS EXCEL for Business <sup>*,3,4</sup> .....	4
CIS 140 Operating Environments: Managing Windows <sup>3,4</sup> .....	4
ET 287 Computer Hardware <sup>3,4</sup> .....	4
CIS 244 Systems Analysis <sup>*,3,4</sup> .....	4
CS 133G or CS 161 Programming 1 with C++ or Java <sup>*,3,4</sup> .....	4
CS 233G or CS 162 Programming 2 with C++ or Java <sup>*,1,3,4</sup> .....	4
CS 275 Database Program Development <sup>*,1,3,4</sup> .....	4

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of “B” or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of “C-” or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

CS 279W Windows Server Administration *1,3,4.....	4
HO 100 Medical Terminology 3,4 .....	3
Total Credits 107-108	

- \* Prerequisite required
- 1 See science advisor for course selection
- 2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
- 3 Major requirement-see advisor for other choices
- 4 Must be taken for a letter grade and earn a grade of a C or higher

## Health Records Technology

**Offered by Health Professions Division**

**One-Year Certificate of Completion**

**Career Pathway Certificate of Completion, Medical Transcriptionist**

**Career Pathway Certificate of Completion, Medical Coding**

**Note** Health Records Technology is a Lane Community College certificate program which begins fall term. Students have the option of completing the program in one or two years.

See the Health Records Technology web pages for additional information: [lanecc.edu/hp/hrt](http://lanecc.edu/hp/hrt)

**Purpose** To prepare students to produce and maintain health records used in medical offices and associated health care facilities. Graduates may be employed as health information specialists, medical records clerks, and/or medical transcriptionists, by hospitals, clinics, health maintenance organizations, insurance companies, law firms, physician offices, mental health care facilities, nursing homes, consulting firms, health data organizations, and information systems vendors.

**Learning Outcomes** The graduate will:

- process, analyze, and distribute healthcare information.
- organize, analyze, and technically evaluate health record content for completeness and accuracy.
- prepare health data input for computer processing.
- abstract health records and assign code numbers to diagnoses and procedures for indexing health data, and processing claims for insurance reimbursement.
- answer legal, governmental, and insurance company inquiries and compile statistical data.
- consult with medical and administrative staffs to ensure the data is accurate, up-to-date, and secure.
- be involved in administration, reimbursement, quality assurance, utilization review, and risk management.
- use library resources for research and written assignments for a variety of classes.
- perform basic mathematical functions as necessary to prepare health data reports.

**Employment Trends** Employment projections from 2006-2016 are estimated to average 114 openings annually statewide and 16 openings annually in Lane County. Reasonable employment opportunities exist for trained workers.

**Wages** Statewide average wages in 2008 were \$15.74 hourly, or \$32,737 annually, usually with excellent benefits. Lane County average wages were \$14.04 hourly or \$30,905 annually.

**Costs in Addition to Tuition (estimates)\***

Books and supplies .....	\$1500
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\* Students also pay a differential fee for some Health Records Technology courses, which total \$335. These and other course fees may change during the year — see the online credit class schedule for fees assigned to courses.

### Prerequisite Courses Required

HO 100 Medical Terminology <sup>D,G</sup> .....	3 credits
BT 120 MS Word for Business <sup>D,G</sup> .....	3 credits
MTH 025 Basic Mathematics Application or higher <sup>D,G</sup> .....	3 credits

**Admission Information** Application into the Health Records Technology Program is required. Admission and application information is found on the web at: [lanecc.edu/hp/hrt](http://lanecc.edu/hp/hrt)

**Admission Deadline** Application submission begins mid-May. Application submission deadline is mid-July. Applicants are accepted on basis of first applied and qualified, first admitted.

**Number of New Students Admitted Annually** Enrollment is limited to 40 students including Medical Coding and Medical Transcription students.

**Criteria Used for Admission** Submission of transcripts of previous college or high school work, completion of placement tests of basic skills in reading, writing and mathematics, and successful completion of course prerequisites (grade “C” or better).

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Marty Pittman, Health Records Cooperative Education Coordinator, Bldg. 4, Rm. 259, 541.463.3177.

**Program Advisor** 541.463.3200

**Program Counselor** 541.463.3200

### One-Year Certificate of Completion

	Fall
HIT 120 Introduction to Health Records * <sup>D,G</sup> .....	1
HO 110 Administrative Medical Office Procedures * <sup>D,G</sup> .....	3
HO 114 Medical Coding Procedures * <sup>D,G</sup> .....	3
HO 150 Human Body Systems1 * <sup>D,G</sup> .....	3
HO 190 Medical Formatting * <sup>D,G</sup> .....	3
HO 195 Medical Transcription1 * <sup>D,G</sup> .....	2
Directed Elective .....	3
Total Credits	18

	Winter
CG 203 Human Relations at Work <sup>H,D,G</sup> .....	3
CS 120 Concepts of Computing <sup>D,G</sup> .....	4
HIT 196 Medical Transcription 2 * <sup>D,G</sup> .....	2
HO 112 Medical Insurance Procedures * <sup>D,G</sup> .....	3
HO 152 Human Body Systems 2 * <sup>D,G</sup> .....	3
HO 220 Legal and Ethical Aspects of Health Care <sup>D,G</sup> .....	3
Total Credits	18

	Spring
HIT 104 Clinical Terminology * <sup>D,G</sup> .....	3
HIT 154 Intro to Medical Science * <sup>D,G</sup> .....	3
HIT 160 Medical Manager* <sup>1,D,G</sup> .....	3
WR 121 Composition: Introduction to Academic Writing * <sup>D,W</sup> .....	4
Choice of:.....	3
PSY 201 General Psychology	
PSY 202 General Psychology	
PSY 203 General Psychology	
SOC 204 Introduction to Sociology	
SOC 205 Social Stratification and Social Systems	
SOC 206 Institutions and Social Change	
Directed Elective .....	3
Total Credits	19

1 Must be accepted into the program to register for this class.

**Directed Electives**

HIT 197 Medical Transcription Lab	3
HIT 222 Reimbursement Methodologies	3
HIT 280 Cooperative Education <sup>*,1</sup>	3-6

**Medical Coding**

**Career Pathway Certificate of Completion**

Medical Coding continues to grow in importance as coders increasingly influence healthcare’s bottom line.

A coding specialist is an individual who reviews and analyzes health records to identify relevant diagnoses and procedures for distinct patient encounters. The coding specialist is responsible for translating diagnostic and procedural phrases utilized by health care providers into coded form. The translation process requires interaction with the health care provider to ensure that the terms have been translated accurately. The coded information that is a product of the coding process is then utilized for reimbursement purposes, in the assessment of clinical care, to support medical research activity, and to support the identification of health care concerns critical to the public at large.

A coding specialist must have a thorough understanding of the content of the medical record in order to be able to locate information to support or provide specificity for coding. The coding specialist must also be highly trained in anatomy and physiology of the human body and disease processes in order to understand the etiology, pathology, symptoms, signs, diagnostic studies, treatment modalities, and prognosis of diseases and procedures to be coded.

Beginning pay for medical coding specialists will range from \$11 - \$14 per hour.

**Prerequisite Courses Required**

HO 100 Medical Terminology <sup>D,G</sup> .....	3 credits
BT 120 MS Word for Business <sup>D,G</sup> .....	3 credits
MTH 025 Basic Mathematics Application or higher <sup>D,G</sup> .....	3 credits

**Admission Information** Application into the Health Records Technology Program is required. Admission and application information is found on the web at: [lanecc.edu/hp/hrt](http://lanecc.edu/hp/hrt)

**Admission Deadline** Application submission begins mid-May. Application submission deadline is mid-July. Applicants are accepted on basis of first applied and qualified, first admitted.

**Number of New Students Admitted Annually** Enrollment is limited to 40 students including Health Records Technology and Medical Transcription students.

**Criteria Used for Admission** Submission of transcripts of previous college or high school work, completion of placement tests of basic skills in reading, writing and mathematics, and successful completion of course prerequisites (grade “C” or better).

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Marty Pittman, Health Records Cooperative Education Coordinator, Bldg. 4, Rm. 259, 541.463.3177, [pittmanm@lanecc.edu](mailto:pittmanm@lanecc.edu)

**Program Advisor** 541.463.3200

**Program Counselor** 541.463.3200

	<b>Fall</b>	
HIT 104 Clinical Terminology <sup>D,G</sup> .....	3	
HO 220 Legal and Ethical Aspects of Health Care <sup>*,D,G</sup> .....	3	
HO 110 Administrative Medical Office Procedures <sup>D,G</sup> .....	3	
HO 150 Human Body Systems 1 <sup>*,D,G</sup> .....	3	
Total Credits	15	
	<b>Winter</b>	
HO 112 Medical Insurance Procedures <sup>*,D,G</sup> .....	3	
HO 152 Human Body Systems 2 <sup>*,D,G</sup> .....	3	
HO 114 Medical Coding Procedures <sup>D,G</sup> .....	3	
Directed Elective.....	3	
Total Credits	9	
	<b>Spring</b>	
HIT 154 Intro to Medical Science <sup>*,D,G</sup> .....	3	
HIT 222 Reimbursement Methodologies <sup>*,D,G</sup> .....	3	
Choice of:		
HIT 280 Cooperative Education <sup>D,G</sup> .....	3-9	
HO 195 Medical Transcription 1 <sup>*,D,G</sup> .....	2	
Total Credits	8-15	

**Medical Transcription**

**Career Pathway Certificate of Completion**

On a word processor or computer, a medical transcriptionist records medical reports according to established guidelines for format, accuracy, and speed. These reports become an important part of the patient’s medical record and are necessary to ensure high quality health care, for documentation of cases, for research, and other purposes. These may include office chart notes, history and physical examinations, consultations, letters, memos, admission notes, emergency department notes, operative reports, discharge summaries, and

many laboratory tests and diagnostic studies. Medical transcriptionists transcribe reports from a variety of medical specialties. Each day’s work presents a unique challenge and opportunity for continuing medical education.

Medical transcriptionists care about quality patient care and are committed to excellence. Important personal and professional characteristics of the medical transcriptionist include:

- desire a professional career in medicine
- have an interest in medicine
- enjoy learning something new everyday
- have above-average skills in spelling and grammar

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of “B” or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of “C-” or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

- enjoy typing and transcribing
- work independently
- concerned about quality and excellence
- enjoy reading for information and fun

Medical transcriptionists work in a variety of settings, including medical clinics, doctors' offices, hospitals, private transcription businesses and home offices. Some transcriptionists become supervisors, managers, and teachers, while others establish their own transcription companies. There is a shortage of qualified medical transcriptionists, and they are always in great demand. Beginning pay is approximately \$11 to \$12 per hour.

**Costs in Addition to Tuition (estimate)\***

Program Costs ..... \$1,000

\* Subject to change without notice.

**Prerequisite Courses Required**

HO 100 Medical Terminology <sup>D,G</sup>..... 3 credits  
 BT 120 MS Word for Business <sup>D,G</sup>..... 3 credits  
 MTH 025 Basic Mathematics Application or higher <sup>D,G</sup>..... 3 credits

**Admission Information** Application into the Health Records Technology Program is required. Admission and Application information is found on the web at: [lanec.edu/hp/hrt](http://lanec.edu/hp/hrt)

**Admission Deadline** Application submission begins mid-May. Application submission deadline is mid-July. Applicants are accepted on basis of first applied and qualified, first admitted.

**Number of New Students Admitted Annually** Enrollment is limited to 40 students including Health Records Technology and Medical Transcriptionist students. Applicants are accepted on basis of first applied and qualified, first admitted.

**Criteria Used for Admission** Submission of transcripts of previous college or high school work, completion of placement tests of basic skills in reading, writing and mathematics, and successful completion of prerequisites (grade "C" or better).

**Program Advisor** 541.463.3200

**Program Counselor** 541.463.3200

	<b>Fall</b>	
HIT 120 Introduction to Health Records <sup>D,G</sup> .....	1	
HO 220 Legal and Ethical Aspects of Health Care <sup>*,D,G</sup> .....	3	
HO 150 Human Body Systems 1 <sup>*,D,G</sup> .....	3	
HO 190 Medical Formatting <sup>D,G</sup> .....	3	
HO 195 Medical Transcription 1 <sup>*,D,G</sup> .....	2	
Total Credits	12	

	<b>Winter</b>	
HIT 196 Medical Transcription 2 <sup>*,D,G</sup> .....	2	
HO 110 Administrative Medical Office Procedures <sup>D,G</sup> .....	3	
HO 114 Medical Coding <sup>D,G</sup> .....	3	
HO 152 Human Body Systems 2 <sup>*,D,G</sup> .....	3	
Directed Elective .....	3	
Total Credits	14	

	<b>Spring</b>	
HIT 104 Clinical Terminology <sup>D,G</sup> .....	3	
HIT 154 Intro to Medical Science <sup>*,D,G</sup> .....	3	
HIT 197 Medical Transcription Laboratory <sup>*,1,D,G</sup> .....	3	
HO 112 Medical Insurance Procedures <sup>*,D,G</sup> .....	3	
Total Credits	12	

1 The Advisory Committee for this Career Pathway Certificate strongly recommends at least 6 credit hours of transcription laboratory (advanced transcription practice). Call the course advisor to discuss this in more detail at 541.463.5621 or 541.463.5617.

## Hospitality Management

**Offered by Culinary Arts and Hospitality Management**

**Two-Year Associate of Applied Science Degree**

**One-Year Certificate of Completion, Food Service Management**

**Career Pathway Certificate of Completion, Restaurant Ownership**

**Purpose** The hospitality industry offers exciting, varied careers in several areas, such as hotel management, meeting and special event management, restaurant management and ownership, and travel and tourism-related businesses. Upon completing this degree program in Hospitality Management, students will have various opportunities for challenging and rewarding careers that can take them around the world if they so choose!

**Learning Outcomes** The Hospitality Management Program graduate will:

- explore careers in the hospitality industry.
- demonstrate job search and interviewing skills.
- develop employability skills required for the hospitality management industry.
- demonstrate technological literacy to support the hospitality management industry.
- apply problem solving and decision making processes to hospitality management situations.
- practice effective communication skills for the hospitality management workplace.
- practice customer service skills required in hospitality management.
- review financial records and accounts applicable to hospitality management operations.
- explore the legal and ethical environment of the hospitality management industry.
- understand economic principles of the hospitality management industry.
- understand safe working habits for the hospitality management industry.
- participate in hospitality management work-based learning experiences.
- demonstrate oral communication skills required in hospitality management.
- understand and demonstrate business and financial management.
- evaluate leadership styles appropriate for the hospitality workplace.
- explain basic hotel departments and functions.
- determine appropriate guest service strategies within the hospitality industry.
- characterize supervisory and management functions.
- summarize management practices for the food industry.
- understand appropriate environmental function and sustainable standard operating procedures.
- understand marketing skills needed in the hospitality industry.

**Employment Trends** Statewide projections report that there will be an 18% increase in Hospitality industry job openings through 2016. In Lane County, there will be a 20% increase. Currently, 229 annual openings for Hotel, Motel, and Resort Desk Clerks are projected in Oregon, and 15 openings are projected annually in Lane County; statewide, 35 annual openings for Tour Guides and Escorts are projected in Oregon, and 4 openings are projected annually in Lane County;



statewide, 28 annual openings for Lodging Managers are projected in Oregon, and 1 opening is projected annually in Lane County; statewide, 19 annual openings for Meeting and Convention Planners are projected in Oregon, and 2 openings are projected annually in Lane County.

**Wages** Wages for Hotel, Motel, and Resort Desk Clerks range from \$9.67 an hour in Lane County to \$10.39 an hour statewide, with an average annual salary of \$21,608; Tour Guides and Escorts range from \$10.64 an hour in Lane County to \$14.00 an hour statewide, with an average annual salary of \$29,119; Lodging Managers range from \$25.18 an hour in Lane County with an average annual salary of \$53,372, and statewide \$24.65 an hour with an average salary of \$51,272; and Meeting and Convention Planners range from \$16.82 an hour in Lane County to \$19.59 an hour statewide with an average annual salary of \$40,756.

**Costs in Addition to Tuition (2-year program estimate)\***

The current cost of tuition is \$83 per credit. The breakdown of the estimate is as follows:

Minimum Credits 95 x \$83 = \$7,885  
Books, class fees, college fees, etc. \$1,735

**Total Estimate \$9,620**

Maximum Credits 110 x \$83 = \$9,130  
Books, class fees, college fees, etc. \$1,735

**Total Estimate \$10,865**

\* Subject to change without notice.

**Accreditation** The two-year degree program is accredited by the Accreditation Commission for Programs in Hospitality Administration (ACPHA). Students graduating from the program will receive national certification status as a Certified Hospitality Graduate.

**Licensing or Other Certification Exams Required** Students completing certain classes that comply with the American Hotel and Lodging Association (AHLA) or National Restaurant Association Education Foundation (NRAEF) will receive Certificates of Completion from these recognized organizations.

**Prerequisites** Must be a credit-level student. Students are strongly advised to enter fall term.

**Admission Deadline** Student applications are reviewed monthly. Steps to be completed for entry into the Hospitality Management program include the following:

- Complete an admission form ([https://exp.lanecc.edu/pls/lane/bwskalog.P\\_DisplLoginNon](https://exp.lanecc.edu/pls/lane/bwskalog.P_DisplLoginNon)) and receive your "L" number. Contact Enrollment and Student Financial Services at 541.463.3100 for admission information.
- Complete college placement tests with the following minimum scores: writing-64, reading-68 and readiness for MTH 025 – taking Math Placement Test Parts A, B and C – 7 out of 10 in each part, and attach copies of test score sheets to application. Students with prior college credit may attach a copy of transcript(s). Math must be current within one year or a placement test will need to be taken.

- Complete an application for admission to the Hospitality Management program. Including questionnaire, available from the Culinary and Hospitality office or online at [lanecc.edu/culinary](http://lanecc.edu/culinary).
- Submit Hospitality Management program application to the Culinary Arts and Hospitality Management office.

**Criteria Used for Admission** Students are selected based on application to the program.

**Cooperative Education (Co-op)** Students may earn credit for on-the-job work experience related to their educational and career goals. Through Co-op, a student can develop and practice skills, expand career knowledge, and make contacts for future employment. For more information, contact Joe McCully, Hospitality Cooperative Education Coordinator, Bldg. 19, Rm. 210, 541.463.3516.

**Program Advisor** Lisa Stegall, 541.463.5378

**Program Counselor** Carolyn Litty, 541.463.5236

**Program Contact** Julie Fether, 541.463.3518

**Note** All HRTM and CA numbered courses required for this program must be taken for a grade, not pass/no pass, and must be passed with a grade of "C" or better.

**Two-Year Associate of Applied Science Degree**

First Year	Fall
CG 203 Human Relations at Work <sup>H</sup> .....	3
HRTM 105 Restaurant Operations <sup>D,G</sup> .....	3
HRTM 106 Introduction to Hospitality Management <sup>D,G</sup> ....	3
HRTM 225 Hospitality Management Lab <sup>D,G</sup> .....	2
*Program Elective <sup>D,G</sup> .....	2-3
MTH 025 Basic Math Applications <sup>*,D,M</sup> .....	3
<b>Total Credits</b>	<b>16-17</b>

	Winter
CS 120 Concepts of Computing: Information Processing <sup>S</sup>	4
HRTM 110 Hospitality Sales and Marketing <sup>D,G</sup> .....	3
HRTM 120 Communications and Guest Relations <sup>D,G</sup> .....	3
HRTM 225 Hospitality Management Lab <sup>D,G</sup> .....	2
MTH 052 Math for Introductory Physical Science <sup>*,S</sup> .....	4
<b>Total Credits</b>	<b>16</b>

	Spring
CA 159 Kitchen Operations <sup>D,G</sup> .....	2
HRTM 130 Hospitality Information Systems <sup>D,G</sup> .....	3
HRTM 140 Security in the Hospitality Industry <sup>D,G</sup> .....	3
HRTM 225 Hospitality Management Lab <sup>D,G</sup> .....	2
BT 165 Introduction to Accounting Cycle .....	4
WR 115W Introduction to College Writing: Workplace Emphasis <sup>*,D,W</sup> .....	3
<b>Total Credits</b>	<b>17</b>

	Summer
HRTM 280 Co-op Ed: Hospitality Management <sup>D,G</sup> .....	7
<b>Total Credits</b>	<b>7</b>

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

**Second Year**

HRTM 230 Hotel Operations 1 <sup>D,G</sup> .....	3
HRTM 260 Supervision in the Hospitality Industry, <sup>D,G</sup> .....	3
HRTM 265 Hospitality Financials 1 <sup>D,G</sup> .....	3
HRTM 279 Buffet and Banquet Planning <sup>D,G</sup> .....	2
*Program Elective <sup>D,G</sup> .....	2-3

Total Credits 13-14

**Winter**

HRTM 231 Hotel Operations 2 <sup>*,D,G</sup> .....	3
HRTM 275 Hospitality Financials 2 <sup>*,D,G</sup> .....	3
HRTM 279 Buffet and Banquet Planning, <sup>D,G</sup> .....	2
*Program Elective <sup>D,G</sup> .....	2-3
Arts and Letters requirement <sup>R</sup> .....	3

Total Credits 13-14

**Spring**

HE 252 First Aid <sup>D,P</sup> .....	3
HRTM 279 Buffet and Banquet Planning <sup>D,G</sup> .....	2
HRTM 290 Hospitality Leadership <sup>*,D,G</sup> .....	4
*Program Elective <sup>D,G</sup> .....	3

Total Credits 12

**Program Electives**

CA 175 Food Safety and Sanitation <sup>D,G</sup> .....	2
Strongly recommended: National ServSafe Certification	
HRTM 104 Introduction to Travel and Tourism <sup>D,G</sup> .....	3
HRTM 109 Principles of Meeting and Convention Management <sup>D,G</sup> .....	3
HRTM 150 At Your Service .....	2
HRTM 281 Restaurant Ownership <sup>D,G</sup> .....	3
HRTM 286 Fundamentals of Wine, Beer and Spirits <sup>D,G</sup> ...	3
CA 110 Guest Chef Series <sup>D,G</sup> .....	2
CA 130 Oregon Wine Country <sup>D,G</sup> .....	2
CA 200 Restaurant and Menu Management <sup>D,G</sup> .....	3
GEOG 201 World Regional Geography .....	3
BT 108 Business Proofreading and Editing .....	4
BA 101 Introduction to Business .....	4
BA 223 Marketing .....	4
BA 224 Human Resource Management.....	4
BA 278 Leadership and Team Dynamics.....	4
BT 120 MS Word for Business .....	3
BT 122 MS PowerPoint for Business .....	3
BT 123 MS Excel for Business.....	3
BT 163 QuickBooks .....	4
ES 102 Contemporary Racial and Ethnic Issues .....	4
LIB 127 Library and Information Research .....	3
PHL 201 Ethics.....	4
SP 115 Introduction to Intercultural Communications .....	4
SP 130 Business and Professional Speech.....	4
SUST 101 Introduction to Sustainability.....	3
WR 121 Composition: Introduction to Academic Writing.....	4

\* Program electives can be met at any time/term of the 2 year Program

**Food Service Management**

**One-Year Certificate of Completion**

The Hospitality Management Program offers a one-year Certificate of Completion intended for students that want to learn how to excel in restaurant management. In addition to the one year Certificate of Completion from Lane, you can also earn 12 certificates and a credential from the National Restaurant Association Education Foundation. All of the classes offered in this Certificate Program apply directly to the Hospitality Management Associate of Applied Science degree. Students follow admissions guidelines similar to the two-year degree program. College placement tests scores are required

with the following minimum scores: writing-64, reading-68 and readiness for MTH 025 - taking Math Placement Test Parts A, B and C - 7 out of 10 in each part, and attach copies of test score sheets to program application. Students with prior college credit may submit a copy of transcript(s). Math must be current within one year or a placement test will need to be taken.

Choice of:.....	<b>Fall</b>
HRTM 105 Restaurant Operations <sup>D,G</sup> .....	3
HRTM 106 Introduction to Hospitality Management <sup>D,G</sup>	
CA 175 Foodservice Safety and Sanitation <sup>D,G</sup> .....	2
MTH 025 Basic Math Applications <sup>*,D,M</sup> .....	3
HRTM 265 Hospitality Financials 1 <sup>D,G</sup> .....	3
HRTM 260 Supervision in the Hospitality Industry <sup>D,G</sup> .....	3
CG 203 Human Relations at Work <sup>H</sup> .....	3
Total Credits	17

**Winter**

HRTM 120 Communications and Guest Relations <sup>D,G</sup> .....	3
HRTM 275 Hospitality Financials 2 <sup>*,D,G</sup> .....	3
FN 105 Nutrition for Foodservice Professionals <sup>D,G</sup> .....	3
WR 115W Introduction to College Writing <sup>*,D,W</sup> .....	3
HRTM 110 Hospitality Sales and Marketing <sup>D,G</sup> .....	3
HRTM 280 Co-op Ed: Hospitality Management <sup>D,G</sup> or HRTM 225 Hospitality Management Lab <sup>D,G</sup> .....	2-3
Total Credits	17-18

**Spring**

CA 159 Kitchen Operations <sup>D,G</sup> .....	2
CA 200 Restaurant and Menu Management <sup>D,G</sup> .....	3
HRTM 286 Fundamentals of Wine, Beer and Spirits <sup>D,G</sup> ...	3
HRTM 130 Hospitality Information Systems <sup>D,G</sup> .....	3
HRTM 290 Hospitality Leadership <sup>*,D,G</sup> .....	4
Total Credits	15

**Restaurant Ownership**

**Career Pathway Certificate of Completion**

The Career Pathways Certificate Program in Restaurant Ownership is for students who want to learn how to successfully own a restaurant. All of the classes offered in this Certificate Program apply directly to an Associate of Applied Science degree in Hospitality Management. This program offers open enrollment, and there is no application process for admissions. A Student Information sheet is required for admission. College placement tests scores are required with the following minimum scores: writing-64, reading-68 and readiness for MTH 025 - taking Math Placement Test Parts A, B and C - 7 out of 10 in each part, and attach copies of test score sheets to program application. Students with prior college credit may submit a copy of transcript(s). Math must be current within one year or a placement test will need to be taken.

CA 175 Foodservice Safety and Sanitation <sup>D,G</sup> .....	<b>Fall</b>
MTH 025 Basic Math Applications <sup>*,D,M</sup> .....	2
HRTM 265 Hospitality Financials 1 <sup>D,G</sup> .....	3
HRTM 260 Supervision in the Hospitality Industry <sup>D,G</sup> .....	3
Total Credits	11

	<b>Winter</b>
HRTM 275 Hospitality Financials 2 <sup>D,G</sup> .....	3
HRTM 120 Communications and Guest Relations <sup>D,G</sup> .....	3
Program Elective <sup>D,G</sup> .....	2-3
Total Credits	8-9

	<b>Spring</b>
CA 159 Kitchen Operations <sup>D,G</sup> .....	2
CA 200 Restaurant and Menu Management <sup>D,G</sup> .....	3
HRTM 281 Restaurant Ownership <sup>D,G</sup> .....	3
HRTM 286 Fundamentals of Wine, Spirits and Beer <sup>D,G</sup> .....	3
HRTM 130 Hospitality Information Systems <sup>D,G</sup> .....	3
Total Credits	14

Check current class schedule for terms offered or go to: [lanec.edu/culinary/career\\_pathways](http://lanec.edu/culinary/career_pathways).

Students may take Cooperative Education in any term approved by the coordinator.

Cooperative Education HRTM 280 can be substituted for one term of HRTM 225 Hospitality Management Lab.

Students interested in transferring to a four-year institution should:

1. Complete WR 122 and WR 123 to fulfill the Arts and Letters requirements for the AAS.
2. Add MTH 111 and MTH 112 courses

## Human Services

**Offered by the Social Science Department**

**Two-Year Associate of Applied Science Degree**

**Career Pathway Certificate of Completion, Adult Development and Aging**

**Purpose** Human service workers are trained to provide a wide range of emotional and practical support services aimed at addressing the needs of people facing a variety of challenges in their lives. Human service workers are employed in diverse settings, serving children, adolescents, families, and adults. For example, human service workers can be found staffing crisis lines; supervising young juvenile offenders; working with the elderly to help them maintain their independence; arranging for services for homeless families; coordinating recreational services for people with disabilities; providing parent education; counseling and case managing individuals experiencing addiction; and advocating for victims of domestic or sexual violence. Coursework includes classes that meet basic requirements for Oregon state certification for chemical dependency counselors. Lane Community College's Human Services Program prepares students for entry-level employment in public and private non-profit agencies. Some Human Services Careers may require a Criminal Background check.

**Learning Outcomes** The graduate will:

- be able to communicate effectively with others.
- develop the competency required to work people from diverse backgrounds.
- assess an individual or a family's needs.
- develop a plan of action using client's strengths, and link people with community resources.
- use appropriate library and information resources to research professional issues and support lifelong learning.

- formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.
- understand and apply evidence-based practices.

**Employment Trends** National and state employment opportunities are excellent. The 2004-2014 growth rate for this occupation is projected to be faster than average. Total job openings are projected to be much higher than average (Oregon Employment Division; U.S. Department of Labor).

**Wages** In Lane County, wages range from \$9 to \$20 an hour with an average annual salary of \$28,382 (Oregon Employment Division). For more information, go to: [qualityinfo.org/olmsi/OIC?areacode=4101000000&rpttype=full&action=report&occ=211093&go=Continue](http://qualityinfo.org/olmsi/OIC?areacode=4101000000&rpttype=full&action=report&occ=211093&go=Continue)

**Costs in Addition to Tuition (estimate)\***

Books ..... \$2,500

\* Subject to change without notice.

**Admission Information** Social Science Division 541.463.5427.

**Cooperative Education (Co-op)** Co-op is a significant field placement component that provides opportunities for students to explore their career options while gaining practical experience in the field. Contact Garry Oldham, Human Services Co-op Ed Coordinator, 541.463.5194, [oldhamg@lanec.edu](mailto:oldhamg@lanec.edu)

**Program Advisor** Cindy Lott 541.463.5232, [lottc@lanec.edu](mailto:lottc@lanec.edu)

**Program Counselor** Anthony Hampton 541.463.5275, [hamptona@lanec.edu](mailto:hamptona@lanec.edu)

	<b>First Year</b>	<b>Fall</b>
HS 201 Introduction to Human Services <sup>D,G</sup> .....		3
HS 226 Ethics and Law <sup>D,G</sup> .....		3
HS150 Personal Effectiveness for Human Service Workers <sup>D,G</sup> .....		3
CG 280HS Co-op Ed: Human Service <sup>2,D,G</sup> .....		3
WR 121 Composition: Introduction to Academic Writing <sup>G,W</sup> .....		4
Total Credits		16

	<b>Winter</b>
HS 155 Interviewing Theory and Techniques <sup>*,D,G</sup> .....	3
Math requirement <sup>R</sup> .....	3
CG 280HS Co-op Ed: Human Service <sup>2,D,G</sup> .....	3
Choice of.....	4
WR 122 English Composition: Argument, Style and Research <sup>A,G</sup>	
WR 123 Composition: Research <sup>A,G</sup>	
Choice of: .....	4
SP 100 Basic Communication	
SP 111 Fundamentals of Public Speaking	
SP 112 Persuasive Speech	
SP 130 Business and Professional Speech	
SP 218 Interpersonal Communication	
Total Credits	17

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

	<b>Spring</b>
ANTH 103 Cultural Anthropology <sup>G,H</sup> .....	4
CG 280HS Co-op Ed: Human Service <sup>2,D,G</sup> .....	3
HS 231 Advanced Interviewing and Counseling <sup>5,D,G</sup> .....	3
HS 265 Casework Interviewing <sup>*,D,G</sup> .....	3
Program Elective <sup>4,D,G</sup> .....	4
Total Credits	17

	<b>Fall</b>
CG 280HS Co-op Ed: Human Service <sup>2,D,G</sup> .....	3
HS102 Psychopharmacology <sup>D,G</sup> .....	4
HS 266 Case Management in Human Services <sup>*</sup> .....	3
Program Elective <sup>4,D,G</sup> .....	4
PSY 201 General Psychology .....	3
Total Credits	17

	<b>Winter</b>
HS 267 Cultural Competence in Human Services <sup>3,D,G</sup> .....	3
Program Elective <sup>4,D,G</sup> .....	2-4
PSY 202 General Psychology.....	3
CG 280HS Co-op Ed: Human Service <sup>2,3,D,G</sup> .....	3
Science/Math/Computer Science requirement <sup>G,R</sup> .....	3
Total Credits	14-16

	<b>Spring</b>
CG 280HS Co-op Ed: Human Service <sup>2,D,G</sup> .....	3
Choice of: <sup>R</sup> .....	3
HE209 Human Sexuality	
HE250 Personal Health	
HE252 First Aid	
HE255 Global Health	
HE275 Lifetime Health and Fitness	
HS 224 Group Counseling <sup>5,D,G</sup> .....	3
HS 232 Cognitive Behavioral Interventions <sup>5,D,G</sup> .....	3
PSY 203 General Psychology.....	3
Total Credits	15

- 2 Cooperative Education is a variable credit course (3-12 credits). Cooperative Education is not required every term, but a total of 18 credits must be completed.
- 4 Program electives – Students are required to take 9 credit hours in electives. Possible choices include:
- HS 107 Aging: A Social and Developmental Perspective
  - HS 205 Youth Addiction
  - HS 206 Counseling the Criminal Addict
  - HS 209 Crisis Intervention and Prevention
  - HS 211 Family Interventions: Children
  - HS 212 Family Interventions: Adolescents
  - HS 213 Family Interventions: Adults
  - HS 235 The Aging Mind
  - CG 280HS Co-op Ed: Human Service
- 5 Must have taken HS 155 Interviewing Theory and Techniques prior to enrollment.

## Adult Development and Aging

### Career Pathway Certificate of Completion

**Purpose** This program prepares students to assist mature and elderly adults in a variety of settings.

**Learning Outcomes** The graduate will:

- be able to communicate effectively with others.
- develop the competency required to work with people from diverse backgrounds.
- assess an individual or a family's needs.
- describe the aging process and the impact of aging on an individual's intellectual, social, cultural and spiritual life.
- explain the diversity of experiences, and challenges, found amongst the aging population.
- demonstrate skills for effectively interacting with mature and elderly adults.

**Employment Trends** The U.S. Bureau of Labor Statistics projects a 35 percent increase in gerontology-related jobs by 2014. Historically, these careers have been primarily in healthcare settings. While demand for people to work in health care continues to remain high, opportunities to assist individuals and their families access social services to maintain their health and independence is expected to grow substantially. Additionally, as the general population ages, the nation's workforce will benefit from knowledge about aging and how to meet the needs of this diverse population of older Americans.

**Wages** In Lane County, wages range from \$9 to \$20 an hour with an average annual salary of \$28,382 (Oregon Employment Division)

### Costs in Addition to Tuition (estimate)\*

Books..... \$400

\* Subject to change without notice.

**Admission Information** Social Science Division, 541.463.5427

**Cooperative Education (Co-op)** Co-op is a significant field placement component that provides opportunities for students to explore their career options while gaining practical experience in the field. Contact Garry Oldham, Human Services Co-op Coordinator, 541.463.5194, [oldhamg@lanecc.edu](mailto:oldhamg@lanecc.edu)

**Program Advisor** Cindy Lott 541.463.5232, [lottc@lanecc.edu](mailto:lottc@lanecc.edu)

**Program Counselor** Anthony Hampton 541.463.5275, [hamptona@lanecc.edu](mailto:hamptona@lanecc.edu)

Required Courses	Credits
HS 107 Aging: A Social and Developmental Perspective <sup>D,G</sup> .....	3
HS 229 Grief and Loss Across the Lifespan <sup>D,G</sup> .....	3
HS 235 The Aging Mind <sup>D,G</sup> .....	3
CG 280HS Co-op Ed: Human Service <sup>2,D,G</sup> .....	3
(with a focus on aging)	
Total Credits	12

## Human Services: Criminal Justice

**Offered by the Social Science Department**

**Two-Year Associate of Applied Science Degree**

**Purpose** To offer men and women preparation for career employment in police, adult and juvenile corrections, security management, and other public service careers. Transferable to four-year colleges and universities, the program is also job entry oriented, depending on the student needs. Public Safety Careers require criminal and personal background checks.

**Learning Outcomes** The graduate will:

- express a thorough knowledge of the criminal justice system.
- apply sociological theory to better understand criminal behavior.
- describe the dynamics of interviews and interrogations in investigations.
- explain the nature of public safety career paths and their own qualifications for various careers in criminal justice.
- understand the importance of inter-disciplines and the need for a well-rounded education in public safety.
- qualify for education requirements for entry-level public safety careers.
- use appropriate library and information resources to research professional issues and support lifelong learning.



- formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.

**Employment Trends** The market demand remains high in public safety careers in spite of the revenue problems facing most areas. A significant factor in the demand remaining high is the rate of retirement or resignation of public safety personnel. Approximately 40 percent or more of the people currently working in public safety will retire over the next five years. Employment opportunities vary in the state of Oregon. Therefore, students should also consider employment opportunities throughout the region of the western United States for potential public safety employment.

**Wages** Entry-level \$14-28 hourly

**Costs in Addition to Tuition** (estimate)\*

Books ..... \$3,000  
 \* Subject to change without notice.

**Admission Information** Social Science Division, John delNero, Program Coordinator, 541.463.5286, [delneroj@lanec.edu](mailto:delneroj@lanec.edu)

**Cooperative Education (Co-op)** Co-op provides opportunities for field placements with various local public safety agencies including local police, sheriffs, corrections, court services, and commercial security organizations. Students may participate on a full or part-time basis. Contact John del Nero, Criminal Justice Co-op Coordinator, 541.463.5286.

**Program Advisor** Cindy Lott 541.463.5232, [lottc@lanec.edu](mailto:lottc@lanec.edu)

**Program Counselor** Anthony Hampton 541.463.5275, [hamptona@lanec.edu](mailto:hamptona@lanec.edu)

<b>First Year</b>		<b>Fall</b>
CJA 100 Introduction to Criminal Justice 1 <sup>D,G</sup> .....		3
Directed elective <sup>2,3</sup> .....		3
SOC 204 Introduction to Sociology <sup>G,H</sup> .....		3
SP 105 Listening and Critical Thinking <sup>A</sup> .....		4
WR 121 Composition: Introduction to Academic Writing <sup>*,G,W</sup> .....		4
<b>Total Credits</b>		<b>17</b>

<b>Winter</b>		
Arts and Letters elective <sup>1</sup> .....	3	
CJA 110 Introduction to Criminal Justice <sup>2,D,G</sup> .....	3	
SOC 205 Social Stratification and Systems <sup>G,H</sup> .....	3	
SP 100 Basic Communication <sup>A</sup> .....	4	
Choice of:.....	4	
WR 122 English Composition: Argument, Style and Research <sup>A,G</sup>		
WR 123 Composition: Research <sup>A,G</sup>		
<b>Total Credits</b>		<b>17</b>

<b>Spring</b>	
CJA 101 Introduction to Criminology <sup>D,G</sup> .....	3
SOC 206 Institutions and Social Change <sup>G,H</sup> .....	3
Choice of:.....	4
CS 120 Concepts of Computing: Information Process <sup>S</sup>	
CIS 131 Introduction to Computers: Information Process	

Choice of:.....	3	
HE 250 Personal Health <sup>P</sup>		
HE 252 First Aid <sup>P</sup>		
HE 275 Lifetime Health and Fitness <sup>P</sup>		
<b>Total Credits</b>		<b>13</b>

<b>Second Year</b>		<b>Fall</b>
Biological or Physical Science requirement <sup>1,4,S</sup> .....		
CJA 213 Interviewing and Interrogation <sup>D,G</sup> .....		3
CJA 220 Introduction to Criminal Law <sup>D,G</sup> .....		3
PS 201 American Government and Politics.....		3
Choice of:.....		4
PHL 201 Introduction to Philosophy: Ethics <sup>H</sup>		
PHL 205 Contemporary Moral Issues <sup>H</sup>		
ANTH 103 Cultural Anthropology <sup>H</sup>		

<b>Total Credits</b>		<b>16-17</b>
<b>Winter</b>		
Biological or Physical Science elective <sup>1,3</sup> .....		
CJA 222 Criminal Law: Procedural Issues <sup>D,G</sup> .....		3
CJA 280 Co-op Ed: Criminal Justice <sup>*,D,G</sup> .....		3
Directed Criminal Justice elective <sup>2,3</sup> .....		3
PS 202 American Government and Politics.....		3
<b>Total Credits</b>		<b>15-16</b>

<b>Spring</b>		
MTH 095 Intermediate Algebra or higher <sup>M</sup> .....	5	
CJA 280 Co-op Ed: Criminal Justice <sup>D,G</sup> .....	3	
PS 203 American Government .....	3	
PSY 203 General Psychology <sup>G</sup> .....	3	
Arts and Letters elective <sup>1</sup> .....	3	
<b>Total Credits</b>		<b>17</b>

- 1 Courses that satisfy transfer general education requirements are recommended: BI, BOT, Z, CH, G, GS, PH
- 2 Directed electives (choose 6 credits total)
  - CJA 232 Correctional Casework <sup>D,G</sup> ..... 3 credits
  - CJA 210 Criminal Investigation 1 <sup>D,G</sup>..... 3 credits
  - CJA 214 Introduction to Forensic Science <sup>D,G,S</sup>..... 4 credits
  - CJA 243 Narcotics and Dangerous Drugs <sup>D,G</sup> ..... 3 credits
  - SOC 211 Social Deviance <sup>D,G</sup> ..... 3 credits
  - CJA 201 Juvenile Delinquency <sup>D,G</sup> ..... 3 credits
- 3 CJA 214 Introduction to Forensic Science can be used to meet Directed Elective or Biological/Physical Science Elective.
- 4 CH 114 Forensic Chemistry can satisfy the Biological or Physical Science requirement

## Human Services: Juvenile Corrections

**Offered by the Social Science Department**

**One-Year Certificate of Completion**

**Purpose** To train individuals to work directly with juvenile offenders in various settings, including Oregon Youth Authority, as well as other public, private, and non-profit agencies/programs. Some agencies/programs require criminal and personal background checks.

**Learning Outcomes** The graduate will:

- provide supervision for juvenile offenders.
- facilitate in the treatment process and crisis intervention.
- provide social and life skills training.

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

- maintain records and documentation.
- engage in support services.
- monitor and ensure a secure environment.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.

**Employment Trends** There had been a decline in juvenile crime during the late 1990's, but that trend tends to be shifting. The resurgence of youth gangs since the year 2000 has reflected an increase in gang homicides and other criminal activity. Nearly all juvenile correction facilities are filled to capacity necessitating more correctional facilities and the demand for more juvenile corrections personnel. This certificate meets the minimum level pre-employment requirement for the Oregon Youth Authority (OYA).

**Wages** Beginning wage for an OYA Group Life Coordinator II is approximately \$2,464-\$3,400 monthly, but salary and benefit packages vary greatly depending up the employing agency and geographical location.

**Costs in Addition to Tuition** (estimate)\*  
 Books ..... \$1,600  
 \* Subject to change without notice.

**Admission Information** Social Science Division, John delNero, Program Coordinator, 541.463.5286, [delneroj@lanecc.edu](mailto:delneroj@lanecc.edu)

**Cooperative Education (Co-op)** Co-op provides opportunities for students to work in regional organizations to develop and expand skills, explore career options, and make contacts for future employment. Students connect theory and practice while earning transferable elective college credit. Contact John del Nero, Juvenile Corrections Co-op Coordinator, 541.463.5286.

**Program Advisor** Cindy Lott 541.463.5232, [lottc@lanecc.edu](mailto:lottc@lanecc.edu)

**Program Counselor** Anthony Hampton 541.463.5275, [hamptona@lanecc.edu](mailto:hamptona@lanecc.edu)

	Fall
CJA 101 Introduction to Criminology <sup>D,G</sup> .....	3
HS 206 Counseling the Criminal Addict <sup>D,G</sup> .....	3
MTH 060 Beginning Algebra <sup>*,1,M</sup> .....	4
PSY 201 General Psychology <sup>D,G</sup> .....	3
SOC 225 Social Problems <sup>D,G,H</sup> .....	3
Total Credits	16

	Winter
CJA 201 Juvenile Delinquency <sup>D,G</sup> .....	3
CS 120 Concepts of Computing: Information Processing..	4
HS 205 Youth Addiction <sup>D,G</sup> .....	3
PSY 202 General Psychology <sup>D,G</sup> .....	3
PSY 235 Human Development <sup>*,1,D,G</sup> .....	3
PSY 239 Introduction to Abnormal Psychology <sup>*,D, G</sup> .....	3
Total Credits	19

	Spring
CJA 232 Correctional Casework <sup>D,G</sup> .....	3
CJA 280 Co-op Ed: Juvenile Corrections <sup>D,G</sup> .....	3
HS 209 Crisis Intervention and Prevention <sup>D,G</sup> .....	3
PSY 203 General Psychology <sup>D,G</sup> .....	3

WR 121 Composition: Introduction to Academic Writing <sup>*,W</sup> .....	4
Total Credits	16
1 Recommend MTH 095 or higher if going on to complete 2-year Criminal Justice program	

## Industrial Mechanics and Maintenance Technology Apprenticeship

**Offered by the Apprenticeship Program**

**Associate of Applied Science Degree**

**Certificate of Completion**

**Purpose** To provide a structured system of training leading to certification in the millwright trade. Only apprentices registered with the State of Oregon Bureau of Labor and Industries may enroll in Industrial Mechanics and Maintenance Technology Apprenticeship courses. Individual employers sponsor students while they learn technical and theoretical aspects of the millwright trade. By working cooperatively with the employer to complete all related training classes and following the joint apprenticeship and training committee rules and policies, a student may achieve journey-level status.

**Learning Outcomes** The graduate will:

- perform the duties and responsibilities of the millwright trade
- develop machine shop skills in troubleshooting
- demonstrate and use industry safety standards
- identify mechanical and/or electrical industrial systems
- develop attitudes conducive to improved customer relations skills in the millwright trade
- develop communication and critical thinking skills necessary for job advancement
- use appropriate library and information resources to research professional issues and support lifelong learning
- access library, computing, and communications services, and appropriately select information and data from regional, national, and international networks
- apply appropriate formulas to mathematical situations
- adapt to new job requirements to qualify for advancement in becoming lead supervisors.
- complete 8000 hours State of Oregon-approved on-the-job-training.

**Employment Trends** Employment of millwrights is projected to grow 6 percent during the 2006-16 decade, slower than the average for all occupations. Opportunities for well-qualified applicants should be excellent, however, as many experienced millwrights retire. To remain competitive in coming years, firms will continue to need millwrights to dismantle old equipment and install new high-technology machinery. Warehouse and distribution companies also are deploying highly automated conveyor systems, which are assembled and maintained by millwrights. In addition, growth in both power generation, including wind power and turbines for natural gas and coal plants, and oil and gas extraction and refining will help drive employment growth. The large number of expected retirements and the difficulty of recruiting new workers will create excellent job opportunities for well-qualified applicants. Job prospects should be especially good for those who have experience in machining, welding, or doing mechanical work. Employment

prospects for millwrights are better than for some other manufacturing workers because they work across a wide range of industries, including power generation, paper mills, mining, and motor vehicle parts manufacturing. When a downturn occurs in one industry, millwrights can more easily switch to another industry. There will always be a need to maintain and repair existing machinery, dismantle old machinery, and install new equipment.

**Wages** Journey-level millwright wages regionally are \$20.30/hr. Although wages vary, the average starting wage of an apprentice is about 50 percent of a journey worker’s rate of pay. Apprentices usually earn a five-percent raise every six months if training and school performance is satisfactory. Check the Bureau of Labor and Industries website: [boli.state.or.us](http://boli.state.or.us)

**Costs in Addition to Tuition** (estimate)\*Estimated costs of books and tools for the required general education courses total approximately \$850-1,000 over a four-year period. Costs of books and tools for the related training classes in the millwright program vary.

**Program Certification** An apprenticeship “Award of Completion” issued by the Oregon Bureau of Labor and Industries Apprenticeship and Training Division certifies that an individual has been trained in all aspects of an occupation and has met the requirements for program completion. This certificate is recognized throughout Oregon and industry-wide as a valid indicator of high quality, standardized training, and it provides on-the-job training documentation for community college credit.

The Oregon community college Industrial Mechanics and Maintenance Technology Apprenticeship pathway provides statewide transfer opportunities, laddered certificates of completion, and an optional transfer path into Oregon Institute of Technology Bachelor of Science in Operations Management degree. The Industrial Mechanics and Maintenance Technology Apprenticeship pathway includes an advising guide with a set of recommended courses that satisfy both the AAS and the Oregon Transfer Module (OTM). Students who complete the recommended set of OTM courses may apply for 45 credits of guaranteed block transfer to any other community college or Oregon University System institution.

**Licensing or Other Certification Exams** The millwright trade is a non-licensed trade.

**Admission Information** Admission to the millwright trade is usually conducted as an internal process with the employer.

**Pre-requisites** Minimum placement scores – Reading 68, Writing 64, and Math parts A, B, C with 7/10 score. Note: See the counselor or advisor to obtain the suggested entry-level skills for successful completion of these programs.

**Criteria Used for Admission** Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries and accepted by a Joint Apprenticeship Training Committee. Selection to the program is by a point system from a pool of qualified applicants. Information on the point system is available at the Oregon Bureau of Labor and Industries website: [boli.state.or.us](http://boli.state.or.us)

In most cases minimum qualifications to begin an apprenticeship include a minimum age of 18 years, a high school diploma with a GPA of 2.0 or higher or GED, and a minimum of a ‘C’ grade for one year of high school algebra (or equivalent).

**Program Advisor** Colleen Cairney, Bldg. 15, Rm. 201  
541.463.5843, [cairneyc@lanec.edu](mailto:cairneyc@lanec.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202  
541.463.5236, [litty@lanec.edu](mailto:litty@lanec.edu)

## Industrial Mechanics and Maintenance Technology Apprenticeship

### Associate of Applied Science

#### To earn the degree, a student must

- complete 8000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion.
- demonstrate an equivalency of 90 credit hours, with a minimum of 24 credits at Lane, including the last term at Lane.
- complete all requirements for an AAS degree as listed below.
- earn a cumulative grade point average above 2.0 at Lane or transfer credits earned at other regionally accredited colleges or universities.

AAS requirements	Credits
General Education .....	23
WR 115W Intro to College Writing:	
Workplace Emphasis <sup>D</sup> or higher-level writing .....	3
MTH 70 Intro to Algebra <sup>D</sup> or equiv or higher .....	5
PE/Health Requirement <sup>R</sup> .....	3
Arts and Letters requirement <sup>R</sup> .....	3
Human Relations requirement <sup>R</sup> .....	3
Science/Math/Computer Science requirement <sup>R</sup> .....	3
Choice of: .....	3
Arts and Letters requirement <sup>R</sup>	
Human Relations/Social Science requirement <sup>R</sup>	
Science/Math/Computer Science requirement <sup>R</sup>	

#### Journey-level card from Oregon Bureau of Labor and Industries Apprenticeship and Training

**Division, prior certification credit** **22**

**Millwright Core-Related Training** **44**

**Program Electives to complete 90 credits for degree:** **3**

- APR 101 Trade Skills Fundamentals
- ET 129 Electrical Theory 1
- CS 120 Concepts of Computing
- DRF 167 CAD 1
- HE 252 First Aid
- MFG 105 Fundamentals of Manufacturing
- MFG 201 CNC Mill

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of “B” or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of “C-” or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

- MFG 202 CNC Lathe
- MTH 076 Applied Geometry for Technicians
- MTH 112 Trigonometry
- WLD 122 Shielded Metal Arc Welding 2
- WLD 139 Welding Lab
- WLD 140 Welder Qualification (Certification) Wire
- WLD 141 Welder Qualification (Certification) SMAW
- WLD 142 Pipe Welding Lab: Carbon Steel
- WLD 151 Fundamentals of Metallurgy
- WLD 154 Wire Drive Welding 2

## Industrial Mechanics and Maintenance Technology Apprenticeship

### Certificate of Completion

Students may earn a Certificate of Completion in Industrial Mechanics and Maintenance Technology Apprenticeship by successfully completing 44 core related training credits with a 'C' or better in all courses, and completing related instruction in communications, computation, and human relations.

### Learning Outcomes

Graduates will:

- perform the duties and responsibilities of the millwright trade
- identify mechanical and/or electrical industrial systems

### To earn the degree, a student must

- complete State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion, 8000-Hour BOLI-ATD Trade: Industrial Millwright
  - complete related instruction credits .....49  
(communication, computation, human relations)
  - complete core-related training credits ..... 44
- Total Credits      53

### Core Related Training requirements.

- APR 150 The Millwright and Shop Safety
- APR 151 Millwright Theory and Trade Calculations
- APR 152 Millwright Power Trains/Boilers and Steam
- APR 250 Industrial Print Reading, Schematics, and Estimating
- APR 251 Pneumatics and Lubrication
- APR 252 Hydraulics for Millwrights
- APR 253 Millwright Piping Systems
- MTH 076 Applied Geometry for Technicians
- WLD 121 Shielded Metal Arc Welding 1
- WLD 143 Wire Drive Welding 1

## Legal Assistant

### Two-Year Associate of Applied Science Degree, Legal Assistant

**Note** This program is no longer offered at Lane. Students interested in this field of study should consider the Two-Year Administrative Office Professional program with Legal directed electives, or the Legal Office Skills Career Pathway Certificate of Completion (see Administrative Office Professional program), or the Paralegal Studies AAS offered in partnership with Umpqua Community College (see details below). Umpqua's two-year degree is not eligible for financial aid through Lane Community College. Students must apply for financial aid through UCC in order to complete that program. For additional information, contact Deb Hupcey in the Counseling Department, 541.463.5635 or [hupceydl@lanec.edu](mailto:hupceydl@lanec.edu).

## Paralegal Studies

### Offered by the Business Department at Umpqua Community College

### Two-Year Associate of Applied Science Degree, Paralegal Studies

### A collaboration between Umpqua Community College and Lane Community College

Lane now partners with Umpqua so that students may take classes at both institutions to become eligible for the AAS Degree in Paralegal Studies through Umpqua Community College. Students planning to complete the AAS program at Umpqua need to complete an advising session with Deb Hupcey at the earliest opportunity. A well-planned course of study at Lane is essential prior to enrolling in LA courses to ensure a smooth transition to Umpqua.

Lane students can complete most of the required courses at Lane before transferring to Umpqua. The remaining Umpqua courses are all offered online, and Co-operative Education (the practicum) is arranged locally through Lane, so students are able to transfer to Umpqua and complete an AAS degree without the need to travel out of the Lane County area for classes.

Students must complete the degree requirements listed in the UCC catalog under which they began their program within a five-year time span. To receive any degree from UCC, a student must maintain a 2.00 ("C") cumulative grade point average, attend UCC for two terms including the last, and complete a minimum of 24-credit hours at UCC. Please see the appropriate Umpqua catalog for graduation requirements.

**Purpose** The UCC two-year associate degree Paralegal Studies prepares students for highly responsible entry-level positions as paralegals or legal assistants. Students take first year courses that provide them with basic competencies and practical skills. In the second year, students broaden their education by taking classes in specialty areas targeted to achieve the legal skills necessary to assist in the legal activities of law firms, businesses, insurance companies, financial institutions, public agencies, title companies, or government offices. The curriculum is designed to prepare the future paralegal professional with both a theoretical understanding of the world of law and the practical skills necessary to succeed.

**Prerequisites** The entering Lane student must place at least into WR 121 and MTH 065, or take classes to reach these levels before enrolling in program courses. Acceptance into Umpqua's Paralegal Program will be postponed if placement is below MTH 060 and WR 115. Before enrolling in BA 214 Business Communications at Lane, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 108 Business Proofreading and Editing. Students are expected to have the ability to accurately type 40 words per minute. The Business Department at Lane offers free placement tests to assist students in determining skill levels. Students who are unable to meet the minimum requirements should consider completing keyboarding and/or skillbuilding courses to reach the required skill level. Additional testing



information and schedule details are available at: [lanecc.edu/business/testing](http://lanecc.edu/business/testing). All courses must be taken for a letter grade and passed with a grade of “C” or better.

**Learning Outcomes** The graduate of the Associate of Applied Science program will have the following competencies:

- awareness of the Code of Professional Responsibility governing lawyers and have an understanding of the importance of client confidentiality and the attorney-client privilege in the legal profession.
- awareness of the importance of accuracy in the law office and knowledge and understanding of the legal and ethical duties requiring prompt and timely responses to client’s legal problems.
- accepted grammatical and organizational skills in drafting letters and legal documents as required by the employer.
- knowledge of the differences and similarities between criminal law and procedure and civil law and procedure.
- recognition of the basic foundation, uniqueness and importance of administrative law in our society.
- the ability to draft a basic interoffice legal memorandum.
- the ability to distinguish between primary and secondary sources of law and identify one law library publication containing each source.
- competence in the use of the West Digest publication and a state reporter in finding and reporting current law on assigned topics.
- the ability to explain the basis of tort law in the United States as it has developed and is developing using the tort of negligence as a basis of discussion.
- basic application skills in analysis of a legal problem.
- the ability to draft a basic complaint in the style of the employer and, if appropriate, to demonstrate the ability to view a tort as a cause of action based upon independent elements.
- awareness of and the ability to apply the civil rules of procedure and any appropriate local rules in responding to a complaint alleging a cause of action based upon a tort.
- the ability to prepare client responses to a formal discovery device which demonstrates an understanding of the function of the complaint and answer which complies with state and local rules of civil procedures.
- the ability to engage in basic interviewing and investigation in order to gather and develop facts necessary to the employer to evaluate the client’s case or to prepare for a possible settlement of the case.
- cognizance of pretrial and trial procedures and the role of the paralegal in assisting the attorney in these stages.
- understanding of a trust document, know the meaning of the legal terms most often associated with the basic trust document and appreciate the meaning of and duties involved in a fiduciary relationship.
- recognition of the basic difference between testate and intestate succession and the ability, under the supervision of a lawyer, to prepare a valid last will and testament.
- knowledge of the forms and pleading associated with the most probate proceedings and the ability to collect the necessary information required by most probate proceedings.
- knowledge of the differences between substantive criminal law and procedural criminal law.
- understanding of the significant differences and similarities in the legal status of sole proprietorships, partnerships and corporations.

- the ability to utilize an employer-prepared or approved form or checklist for gathering information necessary to draft partnership agreements, corporation formation documents, and other business organizations as assigned.
- the ability to explain the generic advantages and disadvantages of each form of business organization.
- fundamental understanding of the basic concepts of property law and the ability to distinguish between real and personal property.
- the ability to identify the principles of bailments, including types of the duty of care involved in each type and to recognize a bailment situation.
- the ability to describe a basic principle-agent relationship and the law of agency as utilized in legal and business situations.
- the ability to use the Microsoft Word program to create, organize, change and present letter and legal documents for the law office.

**Cooperative Education (Co-op)** Co-op offers students graded college credit for on-the-job work experience related to educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for future employment. Four credits of Co-op are required for Umpqua's AAS degree. Additional Co-op credit is strongly recommended as an elective. Contact Jamie Kelsch, Legal Assistant Co-op Coordinator, Bldg. 2, Rm. 143, 541.463.5540.

**Lane Program Advisor** Deb Hupcey, Bldg. 2, Rm. 135, 541.463.5635, [hupceyd@lanecc.edu](mailto:hupceyd@lanecc.edu)

**UCC Paralegal Coordinator** Crystal Sullivan, 541.440.4663, [Crystal.Sullivan@umpqua.edu](mailto:Crystal.Sullivan@umpqua.edu)

**Lane Courses**

MTH 065 Beginning Algebra.....	4
WR 121 Composition: Introduction to Academic Writing ..	4
LA 100 Legal Procedures.....	4
LA 102 Legal Terminology .....	3
BT 108 Business Proofreading and Editing .....	4
CS 120 Concepts of Comp: Information Processing .....	4
LA 101 Introduction to Paralegal Studies .....	3
LA 128 Legal Procedures 2.....	4
BA 211 Financial Accounting .....	4
LA 132 Ethics for the Legal Professional .....	3
LA 105 Civil Litigation.....	3
BA 214 Business Communications .....	4
BA 280L Co-op Ed: Legal Assistant .....	3
Choice of:	
SP 105 Listening and Critical Thinking.....	4
SP 218 Interpersonal Communication.....	4
BA 101 Introduction to Business .....	4
BA 226 Business Law .....	4
BA 280L Co-op Ed: Legal Assistant .....	3
Electives or Co-op Ed (Need 7 Credits)	
BA 213 Managerial Accounting.....	4
BA 281 Personal Finance .....	4
BT 017 Keyboard Skillbuilding 3 .....	3
(If needed to reach 45 wpm)	
BT 123 MS EXCEL for Business .....	4
CIS 125D Software Tools 1: Databases.....	4
CJA 220 Introduction to Criminal Law.....	3
CJA 201 Juvenile Delinquency .....	3
SP 111 Fundamentals of Public Speaking.....	4
WR 122 English Composition:	
Argument, Style and Research.....	4
WR 227 Technical Writing .....	4

Total Credits 69

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of “B” or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of “C-” or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

**Or Equivalent Umpqua Courses:**

MTH 065 Beginning Algebra.....	4
WR 121 Composition: Introduction to Academic Writing ..	4
LA 100 Legal Procedures.....	4
OA 240 Legal Terminology .....	3
OA 128 Editing for Business .....	3
CIS 120 Intro to CIS .....	4
LA 101 Introduction to Paralegal Studies .....	3
LA 128 Legal Procedures II.....	4
BA 211 Principles of Accounting.....	3
LA 132 Ethics for the Legal Professional .....	3
LA 105 Civil Litigation.....	3
BA 214 Business Communications .....	3
LA 280 Cooperative Work Experience.....	2
Any UCC Approved Human Relations Course .....	3
(See Umpqua’s catalog for a complete list)	
BA 101 Introduction to Business .....	4
BA 226 Business Law .....	4
LA 280 Cooperative Work Experience.....	2
Electives from Approved List or CWE (Need 7 Credits)	
BA 213 Principles of Accounting .....	3
BA 218 Personal Finance .....	3
OA 110 or 124 Keyboarding .....	3
(If needed to reach 45 wpm)	
CIS 125S Spreadsheets.....	3
CIS 125D Database .....	3
CJ 105 Concepts of Criminal Law .....	3
CJ 230 Intro to Juvenile Justice System .....	3
SP 111 Fundamentals of Public Speaking.....	3
WR 122 English Composition:	
Argument, Style and Research.....	4
WR 227 Technical Report Writing .....	3
Total Credits	63

(See Umpqua’s catalog for a complete list of electives)

**Additional Required Umpqua Courses for AAS**

BA 231 Microcomputers in Business.....	4
LA 204 Legal Research and Writing.....	3
LA 208 Family Law .....	3
LA 210 Wills Probate and Estates .....	3
LA 226 Criminal Law for Paralegals.....	3
LA 217 Real Estate Law .....	3
LA 224 Torts-Pleadings and Practice.....	4
LA 222 Contract Law .....	3
LA 230 Elder Law .....	3
Total Credits	29

## Manufacturing Technology

**Offered by the Advanced Technology Division**

**Two-Year Associate of Applied Science Degree**

**Two-Year Associate of Applied Science Degree Option:  
Computer Numerical Control Technician**

**Two-Year Certificate of Completion**

**Statewide Certificate of Completion, Basic Manufacturing**

**Purpose** To provide training in basic principles and fundamentals in manufacturing (machine shop) and related work. A graduate qualifies for entrance occupations as a machinist in manufacturing shops or related machine tool industries. Employment opportunities include machine repair and maintenance shops, tool and die shops, manufacturing industries, metalworking plants, repair and maintenance shops for mill and construction contractors, high tech and specialty machine shops, and production machine shops.

**Learning Outcomes** The graduate will:

- demonstrate the use of setups and operation of all standard machine tools employed by the modern machine shop.
- demonstrate and use industrial safety standards for safe operation of all machine tools.
- access library, computing, and communications services and obtain information and data from regional and national networks.
- use basic math skills, formulas and right angle trigonometry.

The CNC Option graduate will also:

- set up, program, and operate 3 Axis CNC milling machines with a G-code controller and 2 Axis CNC lathes with a G-code controller.
- design parts with CAM software and apply to CNC machine tools.

**Employment Trends** Statewide, 115 annual openings for machinists are projected in Oregon and 11 openings are projected annually in Lane County. Competitively trained workers should find reasonable employment opportunities. Those with an associate degree will have a competitive advantage in this labor market.

**Wages** Statewide average, \$19 hourly, \$41,000 annually (\$50,000+ with experience). Lane County average, \$16 hourly, \$37,000 annually.

**Costs in Addition to Tuition and Registration Fees (estimates)\***

Books .....	\$700
Tools.....	\$850-1,075
(import tools may reduce cost by 50%)	
Class Fees.....	\$650
Differential Fees* .....	\$ 1,274
Total	\$3,474-3,699

\* This is the total of all differential fees attached to Manufacturing Technology courses. These and other course fees may change during the year — see the online credit class schedule for fees assigned to courses.

**Prerequisites** Minimum placement score- of 68 in Reading or completion of RD 080 or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

**Note** See a counselor or advisor to learn what entry-level skills are suggested for successful completion of this program.

**Criteria Used for Admission** For consent to enroll in major courses, students must attend a program orientation for fall terms (dates available in Counseling or Enrollment and Student Financial Services) or contact advisor/counselor in winter and spring terms.

**Cooperative Education (Co-op)** Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Manufacturing Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits may be earned in lieu of required Manufacturing Technology course credits. Contact Marv Clemons, Manufacturing Technology Co-op Coordinator, Bldg. 8, Rm. 111, 541.463.3158.

**Program Advisor** Advisor Lisa Stegall, Bldg. 12, Rm. 203,  
541.463.5378, stegalll@lanecc.edu

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202,  
541.463.5236, littyc@lanecc.edu

**Two-Year Associate of Applied Science Degree**

<b>First Year</b>	<b>Fall</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12
MTH 060 Beginning Algebra <sup>*,D,G,M</sup> or higher mathematics.....	4
WLD 151 Fundamentals of Metallurgy <sup>*</sup> .....	3
Total Credits	19

	<b>Winter</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12
Choice of:.....	4
CS 120 Concepts of Computing: Information Processing <sup>S</sup>	
CS 133 Beginning Programming <sup>*,S</sup> or higher	
PE/Health requirement <sup>D,R</sup> .....	3
Total Credits	19

	<b>Spring</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing.....	3
Total Credits	15

<b>Second Year</b>	<b>Fall</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12
DRF 167 CAD 1 <sup>*</sup> .....	4
MTH 076 Applied Geometry for Technicians <sup>*,S</sup> or higher mathematics.....	4
Total Credits	20

	<b>Winter</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	6
Arts/Letters requirement <sup>R</sup> .....	3
Choice of:.....	6
MFG 201 CNC MILL <sup>*,D,G</sup>	
MFG 202 CNC Lathe <sup>*,D,G</sup>	
Total Credits	15

	<b>Spring</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12
WLD 121 Shielded Metal Arc Welding 1 <sup>*</sup> .....	4
Human Relations requirement <sup>R</sup> .....	3
Total Credits	19

**Elective**  
ENGR 280M Co-op Ed: Manufacturing (optional)

**Manufacturing Technology Computer Numerical Control Technician Option**

**Two-Year Associate of Applied Science Degree**

<b>First Year</b>	<b>Fall</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12
MTH 060 Beginning Algebra <sup>*,D,G,M</sup> or higher mathematics.....	4
WLD 151 Fundamentals of Metallurgy <sup>*</sup> .....	3
Total Credits	19

	<b>Winter</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12
Choice of:.....	4
CS 120 Concepts of Computing: Information Processing <sup>S</sup>	
CS 133 Beginning Programming <sup>*,S</sup> or higher computer science	
PE/Health requirement <sup>D,R</sup> .....	3
Total Credits	19

	<b>Spring</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	6
MFG 210 CAM 1 <sup>*,D,G</sup> .....	3
MFG 211 CAM 2 <sup>*,D,G</sup> .....	3
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing.....	3
Total Credits	15

<b>Second Year</b>	<b>Fall</b>
DRF 167 CAD 1 <sup>*</sup> .....	4
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	6
MFG 201 CNC Mill <sup>*,D,G</sup> .....	6
MTH 076 Applied Geometry for Technicians <sup>*,S</sup> or higher mathematics.....	4
Total Credits	20

	<b>Winter</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	6
MFG 202 CNC Lathe <sup>*,D,G</sup> .....	6
Choice of:.....	4
DRF 121 Mechanical Drafting <sup>*</sup>	
DRF 168 CAD 2 <sup>*</sup>	
Total Credits	16

	<b>Spring</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	3
MFG 208 CNC: Special Project <sup>*,D,G</sup> .....	9
Arts/Letters requirement <sup>R</sup> .....	3
Human Relations requirement <sup>R</sup> .....	3
Total Credits	18

**Elective**  
ENGR 280M Co-op Ed: Manufacturing (optional)

**Manufacturing Technology**

**Two-Year Certificate of Completion**

<b>First Year</b>	<b>Fall</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12
MTH 060 Beginning Algebra or MTH 076 Applied Geometry for Technicians <sup>*,D,G,M</sup> or higher mathematics.....	4
Total Credits	16

	<b>Winter</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12
PE/Health requirement <sup>D</sup> .....	3
Total Credits	15

	<b>Spring</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12
WLD 111 Blueprint Reading for Welders.....	3
Total Credits	15

Standard footnotes:  
 \* Prerequisite required  
 A Meets Arts/Letters requirement  
 B Must be passed with grade of "B" or better to use as a prerequisite  
 D Degree or certificate requirement; must be passed with grade of "C-" or better  
 G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement  
 M Meets Mathematics requirement  
 P Meets PE/Health requirement  
 R Required for AAS degree—see page 49  
 S Meets Science/Math/Computer Science requirement  
 W Meets Written Communications or English Composition requirement

<b>Second Year</b>		<b>Fall</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12	
WLD 121 Shielded Metal Arc Welding 1 .....	4	
Total Credits	16	

		<b>Winter</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	6	
WR 115W Introduction to College Writing: Workplace Emphasis <sup>D,W</sup> or higher writing.....	3	
Choice of:.....	6	
MFG 201 CNC Mill <sup>*,G</sup>		
MFG 202 CNC Lathe <sup>*,G</sup>		
Total Credits	15	

		<b>Spring</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> .....	12	
Human Relations requirement <sup>H</sup> .....	3	
Total Credits	15	

**Note:** See a counselor or advisor to learn what entry-level skills are suggested for successful completion of this program.

## Basic Manufacturing

Offered by the Advanced Technology Division

### Statewide Certificate of Completion

**Purpose** To provide training in basic principles and fundamentals in manufacturing (machine shop) and related work.

**Learning Outcomes** The graduate will:

- demonstrate the use of setups and operation of all standard machine tools employed by the modern machine shop.
- demonstrate and use industrial safety standards for safe operation of all machine tools.
- use basic math skills, formulas and right angle trigonometry.

	<b>Credits</b>
MFG 197 Manufacturing Technology <sup>*,D,G</sup> Machine Tool Fundamentals.....	3
MTH 060 Beginning Algebra or higher mathematics <sup>*,D,G,M</sup> .....	4
WLD 111 Blueprint Reading for Welders* .....	3
MFG 197 Manufacturing Technology Inspection <sup>*,D,G</sup> .....	2
MFG 197 Manufacturing Technology Industrial Safety <sup>*,D,G</sup> .....	2
Focus Elective .....	2-4
Total Credits	16-18

<b>Focus Electives</b>	
WLD 121 .....	4
WLD 143.....	4
MFG 201.....	1-6
MFG 197.....	1-12

## Massage Therapy

Offered by Continuing Education

### Certificate of Completion License Exam Preparation Program

**Program approved by Oregon Board of Education and Oregon Board of Massage Therapists**

**Purpose** To prepare graduates for a career as a licensed massage therapist (LMT) and to qualify students for the licensure exam administered by the Oregon Board of Massage Therapists.

**Learning Outcomes** The graduate will:

- demonstrate entry-level knowledge and skills in the clinical curriculum content areas of massage therapy
- demonstrate entry-level knowledge of anatomy/physiology, kinesiology and pathology
- demonstrate professional standards, ethics and competence in the massage profession
- develop therapeutic relationships that support health and well-being
- collect and use client information to determine the appropriateness of massage therapy
- develop a treatment plan
- implement the treatment plan
- evaluate the effectiveness of the treatment plan
- maintain documentation
- influence the advancement of the Massage Therapy profession
- promote the benefits of Massage Therapy to the public

**Employment Trends** This occupation is expected to grow much faster than the statewide average. Total job openings are projected to be at about the statewide average. Reasonable, but limited, employment opportunities exist. Most Licensed Massage Therapists are self-employed.

**Wages** Average hourly wages statewide are \$26.39, or \$54,908 annually for full-time work.

**Program costs** Cost of tuition and fees to complete the program is \$5,989 (Academic Year 2010 - 11).

**Costs in addition to tuition and fees (estimated)**

Textbooks.....	\$550
Personal liability insurance – required .....	\$65
Three professional massages.....	\$150
Miscellaneous supplies .....	\$75

**Licensing or other certification** exams Upon completion of the required courses, students are eligible to apply for Oregon Board of Massage Therapists Licensing Exams.

**Prerequisites** Students must be at least 18 years of age and complete the Massage Foundations class. Massage Foundations will be offered twice each term.

**Admission deadline** None

**Criteria used for admission** High school diploma or GED

**Program contact** 541.463.5911, e-mail: [calisek@lanec.edu](mailto:calisek@lanec.edu)

<b>Core Pre-licensing Program</b>	<b>Contact Hours</b>
<b>Term 1</b>	

XBI 5979 Anatomy/Physiology/Pathology 1 .....	33
XLMT 5972 Introduction to Palpation .....	39
XLMT 5986 Communication from the Heart .....	30

<b>Term 2</b>	
XBI 5980 Anatomy/Physiology/Pathology 2.....	33
XLMT 5973 Massage 1.....	39
XLMT 5988 Energy Systems.....	39

<b>Term 3</b>	
XBI 5989 Anatomy/Physiology/Pathology 3.....	33
XLMT 5974 Massage 2.....	39
XLMT 5976 Hydrotherapy.....	30

<b>Term 4</b>	
XBI 5990 Anatomy/Physiology/Pathology 4.....	33
XLMT 5977 Kinesiology-Lower Body.....	30
XLMT 5981 Law/Ethics.....	20
XLMT 5985 Massage Technique Lab.....	30



<b>Term 5</b>	
XBI 5991 Anatomy/Physiology/Pathology 5.....	33
XLMT 5975 Massage 3.....	39
XLMT 5978 Kinesiology-Upper Body.....	30
XLMT 5982 Professional Practices.....	30
<b>Term 6</b>	
XLMT 5983 Massage 4.....	39
XLMT 5984 Community Student Clinic.....	30
<b>Total Contact Hours in program.....</b>	<b>629</b>
<b>Electives</b>	
XLMT 5971 Student Practice Lab .....	10-40

## Medical Office Assistant

Offered by the Health Professions Division

One-Year Certificate of Completion

**Purpose** To train the graduate for a successful career in the profession of medical assisting, including certification (Certified Medical Assistant®). The Certified Medical Assistant® is a vital member of the ambulatory health care team.

**Learning Outcomes** The graduate will:

- prepare patients for examination or treatment, take temperatures, measure height and weight, and accurately record information in the patient chart.
- physically assist patients onto and off exam table.
- sterilize instruments and stand by to assist as the physician examines or treats patients, or performs in-office surgeries.
- give medical care to patients, under the physician's supervision, such as giving injections and drawing blood.
- perform certain diagnostic testing in the laboratory.
- perform administrative duties, which include managing an appointment schedule, organizing patients' medical records, performing medical transcription, bookkeeping procedures, and processing insurance claims.
- be able to use library resources for research and written assignments for a variety of classes.
- be able to perform mathematic equations associated with medication dosages as well as basic mathematics to process medical insurance claims.

**Employment Trends** Job prospects statewide are excellent. Approximately 90 percent of the graduates of Lane's MOA program are initially employed in Lane County.

**Wages** \$11-14 hourly, \$23,000-40,000 annually

**Costs in Addition to Tuition (estimate)\***

Books, fees, uniform, exam fee, etc. .... \$1,800

\* Students also pay a differential fee for some Medical Office Assistant courses, which total \$554. These and other course fees may change during the year — see the online credit class schedule for fees assigned to courses.

**Program Accreditation** Upon recommendation of the Medical Assisting Education Review Board, the Commission on Accreditation of Allied Health Education Programs (a specialized accrediting board recognized by the Council on Higher Education Accreditation) accredits the Lane Medical

Office Assistant Program. Contact the Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, Florida, 33756, 727.210.2350 or [caahep.org](http://caahep.org)

**Licensing or Other Certification Exams Required** The eligible graduate is qualified to take the national certification examination administered by the American Association of Medical Assistants (AAMA), to become a Certified Medical Assistant.® For detailed information, contact the AAMA, [aama-ntl.org](http://aama-ntl.org).

**Number of New Students Admitted Annually** Enrollment in this program is limited to 40.

**Criteria Used for Admission** Selection to the program is by a point system from a pool of qualified applicants. Each applicant must be a high school graduate, hold a GED, or have completed 12 or more college credits with a 2.5 GPA at time of application. It is expected that all applicants will have proficient keyboarding and computer competencies. Students must demonstrate competency in math and reading as outlined in the application process at [lanec.edu/hp/moa](http://lanec.edu/hp/moa)

**Admission Information** Students are encouraged to consult a program advisor or counselor before applying for admission. The application and information on the point allocation system and transfer students is available in the Counseling and Advising Center and on the Medical Office Assistant website, [lanec.edu/hp/moa](http://lanec.edu/hp/moa)

**Cooperative Education (Co-op)** During the required unpaid Co-op in spring term, Co-op students rotate through local medical offices and clinics in both clinical and administrative settings to earn college credit and gain actual work experience. Students also receive instruction in the identification and proper use of other medical equipment and valuable on-the-job training. A required weekly seminar during spring term includes resume writing instruction, interviewing techniques, and other job-search skills. Contact Marty Pittman, Medical Office Assistant Cooperative Education Coordinator, Bldg. 4, Rm. 259, 541.463.3177.

**Program Advisor** Program Advising Contact Counseling and Advising, Student Services Building, or e-mail [MOAProgram@lanec.edu](mailto:MOAProgram@lanec.edu)

**Enrollment requirements to be met by accepted students by the start of the program in Fall** Each accepted student must submit evidence of a physical examination (within the previous nine months) and receive several vaccinations before classes begin. Students are required to hold a Health Care Provider CPR and a Health Care Provider First Aid card (both must remain current through July of the year of graduation from the program). In addition, students must complete courses outlined below.

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

**Courses Required Prior to Starting Program in Fall**

CG 203 Human Relations at Work <sup>H</sup> .....	3
HO 100 Medical Terminology 1 <sup>D,G</sup> .....	3
Placement into MTH 052 within the past 9 months or Math 020 Math Renewal or higher.....	3
(An accepted student must be eligible to take MTH 052 no later than the beginning of fall term, and complete MTH 052 by the end of fall term.)	
WR 115W Intro to College Writing: Workplace Emphasis <sup>D</sup> or higher-level writing.....	3
<b>Total Credits</b>	<b>12</b>

**Fall**

HO 110 Administrative Medical Office Procedures <sup>D,G</sup> .....	3
HO 150 Human Body Systems 1 <sup>*,D,G,S</sup> .....	3
HO 190 Medical Formatting <sup>D,G</sup> .....	3
MA 110 Clinical Assistant 1 <sup>*,1,D,G</sup> .....	3
MTH 052 Math for Introductory Physical Science .....	4
BT 120 MS WORD for Business <sup>*,2,3,D,G</sup> .....	4
<b>Total Credits</b>	<b>20</b>

**Winter**

BT 165 Introduction to the Accounting Cycle <sup>*,D,G</sup> .....	3
HO 114 Medical Coding Procedures <sup>*,D,G</sup> .....	3
HO 152 Human Body Systems 2 <sup>*,1,D,G</sup> .....	3
HO 220 Legal and Ethical Aspects of Healthcare <sup>*,D,G</sup> .....	3
MA 120 Clinical Assistant 2 <sup>*,1,D,G</sup> .....	3
MA 150 Laboratory Orientation <sup>*,1,D,G</sup> .....	3
<b>Total Credits</b>	<b>18</b>

**Spring**

HIT160 Medical Manager <sup>*,1,D,G</sup> .....	3
HO 112 Medical Insurance Procedures <sup>*,D,G</sup> .....	3
MA 130 Clinical Assistant 3 <sup>*,1,D,G</sup> .....	3
MA 280 Co-op Ed: Medical Office Assistant <sup>*,1 D,G</sup> .....	6
Choice of.....	3-6
PSY 110 Exploring Psychology <sup>2, D, G</sup>	
PSY 201 General Psychology <sup>2, D, G</sup> and	
PSY 203 General Psychology <sup>2, D, G</sup>	
<b>Total Credits</b>	<b>18-21</b>

- 1 Must be accepted into the program to register for these classes.
- 2 May be taken prior to program entry.
- 3 Can be taken any term.

## Multimedia Design

**Offered by the Division of the Arts**

**Two-Year Associate of Applied Science Degree**

**One-Year Certificate of Completion**

**Purpose** To prepare students for entry-level positions in the media industry and careers in multimedia design and production.

**Learning Outcomes** The graduate will:

- design computer applications incorporating multiple forms of media such as text, graphics, audio, video, and animation.
- understand the concept, potential and implications of communicating ideas using computer-based interactive media technology.
- become proficient in developing and applying effective visual design strategies for creating interactive multimedia, animation, games, web sites, and computer-based training for delivery over the Internet, DVD's and CD-ROM.
- have additional skills in one or more elective area: software, design, or media.
- use appropriate library and information resources to research media issues, concepts and tools, and support lifelong technical learning.
- manipulate variables using computer software applications.

**Employment Trends** Reasonable employment opportunities exist for trained workers. Statewide, 16 job openings are projected annually through 2018, with 2 of those in Lane County.

**Wages** Average statewide wages for multimedia artists, animators, and related workers: \$ 25.67 hourly and \$56,417 annually.

**Costs in Addition to Tuition (estimate)\***

Additional costs for two-year degree program ..... \$1,700  
\* Subject to change without notice.

**Cooperative Education (Co-op)** Opportunities to work directly in the media industry as interns are provided by the Co-op program. Through Co-op, students connect classroom learning with field experience, gain skills, and make contacts for the future. Second-year students will work with professional production teams to gain experience producing a variety of interactive multimedia products. Contact Teresa Hughes, Multimedia Design Co-op Coordinator, Bldg. 17, Rm. 106, 541.463.3179.

**Note:** Students must earn a grade of “B-” or better in all prerequisite (s) and “C” or better in major requirements.

**Program Advisors** Rick Simms, Bldg. 17, Rm. 107; Teresa Hughes, Bldg. 17, Rm. 106

**Program Counselor** Christina Salter, Bldg. 1, Rm. 103E, 541.463.5813

**Two-Year Associate of Applied Science Degree**

**First Year**

ART 131 Introduction to Drawing <sup>A,B,G</sup> .....	<b>Fall</b>	3
ART 261 Photography 1 <sup>A,B,G</sup> .....		3
CIS 125H Software Applications: HTML <sup>B,G</sup> .....		3
FA 250 Concepts of Visual Literacy <sup>B,G</sup> .....		3
PE/Health requirement <sup>R</sup> .....		1
WR 121 English Composition: Introduction to Academic Writing <sup>*,B,G,W</sup> .....		4

**Total Credits** 17

**Winter**

MUL 210 Multimedia Design <sup>*,B,G</sup> .....	3
AUD 120 Audio Production <sup>*,B,G</sup> .....	4
FA 261 Writing and Interactive Design <sup>*,B,G</sup> .....	3
MUL 212 Digital Imaging <sup>*,B,G</sup> .....	3
MTH 060 Beginning Algebra or higher mathematics <sup>*,B,G,M,R</sup> .....	4

**Total Credits** 17

**Spring**

Science, Math, Computer Science Requirement <sup>*,B,G,S</sup> .....	4
FA 231 Multimedia Authoring <sup>*,B,G</sup> .....	3
VP 151 Video Production 1 / Camera <sup>*,B,G</sup> .....	3
ART 151A Media Graphics <sup>*,B,G</sup> .....	3
Directed Elective <sup>B,G</sup> .....	3-4

**Total Credits** 16-17

**Second Year**

**Fall**

ART 115 Basic Design: Fundamentals <sup>G</sup> .....	3
ART 245 Drawing for Media <sup>D,G</sup> .....	4
MUS 118 Music Technology MIDI/Audio 1 <sup>D,G</sup> .....	4
VP 152 Video Production 2: Editing <sup>*,B,G</sup> .....	3
Directed Elective <sup>D,G</sup> .....	3-4

**Total Credits** 17-18

<b>Winter</b>	
ART 289 Web Production * <sup>B,G</sup> .....	3
CG 203 Human Relations at Work <sup>B,G,H</sup> .....	3
MDP 246 Multimedia Production 1 * <sup>B,G</sup> .....	4
MDP 280 Co-op Ed: Multimedia * <sup>D,G</sup> .....	3
PE/Health requirement <sup>P</sup> .....	1
Total Credits	14

<b>Spring</b>	
MDP 280 Co-op Ed: Multimedia * <sup>D,G</sup> .....	3
MDP 247 Multimedia Production 2 * <sup>B,G</sup> .....	4
PE/Health requirement <sup>P</sup> .....	1
Directed elective <sup>D,G</sup> .....	6-8
Total Credits	14-16

**One-Year Certificate of Completion**

<b>Fall</b>	
ART 115 Basic Design: Fundamentals <sup>A,B,G</sup> .....	3
ART 131 Introduction to Drawing <sup>A,B,G</sup> .....	3
ART 261 Photography 1 <sup>A,B,G</sup> .....	3
FA 250 Concepts of Visual Literacy <sup>B,G</sup> .....	3
WR 121 Composition: Introduction to Academic Writing * <sup>B,G,W</sup> .....	4
Total Credits	16

<b>Winter</b>	
AUD 120 Audio Production <sup>B,G</sup> .....	4
FA 261 Writing and Interactive Design * <sup>B,G</sup> .....	3
MTH 060 Beginning Algebra or higher mathematics * <sup>D,G,M</sup> .....	4
MUL 210 Multimedia Design * <sup>B,G</sup> .....	3
MUL 212 Digital Imaging * <sup>B,G</sup> .....	3
Total Credits	17

<b>Spring</b>	
ART 151A Media Graphics <sup>B,G</sup> .....	3
CG 203 Human Relations at Work * <sup>B,G,H</sup> .....	3
FA 231 Multimedia Authoring * <sup>B,G</sup> .....	3
VP 151 Video Production 1 / Camera * <sup>B,G</sup> .....	3
Science, Math, Computer Science course <sup>S</sup> .....	4
Total Credits	16

**Directed Electives (Software, Design, or Media)**

Contact the Art and Applied Design Department for additional choices

**Software**

CIS 125G Software Tools 1: Game Development .....	4
CIS 135W Advanced Computer Applications: Web 2.0 .....	3
CS 120 Concepts of Computing .....	4
CS 133 Beginning Programming.....	4
CS 133G Beginning C++ Programming for Games .....	4
CS 133JS Beginning Programming: JavaScript .....	4
CS 295 Web Development 1 .....	4

**Design**

ART 116 Basic Design: Color.....	3
ART 119 Typography.....	3
ART 216 Digital Design Tools .....	4
ART 225 Digital Illustration .....	3
ART 231 Intermediate Drawing .....	3
ART 234 Figure Drawing .....	3
ART 288 Introduction to Web Design.....	2
ART 290 Design Concepts for the Web.....	3

<b>Media</b>	
ART 210 The Photographic Vision.....	3
ART 262 Photography 2 .....	3
FA 221 Computer Animation .....	3
FA 222 Computer Animation 2 .....	3
FA 254 Lighting: Video.....	3
FA 255 Understanding Movies: American Cinema.....	3
FA 256 Lighting: Photography .....	3
J134 Photojournalism .....	3
J234 Photojournalism 2 .....	4
MDP 248 Multimedia Production 3 .....	4
MUL 214 Digital Photography .....	3
MUL 216 Multimedia for the Web .....	3
MUL 218 Business Practices for Media Arts .....	2
MUS 119 Music Technology MIDI/Audio 2 .....	4
MUS 298 IS: Music Technology .....	1-6

**Music**

**Offered by Music, Dance and Theatre Arts**

**Suggested Course of Study**

Lane's Music, Dance and Theatre Arts Department offers a complete range of lower-division (freshman and sophomore) courses in music—everything needed by students intending to transfer to a four-year college or university and major in music, and by students intending to meet their needs entirely at Lane, with or without a degree. Whatever the goal of music studies, one of the courses of study suggested below—or some modification of it—will be appropriate. Before registering, however, each student is urged to meet with the Music, Dance and Theatre Arts Department counselor, or music instructor Barbara Myrick, Bldg. 6, Rm. 138 for advice.

Students can ease their credit-load by taking general requirements during summer term. For B.A. in Music: Arts and Letters should be History of Western Art (Art 204, 205, 206) or World Literature (Eng 107, 108, 109). See current U of O catalog.

**Prepare to transfer into a B.A. or B.S. degree in Music at the University of Oregon**

For students pursuing B.A. or B.S. degree in Music at the University of Oregon the following is an eight-term plan at Lane, including the Associate of Arts Oregon Transfer (AAOT) degree.

Note: UO has a language requirement for admission. (See UO catalog)

<b>First Year</b>	<b>Fall</b>
MUS 111 Music Theory 1 <sup>1,3</sup> .....	4
MUS 127 Keyboard Skills <sup>1,3</sup> .....	2
MUS 114 Sight Reading/Ear Training <sup>1,3</sup> .....	2
Ensemble (large and/or small) .....	2
Individual Lessons <sup>2</sup> .....	2
WR 121 Composition: Introduction to Academic Writing * <sup>W</sup> .....	4
Total Credits	16

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

	<b>Winter</b>
MUS 112 Music Theory 1 <sup>*,1</sup> .....	4
MUS 115 Sight Reading/Ear Training 1 .....	2
MUS 128 Keyboard Skills 1 <sup>1</sup> .....	2
Ensemble (large and/or small) .....	2
Individual Lessons <sup>2</sup> .....	2
Choice of:.....	4
WR122 English Composition: Argument, Style and Research	
WR123 Composition: Style and Argument or Research	
Total Credits	16

	<b>Spring</b>
MUS 113 Music Theory 1 <sup>*,1</sup> .....	4
MUS 116 Sight Reading/Ear Training 1 <sup>1</sup> .....	2
MUS 129 Keyboard Skills 1 <sup>1</sup> .....	2
Ensemble (large and/or small) .....	2
Individual Lessons <sup>2</sup> .....	2
Choice of:.....	4-5
MTH 105 Contemporary Mathematics or	
MTH 111 College Algebra <sup>M,4</sup>	
(MTH 095 recommended before MTH111)	
Total Credits	16-17

	<b>Summer</b>
Science (with lab) .....	4
Science (with lab) .....	4
Science (with lab) .....	4
Arts and Letters	
(non-music: Art History or World Literature).....	3
Total Credits	15

	<b>Second Year</b>	<b>Fall</b>
MUS 211 Music Theory 2 <sup>*,1</sup> .....		3
MUS 214 Keyboard Skills 2 <sup>*,1,3</sup> .....		1
MUS 261 Music History 1 <sup>*,A</sup> .....		4
MUS 224 Sight Reading/Ear Training <sup>*,1</sup> .....		2
Ensemble (large and/or small) .....		2
Individual Lessons <sup>2</sup> .....		2
Social Science .....		4
Total Credits		18

	<b>Winter</b>
MUS 212 Music Theory 2 <sup>*,1</sup> .....	3
MUS 215 Keyboard Skills 2 <sup>*,1</sup> .....	1
MUS 262 Music History 2 <sup>*,A</sup> .....	4
MUS 225 Sight Reading/Ear Training 2 <sup>*,1</sup> .....	2
Ensemble (large and/or small) .....	2
Individual Lessons <sup>2</sup> .....	2
Social Science .....	4
Total Credits	18

	<b>Spring</b>
MUS 213 Music Theory 2 <sup>*,1</sup> .....	3
MUS 216 Keyboard Skills 2 <sup>*,1</sup> .....	1
MUS 263 Music History 3 <sup>*,A</sup> .....	4
MUS 226 Sight Reading/Ear Training 2 <sup>*,1</sup> .....	2
Ensemble (large and/or small) .....	2
Individual Lessons <sup>2</sup> .....	2
Social Science .....	4
Total Credits	18

	<b>Summer</b>
Science (with or without lab).....	3
SP 218 Speech.....	3
Social Science .....	3
HE 250 Personal Health .....	3
Total Credits	12

- 2 Techniques of Instrumental/Vocal Performance, MUS 185 or MUS 186, is co-requisite when offered.
- 3 Placement test in Music, Dance and Theatre Arts Department required for admission to class.
- 4 Several terms of pre-requisite Math may be necessary, depending on Placement Test results. Math 111 is required for transfer.

**Music – preparation for direct transfer to B.M. at University of Oregon**

Students pursuing a B.M. degree in Music at University of Oregon may choose the following eight-term direct transfer plan. No Lane degree is included or needed.

This is a suggested course of study for students interested in the above degree in music. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education, nor is it an Associate of Arts degree. See department advisor for further information.

	<b>First Year</b>	<b>Fall</b>
MUS 111 Music Theory 1 <sup>1,3</sup> .....		4
MUS 127 Keyboard Skills 1 <sup>1,3</sup> .....		2
MUS 114 Sight Reading/Ear Training <sup>1,3</sup> .....		2
Ensemble (large and/or small) .....		2
Individual Lessons <sup>2</sup> .....		2
WR 121 Composition:		
Introduction to Academic Writing <sup>*,W</sup> .....		4
Total Credits		16

	<b>Winter</b>
MUS 112 Music Theory 1 <sup>*,1</sup> .....	4
MUS 115 Sight Reading/Ear Training <sup>*,1</sup> .....	2
MUS 128 Keyboard Skills <sup>1*,1,3</sup> .....	2
Ensemble (large and/or small) .....	2
Individual Lessons <sup>2</sup> .....	2
WR 123 Composition: Research <sup>W</sup> .....	4
Total Credits	16

	<b>Spring</b>
MUS 113 Music Theory 1 <sup>*,1</sup> .....	4
MUS 116 Sight Reading/Ear Training <sup>1</sup> .....	2
MUS 129 Keyboard Skills <sup>1*,1,3</sup> .....	2
Ensemble (large and/or small) .....	2
Individual Lessons <sup>2</sup> .....	2
Arts/Letters (non-music).....	4
MTH 095 Intermediate Algebra (if needed).....	(5)
Total Credits	15

	<b>Summer</b>
Science.....	4
Arts/Letters (non-music).....	4
MTH 111 College Algebra <sup>M</sup> (MTH 095 recommended before MTH 111).....	4-5
Total Credits	12-13

	<b>Second Year</b>	<b>Fall</b>
MUS 211 Music Theory 2 <sup>*,1</sup> .....		3
MUS 214 Keyboard Skills 2 <sup>*,1</sup> .....		1
MUS 261 Music History 1 <sup>*</sup> .....		4
MUS 224 Sight Reading/Ear Training 2 <sup>*,1</sup> .....		2
Ensemble (large and/or small) .....		2
Individual Lessons <sup>2</sup> .....		2
Social Science .....		4
Total Credits		18

1 Indicates music courses that must be taken in the order given. Since there are so many variables, transfer students are strongly advised to see a counselor for Music, Dance and Theatre Arts, or Barbara Myrick in Bldg. 6, Rm. 138.



<b>Winter</b>	
MUS 212 Music Theory 2 <sup>*,1</sup> .....	3
MUS 215 Keyboard Skills 2 <sup>*,1</sup> .....	1
MUS 262 Music History 2 * .....	4
MUS 225 Sight Reading/Ear Training <sup>*,1</sup> .....	2
Ensemble (large and/or small) .....	2
Individual Lessons <sup>2</sup> .....	2
Social Science .....	4
Total Credits	18

<b>Spring</b>	
MUS 213 Music Theory 2 <sup>*,1</sup> .....	3
MUS 216 Keyboard Skills 2 <sup>*,1</sup> .....	1
MUS 263 Music History 3 * .....	4
MUS 226 Sight Reading/Ear Training 2 <sup>*,1</sup> .....	2
Ensemble (large and/or small) .....	2
Individual Lessons <sup>2</sup> .....	2
Social Science .....	4
Total Credits	18

<b>Summer</b>	
Science.....	4
Science.....	4
Arts/Letters (non-music).....	3
Total Credits	11

**Notes:**

- \* Prerequisite required
- 1 Indicates music courses that must be taken in the order given. Since there are so many variables, transfer students are strongly advised to see a counselor for Music, Dance and Theatre Arts, or Barbara Myrick in Bldg. 6, Rm. 138.
- 2 Techniques of Instrumental/Vocal Performance, MUS 185 or MUS 186, is co-requisite when offered.
- 3 Placement test in Music, Dance and Theatre Arts Department required for admission to class.
- 4 Several terms of pre-requisite Math may be necessary, depending on Placement Test results. Math 111 is required for transfer.

### Music Industry – AAOT to transfer to Northwest Christian College for a B.S. in Music Industry

For students pursuing Music Technology options, the following is a six-term plan, including the Associate of Arts Oregon Transfer Degree (AAOT) which prepares students to transfer to Northwest Christian College for a B.S. in Music Industry.

<b>First Year</b>	
MUS 118 Music Technology–MIDI/Audio 1 .....	<b>Fall</b> 4
Choice of:.....	2
MUS 131 Group Piano	
MUS 134 Group Voice	
MUS 137 Group Guitar	
MUP 100 Individual Lessons	
HE 152 Drugs, Society and Behavior <sup>P</sup> .....	3
HST 101 or HST 102 History of Western Civilization <sup>H</sup> .....	4
MTH 111 (or pre-req class(es) as needed) <sup>M,4</sup> .....	5
Total Credits	18

<b>Winter</b>	
MUS 119 Music Technology–MIDI/Audio 2 <sup>*,1</sup> .....	4
Choice of:.....	2
MUS 131 Group Piano	
MUS 134 Group Voice	
MUS 137 Group Guitar	
MUP 100 Individual Lessons	
MUS 101 Music Fundamentals (if needed) .....	3
Any science. ....	3
WR 121 Composition: Introduction to Academic Writing <sup>*W</sup> .....	4
Total Credits	16

<b>Spring</b>	
MUS 298 IS: Music Technology .....	3
Choice of:.....	2
MUS 131 Group Piano	
MUS 134 Group Voice	
MUS 137 Group Guitar	
MUP 100 Individual Lessons	
WR 122 English Composition: Argument, Style and Research .....	4
HST 103 History of Western Civilization <sup>H</sup> .....	4
SP 218 Interpersonal Communication .....	4
Total Credits	17

<b>Second Year</b>	
MUS 107 Audio Engineering 1 <sup>*,1</sup> .....	<b>Fall</b> 3
MUS 111 Music Theory I <sup>*,1,3</sup> .....	4
MUS 114 Sight Reading/Ear Training <sup>1,3</sup> .....	2
MUS 127 Keyboard Skills <sup>1,3</sup> .....	2
Individual Lessons .....	1
PH 101 Fundamentals of Physics <sup>S</sup> .....	4
ECON 200 Introduction to Economics <sup>H</sup> .....	3
Total Credits	19

<b>Winter</b>	
MUS 109 Audio Engineering 2 <sup>*,1</sup> .....	4
MUS 112 Music Theory I <sup>*,1</sup> .....	4
MUS 115 Sight Reading/Ear Training 1.....	2
MUS 128 Keyboard Skills <sup>1,3</sup> .....	2
Individual Lessons .....	1
PH 102 Fundamentals of Physics <sup>S</sup> .....	4
Total Credits	17

<b>Spring</b>	
Individual Lessons or Ensemble .....	2
MUS 110 Audio Engineering 3 <sup>*,1</sup> .....	4
ECON 250 Class, Race and Gender in the U.S. Economy <sup>H</sup> .....	4
PH 103 Fundamentals of Physics <sup>S</sup> or other Science with lab .....	4
Arts and Letters (non-music) .....	3
Total Credits	17

**Notes**

- \* Prerequisite required
- 1 Indicates music courses that must be taken in the order given. Since there are so many variables, transfer students are strongly advised to see a counselor for Music, Dance and Theatre Arts, or Barbara Myrick in Bldg. 6, Rm. 138.
- 2 Techniques of Instrumental/Vocal Performance, MUS 185 or MUS 186, is co-requisite when offered.

Standard footnotes:  
 \* Prerequisite required  
 A Meets Arts/Letters requirement  
 B Must be passed with grade of "B" or better to use as a prerequisite  
 D Degree or certificate requirement; must be passed with grade of "C-" or better  
 G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement  
 M Meets Mathematics requirement  
 P Meets PE/Health requirement  
 R Required for AAS degree—see page 49  
 S Meets Science/Math/Computer Science requirement  
 W Meets Written Communications or English Composition requirement

- 3 Placement test in Music, Dance and Theatre Arts Department required for admission to class.
- 4 Several terms of pre-requisite Math may be necessary, depending on Placement Test results. Math 111 is required for transfer.

## New Media Journalism

Offered by the Arts Division

Suggested Course of Study

Divisional Recognition Award

This suggested course of study is for students considering entry-level positions in new media industries and careers in journalism, web design and production, photography, videography, public relations, advertising or publishing. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education, nor is it an Associate of Arts degree. The guide below includes recommended journalism and multimedia courses, as well as recommended general education courses.

Transfer institutions require additional coursework for a degree, and may change requirements from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

Courses numbered below 100 generally do not transfer, and career technical courses may only have limited transferability to four-year institutions. See a Lane arts counselor or advisor for assistance in course selection and transfer policies.

**Learning Outcomes** Students completing this suggested course of study will:

- develop proficiency in multiple forms of media practices such as writing, reporting, visual communication and web design and production.
- understand the concept, potential and implications of communicating ideas using computer-based interactive media technology.
- become proficient in developing and applying effective visual design strategies for creating interactive multimedia reportage for print, television and the web.
- understand the concepts of media and its effect on society and how to use media ethically.
- use appropriate library and information resources to research topics and media issues.

**Counselor** Timothy Blood, Bldg. 1, Rm. 110

### First Year

CIS 135W Advanced Computer Applications: Web 2.0 <sup>B,D</sup>	<b>Fall</b>	
FA 250 Concepts of Visual Literacy <sup>B,G</sup> .....		4
J 134 Photojournalism .....		3
WR 121 Composition: Introduction to Academic Writing <sup>*,B,G,W</sup> .....		4
J 199G Grammar for Journalists.....		2
Total Credits		16

### Winter

ART 115 Basic Design: Fundamentals <sup>B,G</sup> .....	3
ART 131 Introduction to Drawing <sup>A,B,G</sup> .....	3
CG 203 Human Relations at Work <sup>B,G,H</sup> .....	3
J 216 Newswriting <sup>1</sup> .....	3
(New Course <sup>1</sup> ) Writing for the Web .....	3
Total Credits	15

ART 288 Introduction to Web Design.....	<b>Spring</b>	
ART 119 Typography.....		2
J 234 Photojournalism 2 .....		3
J 199R Intermediate Reporting .....		4
Science/Math/Computer Science <sup>R</sup> .....		3
Total Credits		15

### Second Year

ART 256 Lighting: Photography .....	<b>Fall</b>	
AUD 120 Audio Production <sup>*,B,G</sup> .....		3
J 199 FW Feature Writing .....		4
J 201 Mass Media and Society.....		3
VP 151 Video Production 1/ Camera <sup>*,B,G</sup> .....		3
Total Credits		16

### Winter

ART 289 Web Production .....	3
(New Course <sup>1</sup> ) Publication Design .....	3
MTH 060 Beginning Algebra or higher <sup>B,G,M</sup> .....	4
PE/Health <sup>R</sup> .....	3
Directed Elective <sup>B,G</sup> .....	3
Total Credits	16

### Spring

ART 290 Design Concepts for the Web.....	3
(New Course <sup>1</sup> ) Media Law and Ethics .....	3
(New Course <sup>1</sup> ) Capstone Course.....	3
J 280 Co-op Ed: Journalism.....	3
Directed Elective <sup>B,G</sup> .....	3
Total Credits	15

### Directed Electives

Contact the Art and Applied Design Department for additional choices.

### Computer Science

- CS 120 Concepts of Computing
- CS 125G SWTools 1: Game Development
- CS 133G Beginning C++ Programming for Games
- CS 133JS Beginning Programming: JavaScript
- CS 195 Web Development 1

### Design

- ART 116 Basic Design: Color
- ART 216 Digital Design Tools
- ART 225 Digital Illustration
- ART 231 Drawing: Intermediate
- ART 234 Drawing: Figure

### Media

- ART 210 The Photographic Vision
- ART 262 Photography 2
- FA 221 Computer Animation
- FA 222 Computer Animation 2
- FA 254 Lighting: Video
- FA 255 Understanding Movies: American Cinema
- FA 256 Lighting: Photography
- MDP 248 Multimedia Production 3
- MUL 214 Digital Photography
- MUS 119 Music Technology MIDI/Audio 2
- MUS 298 IS: Music Technology

\* Prerequisite required

1 See Art department or advisors for new course information

A Arts/Letters general education course

B Must be passed with grade of "B-" or better to use as a prerequisite

G Must be taken for a grade, not P/NP

H Human Relations/Social Science general education course

M Mathematics general education course

P PE/Health

R Use AAS degree lists

S Science/Math/Computer Science general education course

W Written Communications / English Composition course

# Nursing

**Offered by the Health Professions Division**

**Two-Year Associate of Applied Science Degree**

**Purpose** To prepare the graduate to be qualified to take the National Council Licensure Examination (NCLEX)-RN and to practice as an associate degree registered nurse.

**Learning Outcomes** Nursing care competencies recognize that a competent nurse provides safe care across the lifespan directed toward the goals of helping clients (individuals, families or communities) promote health, recover from acute illness and/or manage a chronic illness, and support a peaceful and comfortable death. As a member of the Oregon Consortium for Nursing Education (OCNE) the Lane Nursing curriculum supports the following nursing competencies. A competent nurse:

- bases personal and professional actions on a set of shared core nursing values.
- develops insight through reflection, self-analysis and self-care.
- engages in self-directed learning.
- demonstrates leadership in nursing and healthcare.
- collaborates as part of a health care team .
- practices within, utilizes and contributes to the broader health-care system.
- practices relationship-centered care.
- communicates effectively.
- makes sound clinical judgments.
- uses the best available evidence.

**Employment Trends** The Oregon Employment Department projects 149 RN openings in Lane County annually through 2016 and 1,352 openings statewide.

**Wages** Average Oregon statewide wage in 2008 was \$33.18 hourly, \$69,014 annually for fulltime RN employment. These earnings do not account for overtime and shift differentials, which could increase the figures. (Oregon Employment Department)

**Costs in Addition to Tuition (estimate)**

Lab equipment fees and course fees for both years	\$440
Uniform, shoes, stethoscope (minimum of one), etc.	\$250
Books: first year + second year	\$1100
Personal Health Insurance—required	varies
Criminal background check—required	\$40
Physical and Immunizations	varies
Standard Testing for both years	\$220
RN Licensure exam second year	\$300

In addition to tuition, nursing students pay a differential clinical fee for some courses. These and other course fees may change during the year—see the online credit class schedule for current fees assigned to courses. The annual differential fees (not including tuition) are estimated at:

First Year.....	\$5,113
Second Year.....	\$4,998

Nursing students assume responsibility for their own uniforms, books, room and board, parking and transportation to and from clinical facilities.

**Program Approval** Evaluated and fully approved through 2012 by Oregon State Board of Nursing.

**Program Affiliation with the Oregon Consortium of Nursing Education**

In Fall 2007 the nursing program began a new curriculum. Lane Nursing joins with eight other community college programs and all campuses of the Oregon Health and Science University (OHSU) in a unified approach to nursing education developed by the Oregon Consortium for Nursing Education (OCNE). Lane and other OCNE programs have the same prerequisites and comparable application processes for students. Students completing the AAS curriculum at the end of the second year of the Lane nursing program will meet the educational requirements to be eligible to take the RN-licensure examination (NCLEX). They will additionally have the opportunity to continue three or four additional terms of full-time study to earn the Bachelor of Science degree through OHSU. Students would remain on the Lane campus to complete the BS degree. Tuition and crediting will be through OHSU.

**Licensing or Other Certification Exams** Graduates are eligible to take the National Council Licensure Examination (NCLEX) RN licensing exam.

**Prerequisites** An applicant must complete a Nursing Program application. For the most current information regarding the curriculum, prerequisites, admission standards and procedures is available at [lanecc.edu/hp/nursing](http://lanecc.edu/hp/nursing).

**Number of New Students Admitted Annually** The number of applicants accepted is based on college budgetary and clinical facility considerations, usually 72 to 81 students

**Criteria Used for Admission** Students are encouraged to consult a program advisor or counselor before applying for admission. Application is limited to Oregon residents. Selection to the program is by a point system from a pool of qualified applicants. Information on the point allocation system and transfer students is available in the Counseling and Advising Center and the nursing website, [lanecc.edu/hp/nursing](http://lanecc.edu/hp/nursing)

**Admission Information** Please consult [lanecc.edu/hp/nursing](http://lanecc.edu/hp/nursing).

**Cooperative Education (Co-op)** Through Co-op, enrolled nursing students connect classroom learning with field experience, gain skills, and make contacts for the future through additional clinical experience. Co-op may be taken as an optional elective any of the last five terms of the program. Contact Jennifer Tavernier, Nursing Cooperative Education Coordinator at 541.463.5637.

For Counseling and Advising assistance in meeting program or application requirements, please go to [lanecc.edu/hp](http://lanecc.edu/hp) and choose the link “Counseling and Advising for Health Professions Students.”

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of “B” or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of “C-” or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

Course numbers listed here are for courses at Lane Community College. Classes taken at other colleges can only be deemed equivalent by Lane's Faculty and Degree/Transcript Evaluators based on curriculum content. Classes with the same course title and/or number may not transfer to Lane as equivalent. Please consult with the Counseling and Advising department.

**Prerequisite Courses required prior to beginning of program**

BI 231 Human Anatomy and Physiology 1 * <sub>G</sub> , S <sub>1,4</sub> .....	4
Note: see BI 231 course description for required prerequisites.	
BI 232 Human Anatomy and Physiology 2 * <sub>G</sub> , S <sub>1,4</sub> .....	4
BI 233 Human Anatomy and Physiology 3 * <sub>G</sub> , S <sub>1,4</sub> .....	4
FN 225 Nutrition <sub>G,1</sub> .....	4
Human Development course, choice of: .....	3-6
PSY 215 Lifespan Developmental Psychology * <sub>G,1</sub>	
or	
PSY 235 Human Development 1 * <sub>G,1</sub> and	
PSY 236 Human Development 2 * <sub>G,1</sub>	
or	
HDFS 226 Child Development * <sub>G,1</sub> and	
PSY 236 Human Development 2 * <sub>G,1</sub>	
MTH 095 Intermediate Algebra or higher, or	
competency testing * <sub>M</sub> .....	4-5
WR 121 Composition: Introduction to	
Academic Writing * <sub>G</sub> , W <sub>1,2</sub> .....	4
WR 122 English Composition:	
Argument, Style and Research * <sub>A,G,1,2*</sub> .....	4
Social Science course <sub>G,R,1</sub> .....	6
Add electives to total 45 credits prior to beginning nursing	
courses	

**To register for any of the NRS classes below, students must be accepted into the Associate Degree Nursing Program.**

**First Year**

NRS 110A Foundations of Nursing –Health Promotion * <sub>G,1</sub>	Fall	4
NRS 110B Foundations of Nursing –Health Promotion		
Clinical Lab .....		5
BI 234 Introductory Microbiology * <sub>G,S,1,4</sub> .....		4
Biology with genetics: .....		3-4
BI 112 + BI 233 or		
BI 112 + BI 102G or		
BI 101F + BI 233 or		
BI 211 + BI 233 or		
BI 101K + BI 233 or		
BI 101K + BI 102G		

Total Credits 16-17

**Winter**

NRS 111A Foundations of Nursing in Chronic Illness 1 * <sub>G,1</sub>	2
NRS 111B Foundations of Nursing in Chronic Illness Lab	
(pass/no pass) * .....	4
NRS 230 Clinical Pharmacology 1 * <sub>G,1</sub> .....	3
NRS 232 Pathophysiology Processes 1 * <sub>G,1</sub> .....	3
Choice of: .....	3-4
WR 123 Composition: Research * <sub>A,G,1,3,4</sub>	
WR 227 Technical Writing * <sub>A,G,1,3,4</sub>	
Elective:	
NRS 280 Co-op Ed: Nursing .....	(2)

Total Credits 15-16

**Spring**

NRS 112A Foundations of Nursing in Acute Care 1 * <sub>G,1</sub> ....	2
NRS 112B Foundations of Nursing in Acute Care 1	
Clinical Lab* .....	4
NRS 231 Clinical Pharmacology 2 * <sub>G,1</sub> .....	3
NRS 233 Pathophysiology Processes 2 * <sub>G,1</sub> .....	3
Social Science/Human Relations requirement <sub>G, R,1</sub> .....	3-4
Elective:	
NRS 280 Co-op Ed: Nursing .....	(2)

Total Credits 15-18

**Second Year**

NRS 221A Nursing in Chronic Illness 2	Fall	
and End-of-Life * <sub>G,1</sub> .....		4
NRS 221B Nursing in Chronic Illness 2		
and End-of-Life Lab* .....		5
Arts and Letters, Social or Natural Science electives* <sub>G,1</sub> ..		6
(required for BS, not for AAS)		
Elective:		
NRS 280 Co-op Ed: Nursing .....		(2)

Total Credits 9-17

**Winter**

NRS 222A Nursing in Acute Care 2		
and End-of-Life * <sub>G,1</sub> .....		4
NRS 222B Nursing in Acute Care 2		
and End-of-Life Clinical Lab* .....		5
Arts and Letters, Social or Natural Science electives* <sub>G,1</sub> ..		6
(required for BS, not for AAS)		
Elective:		
NRS 280 Co-op Ed: Nursing .....		(2)

Total Credits 15-17

**Spring**

NRS 224A Integrative Practicum 1 * <sub>G,1</sub> .....	2
NRS 224B Integrative Practicum 1	
Clinical Lab (pass/no pass) * .....	7
Arts and Letters, Social or Natural Science electives* <sub>G,1</sub> ..	6
(required for BS, not for AAS)	
Electives as required to complete 90 credits for AAS .....	(2)

Total Credits 9-17

- 1 Must be passed with a "C" or better.
- 2 Waived with completion of previous U.S. Bachelors Degree or higher from U.S. regionally accredited institution
- 3 Waived if WR 121 and WR 122 are taken for 4 credits, effective summer 2010
- 4 The most recent course must have been completed *within 7 years prior to starting the nursing program* (taken fall term 2004 or later).

## Occupational Skills

**Offered by the Cooperative Education Division**

**One-Year Certificate of Completion**

**Purpose** To offer students the opportunity to design and pursue a career path that is not currently available as a certificate or degree program at Lane.

**Learning Outcomes** The graduate will:

- gain knowledge and skills to prepare for employment in a chosen occupation.
- improve communication, human relations, and critical thinking and problem-solving abilities.
- complete occupation-specific classes and work site education/training.
- access library, computing and communications services and obtain information and data from regional, national, and international networks.
- formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.
- interpret the concepts of a problem-solving task and translate them into mathematics.

**Employment Trends** Employment varies by occupation.

**Wages** Varies by occupation.

**Costs in Addition to Tuition (estimates)** Varies depending on courses taken.



**Number of New Students Admitted Annually** Applications are accepted at all times. No cap on admission at this time.

**Criteria Used for Admission** Admission is based on combination of academic background, labor market need, appropriate training site availability and demonstration of student commitment

**Admission Information** Cooperative Education Division office, Bldg. 19, Rm. 231, 541.463.5203

**Cooperative Education (Co-op)** Co-op provides students with on-the-job learning opportunities in a business, industry, government, or community organization. Students will have the opportunity to connect theory with practice, develop skills, and network with professionals and employers while earning college credit. Twenty to 26 credits of Co-op are required to earn a certificate of completion. Contact Chuck Fike, Occupational Skills Co-op Coordinator, Bldg. 19, Rm. 231C, 541.463.5078.

**Program Lead** Chuck Fike, 541.463.5078

**Program Counselor** Debra Ganser 541.463.5034

	<b>Fall</b>	
OST 280 Co-op Ed: Occupational Skills <sup>D,G</sup> .....	6	
Occupation specific course work <sup>1,D</sup> .....	6	
Choice of:.....	3-4	
WR115 Introduction to College Writing <sup>G,W</sup>		
WR115W Introduction to College Writing: Workplace Emphasis <sup>G,W</sup>		
Total Credits	15-16	
	<b>Winter</b>	
OST 280 Co-op Ed: Occupational Skills <sup>D,G</sup> .....	6	
Occupation specific course work <sup>1,D</sup> .....	6	
MTH 025 Basic Mathematics Applications <sup>M</sup> or higher.....	3	
Total Credits	15	
	<b>Spring</b>	
OST 280 Co-op Ed: Occupational Skills <sup>D,G</sup> .....	9	
Occupation specific course work <sup>1,D</sup> .....	3	
CG 203 Human Relations at Work <sup>H</sup> .....	3	
Total Credits	15	

1 Program occupation specific course work must be graded unless course is offered as P/NP only.

## Peace Studies

**Offered by Multiple Departments**

**Suggested Peace Studies electives for transfer degrees**

This is a suggested set of courses related to Peace Studies for students pursuing an Associate of Arts Oregon Transfer, Associate of General Studies, Associate of Science degrees or the Oregon Transfer Module at Lane Community College, or for students completing elective courses in peace studies for transfer to a baccalaureate program elsewhere. Suggested electives are not the same as a state-approved vocational program in which a student earns a degree or certificate with a

vocational major issued by the Lane Board of Education.

Peace Studies at Lane Community College are defined in broad terms extending beyond the study of war, recognizing that peace is rooted in social, economic, racial, gender, and environmental justice. For more information about Peace Studies at Lane Community College contact Stan Taylor at 541-463-5820 or [taylor@lanec.edu](mailto:taylor@lanec.edu)

The following three classes focus directly on the underlying causes of war and conflict, and on steps toward building peace.

**Discipline Studies: Social Science or electives**

PS 211 Peace and Conflict Global  
PS 212 Peace and Conflict National  
PS 213 Peace and Conflict Local

The following courses focus on social, economic, racial, gender and environmental justice as issues that must be addressed to build lasting peace.

**Discipline Studies: Arts and Letters requirement or electives**

ENG 222 Literature and Gender  
SP 115 Introduction to Intercultural Communication

**Discipline Studies: Social Science requirement or electives**

ANTH 103 Cultural Anthropology  
ECON 250/ES 250 Class, Race, and Gender in the U.S. Economy  
ES 101 Historical Race and Ethnic Issues  
ES 102 Contemporary Race and Ethnic Issues  
HIST 195 History of Vietnam  
PS 275 Legal Processes through Civil Rights and Liberties  
PS 297 Environmental Politics  
REL 243 Nature, Religion and Ecology  
SOC 207 Women and Work  
SOC 213 Race and Ethnicity  
SOC 215 Social Class  
SOC 216 Global Social Movements  
WS 101 Introduction to Women's Studies

## Physical Education

**Offered by Health, Physical Education and Athletics Division**

The Physical Education Department offers a variety of course offerings in fitness, strength training, aerobics, martial arts, yoga, individual and team sports, outdoor activities, athletics and rehabilitative therapies.

Students interested in preparing to transfer to a four-year school to major in Physical Education or Exercise Science are encouraged to apply for the Exercise and Movement Science Program. For more information regarding transferring to a four-year school, contact the Counseling and Advising Center, Bldg. 1, Rm. 102, 541.463.3200.

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

# Physical Therapist Assistant

## Candidate for Accreditation Status by CAPTE

Initial accreditation status will be determined in October 2011.

Offered by the Health Professions Division

Two-Year Associate of Applied Science Degree

**Purpose** To prepare the graduate to be qualified to practice as an associate degree licensed physical therapist assistant (PTA), and to qualify for the National Physical Therapy Examination administered by the Federation of State Boards of Physical Therapy.

**Learning Outcomes** The competencies defined by the American Physical Therapy Association and the Commission on Accreditation in Physical Therapy Education (CAPTE) are based on a view of developing knowledge and skills needed to practice as a safe and effective entry-level PTA. The competencies also recognize that effective PTA practice requires a professional competencies, and patient care competencies. Professional competencies:

- exhibit a commitment that reflects the expectation of members of the profession and the health care services industries.
- define relationship capabilities that PTAs need to work with clients and colleagues, the knowledge and skills of practicing the discipline and competencies that encompass understanding of the broader health care system.

In all cases, the client is defined as the recipient of care, is considered active participant in care, and includes the individual, family or community. PTA competencies recognize that a competent PTA provides safe care across the lifespan directed toward the goals of helping clients (individuals, families or communities) promote health and recovery from acute or chronic neuromuscular, cardiovascular, pulmonary, orthopedic, metabolic, and sensory injury or disease.

The graduate will:

- demonstrate the knowledge and skills needed to practice as a safe and effective entry-level Physical Therapist Assistant.
- use verbal and non-verbal communication strategies that demonstrate respect for the dignity, uniqueness and value of each individual.
- demonstrate PTA standards of ethical practice reflective of respect for others.
- demonstrate a commitment to life-long learning and to the maintenance of excellence in the practice of physical therapy.
- demonstrate a commitment to service through completion of a service-learning project.
- demonstrate knowledge and skills required to collect data, document treatment response and communicate progress using correct formats and terminology.
- demonstrate knowledge and skills in interpreting the established physical therapy plan of care, including seeking clarification from the supervising physical therapist when indicated.
- demonstrate critical thinking skills and appropriate treatment modifications for maximizing patient safety, progress, and comfort.
- demonstrate knowledge and skills required to access information and communicate with others using web-based technology.

- demonstrate the knowledge and skills required to select and administer appropriate application of massage, heat, cold, light, water, electricity, compression, exercise, gait, balance, and mobility training to relieve pain, improve the condition of the muscle or skin, and promote health and recovery.
- demonstrate detailed knowledge of human anatomy, physiology, and physical therapy treatment interventions and procedures.

**Employment Trends** From 2006 to 2016, annual new openings are projected to increase by 34 percent.

**Wages** Average Oregon statewide wages in 2009 ranged from \$16.88 hourly, to \$20.28 hourly. Average Oregon statewide salary in 2009 was \$45,157 for fulltime PTA employment. These earnings do not account for overtime and shift differentials, which could increase earnings.

**Costs in Addition to Tuition\*** Please consult [lanecc.edu/hp/pta](http://lanecc.edu/hp/pta) and the online credit class schedule for current course supply and differential fees. PTA students assume responsibility for their own uniforms, books, room and board, parking and transportation to and from clinical facilities.

\* Physical Therapist Assistant students pay a differential fee for some PTA courses. These and other course fees may change during the year—see the online credit class schedule for current fees assigned to courses. The annual differential fees are estimated at:

First year.....	\$995
Second year .....	\$398

**Program Accreditation** Lane Community College has been granted Candidate for Accreditation status by the Commission on Accreditation in Physical Therapy Education (CAPTE, 1111 North Fairfax Street, Alexandria, VA 22314; phone: 703-706-3245; e-mail [accreditation@apta.org](mailto:accreditation@apta.org)). Candidacy is not accreditation status nor does it assure eventual accreditation. Candidate for Accreditation is a pre-accreditation status of affiliation with the Commission on Accreditation in Physical Therapy Education that indicates the program is progressing toward accreditation.

**Licensing or Other Certification** Graduates are eligible to take the National Physical Therapy Examination after successful completion of a CAPTE-accredited program.

**Prerequisites** An applicant must complete a PTA application. The most current information regarding the curriculum, prerequisites, admission standards and procedures is available at [lanecc.edu/hp/pta](http://lanecc.edu/hp/pta)

**Number of New Students Admitted Annually** Each year up to 24 applicants will be accepted into the program.

**Criteria Used for Admission** Selection to the program is by a point system from a pool of qualified applicants. Students are encouraged to consult the program advisor or counselor before applying for admission. Application is limited to Oregon residents. Information on the point allocation system, transfer students, and advanced placement is available in the Counseling and Advising Center and [lanecc.edu/hp/pta/](http://lanecc.edu/hp/pta/)

**Admission Information and Deadlines** Please consult [lanecc.edu/hp/pta/](http://lanecc.edu/hp/pta/)

**Academic Advising/Counseling** Registration in on-line (Moodle) Academic Advising for Physical Therapist Assistant is highly recommended. Drop-in advising is available in Building 1, Room 103. E-mail [ptaprogram@lanec.edu](mailto:ptaprogram@lanec.edu)

**Program Coordinator** Christina Howard, MPT 541.463.5764, [howardc@lanec.edu](mailto:howardc@lanec.edu)

Prerequisites Required to Apply:	Credits
WR 121 Composition: Introduction to Academic Writing or higher writing <sup>R</sup> .....	3-4
HO 100 Medical Terminology 1.....	3
Choice of: .....	3-4
HO 150 Human Body Systems 1	
BI 231 Human Anatomy and Physiology * .....	3
MTH 070 Introductory Algebra <sup>*M</sup> .....	5
(or MTH 060 +MTH 065 or higher/current placement testing)	
Choice of: .....	3
PSY 201 General Psychology *	
PSY 202 General Psychology	
<b>Total Credits</b>	<b>17-19</b>

### Two-Year Associate of Applied Science Degree

First Year	Fall
PTA 100 Introduction to Physical Therapy <sup>G,1</sup> .....	3
PTA 101 Introduction to Clinical Practice 1 <sup>G,1</sup> .....	5
PTA 101L Introduction to Clinical Practice 1 Lab <sup>G,1</sup> .....	2
Choice of: .....	3-4
HO 152 Human Body Systems 2	
BI 233 Human Anatomy and Physiology 3 * .....	3
MTH 095 Intermediate Algebra (or equivalent) <sup>*S, R</sup> .....	5
<b>Total Credits</b>	<b>18-19</b>

	Winter
PTA 103 Introduction to Clinical Practice 2 <sup>*G,1</sup> .....	5
PTA 103L Introduction to Clinical Practice 2 Lab <sup>*G,1</sup> .....	2
PTA 132 Applied Kinesiology 1 <sup>*G,1</sup> .....	2
PTA 132L Applied Kinesiology 1 Lab <sup>*G,1</sup> .....	2
SP 115 Introduction to Intercultural Communication <sup>*A</sup> .....	4
<b>Total Credits</b>	<b>15</b>

	Spring
PTA 104 PT Interventions – Orthopedic Dysfunctions <sup>*G,1</sup> .....	5
PTA 104L PT Interventions – Orthopedic Dysfunctions Lab <sup>*G,1</sup> .....	2
PTA 133 Applied Kinesiology 2 <sup>*G,1</sup> .....	2
PTA 133L Applied Kinesiology 2 Lab <sup>*G,1</sup> .....	2
Choice of:	
HE 252 First Aid – Responding to Emergencies <sup>*P</sup> .....	3
HE 262 First Aid 2 - Beyond the Basics .....	3
<b>Total Credits</b>	<b>17</b>

### Summer Workshops

Second Year	Fall
PTA 204 PT Interventions – Neurological Dysfunctions <sup>*G,1</sup> .....	5
PTA 204L PT Interventions – Neurological Conditions Lab <sup>*G,1</sup> .....	2
PTA 280A Cooperative Education: First Clinical Affiliation <sup>*G,1</sup> .....	6
<b>Total Credits</b>	<b>13</b>

	Winter
PTA 205 PT Interventions – Complex Medical Dysfunctions <sup>*G,1</sup> .....	4
PTA 205L PT Interventions – Complex Medical Dysfunctions Lab <sup>*G,1</sup> .....	2
PTA 280B Cooperative Education: Second Clinical Affiliation <sup>*G,1</sup> .....	6
HO 102 Diversity Issues in Health Care .....	3
<b>Total Credits</b>	<b>15</b>

	Spring
PTA 200 Professionalism, Ethics and Exam Preparation <sup>*G,1</sup> .....	4
PTA 203 Contemporary Issues in Physical Therapy <sup>*G,1</sup> .....	2
PTA 280C Cooperative Education: Third Clinical Affiliation <sup>*G,1</sup> .....	6
<b>Total Credits</b>	<b>12</b>

1 Must be passed with grade of "C" or better

## Pre-Chiropractic

Offered by the Science Division

**Suggested Course of Study includes prerequisites for transfer**

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite chiropractic courses for transfer to a chiropractic program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-chiropractic courses that can be taken at a two-year institution for the professional chiropractic program at Western States Chiropractic College, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for a chiropractic degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

**Suggested Course of Study**

WR 121 English Composition: Exposition and Introduction to Argument * <sup>3,G</sup> .....	4
Choice of:.....	4
WR 122 English Composition: Introduction to Academic Writing * <sup>3,G</sup> .....	
WR 123 Composition: Research * <sup>3,G</sup> .....	
WR 227 Technical Writing * <sup>3,G</sup> .....	
MTH 097 Geometry*.....	4
MTH 111 College Algebra * <sup>G</sup> .....	5
MTH 112 Trigonometry * <sup>G</sup> .....	4
AAOT Speech requirement <sup>G</sup> .....	4
AAOT Health requirement <sup>1</sup> .....	3-4
AAOT Arts and Letters requirement <sup>1,2,3,G</sup> .....	9-12
AAOT Social Science requirement <sup>1,2,3,G</sup> .....	6-8
PSY 201 and PSY 202 General Psychology <sup>G</sup> .....	6
CH 221, 222, 223 General Chemistry * <sup>3,G</sup> .....	15
CH 241, 242, 243 Organic Chemistry * <sup>3,G</sup> .....	15
BI 211, BI 212, Z 213 Principles of Biology <sup>3,G</sup> .....	12
PH 201, 202, 203 General Physics * <sup>3,G</sup> .....	15

Total Credits 106-112

\* Prerequisite required

G must be taken for a letter grade and earn a grade of a C or higher

- 1 See science advisor for course selection
- 2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
- 3 Program prerequisite-see advisor for other choices

**Pre-Occupational Therapy**

**Offered by the Science Division**

**Suggested Course of Study includes prerequisites for transfer**

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to an occupational therapy program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-occupational therapy courses that can be taken at a two-year institution for the professional occupational therapy program at Pacific University, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for an occupational therapy degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

**Suggested Course of Study**

WR 121 English Composition: Introduction to Academic Writing * <sup>3,G</sup> .....	4
WR 227 Composition: Technical Writing * <sup>3,G</sup> .....	4

MTH 097 Geometry*.....	4
MTH 111 College Algebra * <sup>G</sup> .....	5
MTH 112 Trigonometry * <sup>G</sup> .....	4
MTH 243 Introduction to Probability and Statistics * <sup>3,G</sup> .....	4
AAOT Speech requirement <sup>G</sup> .....	4
AAOT Health requirement <sup>1</sup> .....	3-4
AAOT Arts and Letters requirement <sup>1,2,3,G</sup> .....	9-12
AAOT Social Science requirement <sup>1,2,3,G</sup> .....	6-8
AAOT Science requirement <sup>1,3,G</sup> .....	8
PSY 201 General Psychology <sup>G</sup> .....	3
PSY 239 Introduction to Abnormal Psychology <sup>G</sup> .....	3
HO 100 Medical Terminology <sup>3</sup> .....	3
PH 201 General Physics * <sup>3,G</sup> .....	5
Electives <sup>1,G</sup> .....	14
Cooperative Education <sup>1</sup> .....	6

Total Credits 94-100

1 Prerequisite required

G must be taken for a letter grade and earn a grade of a C or higher

- 1 See science advisor for course selection
- 2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
- 3 Program prerequisite-see advisor for other choices

**Pre-Optometry**

**Offered by the Science Division**

**Suggested Course of Study includes prerequisites for transfer**

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to an optometry program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-optometry courses that can be taken at a two-year institution for the professional optometry program at Pacific University, as well as the necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for an optometry degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane science advisor, and also to be aware of changes in programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

**Suggested Course of Study**

WR 121 English Composition: Introduction to Academic Writing * <sup>3,G</sup> .....	4
WR 227 Composition: Technical Writing * <sup>3,G</sup> .....	4
MTH 097 Geometry*.....	4
MTH 111 College Algebra* <sup>G</sup> .....	5
MTH 112 Trigonometry* <sup>G</sup> .....	4
MTH 241 or 251 Elementary Calculus 1 or Calculus1* <sup>3,G</sup> ..	4-5
MTH 243 Introduction to Probability and Statistics* <sup>3,G</sup> .....	4
AAOT Speech requirement <sup>G</sup> .....	4
AAOT Health requirement <sup>1</sup> .....	3-4



AAOT Arts and Letters requirement <sup>1,2,3,G</sup> .....	9-12
AAOT Social Science requirement <sup>1,2,3,G</sup> .....	6-8
PSY 201 General Psychology <sup>G</sup> .....	3
PSY 202 or PSY 203 General Psychology <sup>G</sup> .....	3
CH 221, 222, 223 General Chemistry <sup>*,3,G</sup> .....	15
CH 241, 242, 243 Organic Chemistry <sup>*,3,G</sup> .....	15
BI 211 Principles of Biology <sup>3,G</sup> .....	4
PH 201, 202, 203 General Physics <sup>*,3,G</sup> .....	15
Total Credits 106-113	

- \* Prerequisite required
- G must be taken for a letter grade and earn a grade of a C or higher
- 1 See science advisor for course selection
- 2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
- 3 Program prerequisite-see advisor for other choices

## Pre-Pharmacy

Offered by the Science Division

**Suggested Course of Study includes prerequisites for transfer**

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a pharmacy program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-pharmacy courses that can be taken at a two-year institution for the professional pharmacy programs at Oregon State University and Pacific University, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for a pharmacy degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon’s public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

### Suggested Course of Study

WR 121 English Composition: Introduction to Choice of .....	4
WR 122 English Composition: Argument, Style and Research <sup>G</sup>	
WR 123 Composition: Research <sup>*,3,G</sup> .....	4
MTH 097 Geometry <sup>*</sup> .....	4
MTH 111 College Algebra <sup>*,G</sup> .....	5
MTH 112 Trigonometry <sup>*,G</sup> .....	4
MTH 241 or 251 Elementary Calculus 1 or Calculus1 <sup>*,3,G</sup> ..	4-5
MTH 243 Introduction to Probability and Statistics <sup>*,3,G</sup> .....	4
SP 218 Interpersonal Communication <sup>3,G</sup> .....	4

AAOT Health requirement <sup>1</sup> .....	3-4
AAOT Arts and Letters requirement <sup>1,2,3,G</sup> .....	9-12
AAOT Social Science requirement <sup>1,2,3,G</sup> .....	6-8
PSY 201 General Psychology <sup>G</sup> .....	3
ECON 201 or 202 Introduction to Microeconomics or Macroeconomics <sup>3,G</sup> .....	3
CH 221, 222, 223 General Chemistry <sup>*,3,G</sup> .....	15
CH 241, 242, 243 Organic Chemistry <sup>*,3,G</sup> .....	15
BI 211, BI 212, Z 213 Principles of Biology <sup>3,G</sup> .....	12
PH 201, 202, 203 General Physics <sup>*,3,G</sup> .....	5-15

- \* Prerequisite required
- G must be taken for a letter grade and earn a grade of a C or higher
- 1 See science advisor for course selection
- 2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
- 3 Program prerequisite-see advisor for other choices
- 4 Pacific University requires PH 201 only

Total Credits 104-121

## Pre-Physical Therapy

Offered by the Science Division

**Suggested Course of Study includes prerequisites for transfer**

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a physical therapy program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-physical therapy courses that can be taken at a two-year institution for the professional physical therapy programs at Pacific University, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for a physical therapy degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon’s public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

### Suggested Course of Study

WR 121 English Composition: Introduction to Academic Writing <sup>*,3,G</sup> .....	4
Choice of.....	4
WR 122 English Composition: Argument, Style and Research <sup>A,G</sup>	
WR 123 Composition: <sup>*,3,G</sup> .....	4
MTh 097 Geometry <sup>*</sup> .....	4
MTH 111 College Algebra <sup>*,G</sup> .....	5
MTH 112 Trigonometry <sup>*,G</sup> .....	5

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of “B” or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of “C-” or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

MTH 243 Introduction to Probability and Statistics <sup>*,3,G</sup> .....	4
AAOT Speech requirement <sup>G</sup> .....	4
AAOT Health requirement <sup>1</sup> .....	3-4
AAOT Arts and Letters requirement <sup>1,2,3,G</sup> .....	9-12
AAOT Social Science requirement <sup>1,2,3,G</sup> .....	3-4
PSY 201 General Psychology <sup>G</sup> .....	3
PSY 215 Lifespan Developmental Psychology <sup>*,3,G</sup> .....	3
PSY 239 Introduction to Abnormal Psychology <sup>3,G</sup> .....	3
CH 221, 222, 223 General Chemistry <sup>*,3,G</sup> .....	15
BI 211, BI 212, Z 213 Principles of Biology <sup>3,G</sup> .....	12
PH 201, 202, 203 General Physics <sup>*,3,G</sup> .....	15
Total Credits 95-100	

- \* Prerequisite required
- G must be taken for a letter grade and earn a grade of a C or higher
- 1 See science advisor for course selection
- 2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
- 3 Program prerequisite-see advisor for other choices

## Pre-Physician Assistant

Offered by the Science Division

**Suggested Course of Study includes prerequisites for transfer**

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a physician assistant program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-physician assistant courses that can be taken at a two-year institution for the professional physician assistant programs at Oregon Health Sciences University and Pacific University, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for a physician assistant degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. See a Lane science advisor for assistance in course selection and transfer policies.

### Suggested Course of Study

WR 121 English Composition: Introduction to Academic Writing <sup>*,3,G</sup> .....	4
Choice of:.....	4
WR 122 English Composition: Argument, Style and Research <sup>*,3,G</sup> .....	4
WR 123 Composition: Research <sup>*,3,G</sup> .....	4
MTH 111 College Algebra <sup>*G</sup> .....	5
MTH 243 Introduction to Probability and Statistics <sup>*,3,G</sup> .....	4
AAOT Speech requirement <sup>G</sup> .....	4
AAOT Health requirement <sup>1</sup> .....	3-4
AAOT Arts and Letters requirement <sup>1,2,3,G</sup> .....	9-12
PSY 201 General Psychology <sup>G</sup> .....	3
PSY 215 Lifespan Developmental Psychology <sup>*,3,G</sup> .....	3
PSY 239 Introduction to Abnormal Psychology <sup>3,G</sup> .....	3
Sociology elective <sup>3,G</sup> .....	6

CH 221, 222, 223 General Chemistry <sup>*,3,G</sup> .....	15
CH 241 Organic Chemistry <sup>*,3,G</sup> .....	5
BI 211, BI 212, Z 213 Principles of Biology <sup>3,G</sup> .....	12
Electives <sup>1,3,G</sup> .....	12
Total Credits 92-96	

- \* Prerequisite required
- G must be taken for a letter grade and earn a grade of a C or higher
- 1 See science advisor for course selection
- 2 One Arts and Letters course needs to meet Cultural Diversity Requirement
- 3 Program prerequisite-see advisor for other choices

## Pre-Veterinary Medicine

Offered by the Science Division

**Suggested Course of Study includes prerequisites for transfer**

This suggested course of study is for students who want to earn an Associate of Arts Oregon Transfer (AAOT) degree at Lane Community College and complete prerequisite courses for transfer to a veterinary medicine program elsewhere. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education. The guide below includes all pre-veterinary courses that can be taken at a two-year institution for the professional veterinary medicine programs at Oregon State University, as well as necessary general education requirements for an AAOT.

Transfer institutions require additional coursework for a veterinary medicine degree, and may change prerequisites from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor, and also to be aware of changes in prerequisites for programs at potential transfer institutions.

General education courses transferred within a completed AAOT degree satisfy lower division general education requirements for any of Oregon's public universities and will transfer intact. Courses numbered below 100 generally do not transfer. See a Lane science advisor for assistance in course selection and transfer policies.

### Suggested Course of Study:

WR 121 English Composition: Exposition and Introduction to Argument <sup>*,3,G</sup> .....	4
WR 227 Technical Writing <sup>*,3,G</sup> .....	4
MTH 097 Geometry <sup>*</sup> .....	4
MTH 111 College Algebra <sup>*G</sup> .....	5
MTH 112 Trigonometry <sup>*G</sup> .....	5
MTH 243 Introduction to Probability and Statistics <sup>*,3,G</sup> .....	4
MTH 251 Calculus <sup>*,3,G</sup> .....	4
SP 111 Public Speaking <sup>1,G</sup> .....	4
AAOT Health requirement <sup>1</sup> .....	3-4
AAOT Arts and Letters requirement <sup>1,2,3,G</sup> .....	9-12
AAOT Social Science requirement <sup>1,2,3,G</sup> .....	12-15
CH 221, 222, 223 General Chemistry <sup>*,3,G</sup> .....	15
CH 241, 242, 243 Organic Chemistry <sup>*,3,G</sup> .....	15
BI 211, BI 212, Z 213 Principles of Biology <sup>3,G</sup> .....	12
PH 201, 202, 203 General Physics <sup>*,3,G</sup> .....	15
Total Credits 115-122	

- \* Prerequisite required
- G must be taken for a letter grade and earn a grade of a C or higher
- 1 See science advisor for course selection
- 2 One Social Science or Arts and Letters course needs to meet Cultural Diversity Requirement
- 3 Program prerequisite-see advisor for other choices

# Respiratory Care

Offered by Health Professions Division

Two-Year Associate of Applied Science Degree

See the Respiratory Care web pages for additional information.

**Purpose** To prepare graduates to pass the National Board for Respiratory Care (NBRC) Advanced Practitioner Examination and to become competent Registered Respiratory Therapists

**Learning Outcomes** The graduate will:

- provide treatment, management, control, and care of patients with deficiencies and abnormalities associated with respiration.
- provide patients with therapeutic use of medical gases, air and oxygen administering apparatus.
- appropriately use environmental control systems, humidification and aerosols, medications, ventilatory control.
- supervise postural drainage, chest physiotherapy and breathing exercises.
- perform cardiopulmonary resuscitation, and measures and maintenance of natural, artificial, and mechanical airways.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- formulate questions that can be addressed with data and collect, organize and present relevant data to answer them.

**Employment Trends** The 2008-18 employment projection estimates 44 openings annually statewide, with 5 openings annually in Lane County. This occupation is expected to grow somewhat faster than the statewide average. Reasonable employment opportunities exist for trained workers largely due to the need to fill replacement job openings.

**Wages** Oregon 2009 statewide average is \$27.01 hourly and \$56,168 annually. Lane County average is commensurate with statewide average.

**Costs in Addition to Tuition (estimates)\*** Students also pay a differential fee for some Respiratory Care courses, which total \$1,432 for first year courses and \$2,807 for second year courses. These and other course fees may change during the year – see the online credit class schedule for current fees assigned to courses.

Student health insurance is required in the program. This can be obtained through the student health insurance (information available at the student health clinic) or other health insurance providers.

A physical examination, immunizations, and criminal background check are required for the program. Criminal background check must pass clinical affiliate criteria for student to participate in required clinical courses. Costs related to transportation, childcare, post-graduate credentialing and state licensure are not included in this estimate. Costs related to completion of pre-requisites are not included, but could add up to approximately \$2000 if completed at Lane Community College. Cost of travel to and parking at clinical affiliates varies with assignment. Licensure and post-graduate credentialing can

cost up to \$730 depending on the level of credentialing and State Licensure Fees. For further information related to licensure process or fees in Oregon, contact: Oregon Health Licensing Agency, Respiratory Therapist Licensing Board 503.378.8667. Students should consider the additional costs of these requirements.

**Program Accreditation** The Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care, *coarc.com*

**Licensing or Other Certification Exams Required** National credentialing - National Board for Respiratory Therapy, 913.599.4200, *nbr.org* - Oregon State Respiratory Care Practitioner License - Oregon Health Licensing Agency, 503.378.8667, *oregon.gov/OHLA/RT*

**Application requirements** In order to apply for fall entry all applicants must complete the following minimum prerequisites as indicated below. Other specialized program requirements will be described in acceptance materials.

- Math 95 (5 credits), or higher (4 or more credits) graded C- or better.
- Chemistry 112 <sup>\*,S</sup> and Biology 112 <sup>\*,S</sup> (3 credits each), or 100-level or higher college chemistry <sup>S</sup> course (5 credits or more) pass/no pass option okay, or grade equal to C- or better
- BI 231 Human Anatomy and Physiology 1 (4 credits) Graded "C-" or better
- HO 100 Medical Terminology 1 (3 credits) pass/no pass option okay, or grade equal to C- or better
- WR 121 Composition: Introduction to Academic Writing <sup>\*,W</sup> (4 credits) pass/no pass option okay, or grade equal to C- or better .

**Admission and Deadline Information** Application information is available online at *lanec.edu/hp/rc* or at Counseling and Advising.

**Criteria Used for Admission** Selection to the program is by a points based system from a pool of qualified applicants. Information on the point allocations system is available from the program website. The application information packet is found on the program web page, *lanec.edu/hp/rc*

Selection to the program is based on completion date of the application (application plus all transcripts documenting successful completion of prerequisites) and meeting all requirements indicated in the application information packet.

**Number of New Students Admitted Annually** The number of applicants accepted is based on college budgetary and clinical facility considerations, usually 25 – 30 students.

**Cooperative Education (Co-op)** Respiratory care allows students to earn college credit for participating in job-related activities in respiratory care professional settings under direct supervision. Through Co-op, enrolled students develop skills, connect classroom theory with practice, expand career knowledge, and make contacts for potential future employment in respiratory care. Co-op may be taken as an optional elective, and is a

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

required course as the clinical capstone ICU practicum course in the final term. Contact Norma Driscoll, Respiratory Care Co-op Coordinator, Bldg. 4, Rm. 135, 541.463.3176.

**Counseling and Advising** For assistance in meeting program or application requirements, please go to Counseling and Advising in Building 1, Room 103, or e-mail [RCProgram@lanecc.edu](mailto:RCProgram@lanecc.edu)

**First Day Enrollment Requirements completed prior to enrolling in fall term program courses:**

- BI 232 Human Anatomy and Physiology 2 (4 credits) (Graded – “C-” or better)
- Evidence of a physical examination (within the previous nine months)
- CPR Certification for Health Care Professionals – 2-year certification preferred

**First Year**

	<b>Fall</b>
BI 233 Human Anatomy and Physiology 3 <sup>*,G,S,4</sup> .....	4
RT 112 Respiratory Care Science 1 <sup>G</sup> .....	2
RT 114 Fundamentals of Respiratory Care 1 <sup>G</sup> .....	2
RT 146 Introduction to Clinical Respiratory Care 1 <sup>3</sup> .....	3
Human Relations requirement <sup>R,G</sup> .....	3
The following are preferred:	
CG 203 Human Relations at Work	
CG 191 Issues in Cultural Diversity	
HO 102 Diversity Issues in Health Care	
Total Credits	14

**Winter**

RT 116 Basic Respiratory Assessment <sup>*,G</sup> .....	2
RT 127 Respiratory Care Diseases and Medications <sup>*,G</sup> .....	4
RT 141 Principles of Respiratory Care Lab <sup>*,G</sup> .....	1
RT 144 Principles of Respiratory Care <sup>*,G</sup> .....	3
BI 234 Microbiology <sup>*,G,S</sup> .....	4
Total Credits	14

**Spring**

RT 251 Pulmonary Diagnostics and Monitoring Lab <sup>*,G</sup> .....	1
RT 254 Pulmonary Diagnostics and Monitoring <sup>*,G</sup> .....	3
RT 126 Respiratory Care Case Review - Part 1 <sup>*,G</sup> .....	2
RT 236 Clinical Practice 1 <sup>*,3</sup> .....	8
Total Credits	14

**Summer**

RT 110 Introduction to Mechanical Ventilation <sup>*,G,4</sup> .....	3
RT 136 Respiratory Care Case Review - Part 2 <sup>*,G,4</sup> .....	4
RT 248 Clinical Practice 2 <sup>*,3</sup> .....	6
Total Credits	13

**Second Year**

	<b>Fall</b>
RT 241 Principles of Mechanical Ventilation Lab <sup>*,G,4</sup> .....	1
RT 244 Principles of Mechanical Ventilation <sup>*,G,4</sup> .....	3
RT 216 Respiratory Care Case Review - Part 3 <sup>*,G,4</sup> .....	2
RT 258 Clinical Practice 3 <sup>*,3</sup> .....	8
Total Credits	14

**Winter**

RT 256 Respiratory Care Case Review - Part 4 <sup>*,G,4</sup> .....	2
RT 262 Neonatal/Pediatric Respiratory Care <sup>*,G,4</sup> .....	3
RT 266 Emergency and Critical Care - Part 1 <sup>*,G,4</sup> .....	3
RT 268 Clinical Practice 4 <sup>*,3</sup> .....	8
Total Credits	16

	<b>Spring</b>
Health/PE requirement <sup>2,R</sup> .....	3
Preferred: HE 275 Lifetime Health and Fitness <sup>2,P</sup> .....	
RT 270 Clinical Competency Assessment <sup>*,3</sup> .....	1
RT 274 Credentialing Topics <sup>*,G,D</sup> .....	2
RT 276 Emergency and Critical Care - Part 2 <sup>*,G,4</sup> .....	2
RT 280 Co-op Ed: Respiratory Therapy <sup>*,G,4</sup> .....	4
Arts and Letters <sup>A, G</sup> .....	4
The following are preferred:	
SP 111 Fundamentals of Public Speaking	
SP 115 Introduction to Intercultural Communication	
SP 218 Interpersonal Communication	
SP 220 Communication, Gender and Culture	
Total Credits	16

- 1 Must be accepted into Respiratory Care Program.
- 2 Students fulfilling Physical Education degree requirements via PE courses must complete activity courses over at least two terms.
- 3 Graded Pass/No Pass
- 4 Must be passed with grade of “C-” or better

**Optional courses each term:**

- RT 148 Advanced Placement Clinical Practice
- RT 298 Independent Study
- RT 280 Co-op Ed: Respiratory Therapy

## Retail Management

**Offered by the Business Department**

**Two-Year Associate of Applied Science Degree**

**One-Year Certificate of Completion**

**Career Pathway Certificate of Completion**

**Purpose** This two-year Retail Management Associate of Applied Science degree program provides a program of study for retail employees and for students who would like to advance to retail store supervision, store management, and be qualified to move forward into corporate leadership. This program represents skills identified by the retail industry at the statewide level, as represented by the Western Association of Food Chains.

**Learning Outcomes** The graduate of the Associate of Applied Science program will:

- understand the purpose, context, concepts, and processes of retailing and the retail environment and the responsibilities of the retail operations function.
- understand the advantages, disadvantages, and circumstantial uses of various leadership styles.
- understand various ethical tools and the reasoning behind various ethical positions.
- determine appropriate and inappropriate interview, hiring, and employee supervision procedures.
- understand the opportunities and challenges posed by a team-based, multicultural work force and the responsibilities of management in handling and motivating employees to achieve organizational objectives.
- apply leadership skills to achieve a motivational and productive culture and climate.
- understand the impact of technology on marketing and recognize how the major elements of the marketing process apply to actual marketing situations.
- define theories and strategies of business management, including human resources management and operations management.
- understand the basic terms and concepts of accounting, and the content of financial statements and be able to understand and interpret the information they contain.



- understand communication theory and give well-organized, clear written and oral business presentations that inform, recommend, and train.
- prepare mathematical business computations for industry requirements, including discounts and mark-ups, returns and allowances, and data to maintain good records.
- learn and demonstrate proficiency with office suite products, including word processing, spreadsheets, database, communication, and presentation software.
- know, demonstrate, and appreciate good work ethics, including dependability, attention to detail, good customer relations, professionalism, and good teamwork relationships.
- appreciate the significance of meeting employer/retailer needs in providing superior customer service and apply communication skills to improve customer service and work relationships.
- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision-making and problem solving.

**Employment Trends** For retail management and supervision, the projected number of annual openings for the state of Oregon is 555, with approximately 49 in Lane County. Employers particularly seek employees with good communication, teamwork, and interpersonal skills, as well as those who present themselves in a professional manner. Workers must have related work experience to gain the necessary skills for this occupation. However, workers with postsecondary training have a competitive advantage in the labor market.

**Wages** Statewide wages for retail managers and supervisors average \$19.31 hourly and \$40,169 annually plus benefits. Lane County wages average \$19.74 hourly and \$41,077 annually plus benefits.

**Costs in Addition to Tuition (estimate)\***

Books and fees..... \$2,550  
Some Business courses have a one-time fee of \$5 per term to help support the Student Resource Center. See the Business department for details.

\* Subject to change without notice.

**Prerequisites** The entering student must have the ability to type by touch, have a basic knowledge of the Windows operating system, and place at least into WR 121 and MTH 060, or take classes to reach these levels before enrolling in program courses. Before enrolling in BA 214 Business Communications, students must pass a Language Skills and Proofreading test in the Testing office or pass BT 108 Business Proofreading and Editing. All Business Department majors must have a computer that meets minimum system requirements; contact the department or advisor for details.

**Program Advisor** Deb Hupcey, Bldg. 2, Rm. 135, 541.463.5635, [hupceyd@lanec.edu](mailto:hupceyd@lanec.edu)

**Program Counselor** Marva Solomon, Bldg. 1, Rm. 103B, 541.463.5625, [solomonm@lanec.edu](mailto:solomonm@lanec.edu)

## Retail Management

### Two-Year Associate of Applied Science Degree

First Year	Fall
BA 101 Introduction to Business <sup>D,G</sup> .....	4
CS 120 Concepts of Computing: Information Processing <sup>D,G</sup> .....	4
MTH 060 Beginning Algebra or higher <sup>*D,G,M</sup> .....	4
Choice of:.....	4
SP 111 Fundamentals of Public Speaking <sup>D,G</sup>	
SP 100 Basic Communication <sup>D,G</sup>	
SP 130 Business and Professional Speech <sup>D,G</sup>	

Total Credits 16

Winter	
BA 211 Financial Accounting <sup>*D,G</sup> .....	4
BA 224 Human Resource Management <sup>*D,G</sup> .....	3
BA 223 Marketing <sup>*D,G</sup> .....	4
WR 121 Composition: Introduction to Academic Writing <sup>*D,G,W</sup> .....	4

Total Credits 15

Spring	
BA 214 Business Communications <sup>*D,G</sup> .....	4
BA 249 Retailing <sup>*D,G</sup> .....	4
BA 278 Leadership and Team Dynamics <sup>D,G</sup> .....	4
BA 206 Management Fundamentals <sup>*D,G</sup> .....	3

Total Credits 15

### Second Year

Fall	
BA 213 Managerial Accounting <sup>*D,G</sup> .....	4
BA 251 Supervisory Management <sup>D,G</sup> .....	4
HE 252 First Aid <sup>D,G</sup> .....	3
SP 115 Intercultural Communication <sup>D,G</sup> .....	4

Total Credits 15

Winter	
BA 226 Business Law <sup>D,G</sup> .....	4
Choice of:.....	3-4
BT 123 MS EXCEL for Business <sup>*D,G</sup>	
BT 165 Introduction to the Accounting Cycle <sup>D,G</sup>	
BT 170 Payroll Records and Accounting <sup>*D,G</sup>	
BT 171 Payroll Laws and Regulations <sup>D,G</sup>	
BT 251 E-Business Fundamentals <sup>D,G</sup>	

ECON 200 Principles of Economics:

Introduction to Economics <sup>D,G</sup> .....	3
SP 105 Listening and Critical Thinking <sup>D,G</sup> .....	4

Total Credits 14-15

Spring	
BA 124 Negotiating <sup>D,G</sup> .....	3
BA 217 Budgeting for Managers <sup>*D,G</sup> .....	4
BA 238 Sales <sup>D,G</sup> .....	3
BA 261 Consumer Behavior <sup>D,G</sup> .....	3
BA 280 Cooperative Education: Retail <sup>D,G</sup> .....	3

Total Credits 16

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

## Retail Management

### One-Year Certificate of Completion

**Purpose** The Retail Management Certificate of Completion represents skills identified by the retail industry, which desires to provide a program of study for their employees and for students who would like to become retail employees. The certificate builds on the Career Pathway Certificate of Completion and incorporates additional coursework in writing and business. This program is recognized by retail employers and identifies skills that lead to professional growth, hiring, and advancement opportunities. This program is a body of study that prepares the student for retail sales and management responsibilities; those who complete the program may be given preference in hiring, and/or may be eligible for promotions.

**Learning Outcomes** The graduate will:

- understand the purpose of retailing and the retail environment and the responsibilities of the retail operations function.
- understand the advantages, disadvantages, and circumstantial uses of various leadership styles.
- understand various ethical tools and the reasoning behind various ethical positions.
- determine appropriate and inappropriate interview and hiring questions.
- understand the opportunities and challenges posed by a multi-cultural work force and the responsibilities of management in handling and motivating employees in the current business environment.
- understand the impact of technology on marketing and recognize how the major elements of the marketing process apply to actual marketing situations.
- define theories and strategies of business management, including human resources management and operations management.
- understand the basic terms and content of financial statements and be able to understand and interpret the information they contain.
- understand communication theory and give well-organized, clear business presentations that inform, recommend, and train.
- understand the basics of word processing, spreadsheets, database management, and internet communications.
- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision-making and problem solving.

	Fall
BA 101 Introduction to Business <sup>D,G</sup> .....	4
CS 120 Concepts of Computing: Information Processing <sup>D,G</sup> .....	4
MTH 060 Beginning Algebra or higher <sup>*,D,G</sup> .....	4
Choice of:.....	4
SP 111 Fundamentals of Public Speaking <sup>D,G</sup>	
SP 100 Basic Communication <sup>D,G</sup>	
SP 130 Business and Professional Speech <sup>D,G</sup>	
<b>Total Credits</b>	<b>16</b>

	Winter
BA 211 Financial Accounting <sup>*,D,G</sup> .....	4
BA 224 Human Resource Management <sup>*,D,G</sup> .....	3
BA 223 Marketing <sup>*,D,G</sup> .....	4
WR 121 Composition: Introduction to Academic Writing <sup>*,D,G,W</sup> .....	4
<b>Total Credits</b>	<b>15</b>

	Spring
BA 214 Business Communications <sup>*,D,G</sup> .....	4
BA 249 Retailing <sup>*,D,G</sup> .....	4
BA 278 Leadership and Team Dynamics <sup>D,G</sup> .....	4
Choice of:.....	3-4
BA 206 Management Fundamentals <sup>*,D,G</sup>	
BA 226 Business Law <sup>D,G</sup>	
<b>Total Credits</b>	<b>15-16</b>

## Retail Management

### Career Pathway Certificate of Completion

**Purpose** This Career Pathway Certificate of Completion represents skills identified by the retail industry, as represented by the Western Association of Food Chains, which desires to provide a program of study for their employees and for students who would like to become retail employees. This program is recognized by retail employers and identifies skills that lead to professional growth, hiring, and advancement opportunities. This program is a body of study that prepares the student for retail sales and management responsibilities. Those who complete the program will be given preference in hiring, will be eligible for promotions, and will receive compensation to recognize their educational achievement.

**Learning Outcomes** The graduate will:

- understand the purpose of retailing and the retail environment and the responsibilities of the retail operations function.
- understand the advantages, disadvantages, and circumstantial uses of various leadership styles.
- understand various ethical tools and the reasoning behind various ethical positions.
- determine appropriate and inappropriate interview and hiring questions.
- understand the opportunities and challenges posed by a multi-cultural work force and the responsibilities of management in handling and motivating employees in the current business environment.
- understand the impact of technology on marketing and recognize how the major elements of the marketing process apply to actual marketing situations.
- define theories and strategies of business management, including human resources management and operations management.
- understand the basic terms and content of financial statements and be able to understand and interpret the information they contain.
- understand communication theory and give well-organized, clear business presentations that inform, recommend, and train.
- understand the basics of word processing, spreadsheets, database management, and internet communications.

- use appropriate library and information resources to research business topics.
- apply critical thinking and analytical skills in decision-making and problem solving.

	Fall
BA 101 Introduction to Business <sup>D,G</sup> .....	4
CS 120 Concepts of Computing: Information Processing <sup>D,G</sup> .....	4
MTH 060 Beginning Algebra or higher <sup>*,D,G</sup> .....	4
Choice of:.....	4
SP 111 Fundamentals of Public Speaking <sup>D,G</sup>	
SP 100 Basic Communication <sup>D,G</sup>	
SP 130 Business and Professional Speech <sup>D,G</sup>	
Total Credits	16

	Winter
BA 211 Financial Accounting <sup>*,D,G</sup> .....	4
BA 223 Marketing <sup>D,G</sup> .....	4
BA 224 Human Resource Management <sup>*,D,G</sup> .....	3
Total Credits	11

	Spring
BA 214 Business Communications <sup>*,D,G</sup> .....	4
BA 249 Retailing <sup>D,G</sup> .....	4
BA 278 Leadership and Team Dynamics <sup>D,G</sup> .....	4
Total Credits	12

## Speech and Communication Studies

**Offered by Language, Literature, and Communication Division**

### Suggested Course of Study

**Important note** Oregon four-year schools vary in their requirements. If you are a transfer student and considering a Suggested Course of Study in Speech and Communication Studies, you must work closely with a Lane academic advisor as well as an academic advisor at your transfer school.

Lane Community College's four core learning outcomes emphasize how essential communication is to education and success in the workplace. To become a competent communicator, students usually need more than a one-course requirement in Speech and Communication Studies. In choosing this course of study students demonstrate to prospective and current employers their enhanced speech and communication skills.

By selecting one of the following tracks students can prepare themselves for careers in law, public relations, communication consulting, business administration, teaching, speechwriting, speech/debate direction, broadcast, counseling, mediation, labor relations, public opinion research, human resources, advertising, educational administration, lobbying, and marketing, to name a few fields.

This is a suggested course of study, which is not the same as a state-approved vocational program with a vocational major leading to a degree from the Lane Board of Education. Rather the courses below are appropriate electives for students interested in Speech and Communication Studies. This suggested course of study is available in two tracks:

- 1 Academic track—for those pursuing a bachelor's degree or a minor in Speech and Communication Studies.
- 2 Occupational track—for those completing a two-year degree program who want to maximize their proficiency in speech and communication to enhance occupational readiness, performance, and flexibility.

Internship Students in either the academic or occupational track can elect to complete a one-term internship related to the field of Speech and Communication Studies. This work would be completed under the joint supervision of the Cooperative Education program at Lane and a Speech and Communication Studies faculty member. Letters of recommendation from the supervising employer and credits earned in practicum can give students a competitive edge when applying for employment. Internships may focus on public relations, advertising, political canvassing, environmental or health education, marketing, or other fields.

**Important note** Oregon four-year schools that provide a Communication major vary in their requirements. When selecting classes for the academic track, students must work closely with a Lane academic advisor as well as an academic advisor at the transfer school.

### Completing an Academic Track in Communication Studies

The suggested course of study recommends either the AAOT, ASOT, or OTM Foundational Skills requirement along with four elective courses in Speech and Communication Studies.

#### AAOT Foundational Skills requirements

Communication/Rhetoric: Four credits - A fundamentals of speech or communication course. Choice of one course from:

- SP100 Basic Communication
- SP 111 Public Speaking
- SP 112 Persuasive Speech
- SP 130 Business and Professional Speech
- SP 218 Interpersonal Communication
- SP 219 Small Group Discussion

#### ASOT Business Foundational Skills requirements

Communication: Four credits. A fundamentals of speech or communication course. Choice of one course from:

- SP 100 Basic Communication
- SP 105 Listening and Critical Thinking
- SP 111 Fundamentals of Public Speaking
- SP 112 Persuasive Speech
- SP 115 Introduction to Intercultural Communication
- SP 130 Business and Professional Speech
- SP 218 Interpersonal Communication
- SP 219 Small Group Discussion
- SP 220 Communication, Gender and Culture
- SP 262 Voice and Articulation

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

**OTM Foundational Skills requirements**

Oral Communication: Four credits. As a part of the Foundational Studies requirement, students select from:

- SP 100 Basic Communication
- SP 111 Fundamentals of Public Speaking

**Electives and/or University-Specific Prerequisites for the ASOT and AAOT**

To complete the suggested course of study, four courses may be selected from the remainder of the Speech and Communication Studies curriculum. All of the following are four credits. The starred courses may also be applied to the AAOT or ASOT Introduction to Disciplines Arts and Letters requirement, which specifies that a student must choose 12 credits from at least two disciplines.

- SP 100 Basic Communication
- SP 105 Listening and Critical Thinking
- SP 111 Fundamentals of Public Speaking
- SP 112 Persuasive Speech
- SP 115 Introduction to Intercultural Communication\*
- SP 130 Business and Professional Speech
- SP 218 Interpersonal Communication
- SP 219 Small Group Discussion
- SP 220 Communication, Gender and Culture\*
- SP 221/222/223 Forensics (1-2 credits)
- SP 262 Voice and Articulation

**Completing an Occupational Track in Communication Studies**

The suggested course of study recommends three skills-oriented courses that include the following:

- SP 105 Listening and Critical Thinking
- SP 111 Fundamentals of Public Speaking or SP 130 Business and Professional Speech
- SP 219 Small Group Discussion

## Speech Language Pathology Assistant (SLPA)

**Offered by Chemeketa Community College**

**A collaboration between Chemeketa Community College and Lane Community College**

**Certificates and AAS Degrees**

**Purpose** To provide training to become a Speech Language Pathology Assistant (SLPA), a certified support person who carries out specific therapy-related tasks under the supervision of a licensed speech-language pathologist. The SLPA works closely with others in a variety of settings including schools, hospitals, rehabilitation centers, or private practice. As a member of a speech-language therapy team, the SLPA helps children and adults with communication disorders improve their ability to speak, listen and interact with others.

Lane partners with Chemeketa so that students may take classes at both institutions to become eligible for the SLPA certification through Chemeketa Community College. Chemeketa offers the required coursework for an individual to be eligible for certification as a Speech-Language Pathology Assistant with the Oregon State Board of Examiners for Speech-Language Pathology and Audiology. Chemeketa also offers students the option to obtain an Associate of Applied Science (AAS) degree in Speech Language Pathology Assistant with the completion of an additional 45 general education credits.

Lane offers the general education portion of the SLPA AAS degree and two Education courses. Since all of Chemeketa's SLPA courses are online, and the practicum is arranged locally, students are able to complete an AAS degree from Chemeketa and become eligible for the SLPA certification without the need to travel out of the Lane County area.

To earn either an SLPA Certification or the SLPA AAS degree, a student must complete a total of 90 credits: 45 credits of general education and 45 credits of required SLPA courses. The SLPA program description is available at [speechpathology.chemeketa.edu](http://speechpathology.chemeketa.edu)

**Learning Outcomes** Students who complete the program will be able to:

- assist a Speech Language Pathologist, who diagnoses disorders and provides treatment in the areas of speech, language, fluency, voice, and swallowing.
- follow treatment plans and provide therapy designed by the Speech Language Pathologist.
- assist with screenings conducted by the SLP.
- give general input in the team process of planning for a client's therapy needs.

**Application** All students must apply and be accepted into Chemeketa's SLPA program before they are eligible to enroll in Chemeketa's SLPA courses. Applications are usually due in February and accepted students begin program courses the spring term immediately following acceptance. Students must complete pre-requisite courses (or their equivalent) prior to being accepted in the SLPA program and beginning coursework, such as these Lane courses:

- BT 010 Computer Keyboarding (if less than 25 wpm)
- CIS 101 Computer Fundamentals
- MATH 060 Beginning Algebra
- RD 090 College Reading Skills
- WR 115 Introduction to College Writing

Current information regarding prerequisites, admissions procedures, and program costs is available at: [chemeketa.edu/programs/slpa/process](http://chemeketa.edu/programs/slpa/process)

Lane students may enroll in two of the SLPA-required courses that are offered at Lane, ED 258 Multicultural Education, and ED 130 Comprehensive Classroom Management without admission to the SLPA program.

A student enrolled continuously at Lane or Chemeketa, or enrolled continuously in a combination of courses alternating between the colleges, will be able to use the requirements in place when the student entered the program. Chemeketa's two-year interruption clause will apply. A candidate for the AAS in SLPA may be enrolled at either Lane or Chemeketa during the final term of classes and need not be enrolled at Chemeketa in the term the graduation application is submitted.

**Wages** Data from Chemeketa indicate that the pay range for SLPAs is \$14 to \$20 per hour with benefits. Most jobs currently are in school districts (K-12) or with Educational Service Districts.



**Program Advisor** Cindy Lott 541.463.5232 [lottc@lanecc.edu](mailto:lottc@lanecc.edu)

**Program Counselor** Anthony Hampton 541.463.5275  
[hamptona@lanecc.edu](mailto:hamptona@lanecc.edu)

**Required Chemeketa Courses to be eligible for SLPA certification:**

ED 130 Comprehensive Classroom Management.....	3
ED 258 Multicultural Education.....	3
ED 280 Cooperative Education: SLPA.....	6

\*Cooperative Education is part of the 45 credits that make up the OAR requirement of the Oregon Board for Speech Language Pathology and Audiology for 45 credits in speech language pathology technical coursework. Lane's ED 280 has a special section exclusively for SLPA students. Co-op courses require onsite clinical interaction and a weekly seminar with reading and assignments geared toward the direct clinical practice of a speech language pathology assistant. In collaboration with the SLPA program at Chemeketa, Lane provides a local practicum supervisor licensed in the SLPA field.

Additional Lane general education courses are required for Chemeketa's Associate of Applied Science Degree, Speech Language Pathology Assistant. Students choosing to earn Chemeketa's Associate of Applied Science Degree in addition to the SLPA Certificate may complete general education coursework at Lane. Students must pass the following courses with a grade of "C" or better:

**Writing**

WR 121 Composition: Introduction to Academic Writing, or higher.....4 credits

**Mathematics**

Math 070 Elementary Algebra, or higher .....4 credits  
Recommended course  
MTH 211 Fundamentals Elementary Math 1 .....4 credits

**Computer Literacy**

CS 120 Concepts of Computing or .....3-4 credits  
CIS 101 Computer Fundamentals

**Speech**

SP 100 or higher .....4 credits  
Any Speech course from Lane's Associate of Arts Oregon  
Transfer degree approved Arts and Letters offerings\*\*.....4 credits

**Physical Education or Health.....3 credits**

Any course from Lane's Associate of Arts Oregon Transfer degree approved Health offerings.  
Recommended course  
HE 252 First Aid .....3 credits

**Humanities/Fine Arts .....9 credits**

Any courses from Lane's Associate of Arts Oregon Transfer degree approved Arts and Letters offerings. \*\*  
Recommended course  
ENG 100 Children's Literature .....4 credits

**Social Science.....12 credits**

Any courses from Lane's Associate of Arts Oregon Transfer degree approved Arts and Letters offerings. \*\*  
Science.....9 credits

Any two 4-credit classes from Lane's biological sciences with laboratories or physical sciences with laboratories course offerings. \*\*

\*\*Because of the variety and extent of courses that qualify in Social Science, Arts and Humanities, and Science please refer to the appropriate Lane catalog for a complete list of approved courses in these areas.

## Sustainability

**Offered by Multiple Departments**

**Suggested Course of Study**

This suggested course of study leads to an AAOT degree for students interested in pursuing a bachelor's degree in fields such as environmental science, environmental studies, or community planning. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education.

Most courses listed below relate to sustainability topics and outcomes. Sustainability is by its nature multidisciplinary, and this course of study can lead to many different fields. Students will be able to move onto further studies equipped with knowledge of the systems that sustain life on the planet; a broad understanding of sustainable ecological, social, and economic systems; a concern for building a socially diverse, just, and sustainable society; and the competence to act on such knowledge. For more information about sustainability at Lane contact Susie Cousar, Sustainability and Learning coordinator, at 541.463.5271 or [cousars@lanecc.edu](mailto:cousars@lanecc.edu)

<b>First Year</b>	<b>Fall</b>
Arts and Letters requirement.....	3
ENVS 181 Terrestrial Environment .....	4
HE 255 Global Health and Sustainability.....	4
WR 121 Composition: Introduction to Academic Writing ..	4
Total Credits	15

	<b>Winter</b>
BI 102H General Biology: Forest Biology .....	4
ECON 250 Class, Race and Gender in the US Economy....	4
GEOG 141 Natural Environment .....	4
WR 122 English Composition: Argument, Style and Research	4
Total Credits	16

	<b>Spring</b>
BI 103M General Biology: Biodiversity and Sustainability	4
ENVS 184 Global Climate Change .....	4
ECON 260 Intro to Environmental and Natural Resource Economics .....	4
SOC 216 Global Social Movements.....	3
Total Credits	15

<b>Second Year</b>	<b>Fall</b>
MTH 105 Introduction to Contemporary Mathematics .....	4
PS 211 Peace and Conflict Studies: Global.....	4
REL 243 Nature, Religion and Ecology .....	4
SP 111 Fundamentals of Public Speaking.....	4
Total Credits	16

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

	<b>Winter</b>
ENVS 182 Atmospheric Environment and Population .....	4
PS 212 Peace and Conflict Studies: National .....	4
PS 297 Environmental Politics .....	4
SP 115 Intro to Intercultural Communication .....	4
Total Credits	16

	<b>Spring</b>
BI 103G General Biology: Global Ecology .....	4
ENVS 183 Aquatic Environment .....	4
PS 213 Peace and Conflict Studies: Local .....	4
ENG 240 Nature Writing .....	4
Total Credits	16

Sustainability-focused courses are approved by Lane's Sustainability and Learning Committee

## Sustainability Coordinator

**Offered by the Advanced Technology Division**

**Two-Year Associate of Applied Science Degree**

**Purpose** To prepare students for careers as sustainability coordinators, resource management technicians, corporate social responsibility coordinators, environmental specialists, recycling coordinators, pollution prevention specialists and energy or waste reduction analysts. Graduates may work for public agencies, school districts, colleges or universities, non-governmental organizations, nonprofit organizations, private businesses or corporations.

**Learning Outcomes** Graduates will have the knowledge and skills to:

- demonstrate holistic understanding of interdisciplinary subjects related to sustainability including physical and biological sciences, social and behavioral sciences, economics, the regulatory environment, and business management.
- develop policies that support the triple bottom line of sustainability: healthy economy, healthy environment, and healthy communities.
- obtain information from public and research libraries, online sources, and regional, national, and international networks.
- demonstrate skills in data collection and analysis, statistical analysis, and basic mathematics.
- demonstrate skills in the use of computer programs and databases that track and measure.
- perform environmental audits, perform laboratory and field tests, conduct and coordinate research, and prepare written reports for internal and external stakeholders.
- demonstrate understanding of the causes and the ecological, social, and economic costs of challenges to sustainability including pollution, climate change, loss of biodiversity, water quality and supply, and human health.
- apply practical and technical strategies to objectives including pollution prevention, climate change reduction, energy conservation and use of alternative energy, efficient resource use, waste reduction and recycling, LEED and other green building tools, water conservation, stormwater and wastewater management, indoor air quality, transportation, closed loop production and life cycle analysis.
- articulate verbal and written understanding of laws and regulations related to sustainable environment, business and community.
- develop and implement action plans based on best practices; coordinate project management goals and tasks.
- conduct public relations and social marketing efforts; develop educational materials; and create community networks and resources to support sustainability practices in business and community.

- demonstrate the ability to organize events, meetings, workshops, conferences and fundraising.
- utilize collaborative team skills in the design and implementation of sustainable practices.

**Employment Trends** Sustainability Coordinator is an emerging occupation for which State of Oregon historical data are not yet available. Market surveys of regional and statewide employers indicate job growth potential is significant and expected to increase.

**Wages** Based on Oregon Employment Department wage data for related occupations including environmental science technician, environmental engineering technician, life-physical-social science technician, and public relations specialist, statewide predicted average wage is \$20-\$23 hourly. Lane County predicted average wage is \$19-\$22 hourly. Predicted entry-level wages are \$11-\$16 hourly.

**Costs in Addition to Tuition and Registration Fees (estimates)\***

Books .....\$ 2,250

\* Subject to change without notice.

**Prerequisites/Application Requirements** Students must qualify for MTH 095 and WR 121, either by placement testing or by completing prerequisite courses. Students are expected to be comfortable working on a computer. Students should consult with a counselor or advisor to plan a program of study.

**Admission Information** Students typically enter in fall term. For consent to enroll in certain major courses, students must attend a program orientation for fall term (dates available in Counseling or Enrollment Services). Contact advisor/counselor for possible entry in winter or spring terms.

**Cooperative Education (Co-op)** Co-op is a required and important part of the Sustainability Coordinator program. Through Co-op students connect theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Contact Larry Scott, Sustainability Co-op Coordinator, Bldg. 19, Rm. 154, 541.463.5458.

**Program Advisor** Lisa Stegall, Bldg. 12, Rm. 203, 541.463.5378, [stegall@lanec.edu](mailto:stegall@lanec.edu)

**Program Counselor** Carolyn Litty, Bldg. 12, Rm. 202, 541.463.5236, [littyc@lanec.edu](mailto:littyc@lanec.edu)

**Two-Year Associate of Applied Science Degree**

	<b>First Year</b>	
PH 101 Fundamentals of Physics <sup>*,D</sup> .....	4	<b>Fall</b>
SUST 101 Introduction to Sustainability <sup>D,G</sup> .....	3	
NRG 103 Sustainability in the Built Environment <sup>1,D,G</sup> .....	3	
ENVS 181 Terrestrial Environment <sup>D,S,G</sup> .....	4	
Total Credits	14	

	<b>Winter</b>	
WR 121 Composition: Introduction to Academic Writing <sup>*,D,W</sup> .....	4	
NRG 111 Residential/Light Commercial Energy Analysis <sup>*,1,D,G</sup> .....	3	
HE 255 Global Health <sup>D,P,G</sup> .....	4	
ENVS182 Atmospheric Environment and Population <sup>D,G</sup> ..	4	
Total Credits	15	

	<b>Spring</b>
BI 103J General Biology: Forest Ecology <sup>D,G</sup> .....	4
BI 103M General Biology: Biodiversity and Sustainability <sup>D,G</sup> .....	4
ECON 260 Introduction to Environmental and Natural Resource Economics: Water <sup>D,G</sup> .....	4
ENVS 184 Global Climate Change <sup>D,G</sup> .....	4
<b>Total Credits</b>	<b>16</b>

	<b>Fall</b>
<b>Second Year</b>	
MTH 095 Intermediate Algebra or higher <sup>*,D,M</sup> .....	5
BT123 MS Excel for Business <sup>*,D</sup> .....	4
WR 227 Technical Writing <sup>*,A,D,W</sup> .....	4
COOP 206S Sustainability Coordinator Seminar <sup>D,G</sup> .....	1
NRG 141 Energy Investment Analysis <sup>*,1,D,G</sup> .....	3
<b>Total Credits</b>	<b>17</b>

	<b>Winter</b>
MTH 105 Introduction to Contemporary Mathematics or higher <sup>*,D,M</sup> .....	4
CG 203 Human Relations at Work <sup>D,H</sup> .....	3
PS 297 Environmental Politics <sup>D,G</sup> .....	4
ECON 250 Class, Race and Gender in the US Economy <sup>D,G</sup> .....	4
<b>Total Credits</b>	<b>15</b>

	<b>Spring</b>
Directed Electives <sup>D</sup> .....	7
COOP 280S Co-op Ed: Sustainability Management <sup>D,G</sup> .....	3
BT124 MS Access for Business <sup>*,D</sup> .....	3
ENVS 183 Aquatic Environment <sup>D,G</sup> .....	4
<b>Total Credits</b>	<b>17</b>

**Directed Electives**

CH 104 Introductory Chemistry .....	5
WATR 202 Fostering Sustainable Practices.....	3

1 Instructor permission required

Sustainability-focused course approved by Sustainability and Learning Committee

## Teacher Education Preparation

**Offered by Cooperative Education Department**

**Suggested Course of Study**

### Elementary Teacher Preparation

This information is a guide for students interested in pursuing a career in elementary education. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education.

There are 19 Oregon schools that offer teacher education preparation. Admission is selective and based on coursework, experience with children, tests scores, and other application material. Every school has a specific set of recommended and required curriculum that students should follow to increase their chances of being admitted. It is critical that students work closely with a Lane education advisor in selecting the transfer school and designing their educational plan.

A broad liberal arts curriculum including coursework in literature, art, music, child development, history, geography, mathematics (including geometry and algebra), biology and physical science is required of many education programs. In addition, experience working in a classroom setting under the supervision of a certified teacher is beneficial to students considering a teaching career.

**Cooperative Education (Co-op)** offers Lane students the opportunity to gain classroom experience at the elementary or secondary level. Letters of recommendation from the supervising teacher, your Lane instructors in courses in education, and credits earned through Co-op give students a competitive advantage when applying for admission to four-year education programs and to graduate programs.

Students unsure of whether they want to become teachers may participate in the Foundations of Education seminar while also working in a classroom to help decide if teaching is a good career choice for them.

For information about seminar classes and gaining experience in a classroom, contact: Merrill Watrous, Education Co-op Coordinator, 541.463.5423.

The following list is a sample of classes that many elementary education programs recommend. It may be a good starting point for students who have not yet identified a specific transfer institution. Completion of these suggested classes alone will not constitute a degree but can be applied toward the Associate of Arts Oregon Transfer (AAOT) degree. Consult with Lane's education advisors for course planning to meet your specific educational goals.

**Program Advisor** Deb Hupcey, Academic Advisor,  
541.463.5635.

**Program Counselor** Marva Solomon, Counselor,  
541.463.5625.

**Recommended Classes for AAOT Degree**

WR 121 Composition: Introduction to Academic Writing (or higher)  
MTH 211 Fundamentals of Elementary Mathematics 1  
ENG 100 Children's Literature

HST 201 or 202 or 203 History of the United States

GEOG 103 Cultural Geography

PSY 235 Human Development or HDFS 226 Child Development

BI 101 or 102 or 103 Survey of Biology

**One Physical Science course such as (but not limited to):**

CH 104 Introduction to Chemistry

ENVS 181 Terrestrial Environment

ENVS 182 Atmospheric Environment and Population

ENVS 183 Aquatic Environment

ENVS 184 Global Climate Change

G 101 Earth's Dynamic Interior

G 102 Earth's Dynamic Surface

G 103 Evolving Earth

GS 104 or 105 or 106 Physical Science

PH 101 or 102 or 103 Fundamentals of Physics

Standard footnotes:

\* Prerequisite required

A Meets Arts/Letters requirement

B Must be passed with grade of "B" or better to use as a prerequisite

D Degree or certificate requirement; must be passed with grade of "C-" or better

G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement

M Meets Mathematics requirement

P Meets PE/Health requirement

R Required for AAS degree—see page 49

S Meets Science/Math/Computer Science requirement

W Meets Written Communications or English Composition requirement

**Recommended Electives toward AAOT Degree**

- CG 211 Dreikursian Principles of Child Guidance 1
- ED 130 Comprehensive Classroom Management
- ED 131 Instructional Strategies
- ED 200, 201 Foundations of Education
- ED 258 Multicultural Education
- ED 280 Cooperative Education
- ENG 104, 105, 106 Introduction to Literature
- HDFS 226 Child Development
- HDFS 227 Children Under Stress
- HDFS 229 Middle Childhood Ages 6-12
- HDFS 250 Developmental Kindergarten
- MTH 212, 213 Fundamentals of Elementary Mathematics 2 and 3
- SPAN 101, 102, 103 Spanish, First Year
- Introductory Art and/or Music classes

**Middle/High School Teacher Preparation**

For middle/high school teaching (secondary education), students should major in the subject they plan to teach. Examples of subjects commonly taught are History, Geography, English, Mathematics, Biology and general or specific Science. For more information about middle/high school teaching contact Counseling and Advising and ask to meet with the advisor for your specific major.

**Theatre Acting**

**Offered by Music, Dance and Theatre Arts**

**Suggested Course of Study**

For students pursuing a bachelor's degree with a major in theatre arts. For information and advice about other courses required for transfer to specific Oregon colleges and universities, and about other degree and non-degree options, see the Counseling and Advising department.

For advice about career choices other than transfer study it is strongly recommended that each student meet with a member of the Theatre Arts faculty.

This is a suggested course of study for students interested in acting. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate issued by the Lane Board of Education, nor is it an associate of arts degree. See department advisor for further information.

This "fast track" first-year curriculum is designed to help students get a B.A. degree in four years. Individual needs and desires may require a different approach. Interested students should seek advice from Theatre Arts instructor Patrick Torelle, Bldg. 6, Rm. 132.

<b>First Year</b>	<b>Fall</b>
TA 141 Acting 1 .....	3
WR 121 Composition: Introduction to Academic Writing .....	4
Science or Social Science .....	3-4
Foreign Language .....	5
<b>Total Credits</b>	<b>15-16</b>

TA 142 Acting 2 .....	<b>Winter</b> 3
WR 122 Composition: Style and Argument .....	4
Science or Social Science .....	3-4
Foreign Language .....	5
<b>Total Credits</b>	<b>15-16</b>

TA 143 Acting 3 .....	<b>Spring</b> 3
WR 123 Composition: Research .....	4
Science or Social Science .....	3-4
Foreign Language .....	4
<b>Total Credits</b>	<b>14-15</b>

**Two-Year Transfer Course of Study**

The following is a general second year course of study. It is strongly recommended that each student meet with Patrick Torelle, Bldg. 6, Rm. 132, to design a curriculum to meet the requirements of the particular school the student wishes to attend.

<b>Second Year</b>	<b>Fall</b>
TA 241 Intermediate Acting .....	3
Voice, Dance, or Improvisation .....	2-3
One other Theatre class .....	3
Health requirement .....	3
Science or Social Science .....	3-4
<b>Total Credits</b>	<b>14-16</b>

TA 242 Intermediate Acting .....	<b>Winter</b> 3
Voice, Dance or Improvisation .....	2-3
One other Theatre class .....	3
Cultural Diversity requirement .....	3
Science or Social Science .....	3-4
<b>Total Credits</b>	<b>14-16</b>

TA 243 Intermediate Acting .....	<b>Spring</b> 3
Voice, Dance or Improvisation .....	2-3
Speech requirement .....	3
One other Theatre class .....	3
Science or Social Science .....	3-4
<b>Total Credits</b>	<b>14-16</b>

**Water Conservation Technician**

**Offered by the Science Division**

**Two-Year Associate of Applied Science Degree**

**Purpose** This degree prepares students to enter careers in the water field as water efficiency technicians and workers, coordinators, specialists or managers or as water management specialists and technicians. The program prepares students to design, implement and evaluate water conservation programs. Upon successful completion of the program students will have the opportunity to seek professional certification.

**Learning Outcomes** The graduate will:

- evaluate indoor and outdoor water use patterns for rural, urban, residential and commercial sites.
- recommend water efficiency measures, wise water landscapes and efficient plumbing solutions.
- design, implement and evaluate water conservation programs.
- convey water conservation strategies to a broad audience using multiple communication methods.
- understand regional regulatory context and international code trends as they pertain to water conservation.



- develop basic knowledge of water resource economics and how economics relates to supply and demand.
- understand water distribution, flow and elimination systems as well as time of use.
- create technical reports and collect, interpret, display and explain data.
- perform systems analysis using water bills, meters and other evidence to solve problems.

**Employment Trends** The annual projected number of openings in Oregon is growing moderately and in the future will grow rapidly along with population growth. In addition to openings resulting from growth, the need to replace retirees or those who transfer to other occupations will provide numerous job openings. Graduates must consider the entire nation for job placement as those that do will enhance their opportunities.

**Wages** in Oregon range from \$32,000 to \$48,500 annually plus benefits.

**Costs in Addition to Tuition (estimated)\*** \$800 for the two-year degree program

\*Subject to change without notice.

**Program Admission Requirements** A high school diploma (or equivalent) and completion of Math 065 or 070 is required for entry into the Water Conservation Technician Program along with a completed Water Program application form. This is a limited enrollment program.

**Admission Information** Science Department, 541.463.4729, Bldg 16, Rm. 252/253, [youngg@lanecc.edu](mailto:youngg@lanecc.edu) or [ebbager@lanecc.edu](mailto:ebbager@lanecc.edu) or counselor, [ganserd@lanecc.edu](mailto:ganserd@lanecc.edu) or [meenaghang@lanecc.edu](mailto:meenaghang@lanecc.edu)

**Program Information** Tammie Stark 541.463.5451, [starkt@lanecc.edu](mailto:starkt@lanecc.edu)

**Cooperative Education** Cooperative Education is an important avenue to provide field experience to integrate theory and practice while developing skills and exploring career options. Students must complete a minimum of nine and a maximum of 18 Co-op credits. Contact Larry Scott, Science Co-op program coordinator, Bldg 19/Rm. 154, 541.463.5458.

<b>First Year</b>		<b>Fall</b>
WATR 101 Intro to Water Resources <sup>1,D,G</sup> .....		3
BT 123 MS Excel for Business <sup>*,D,G</sup> .....		4
WR 121 Composition: Introduction to Academic Writing <sup>2,5,6,w,g*</sup> .....		4
Choice of: <sup>5,6,R</sup> .....		2
Physical Education Activity Requirement		
Health requirement		
<b>Total Credits</b>		<b>13</b>

		<b>Winter</b>
SUST 101 Intro to Sustainability <sup>1,D,G</sup> .....		3
WATR 105 Water Conservation: Residential <sup>1,D,G</sup> .....		4
MTH 095 Intermediate Algebra <sup>*,2,M,G</sup> .....		5
WR 227 Technical Report Writing <sup>*,5,6,A,G</sup> .....		4
WATR 206 Co-op Ed: Water Conservation Seminar <sup>D</sup> .....		1

Choice of:.....	1
Physical Education Activity Requirement <sup>5,6,R</sup>	
Health requirement <sup>5,6,R</sup>	
<b>Total Credits</b>	<b>18</b>

		<b>Spring</b>
WATR 107 Water Conservation: Outdoor <sup>1,D,G</sup> .....		4
Choice of: .....		4
WATR 150 Water Resource Economics <sup>1,D,G</sup> or		
ECON260 Introduction to Environmental and Natural Resource Economics <sup>*1,D,G</sup>		
BI 103F General Biology: Wildflowers of Oregon (Regional Botany class) <sup>G</sup> .....		4
CG 203 Human Relations at Work <sup>5,H</sup> .....		3
<b>Total Credits</b>		<b>15</b>

<b>Second Year</b>		<b>Fall</b>
WATR 210 Water Conservation: Industrial, Commercial <sup>1,D,G</sup> .....		4
WATR 208 Water Conservation: Agricultural <sup>1,D,G</sup> .....		4
WATR 261 Regional Water Policy <sup>1,D,G</sup> .....		
WATR 280 Co-op Ed: Water Conservation <sup>4,D,G</sup> .....		3
Directed electives <sup>5,7,D,G</sup> .....		3
<b>Total Credits</b>		<b>17</b>

		<b>Winter</b>
WATR 215 Integrated Water Resources Management <sup>1,D,G</sup> .....		4
GIS 245 Maps and Spatial Information <sup>*,D,G</sup> .....		4
WATR 202 Fostering Sustainable Practices <sup>1,D,G</sup> .....		3
WATR 280 Co-op Ed: Water Conservation <sup>4,D</sup> .....		3
WATR 206 Co-op Ed Water Conservation Seminar.....		1
Arts/Letters requirement <sup>5,6,R</sup> .....		3
<b>Total Credits</b>		<b>18</b>

		<b>Spring</b>
WATR 220 Water Conservation Program Development <sup>1,D,G</sup> .....		4
WATR 221 Water Mechanical Systems <sup>1,D,G</sup> .....		4
WATR 280 Co-op Ed: Water Conservation <sup>4,D</sup> .....		3
Directed Elective <sup>5,7,D,G</sup> .....		3
<b>Total Credits</b>		<b>14</b>

- 1 Instructor permission required
- 2 Must be completed before spring term of the first year
- 3 Contains computation instruction to meet industry requirements
- 4 May also be taken during summer
- 5 Can be taken any term
- 6 See catalog for AAS requirements
- 7 Directed Electives:
  - ECON 200 - Principles of Economics: Introduction to Economics
  - ECON 201 - Principles of Economics: Introduction to Microeconomics
  - ECON 202 - Principles of Economics: Introduction to Macroeconomics
  - ED 100 - Introduction to Education
  - ENVS 182 - Atmospheric Environment and Population
  - ENVS 183 - Aquatic Environment
  - ENVS 184 - Global Climate Change
  - SOC 206 - Institutions and Social Change
  - SP 100 - Basic Communication
  - SP 105 - Listening and Critical Thinking
  - SP 111 - Fundamentals of Public Speaking
  - SP 112 - Persuasive Speech
  - SP 115 - Introduction to Intercultural Communication
  - SP 130 - Business and Professional Speech

Standard footnotes:  
 \* Prerequisite required  
 A Meets Arts/Letters requirement  
 B Must be passed with grade of "B" or better to use as a prerequisite  
 D Degree or certificate requirement; must be passed with grade of "C-" or better  
 G Must be taken for a grade, not P/NP; major requirement

H Meets Human Relations/Social Science requirement  
 M Meets Mathematics requirement  
 P Meets PE/Health requirement  
 R Required for AAS degree—see page 49  
 S Meets Science/Math/Computer Science requirement  
 W Meets Written Communications or English Composition requirement

- Any Business Administration (BA) or Business Technology (BT) classes
- Any Energy Management (NRG) classes
- Any Spanish (SPAN) Language classes
- Any Graphic Design (GD), Multimedia (MUL) or Multimedia Production (MDP) classes
- Any Landscape/Nursery Technology (LAT) or Construction (CST) classes
- Any Journalism (J) classes
- Any Geographic Information Science (GIS) classes

## Web Designer

**Offered by the Arts Division**

**Suggested Course of Study**

**Divisional Recognition Award**

This suggested course of study is for students considering entry-level positions in web design and production, new media design, or positions with a focus on designing for the web. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education, nor is it an Associate of Arts degree. The guide below includes recommended art, multimedia, and computer technology courses, as well as recommended general education courses.

Transfer institutions require additional coursework for a degree and may change requirements from year-to-year. Any student interested in transfer must accept responsibility to work very closely with a Lane academic advisor and also to be aware of changes in prerequisites for programs at potential transfer institutions.

Courses numbered below 100 generally do not transfer, and career technical courses may only have limited transferability to four-year institutions. See a Lane arts counselor or advisor for assistance in course selection and transfer policies.

**Learning Outcomes** Students completing this suggested course of study will:

- develop proficiency in multiple forms of media design which includes writing for the web, graphic and web design, working with visual imagery, video, sound and animation.
- understand the concept, potential and implications of communicating ideas using computer-based interactive media technology.
- become proficient in developing and applying effective visual design strategies for creating web sites, interactive multimedia, animation, games, and computer-based training for deliver over the Internet, DVD's and CD-Rom. Develop additional skills in one or more elective area: software, design, or media.
- understand the concepts of media and its effect on society, and how to use media ethically.
- learn to use appropriate library and information resources to research media topics and issues, concepts and tools, and support lifelong technical and aesthetic learning.
- manipulate variables using computer software applications.

**Program Counselor** Christina Salter, Bldg. 1, Rm. 103E

### First Year

	<b>Fall</b>
CS 195 Web Authoring <sup>1 D,G</sup> .....	3
ART 115 Basic Design Fundamentals <sup>D,G</sup> .....	3
CIS 135W Advanced Computer Applications: Web 2.0 <sup>D,G</sup> .....	4
MUL 212 Digital Imaging <sup>D,G</sup> .....	3
WR 121 Composition: Introduction to Academic Writing <sup>*B,G,W</sup> .....	4

Total Credits **17**

	<b>Winter</b>
CS 133JS Beginning Programming: JavaScript <sup>D,G</sup> .....	4
ART 245 Drawing for Media <sup>G</sup> .....	3
ART 289 Web Production <sup>D,G</sup> .....	3
MTH 060 Beginning Algebra or higher math <sup>*G,M</sup> .....	4

Total Credits **14**

	<b>Spring</b>
CS 295 Web Development 1 <sup>*G,M</sup> .....	4
MUL 216 Multimedia for the Web .....	4
ART 290 Design Concepts for the Web <sup>*G,M</sup> .....	4
ART 151A Media Graphics <sup>*G,M</sup> .....	3
CG 203 Human Relations at Work <sup>G,H</sup> .....	3

Total Credits **18**

### Suggested Electives

Contact the Art and Applied Design Department for additional choices.

#### Computer Science

- CS 120 Concepts of Computing
- CS 125G SW Tools 1: Game Development
- CS 133G Beginning C++ Programming for Games
- CS 133JS Beginning Programming: JavaScript

#### Design

- ART 116 Basic Design: Color
- ART 119 Typography
- ART 216 Digital Design Tools
- ART 225 Digital Illustration
- ART 231 Drawing: Intermediate
- ART 234 Drawing: Figure
- ART 288 Introduction to Web Design
- ART 290 Design Concepts for the Web

#### Media

- ART 210 The Photographic Vision
- ART 262 Photography 2
- FA 221 Computer Animation
- FA 222 Computer Animation 2
- FA 254 Lighting: Video
- J 134 Photojournalism
- J 234 Photojournalism 2
- MDP 248 Multimedia Production 3
- MUL 214 Digital Photography
- MUS 119 Music Technology MIDI/Audio 2
- MUS 298 IS: Music Technology

\* Prerequisite required

1 See Art department or advisors for new course information

A Arts/Letters general education course

B Must be passed with grade of "B-" or better to use as a prerequisite

G Must be taken for a grade, not P/NP

H Human Relations/Social Science general education course

M Mathematics general education course

P PE/Health

R Use AAS degree lists

S Science/Math/Computer Science general education course

W Written Communications / English Composition course

# Women's Studies

## Offered by Multiple Departments

### Suggested Course of Study

Does our understanding of the world change if we explicitly place women's experience and perspective at the center and look outward? Women's Studies answers this question with a resounding, "Yes!" It is an interdisciplinary field that explores how gender relations structure our lives. Through feminist scholarship and a focus on women, Women's Studies challenges and transforms existing thought and practices across academic boundaries. Women's Studies courses at Lane address the manner in which gender—entangled with issues of race and class—remains a critical lens of analysis in the artistic, literary, religious, political, economic, and interpersonal aspects of society.

There are hundreds of women's studies programs in colleges and universities across the country offering undergraduate minors and majors as well as graduate degrees and graduate certificates including a few programs that offer Ph.D.'s. Because Women's Studies at Lane is an interdisciplinary program, students who take women's studies courses are prepared to enter a variety of fields and address the accompanying gender issues that they will invariably face. Any career objective can benefit from courses taken in women's studies as the field inherently enhances critical thinking skills through cross-disciplinary analyses.

This is a suggested course of study for students interested in women's studies and wishing to complete an AAOT degree. However, those not choosing to pursue a degree progression may find this a useful listing as well. The current Women's Studies offerings at Lane fulfill all 12 credits of requirements in the Arts/Letters and 12 of 15 credits in the Social Science Category of the AAOT degree. A suggested course of study is not the same as a state-approved vocational program in which a student earns a degree or certificate with a vocational major issued by the Lane Board of Education nor is it an associate of arts degree. For those interested in going on to obtain a women's studies degree, minor or certificate, the women's studies courses at Lane are transferable. For example, the Women's and Gender Studies program at the University of Oregon allows up to eight credits to transfer for a major or minor in women's studies. See Patsy Raney, Women's Studies Instructor, 541.463.5877 or email [raneyp@lanec.edu](mailto:raneyp@lanec.edu) for further information.

<b>First Year</b>	<b>Fall</b>
WS 101 Introduction to Women's Studies .....	4
ENG 222 Literature and Gender or	
ENG 260 Introduction to Women Writers .....	4
General Education requirements and Electives	
	<b>Winter</b>
HST 266 U.S. Women's History (elective) .....	4
SP 220 Communication, Gender, and Culture .....	4
General Education requirements	
	<b>Spring</b>
SOC 108A Selected Topics in Women's Studies, Women's Bodies Women's Selves (elective) .....	3
FA 264 Women Make Movies .....	4
General Education requirements and Electives	
<b>Second Year</b>	<b>Fall</b>
ENG 222 Literature and Gender	
or ENG 260 Intro to Women Writers .....	4
General Education requirements and Electives	
	<b>Winter</b>
SOC 207 Women and Work .....	3
General Education requirements and Electives	
	<b>Spring</b>
ES 250/ECON 250 Class, Race, and Gender in the U.S. Economy .....	4
SOC 218 Sociology of Gender (elective) .....	3
General Education requirements	

Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree—see page 49
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

## Accounting

### Also see Computers: Software Applications

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

**BA 211 Financial Accounting** .....4 credits  
Prerequisite: BA 101 or instructor consent. Students will gain an understanding of the basic terms, the accounting model, and content of financial statements and then focus on understanding and interpreting the information they contain. Students are strongly encouraged to take BT 165 Intro to the Accounting Cycle before this class. Because of the overlap between BA 211 and BA 215 only one of these courses will be counted toward a degree or certificate. May be offered through Distance Learning.

**BA 213 Managerial Accounting** .....4 credits  
Prerequisite: BA 211 and MTH 060 or higher, or instructor consent. Introduction to tools and techniques for gathering and analyzing accounting information to make management decisions. Topics include cost-volume-profit analysis, manufacturing costs, special decision analysis, budgeting, and responsibility accounting. May be offered through Distance Learning.

**BA 280AC Co-op Ed: Accounting** .....3-12 credits  
An opportunity to apply theory learned in the classroom to practical work experience in the accounting field. In this course a student will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**BT 165 Introduction to the Accounting Cycle** .....4 credits  
Introduces fundamental principles of double entry accrual accounting for a sole proprietorship. Students will analyze and record transactions and adjustments, account for payroll transactions, and prepare financial statements for service and merchandising firms. May be offered through Distance Learning.

**BT 170 Payroll Records & Accounting** .....4 credits  
Prerequisite: BT 163 (formerly BT 113) or BT 175, or instructor consent, and knowledge of basic accounting and MS Excel. Introduces federal and state regulations affecting payroll. Provides practice in all payroll operations, including accounting entries, and the preparation of payroll tax returns that are required of business. Course will provide a manual practice set and a computerized practice set. May be offered through Distance Learning.

**BT 171 Payroll Laws and Regulations** .....4 credits  
This is an advanced course on complex payroll functions and regulations. Issues such as how the payroll function impacts the accounting, benefits, and human resources department are discussed, as well as more complicated legal issues including benefits taxation, third-party sick pay reporting, and involuntary deductions. Using case studies, students will develop a best practices plan based on examining organizational structures and models, processes, compliance issues, internal controls, methods of service delivery, corporate culture and staffing, and technology. Students will learn how to keep abreast of changes in federal and state payroll legislation and complete year-end payroll tax functions. May be offered through Distance Learning.

**BT 272 Tax Concepts & Preparation** .....4 credits  
Prerequisite: BA 101 with minimum grade of B-, or instructor consent. Introduces individual and business federal taxation. Students will study tax concepts, planning, rules, procedures, and the implication of taxes on financial decisions. Students will become familiar with the preparation of basic tax forms and schedules. May be offered through Distance Learning. Note: BT 272 was formerly numbered BT 172. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**BT 276 Automated Accounting Systems** .....4 credits  
Prerequisites: BA 211, BT 123 (formerly BT 114), and BT 163 (formerly BT 113) or BT 175. The purpose of this course is to provide students with a basic understanding of accounting information systems, including the differences between double-entry bookkeeping and database accounting. They will learn to use information technologies to understand how an accounting information system gathers and transforms data into useful decision-making information. The course will primarily teach students about business processes, accounting internal controls, and capturing accounting data and turning it into useful output. Students will learn automated accounting data management techniques, documentation, and accounting internal controls.

Students will learn to document and flowchart an accounting system. May be offered through Distance Learning. Note: BT 276 was formerly numbered BT 250. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**BT 286 Professional Bookkeeping** .....4 credits  
Prerequisite: BA 211, BT 165, and BT 272 (formerly BT 172), or instructor consent. This course is designed to prepare students for one of two national certifications. (AIPB or NACBP) The course consists of five primary areas of focus and a substantial practice set. The areas of focus and examination include the correcting of accounting errors, adjusting entries, payroll, depreciation and inventory. Students are expected to have experience and knowledge of these accounting areas and can use the course to refresh and supplement existing knowledge in preparation for the exam. The course will include some lecture, review of problems, and test taking strategies. Homework will supplement the meeting schedule. May be offered through Distance Learning. Note: BT 286 was formerly numbered BT 295. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**BT 296 Applied Financial Accounting** .....5 credits  
Prerequisite: MTH 065 or higher, BT 163 (formerly BT 113) or BT 175, BT 165, BT 170, BT 223 (formerly BT 217), BT 276 (formerly BT 250), BT 286 (formerly BT 295), and BA 211, or instructor consent. Provides experience applying financial accounting principles and understanding basic business systems, with a focus on improving problem-solving skills needed for accounting work. Students prepare actual documents, accounting records, and federal and state payroll tax reports, as well as professional quality working papers to document their analysis of the accounting records. The course requires integration of skills needed in an accounting office - knowledge of GAAP, computer software applications for business, communication skills, and teamwork. May be offered through Distance Learning. Note: BT 296 was formerly numbered BT 263. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

### Acting - See Theatre Arts

## Administrative Support

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

**BA 280AA Co-op Ed: Administrative Assistant** .....3-12 credits  
Applies theory learned in the classroom to practical work experience in the administrative support field. In this course a student will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**BT 020 10-Key Calculator** .....1 credits  
This course provides students the opportunity for intensive practice on the basic operations of the electronic calculator and solving basic business application problems.

**BT 108 Business Proofreading and Editing** .....4 credits  
Review of writing and language skills necessary to succeed in a business career. Practice writing and editing business-appropriate paragraphs and e-mail. As part of a team and as an individual, the learner will analyze and apply software and reference tools to proofread, edit, and format mailable business documents. May be offered through Distance Learning. Note: BT 108 was formerly numbered BT 180. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**BT 144 Administrative Procedures** .....4 credits  
Prerequisite: Pass a Language Skills and Proofreading test in the Testing office or BT 108 (formerly BT 180), BT 112 (formerly BT 146), BT 120 and WR 121. Recommend the ability to accurately type at least 35 words per minute. The Business Department offers free placement tests to assist students in determining their skill levels. Business program majors not successfully passing the placement test at 35 words per minute will be strongly encouraged to complete BT 015 with a minimum grade of B- in the timing

### Course Fees

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.



component before enrolling in this class. Additional testing information and schedule details are available at: [www.lanec.edu/business/testing](http://www.lanec.edu/business/testing). This course introduces students to a wide variety of office procedures, practices, and skills needed to be efficient and effective in the changing office environment. Students will draw upon related learning in previous courses as they participate in team and individual office skills projects. New career development skills and knowledge will be added through learning activities and classroom practice and discussion about soft skills, professionalism, and customer service, and through preparation of job search documents. Students will practice with formatting and arranging of informal reports, correspondence, and other business documentation and will continue the development of keyboarding skill. May be offered through Distance Learning.

**BT 230 Paperless Office Practices using Adobe Acrobat** .....4 credits  
Prerequisite: Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute. The Business Department offers free placement tests to assist students in determining their skill levels. Students who are unable to meet the minimum requirements should consider completing BT 010 Computer Keyboarding before enrolling in this course. Additional testing information and schedule details are available at: [www.lanec.edu/business/testing](http://www.lanec.edu/business/testing). This course will teach the student to create virtually any document in a PDF format, preserving the exact look and content of the original and how to unify a wide variety of documents such as spreadsheets, presentation, email, rich media, and more into a single, cohesive PDF Portfolio. Students will be able to create, enhance, and review PDF documents and create fillable forms. Students will learn how to distribute PDF documents reliably and securely by email, the web, intranets, file systems, CDs [no period here] and web services. Other topics will include electronic records keeping, ethical and legal matters around electronic data, electronic signatures and security. It will teach the student to use a high volume scanner to scan existing documents into an electronic file management system. May be offered through Distance Learning.

**BT 243 Document Formatting** .....4 credits  
NOTE: The 2010-2011 academic year will be the last year this course is offered to satisfy program requirements. Prerequisite: BT 123 (formerly BT 114), BT 144, and BT 220, or instructor consent. Recommend familiarity with MS PowerPoint or BT 122 (formerly BT 118) and the ability to accurately type at least 40 words per minute. The Business Department offers free placement tests to assist students in determining their skill levels. Business program majors not successfully passing the placement test at 40 words per minute will be strongly encouraged to complete BT 016 with a minimum grade of B- in the timing component before enrolling in this class. Professional standards for document processing are emphasized. Prepare a variety of business documents such as letters, memos, reports, tables, and electronic forms as well as agendas, meeting minutes, itineraries, news releases, brochures, slide shows, and newsletters. The course will include the integration of spreadsheet, database, and presentation software, and application of advanced word processing skills.

**BT 248 Integrated Office Systems**.....4 credits  
NOTE: The 2010-2011 academic year will be the last year this course is offered to satisfy program requirements. Prerequisite: BT 144, BT 220, BT 243, and BT 245. A capstone course for the Administrative Assistant degree. In a simulated business setting, students analyze data and produce business documentation using computer technology, including local area networks, electronic communications, and peripheral devices. Working in teams, students solve problems, make decisions, and apply software integration techniques to complete business projects. Projects incorporate object linking and embedding (OLE) and import/export functions of commonly-used office software as well as analysis and examination of office information and decision support systems.

**BT 271 Administrative Professional Practicum**.....4 credits  
Prerequisite: BA 206, BA 224, BT 144, and BT 228. Recommend the ability to accurately type 45 words per minute. The Business Department offers free placement tests to assist students in determining their skill levels. Business program majors not successfully passing the placement test at 45 words per minute will be strongly encouraged to complete BT 017 with a minimum grade of B- in the timing component before enrolling in this class. Additional testing information and schedule details are available at: [www.lanec.edu/business/testing](http://www.lanec.edu/business/testing). Students participate in dynamic business simulations that provide experience in working as team

members in a professional environment. Includes practice in using integrated software skills, office procedures, oral and written communications, analyzing information, problem solving, decision making, prioritizing, and using time management skills.

#### **Agriculture Equipment/Mechanics - See Diesel and Heavy Equipment**

**Air Conditioning - See Automotive, Diesel**

#### **Anatomy/Physiology/Microbiology**

For information, contact Science, Bldg. 16/Rm. 156, 541.463.5446.

**BI 231 Human Anatomy and Physiology 1**.....4 credits  
Prerequisite: Grade of 'C-' or better in BI 112 and CH 112. BI 231 is the first course in a sequence and provides a foundation for the subsequent courses. The BI 231, 232 and 233 courses provide basic information needed by pre-health professionals and are both required and accepted by many of Lane's Health Careers programs. These credits are generally transferable to other academic institutions. Each class includes a study of anatomical models, histological slides, selected dissections and appropriate multimedia technologies. This first course includes an introduction to human body organization, tissues and the integumentary, skeletal, articular and muscular body systems. The fundamentals of the nervous system and a study of the autonomic nervous system are also included. May be offered through Distance Learning.

**BI 232 Human Anatomy and Physiology 2**.....4 credits  
Prerequisite: Grade of 'C-' or better in BI 231 The second course in the sequence includes anatomy and physiology of central and peripheral nervous systems, special senses, hematology, cardiovascular, lymphatic and immune systems. Common laboratory/clinical tests associated with these topics are presented. See sequence description under BI 231. May be offered through distance learning.

**BI 233 Human Anatomy and Physiology 3**.....4 credits  
Prerequisite: Grade of 'C-' or better in BI 232 The third course in the sequence includes anatomy and physiology of the respiratory, digestive, urinary, endocrine, and reproductive systems. Also included are concepts of genetics, inheritance patterns and disorders. Common laboratory/clinical tests associated with the topics above are presented. See sequence description under BI 231. May be offered through distance learning.

**BI 234 Introductory Microbiology**.....4 credits  
Prerequisite: Grade of 'C-' or better in BI 233 or instructor consent This course is a medically oriented survey of bacteria, viruses and other microorganisms and takes an organ systems approach to the discussion of representative diseases. Topics include: cell biology, host-microbe interactions, body defenses, physical and chemical methods of microbial control, contribution of bacteria, viruses and other microbes to the pathogenesis of disease and the prevention and treatment of infectious diseases. Laboratory manipulations and observations of microbes are chosen to enhance student learning. Lab activities emphasize aseptic technique and introduce students to a variety of methods including culturing, staining, isolation and identification.

**BI 298 Independent Study**.....1-3 credits  
A variable credit course based on independent study contracted between an instructor and a student.

#### **Anthropology**

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

**ANTH 101 Physical Anthropology**.....4 credits  
An introduction to the study of human evolution, with the goal of understanding humans as part of the natural world and as organisms shaped by their evolutionary past. The course covers the basic processes of evolution, the early human fossil and archaeological record, primate behavior and human genetic variability. May be offered through Distance Learning.

**ANTH 102 World Archaeology** .....4 credits  
This course traces the transition of human societies from a predominantly hunting and gathering way of life to a settled farming, and ultimately urban, way of life. The course focuses on the rise of social complexity in ancient civilizations such as the Near East, Egypt, India, China, South America, MesoAmerica, and North America. May be offered through Distance Learning.

**ANTH 103 Cultural Anthropology**.....4 credits  
A comparative cross-cultural explanation of how cultural learning shapes human behavior. Aspects of culture to be examined include patterns of subsistence social structures, marriage and family, political processes, social control, religious beliefs and practices, and worldview and values. May be offered Distance Learning.

**ANTH 199 Special Studies:** .....3 credits  
See department for topics.

**ANTH 227 Prehistory of Mexico** .....3 credits  
First term of a three-term sequence of Anthropology courses which focus on culture of Americans of Mexican descent. This term, the focus is on the archaeology and cultural anthropology of Mesoamerica. Olmec, Zapotec, Toltec, Mayan, and Aztec cultures are surveyed. This course draws upon a number of different resources: readings, videos, student presentations, and artwork, to obtain as accurate a knowledge and understanding of these cultures as is presently possible.

**ANTH 228 Cultures of Mexico** .....3 credits  
Second term of three-term sequence of Anthropology courses which deal with culture of Americans of Mexican descent. This term, the focus is on indigenous peoples and cultures of contemporary Mexico. Special emphasis given to contemporary Mayan, Nahuatl, and Zapotec cultures as well as impact of European civilization on these cultures. Course design as described for ANTH227.

**ANTH 229 Chicano Culture** .....3 credits  
This is the third term of a three-term sequence of Anthropology courses which deal with the culture of Americans of Mexican descent. In this term, the focus of the course is on the social and cultural characteristics that define Chicanos as a culturally unique group within American society. Course design as described for ANTH227.

**ANTH 231 American Indian Studies**.....3 credits  
First term of a three-term sequence of Anthropology courses dealing with the native cultures of North America, this one focusing on the people and cultures indigenous to the Northeastern and Southeastern states of America. Ojibwa, Iroquois, Creek, and Natchez cultures are emphasized. All three courses draw on a number of different resources: readings, videos, , student presentations, works of art, to obtain an understanding of the history and cultural heritage of contemporary native peoples of America in the north and southeastern states.

**ANTH 232 American Indian Studies**.....3 credits  
Second term of a three-term sequence of Anthropology courses dealing with native cultures of North America, focusing on the people and cultures indigenous to the Central and Southwestern states of America. Kiowa, Mandan, Navaho, and Zuni cultures are emphasized. Course design as described for ANTH 231and may be taken out of sequence.

**ANTH 233 American Indian Studies**.....3 credits  
Third term of a three-term sequence of Anthropology courses dealing with native cultures of North America. This course focuses on the people and cultures indigenous to America west of the Rockies: California, Pacific Northwest, Plateau, and Great Basin areas. Kwakiutl, Nez Perce, Shoshone, and Pomo cultures are emphasized. Course design as described for ANTH231. May be taken out of sequence.

**ANTH 280 Co-op Ed: Anthropology** .....2-12 credits  
This course provides students anthropology-related work experience in community organizations. Students will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course students may develop skills, explore career options, and network with professionals and employers while earning credit toward a degree.

**Apprenticeship**

For information about course content or other questions, visit [www.boli.state.or.us](http://www.boli.state.or.us) and [lanec.edu/apprenticeship](http://lanec.edu/apprenticeship) or call 541.463.5843.

**APR 101 Trade Skills Fundamentals**.....4 credits  
This course provides an introduction into the apprenticeship industry and the necessary skills required for selection into a specific trade career. Students will explore current trends in Apprenticeship and basic requirements to enter apprenticeship programs. Students will become familiar with licensing and

certification in a chosen trade. General topics include: employment opportunities and an introduction to construction and maintenance skills used in various crafts. Basic concepts in safety, construction math, hand and power tool use, construction drawings, communication skills, basic rigging, and materials handling are examined in this course. Note: This class may be taken to satisfy the ET 121 Shop Practices requirement in the Electronic Technology Program.

**APR 101A Trade Skills Fundamentals**.....4 credits  
Designed for Oregon state-recognized apprentices employed in a specific trade. The curriculum is competency-based and modular in format. This course provides the necessary skills required for a variety of trade careers. Students will become familiar with licensing and certification in a chosen trade. General topics include: employability skills and an introduction to construction and maintenance skills used in various crafts. Basic concepts in safety, construction math, hand and power tools, construction drawings, basic rigging, and materials handling are examined in this course.

**APR 105 Residential Wiring** .....4 credits  
This course is designed to familiarize the student with work tasks in the electrical construction industry. In this introductory course, the student will learn basic electrical concepts and build basic circuits using physical components of residential electrical systems. The student will study and be introduced to electrical trade tools, equipment and materials.

**APR 115 Carpentry Skill Fundamentals**.....3 credits  
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to fundamental concepts and skills required of trades people. Participants will receive training in employability and communication skills, and an orientation to the carpentry trade. This course includes introduction to hand and power tool use, safety, building materials, and blueprint reading.

**APR 116 Carpentry Framing Fundamentals** .....3 credits  
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to math concepts and fundamental construction math concepts utilized by professional carpenters. Floor, wall and ceiling framing systems are presented as well.

**APR 117 Carpentry Framing and Introduction to Concrete**..3 credits  
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to framing roofs, windows and exterior doors, as well as an introduction to concrete.

**APR 118 Carpentry Framing and Finishing** .....3 credits  
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to framing with steel studs, commercial door installation, and explains how to install and finish drywall.

**APR 119 Carpentry Commercial Plans and Exterior Finish** ..3 credits  
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to common materials used in residential and light commercial roofing. Application methods, commercial plans, insulation and vapor barrier materials and installation will also be covered, as well as exterior finish materials and application procedures

**APR 120 Carpentry Interior Finish** .....3 credits  
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to the materials, layout, and installation procedures for many types of suspended ceilings. Students will also learn the selection and installation of different trim types used in finish work, layout and installation of basic stairs, as well as methods of proper cabinet installation.

**APR 130 Electrical Principles**.....5 credits  
Designed for Oregon state recognized apprentices employed in a

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

trade or industry- related occupation. This course is the first term of the first year of general journeyman inside wire electrician program. Course content will include safety/electrical, electrical theory, Ohm's law, residential wiring, and introduction to the National Electrical Code.

**APR 131 Electrical Principles/Residential Wiring**.....5 credits  
Designed for Oregon state recognized apprentices employed in a trade or industry -related occupation. This course is the second term of the first year of general journeyman inside wire electrician program. Course content will cover basic AC theory, series/parallel circuits, mathematical formulas, conduit bending, use of test equipment, and applicable references to the National Electrical code.

**APR 132 Electrical Residential Wiring Lab**.....3 credits  
Designed for Oregon state recognized apprentices employed in a trade or industry- related occupation. This course is the third term of the first year of general journeyman inside wire electrician program. This class is designed to cover hands-on demonstration and practicals of basic residential one- and two-family dwellings wiring techniques to include receptacles, services, lighting, wiring, conduit bending, structural wiring, and introduction to residential data communication systems.

**APR 133 Electrical Generators, Transformers, and Motors 1** .....5 credits  
Designed for Oregon state recognized apprentices employed in a trade or industry- related occupation. This course is the first term of the second year of general journeyman inside wire electrician program which includes technical knowledge of the skills required of an Inside Wire Electrician. General topics include safety/electrical, advanced electrical theory, electrical math, AC theory, motors, generators, and transformer theory, and 3-phase power, and commercial installations and calculations. All course content will include references to applicable NEC Articles.

**APR 134 Electrical Generators, Transformers and Motors 2** 5 credits  
Designed for Oregon state recognized apprentices employed in a trade or industry- related occupation. This course is the second term of the second year of general journeyman inside wire electrician program. General topics include safety/electrical, hazardous locations, health care facilities, industrial and commercial wiring, and references to applicable NEC Articles.

**APR 135 Electrical, Generators, Transformers, and Motors Lab** .....3 credits  
Designed for Oregon state recognized apprentices employed in a trade or industry -related occupation. This course is the third term of the second year of general journeyman inside wire electrician program. Course will include hands-on experience in basic wiring of transformers and motors to include identification of motor component leads. Course activities build on those learned in prior courses and enable students to build their skills before being introduced to process control and automation and motor controls.

**APR 140 Electrical Systems Installation Methods** .....4 credits  
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course explores construction materials and methods used in the installation of limited electrical systems along with the NEC codes that regulate installation. Students will learn a knowledge base consisting of the basic theory, vocabulary and safety practices common to limited electrical installations.

**APR 141 Limited Voltage Electrical Circuits** .....4 credits  
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course explores the basic laws of electrical theory and the safety practices employed in the limited electric field. Power quality, trade repairs and installations and blueprint reading will be reviewed along with the NEC codes that regulate the trade. Students learn a knowledge base consisting of the basic theory, vocabulary and safety practices common to limited energy installations

**APR 142 Testing Equipment and Specialized Applications** .4 credits  
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course explores the basic theory and safety practices employed in equipment hook up, testing, computer applications and specialized test equipment along with the NEC codes that regulate their use and installation. Students will gain a knowledge base consisting of the basic theory, vocabulary and safety practices common to limited electrical hook up, testing, computer applications and specialized test equipment.

**APR 143 Limited Voltage Cabling**.....4 credits  
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course explores cable selection buses, network systems and fiber optic communications. An emphasis is placed on connections as used in various video and control systems. Students will gain knowledge of the basic theory, vocabulary and safety practices common to communication and control systems.

**APR 144 System Planning and Maintenance** .....4 credits  
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course explores, wireless communications as well as site survey and project planning. An emphasis is placed on the operations and principles involved in troubleshooting and the skills necessary to perform as a successful crew leader. Students will learn basic theory, vocabulary and safety practices common to maintenance and repair, wireless communications and project planning

**APR 150 The Millwright and Shop Safety** .....5 credits  
Designed for Oregon state-recognized apprentices employed in the millwright industry. This course provides an overview of workplace practices and how to succeed on the job. Course content will include: communication and leadership skills; employee attitudes and safety awareness; personal safety procedures; workplace safety; tools for the job; basic rigging practices; and the wellness of the Millwright.

**APR 151 Millwright Machine Theory and Trade Calculations** 5 credits  
Designed for Oregon state-recognized apprentices employed in the millwright trade. Students will learn trade calculations as they pertain to the millwright industry. This course will provide students with hands-on experience using Mics, calipers and various precision measuring equipment. Students will gain knowledge in the use of metal lathes, milling equipment, boring, keyway cutting, and other facets of machine work.

**APR 152 Millwright: Power Transmissions and Boilers Steam**.....5 credits  
Designed for Oregon state-recognized apprentices employed in the millwright industry. Course will provide students with an understanding of mechanical power train functions and what makes a mill operational such as: drives, clutches, brakes, and couplers (their functions, applications, and advantages/disadvantages). Students will learn all steam functions and the precautions necessary to be aware of during installations and repairs; the differences in fire tube and water tube systems; and all associated traps, valves, pumps, and reliefs. Discussions will include how they function and what can be serviced by Millwrights and what the requirements are for a steam specialist.

**APR 160 Plumbing Skill Fundamentals** .....4 credits  
Designed for Oregon state-registered apprentices employed in the plumbing trade. This course provides an introduction to the necessary skills required for the plumbing trade. Students will learn an overview of the plumbing trade and become familiar with employer expectations. General topics include: basic concepts in safety in the workplace, trade vocabulary, trade math-basic offsets, common tools and materials, plumbing drawings, and introductory overview of the Uniform Plumbing Code (UPC) with Oregon Amendments; administration, definitions and general regulations.

**APR 161 Plumbing Materials & Fixtures** .....4 credits  
Designed for Oregon state-registered apprentices employed in the plumbing trade. Introduces student to different types of pipe and fittings used in plumbing applications and reviews applicable safety and code requirements. Students will learn piping system components and the various connection and installation options. Course includes the proper applications of code-approved fixtures and faucets in plumbing installations. Math and science principles in completion of plumbing tasks will be included along with an introduction to tables in the Uniform Plumbing Code.

**APR 162 Plumbing Basic Waste Water Systems** .....2 credits  
Designed for Oregon state-registered apprentices employed in the plumbing trade. Students will be introduced to the DWV systems, the characteristics of water, how to select proper water pipe size, and explain the principle of backflow prevention. Hot water heaters will be discussed along with hands-on troubleshooting of electric and gas water heaters. Uniform Plumbing Code compliance will also be discussed with reference to specific articles.

**APR 163 Plumbing Calculations & Print Reading** .....4 credits  
Designed for Oregon state-registered apprentices employed in the



plumbing trade. This course reviews methods for finding angles using the Pythagorean Theorem. Students will interpret and use civil, architectural, structural, mechanical plumbing and electrical drawings when installing plumbing systems. Techniques to create isometric drawings, material takeoffs and approved submittal data using will be included. Methods are introduced for attaching and running DWV and water supply piping in relation to structural elements and code requirements.

**APR 164 Plumbing Basic Installation 1** .....4 credits  
 Designed for Oregon state-registered apprentices employed in the plumbing trade. This course includes techniques for installation and testing of water supply piping and basic plumbing fixtures, valves, and faucets. An introduction to the principles of electricity common to plumbing-related electrical applications and review of proper installation and testing techniques and federal guidelines that apply to water heaters will also be discussed. Code requirements will be included for each section.

**APR 165 Plumbing Basic Installation 2** .....2 credits  
 Designed for Oregon state-registered apprentices employed in the plumbing trade. This course will include review of proper installation and testing techniques that apply to water heaters. Identification, troubleshooting and repair of water heaters, fixtures, valves, and faucets will also be included along with federal guidelines. Code requirements will be included for each section.

**APR 170 Introduction to Sheet Metal Apprenticeship**.....4 credits  
 Designed for Oregon state-recognized apprentices employed in the sheet metal trade. The course content will include introduction to the sheet metal trade, trade terminology, safe working habits, and basic tools and equipment for forming and installing sheet metal air ducting. Students will obtain a basic understanding of duct layout principles.

**APR 171 Sheet Metal Basic Layout**.....4 credits  
 Designed for state-recognized apprentices employed in the sheet metal trade. Course is an introduction to shop equipment and safety; and shop hand tools required for the course. Students will gain knowledge in sheet metal working drawings and blueprints. General topics include: basic layout, techniques, and modification of duct work and fittings.

**APR 172 Sheet Metal/HVAC/R Blueprint Reading**.....3 credits  
 Designed for Oregon state-recognized apprentices employed in the HVAC/R or sheet metal trades. The course content includes Introduction to specifications, submittals, blueprint reading, drafting blueprints, scaling existing buildings and drafting architectural components and mechanical systems.

**APR 199 Special Studies:** .....2 credits  
 See department for topics.

**APR 199A Special Studies:**.....4 credits  
 See department for topics.

**APR 201 Carpentry Basic Rigging and Practices** .....3 credits  
 Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to the basic equipment and hardware used in rigging. An overview of personnel lifting, lift planning and crane load charts will also be introduced along with handling and placing of concrete and the preparing of the student for working in and around excavations.

**APR 202 Carpentry Concrete Practices**.....3 credits  
 Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to different types of reinforcing materials, including cutting, bending and splicing, concrete joint sealants, and form removal procedures. In addition, students will learn procedures and techniques for both deep and shallow foundations, as well as those required for slab-on-grade concrete work.

**APR 203 Carpentry Forms and Tilt-up Panels** .....3 credits  
 Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to the applications and construction methods for various types of forming and form hardware systems utilized in both vertical and horizontal concrete formwork. Students will also learn the methods and materials utilized in the construction of tilt-up wall panels, including forming, rebar, and embedments, as well as architectural and decorative finishes.

**APR 204 Carpentry Advanced Layout and Building Systems**.....3 credits  
 Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to the equipment, layout and methods to perform distance measurement and leveling. Students will also learn the structures, materials and procedures for installing commercial roofing, as well as the varieties of, and installation procedures for commercial wall systems.

**APR 205 Carpentry Advanced Planning and Management**...3 credits  
 Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to welding equipment, procedures and safety, specialized interior and exterior finish materials, and the construction planning process. Management topics are also discussed, specifically, scheduling, estimating, and supervisory skills

**APR 206 Carpentry Equipment and Site Layout** .....3 credits  
 Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to various pieces of light construction equipment commonly used at construction sites. Students will also learn the principles, equipment, and methods used to perform site layout tasks that require making angular measurements and provide extensive coverage of the materials and techniques used in finishing wooden staircases.

**APR 210 HVAC Systems 1** .....4 credits  
 This is the first course of a three term sequence in HVAC theory and application. This first term identifies basic systems common to this industry with emphasis on specialized control systems, including HVAC, boiler, clock and instrumentation. In addition, concepts in geothermal technologies will be explored. This class is designed for Oregon state-recognized apprentices working in the HVAC/R trade.

**APR 211 HVAC Systems 2** .....4 credits  
 This is the third course of a three term sequence in HVAC theory and application. Course focuses on the design of HVAC residential and commercial systems. Emphasis will be placed on the sizing of HVAC systems for specific applications. In addition, soldering and brazing will be covered, along with techniques of fusing copper, brass, and plastic. This class is designed for Oregon state-recognized apprentices employed in the HVAC/R trade.

**APR 212 HVAC Systems 3** .....4 credits  
 This is the third course of a three term sequence in HVAC theory and application. This course covers operational characteristics, service, and maintenance of gas, water, oil, air, vacuum pumps, and compressors. Students will learn how to troubleshoot mechanical problems, pneumatic controls and control valve components and perform heat pump installation. This class is designed for Oregon state-recognized apprentices working in the HVAC/R trade.

**APR 220 Electrical Apprenticeship Code and Exam Preparation**.....2-3 credits  
 Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course is designed to instruct students in techniques for interpreting and understanding the National Electrical Code (NEC). Students will participate in practice exams to illustrate the development and layout of the NEC. APR 220 is presented in 2 or 3 credit blocks preparing students for the electrical licensing examination administered by the State of Oregon Building Codes Division.

**APR 225 Electrical Motor Controls**.....5 credits  
 Designed for Oregon state recognized apprentices employed in a trade or industry-related occupation. This is the first term of the third year of the general journeyman inside wire electrician Apprenticeship related training. This course will provide students with an introduction into motor controls, contactor, aux contactors, relays, relay logic, and basic human/machine interface.

**APR 226 Electrical Grounding/Bonding and Blueprint Reading**.....5 credits  
 Designed for Oregon state recognized apprentices employed in a trade or industry- related occupation. This course is the second term of the third year of general journeyman inside wire electrician Apprenticeship related training. General topics include safety/electrical safety, electrical theory, electrical math, grounding and bonding fundamentals, blueprint reading and sketching, and basic electrical design.



**APR 227 Electrical System Troubleshooting** .....3 credits  
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. Course will include hands-on training to introduce students to concepts of electrical systems troubleshooting. Students will identify faults using digital multi-meters and troubleshooting concepts.

**APR 228 Apprenticeship Blueprint Reading**.....3 credits  
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. The student will learn to interpret drawings used in the electrical trades. This class emphasizes the fundamentals of blueprint reading and includes electrical symbology, views, symbols, and notations for blueprints. Students will learn an overview of various topics including: civil, architectural, electrical, mechanical, as they apply to practical drawings.

**APR 240 Alarm Systems** .....4 credits  
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course explores the theory and safety practices employed in fire alarm and intrusion detection systems along with the NEC codes that regulate their use and installation. Students learn basic theory, vocabulary and safety practices common to alarm systems

**APR 241 Audio and Signaling Systems** .....4 credits  
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course explores the theory and safety practices employed in audio, nurse call, CCTV and Broadband systems along with the NEC codes that regulate their use and installation. Students will gain knowledge consisting of the basic theory, vocabulary and safety practices common to audio and nurse call systems.

**APR 242 Limited Voltage System Integration**.....4 credits  
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course explores the theory and safety practices employed in access control systems and media management systems along with methods of system integration and user training. Students will learn a knowledge base consisting of the basic theory, vocabulary and safety practices common to control and media management systems and systems integration.

**APR 250 Millwright: Industrial Print Reading, Schematics, and Estimating** .....5 credits  
Designed for Oregon state-recognized apprentices employed in the millwright industry. Course will include a review of orthographic projection, isometric, and schematic drawings used to show piping, hydraulic, and pneumatic systems, industrial automation, and conveyer system. Discussion and lab work will include an overview of several types of prints, their symbols and abbreviations, the components that make up a print and the various lines used within them. Students will practice take-offs and bid proposals by using various sets of industrial prints to provide cost estimations.

**APR 251 Millwright: Pneumatics and Lubrications**.....5 credits  
Designed for Oregon state-recognized apprentices employed in the millwright industry. This course is a comprehensive view of pneumatics where power is derived from the use of a gas, usually air. Topics will include pneumatic applications that require quick response, low and moderate precision, lower power and light to moderate load capacity requirements and the similarities and differences that pneumatics share with hydraulics. An overview of the special requirements of lubes and lubrication systems will be examined along with the various shapes and construction of bearings; their applications and specifications.

**APR 252 Hydraulics for Millwrights** .....5 credits  
Designed for Oregon state-recognized apprentices employed in the millwright industry. Students will gain an understanding of the functions of today's hydraulic systems and components, components specification for certain applications, and theory and formulas for verifying these results. Students will perform hands-on review and troubleshooting of components, such as fluids, valves, pumps and motors.

**APR 253 Millwright Piping Systems** .....5 credits  
Designed for Oregon state-recognized apprentices employed in the millwright industry. This course is an overview of piping systems and various types of pipe that contribute to each type of system. Students will learn construction piping systems along with ancillary components and how they differ. The course will also cover schematics for piping systems and methods of clamping, hanging

and supporting them. Tube bending and how to make it fit and look good will also be discussed.

**APR 260 Plumbing Water Supply Systems** .....4 credits  
Designed for Oregon state registered apprentices employed the plumbing trade. Course provides applied math concepts that include geometry, instruction on how to size water piping in all applications and treatment of potable water for private and public water systems. Sizing waste and vent piping, installing water heaters, diagnosing gas and electric water heaters will also be explored in this third year course. General topics include: safety in the workplace, trade math-basic offsets, plumbing tools, code definitions, and hands-on troubleshooting with plumbing. This course will also cover an overview of the Uniform Plumbing Code (UPC) with Oregon Amendments; administration, definitions and general regulations.

**APR 261 Plumbing Piping Sizing and Systems**.....4 credits  
Designed for Oregon state-registered apprentices employed in the plumbing trade. This course introduces the principles and hazards of backflow prevention, reviews different types of vents that can be installed in a drain, waste and vent system, sewage pumps, sump pumps, corrosive waste, and safety issues. In addition, this course covers sizing drain, waste, vent (DWV), and indirect waste piping.

**APR 262 Plumbing Advanced Waste Systems** .....2 credits  
Designed for Oregon state-registered apprentices employed in the plumbing trade. This course will cover sizing and installation of gas piping with additional hands on instruction. Sizing of storm drainage, green plumbing, rain water harvesting, and gray water harvesting will be reviewed. The course will also cover compressed air line installation, sizing and troubleshooting.

**APR 263A Plumbing Code and Test Prep** .....2-3 credits  
Designed for Oregon state-recognized apprentices employed in the plumbing trade. This course is a comprehensive review of the Uniform Plumbing Code and theory of plumbing to prepare students for the Oregon Building Codes Journey level Plumbing exam.

**APR 263B Plumbing Code and Test Prep**.....2-3 credits  
Designed for Oregon state-recognized apprentices employed in the plumbing trade. This course is a comprehensive review of the Uniform Plumbing Code and theory of plumbing to prepare students for the Oregon Building Codes Journey level Plumbing exam.

**APR 263C Plumbing Code and Test Prep**.....2-3 credits  
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course is a comprehensive review of the Uniform Plumbing Code and theory of plumbing to prepare students for the Oregon Building Codes Journey level Plumbing exam.

**APR 270 Architectural Sheet Metal**.....4 credits  
Designed for Oregon state-recognized apprentices employed in the sheet metal trade. Students will study architectural sheet metal in the context of today's industry. The course will include discovery of various types of materials, profiles of roofing panels, water conductors, various types of roof flashings, related trades that are integral with this trade. The philosophy of layout in the field and the application of actual installations, safety equipment and practices applicable to this trade are also discussed.

**APR 271 Sheet Metal Building Codes and Installation** .....4 credits  
Designed for Oregon state-recognized apprentices employed in the sheet metal trade.. This course is an overview of the mechanical codes as related to the HVAC industry in commercial and residential applications. In addition, installation manuals will be explored as to proper installation and usage of HVAC equipment.

**APR 272 Sheet Metal Duct Design**.....4 credits  
Designed for Oregon state-recognized apprentices employed in the sheet metal trade. The course content will include introduction to duct design, different styles of duct design, and multi-level duct system design. Other topics included in this course are: Heat loss, heat gain calculations, and instruction of use of duct calculators.

**APR 273 General Sheet Metal Fabrication** .....4 credits  
Designed for Oregon state-recognized apprentices employed in the sheet metal trade. This course is the study of the sheet metal trade as it is applied to general-needs metal work. The work studied is that outside of the traditional HVAC and architectural scope as studied in previous terms with a broader base of skills to be learned, such as custom decorative and artistic finished products.

**APR 274 Sheet Metal Shop Fabrication** .....4 credits  
 Designed for Oregon state-recognized apprentices employed in the sheet metal trade. This course will provide students with an understanding of project planning techniques, principles of efficient shop layout; and knowledge of parallel line, radial line, and triangulation pattern development.

**APR 275 Sheet Metal Project Supervision** .....4 credits  
 This course is an introduction to construction management skills as they apply to project supervision. Course content will include human relations and interpersonal skills, safety, problem solving and negotiation techniques, construction documents, estimating and planning, and scheduling and quality control.

**Architecture - See Drafting**

**Art History**

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, 541.463.5409.

**ART 111 Introduction to Visual Arts** .....3 credits  
 This course introduces you to a spectrum of art, beginning with Paleolithic cave paintings and Venus figurines to modern and contemporary works through a combination of slide lectures, discussions, gallery/museums/public art visits and student projects. Art 111 will serve to expand your artistic cultural, and historical references as well as inform and enhance your own creative endeavors.

**ART 200 Graphic Design History** .....3 credits  
 A team-taught interdisciplinary approach to graphic design history and its relationship to traditional art. Students will examine the chronology and development of graphic design within a social context, through an exploration of styles, movements, and individual careers. Emphasis is on mid-19th century design to the present. Open to all students, required for graphic design majors.

**ART 202 Survey of Western Art** .....3 credits  
 ART 202 - Survey of Western Art This course introduces and examines works of art that have come to define the Western visual tradition from ancient 5th century B.C. to the 20th century. May be offered through Distance Learning.

**ART 203 Survey of American Indian Art and Architecture: North and Central America** .....4 credits  
 Historical survey of North and Central American Indian Art and Architecture. Areas covered include Mayan, Mississippi Valley, American Southwest, Northwest, Northern Plains, California and Arctic cultures. Emphasis on how art and architecture reflect the ideology of the cultures and peoples who created it, including symbolism, aesthetics, spirituality, materials, and in what form it exists today.

**ART 204 History of Western Art** .....3 credits  
 Historical survey of the visual arts from prehistory to the fall of the Roman Empire. Examines the role of art within emerging cultures and civilizations, the relationship of art to social, political and philosophical contexts, and connections of past art and culture to the present.

**ART 205 History of Western Art** .....3 credits  
 Historical survey of the visual arts from early Christian through the High Renaissance in the Western world. Examines the relationship of art to religion within a social, historical, political and philosophical context, and explores how these connections relate to the present.

**ART 206 History of Western Art** .....3 credits  
 Historical survey of the visual arts from the 16th century to the late 19th century, with emphasis on the Western world. Examines the role of art in the emergence of modern societies and nations, and how political and philosophical contexts are revealed in art, with emphasis on critical evaluation. Explores connections to present art and culture.

**ART 207 History of Asian Art: India** .....3 credits  
 Historical survey of Indian art from the Indus Valley civilization (3rd millennium B.C.) through the Mughal period (18th century.) Examines the influence of Buddhism, Hinduism, and Islam on architecture, sculpture and painting.

**ART 208 History of Asian Art: China** .....3 credits  
 Historical survey of major developments in Chinese art from Neolithic through the 18th century. Emphasis is on stylistic developments and changes, as well as themes and their interrelationships. Examines the relationship of art and philosophy, religion and foreign contacts.

**ART 209 History of Asian Art: Japan** .....3 credits  
 Historical survey of major monuments and movements of Japanese art from prehistoric times through the early 19th century. The course examines the relationship of religion, social institutions, and foreign contacts to the arts.

**ART 211 Survey of Visual Arts: Early Modern Art** .....3 credits  
 Historical survey of the development of early "modern" art from the mid-19th century in Europe to the beginning of the 20th century. Examines major styles, monuments and artists within their cultural context, including Impression, Post Impression and Cubism. Explores the impact of these artistic developments on later art and society.

**ART 212 Survey of Visual Arts: Modern Art** .....3 credits  
 Historical survey of 20th-century art. Examines key artist, styles and movements within a social, philosophical and political context. Course focus emphasizes developments during first half of the century, but which inform the visual arts today. Includes presentations by practicing artists to provide connections to art in our current time.

**ART 214 American Art** .....3 credits  
 Survey of major developments in American painting from the 17th century through the 20th century. Major art movements are related to historical and cultural developments. Course presents insight into what makes American art unique.

**ART 217 Islamic Art** .....3 credits  
 Surveys the major developments in Islamic art from the 7th through the 18th centuries. Topics include architecture, painting, calligraphy, crafts, and the characteristics that make them uniquely Islamic. Explores historical, cultural and religious issues that have shaped Islamic visual traditions.

**ART 298 Independent Study** .....1-3 credits  
 An independent study experience designed to allow the student with prior qualifying college course experience in his/her field of interest to initiate individual projects, with instructor approval. Enables the student to explore further some specific interest, method, project, or technique. Upon completion of the course, the student should demonstrate an increased capability in the chosen field, method or technique. May be available in the following areas: Art History, Design, Drawing, Ceramics, Graphic Design, Painting, Fibers, Printmaking, and Sculpture. Repeatable.

**Art, Studio**

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, 541.463.5409.

**ART 115 Basic Design: Fundamentals** .....3 credits  
 Beginning course in two-dimensional design for art and non-art majors. Emphasis on fundamental visual elements, concepts and theory basic to drawing, painting, graphic design and other media. Strongly recommended for first year art majors, taken prior to ART116 and concurrently with ART111 and ART131.

**ART 116 Basic Design: Color** .....3 credits  
 A beginning course in the study of color for art and non-art majors. Emphasis on visual concepts, theory and application of color in two-dimensional and three-dimensional artwork such as: painting, graphic design, sculpture, fiber and printmaking. Strongly recommended students first take ART 115.

**ART 117 Basic Design: 3-Dimensional** .....3 credits  
 Beginning course in principles of three-dimensional design for art and non-art majors. Studio projects explore basic elements such as mass, space, delineation of space, planes in space and physical texture. Fundamental course for students interested in ceramics, sculpture, architecture and other 3-dimensional design fields.

**ART 131 Introduction to Drawing** .....3 credits  
 Beginning course for art and non-art majors. Emphasis on concepts of drawing and developing skills in observation to describe three-dimensional objects on two-dimensional surfaces. This course or equivalent ability level is a prerequisite for many 200-level studio courses. Recommend art majors take concurrently with ART 115. Repeatable.

**ART 199 Special Studies:** .....1-3 credits  
 See department for topics.

**ART 199A Special Studies:** .....3 credits  
 See department for topics.

**ART 199B Special Studies:** .....3 credits  
 See department for topics.

**ART 199DP Special Studies:**.....2 credits  
See department for topics.

**ART 231 Drawing: Intermediate** .....3 credits  
Art 131 or instructor permission by portfolio. Develops basic drawing skills of observation, selection, representation, perception, and hand-eye-mind coordination. Emphasis on composition and understanding visual form. Examines visual concepts and theory within historical and cultural contexts. This course is recommended before taking any 200 level painting or printmaking course. Repeatable.

**ART 232 Drawing: Perspective**.....3 credits  
Prerequisite: ART 131. Explores principles of perspective drawing and visual problem solving using various media and subjects. Course includes study of interior-exterior space using isometric, one-point, two-point, and three-point perspective systems, elliptical graduation, aerial perspective, and atmospheric perspective. Studies will be done in various media. This course would be helpful training for prospective students in Graphic Design, Multimedia and Architecture. Repeatable.

**ART 234 Drawing: Figure**.....3 credits  
Prerequisite: ART 131. Explores complex form relationships in value and space through drawing the human figure. Develops understanding of basic anatomical structure, proportion, and foreshortening. Students develop skills in compositional techniques and individual expression. Examines the portrayal of the figure through historical context. Repeatable.

**ART 245 Drawing for Media**.....4 credits  
From concept to finished product, the ability to develop and communicate ideas visually is an essential skill for media professionals. This course teaches drawing techniques and practices valuable to a career in media. Students will work with materials and learn methods used for concept development, design, and production. The practice of drawing will be integrated into the visualization process through the production of concept sketches, thumbnails, and storyboards.

**ART 247 Site Specific Sculpture**.....3 credits  
An introduction to the historic and contemporary trend toward site-specific sculpture making. This includes low impact green sculpture, temporary work, large-scale public work, urban planning, and installation artwork. This course will take the students through the entire process of creating a site-specific artwork from formulating a concept, planning, budgeting and timeline, construction logistics, installation and presentation. Repeatable.

**ART 248 Stone Sculpture** .....3 credits  
A sculpture course designed for the beginning student who desires to learn the art of stone carving. Historical and contemporary stone sculpture will be studied as a basis for understanding the medium. Students will experience the entire process of creating a stone sculpture: choosing the stone, developing a design, making simple hand-carving tools, mastering the use of power carving tools, finishing and display of the completed work. Regular discussions and critiques of class work will be used to further an understanding of technical and formal considerations in the work. Repeatable.

**ART 250 Ceramics: Hand Building**.....3 credits  
Introduction to the materials, methods, and techniques of pottery design and construction. Emphasis on basic hand building skills, simple glaze application and an understanding of the fundamental pottery processes. Development of basic hand-eye-mind coordination for good form making. Introductory exploration of historical, cultural, modern trends and ideology. Students should plan on at least one term of this course and/or Ceramics: Wheel Throwing ART 251 before advancing to Ceramics: Intermediate ART 253. Repeatable.

**ART 251 Ceramics: Wheel Throwing** .....3 credits  
An introductory ceramics course designed for the student with no previous pottery training. Emphasis is on basic pottery wheel skills, simple glaze application, and an understanding of the fundamental pottery processes. Development of basic hand-eye-mind coordination for good form making. Introductory exploration of historical, cultural, modern trends and ideology. Student should plan on at least one term of this course and/or Ceramics: Hand Building ART 250 before advancing to Ceramics: Intermediate ART 253. Repeatable.

**ART 253 Ceramics: Intermediate** .....3 credits  
Prerequisite: ART 250 and ART 251. Enhancement of ceramic wheel throwing and handbuilding skills. Introduction to complex thrown and handbuilt forms with attention to good visual resolution. Introduction to the understanding of glaze formulation, testing and kiln firing. Enhancement of pottery decoration techniques. In-depth exploration of historical, cultural, and modern trends and ideology in ceramics. Repeatable.

**ART 266 Off-Loom Fibers** .....3 credits  
Traditional and contemporary applications in fiber arts. Provides the opportunity to study non-woven textile processes. The content emphasizes a different focus from term to term, including natural and synthetic dyeing; two and three dimensional fiber construction; feltmaking, spinning, papermaking; fabric printing; resist techniques of surface design, chemical and mechanical techniques to manipulate cloth.

**ART 270 Printmaking, Intaglio** .....3 credits  
A beginning and intermediate level course in the medium of Intaglio Printmaking (etching, aquatint, drypoint and engraving). Students will explore the techniques involved in intaglio printmaking and will design and create original edition prints. A variety of metal etching techniques will be introduced, as well as the aesthetics and history of printmaking. Repeatable

**ART 271 Printmaking, Relief** .....3 credits  
A beginning and intermediate level course in the medium of relief printmaking (woodcut or linoleum cut). Students will explore techniques involved in relief printmaking and will design and create original edition prints. Single block, multiple block and reduction block techniques will be introduced, as well as the aesthetics and history of printmaking. Repeatable.

**ART 272 Printmaking, Monotype, Collograph** .....3 credits  
A beginning and intermediate level course in the mediums of monotype and collage plate printmaking. Students will explore techniques involved in creating original prints. A variety of monotype and collage plate techniques will be introduced as well as the aesthetics and history of printmaking. Repeatable.

**ART 273 Intermediate Intaglio Print**.....3 credits  
Prerequisite: ART 270 Provides instruction in multiple plate and other color intaglio techniques. This course explores traditional as well as contemporary issues in intaglio printmaking. It may be repeated for credit. This is a lecture/lab class, and students will be expected to produce work reflecting the course content. The objective of this course is to give students wanting to continue with Intaglio printmaking a structured, in depth form of study. Repeatable.

**ART 274 Intermediate Relief Printmaking** .....3 credits  
Prerequisite: ART 271. Provides instruction in intermediate level techniques as well as combining techniques. This course explores traditional as well as contemporary issues in relief printmaking. It may be repeated for credit. This is a lecture/lab class, and students will be expected to produce work reflecting the course content. The objective of this course is to give students wanting to continue with Relief printmaking a structured, in depth form of study. Repeatable.

**ART 275 Silkscreen**.....3 credits  
This course provides instruction in screen-printing. The curriculum focuses on traditional and experimental techniques using water-based inks, emphasizing both skill development and personal image making. This course will explore established and contemporary issues in screen-printing. The objective of this course is to provide students with a strong foundation in this medium. Repeatable.

**ART 276 Sculpture: Introduction** .....3 credits  
A beginning course for students without prior training in sculpture. Explores fundamentals of sculptural processes and their aesthetic and theoretical considerations. Emphasizes development of hand-eye-mind coordination skills, understanding space and form, and the techniques of tool usage. Students complete a project in each basic process. Repeatable.

**ART 277 Sculpture: Welding**.....3 credits  
An intermediate-level sculpture class emphasizing the process of metal welding fabrication. This course focuses on the techniques of oxy-acetylene welding, shielded metal arc welding, and gas metal arc welding; and the aesthetics of fabricated metal sculpture. Repeatable.



**ART 278 Sculpture: Wood**.....3 credits  
 A beginning-level course designed to strengthen and further develop the student's initial capability in sculpture. Specific emphasis on exploring wood construction and carving techniques, and their application in making sculpture. Recommended prerequisite: ART 276 or ART 117. Repeatable.

**ART 279 Figure Exploration** .....3 credits  
 An intermediate course in the study of the human form and portraiture. Emphasis on theory and concepts of shape, form, value and composition in a choice of media. There will be opportunities for studies in bas-relief sculpture, printmaking, and painting. Repeatable.

**ART 280A Co-op Ed: Art and Applied Design** .....3-12 credits  
 This course offers career-related work experience in community businesses and organizations. The student may have the opportunity to integrate theory and practice gleaned in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree. Please contact art cooperative education coordinator as soon as possible after registering.

**ART 281 Painting: Introduction**.....3 credits  
 Prerequisite: ART 131, ART 115, and ART 116. Introductory course for beginning students employing oil or acrylic media. Emphasis on basic technical skills of painting, physical properties and manipulation of materials, painting concepts and art historical context. Develops understanding of composition and color necessary for intermediate-level painting courses. Students complete several painting compositions. Repeatable.

**ART 284 Painting: Intermediate** .....3 credits  
 Prerequisite: ART 281 and ART 131. Oil painting course for the student already familiar with the medium. Further expands the student's knowledge of composition and technique. A series of structured exercises are introduced to develop personal expression. Subject matter may emphasize figure or landscape; see 'notes' for course emphasis. Repeatable.

**ART 285 Advanced Silkscreen**.....3 credits  
 Prerequisite: ART 275. This course provides instruction in advanced and contemporary screen-printing. The curriculum focuses on building from already learned basic skills by focusing on continued and enhanced development of traditional and progressive techniques. Students will study application of water-based inks and fabric dyes, emphasizing both skill development and personal image making. This course will also introduce applied computer and modern technology in screen-printing. The objective of this course is to provide students with the opportunity to develop and enhance a comprehensive foundation in this medium. Repeatable.

**ART 291 Sculpture: Metal Casting** .....5 credits  
 Prerequisite: ART 276 or ART 117 and ART 277. Designed for students with prior sculpture training who desire to learn the method and theory of the lost-wax foundry casting process. Students will gain the experience of using wax as the direct sculptural medium, preparing the sculpture for casting, and the foundry processes of burnout, melting, and pouring. Repeatable.

**ART 293 Sculpture: Figure**.....3 credits  
 Sculpture course providing intensive study of the human figure in three dimensions using live models. Emphasis will be on the study and theory of anatomy, proportion and gesture. Projects will be developed from modeled clay over wire armatures and may be completed in fired terra cotta. Repeatable.

**ART 294 Watercolor: Introduction** .....3 credits  
 Prerequisite: Recommend taking ART 131 prior to course. Beginning course for students without previous training in watercolor medium. Introduces basic technical skills of painting, the physical properties and manipulation of the materials, visual theory of composition and color knowledge. Students complete a number of painting assignments. Repeatable.

**ART 295 Watercolor: Intermediate**.....3 credits  
 Intermediate level course in the technique and use of transparent watercolor. Students further develop technical skills, personal expression and understanding of visual theory. Subject matter may emphasize figure or landscapes; see 'notes' for course emphasis. Repeatable.

**ART 298 Independent Study**.....1-3 credits  
 An independent study experience designed to allow the student

with prior qualifying college course experience in his/her field of interest to initiate individual projects, with instructor approval. Enables the student to explore further some specific interest, method, project, or technique. Upon completion of the course, the student should demonstrate an increased capability in the chosen field, method or technique. May be available in the following areas: Art History, Design, Drawing, Ceramics, Graphic Design, Painting, Fibers, Printmaking, and Sculpture. Repeatable.

**ART 299A Trends**.....4 credits  
 See department for topics.

**ART 299S Trends**.....3 credits  
 See department for topic.

**Astronomy - See Physics**

**Audio**

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, 541.463.5409.

**AUD 120 Audio Production** .....4 credits  
 Basic theories and practices of audio production for video and multimedia. Includes the use of microphones, mini disc recorders, mixing consoles, and digital audio workstations for a variety of sound collection and processing applications.

**AUD 199 Special Studies**.....3 credits  
 See department for topics.

**Auto Collision and Refinishing**

For information, contact Advanced Technology, Bldg. 12/Rm. 201, 541.463.5380.

**AB 132 Beginning Auto Paint**.....1-12 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Theories and principles used in the auto paint industry. Included: fundamentals of surface preparation, spray guns and their use, sanding materials, undercoats, basic application of color coats, and masking.

**AB 133 Beginning Auto Collision** .....1-12 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Theories and principles used in the collision repair industry. Fundamentals of automobile construction; basic auto sheet metal work; minor auto body repair; body alignment; welding equipment and its uses; and basic panel replacement and adjustments.

**AB 134 Paint and Collision** .....1-6 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Theories and principles used in the auto paint and collision industry. Technical information and shop projects to apply and understand auto collision and paint shop work and safety procedures; hand tools; power tools; compressed air supply equipment; restoring corrosion protection; auto collision and paint nomenclature; abbreviations used by technicians and estimators; and estimating auto body and refinishing costs. Major students should enroll in 6 credits per term for three terms. AB 134 consists of a total of 18 credits (330 hours).

**AB 260 Intermediate Auto Painting**.....1-12 credits  
 Prerequisite: AB 132 Theories and principles used in the auto paint industry. Technical information and shop projects to apply and understand surface preparation, undercoats, intermediate application of color coats, intermediate masking, and refinishing equipment.

**AB 261 Intermediate Auto Collision** .....1-12 credits  
 Prerequisite: AB 133 Theories and principles used in the collision repair industry. Technical information and shop projects to apply and understand fundamentals of automobile construction; intermediate auto sheet metal work; minor auto body repair; intermediate body alignment; welding equipment and its uses; intermediate panel replacement and adjustments; and miscellaneous body shop repairs.

**AB 262 Advanced Auto Paint**.....1-12 credits  
 Prerequisite: AB 132 And AB 260 Theories and principles used in the auto paint industry. Technical information and shop projects to apply and understand application of two-part urethane primers and epoxies; refinishing materials; advanced application of color coats; advanced masking; choosing and matching paint; painting plastic parts and finishing touches; and custom painting.

**AB 263 Advanced Auto Collision** .....1-12 credits  
 Prerequisite: AB 133 And AB 261 Theories and principles used in



the collision repair industry. Technical information and shop projects to apply and understand diagnosis of major collision damage; advanced panel replacement and adjustments; advanced body alignment; analyzing mechanical components; and repairing auto plastics.

**AB 280 Co-op Ed: Auto Body and Fender** .....3-12 credits  
 This course provides students with auto body-related work experience in community businesses. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**Automotive**

For information, contact Advanced Technology, Bldg. 12/Rm. 201, 541.463.5380.

**AM 105 Fundamentals of Automotive Systems**.....2-12 credits  
 This course is designed to prepare students for entry into the Automotive Technology Program. Students will learn fundamental skills required for success in the automotive field including: Basic Electricity, Basic Hydraulics, Automotive Electrical Systems, Automotive Brakes, Engine Repair, Precision Measurement, Safety and Tools. Students will develop employability skills such as teamwork and communication. This course may be repeated up to 12 credits total.

**AM 143 Brakes**.....1-8 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Braking systems found on passenger cars and light trucks. Design, function, diagnostic and repair procedures, including theory and laboratory experience in brake system fundamentals, brake safety, master cylinders, power-assist units, hydraulic lines and valves, disc brakes, drum brakes, antilock braking systems, parking brakes, and brake electrical and electronic components.

**AM 145 Engine Repair** .....1-12 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Engines found in passenger cars and light trucks. Design, function, diagnostic and repair procedures for cylinder heads, engine blocks and internal parts, lubrication and cooling systems, gaskets and seals, and measurement and machining procedures commonly performed in repair shops.

**AM 147 Suspension and Steering**.....1-6 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Design, function, diagnosis, repair and replacement of steering and suspension components used in passenger cars and light trucks including wheel balancing, front-end alignment, and shock absorber service.

**AM 149 Manual Drive Trains and Axles**.....1-6 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Manual transmissions and transaxles and other drive train components. Included are design, function, diagnosis, service and overhaul procedures for manual transmissions, differentials, clutches, drive shafts and axles. Also covered are four wheel drive and all wheel drive components.

**AM 242 Automatic Transmissions/ Transaxles** .....1-12 credits  
 Prerequisite: AM 147 AND AM 149. Automatic transmissions and transaxles used in passenger cars and light trucks. Design, function, diagnosis, service and overhaul procedures, principles of hydraulics as applied to automatic transmissions, planetary gear theory and principles, torque converter design and function, and basic electronic controls.

**AM 243 Electrical and Electronic Systems**.....1-12 credits  
 Prerequisite: Minimum reading score of 68 OR RD 0080 OR Prior College. Automotive electrical and electronic systems. Theories and principles used to operate, diagnose, test, and repair systems. Included: basic theories; electric components; wiring and circuit diagrams; automotive batteries; DC motors and the starting systems; charging systems; ignition systems; lighting circuits; conventional analog instrumentation, indicator lights, and wiring devices; electrical accessories; introduction to body computer systems; advance lighting circuits and electronic instrumentation; and chassis electronic control systems.

**AM 244 Engine Performance** .....1-12 credits  
 Prerequisite: AM 145 And AM 243. Automotive engine systems. Theories and principles used to operate, diagnose, test, and repair systems. Included: engine design and operation; engine cooling

and lubrication systems; intake and exhaust systems; introduction to engine tune-up; computers and input sensors; ignition systems; conventional and computer controlled carburetors; electronic fuel injection systems; vehicle emission control systems; scope and gas analysis; and turbo chargers and super chargers.

**AM 246 Heating and Air Conditioning** .....1-4 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Automotive heating and air conditioning systems. Theories and principles used to operate, diagnose, test, and repair systems. Included: temperature and pressure fundamentals; the refrigeration system; system components; compressors and clutches; system servicing, testing, and diagnosing; case and duct systems; retrofit CFC-12 to HFC-134a; system controls; and engine cooling and comfort heating systems.

**AM 280 Co-op Ed: Automotive** .....3-12 credits  
 This course provides automotive-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**RTEC 100 Basic Career Technical Skills** .....2-6 credits  
 This course explores the basic skills for entering technical careers such as mechanics, manufacturing, aviation, electronics, etc. The course includes; safety, math, tools, basic electricity, basic hydraulics, employability skills, rigging, blue prints, and communication. Students may not receive credit for both RTECH 100 and APPR 101.

**Aviation Maintenance**

Also see Flight

For information, contact Advanced Technology, Bldg. 12/Rm. 201, 541.463.5380.

**AV 192 General 101** .....1-6 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Basic physics, aircraft drawings, mechanic privileges and limitations, and materials and processes. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

**AV 193 General 102** .....1-6 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Maintenance publications, maintenance forms and records, ground operation and servicing, fluid lines and fittings, cleaning and corrosion control, and airframe and engine inspection. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

**AV 194 General 103** .....1-6 credits  
 Prerequisite: RD 080 or minimum reading score of 68 or Prior College. Basic electricity. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

**AV 195 General 104** .....1-6 credits  
 Prerequisite: AV 194. Aircraft and engine electrical systems and components. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

**AV 196 General 105** .....1-6 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Aircraft and engine fuel systems, aircraft and engine fire protection systems, aircraft and engine instrument systems, and weight and balance. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

**AV 279 Airframe**.....1-6 credits  
 Prerequisite: MTH 076 Airframe structures, systems, and components. Technical information and laboratory projects to apply and understand theories, principles, and concepts. AV 279 consists of a total of 24 credits, 576 lecture/lab hours. AV 279 is scheduled in 6 credit sections. Credits are issued on the basis of satisfactory completion of subtopics within each section.

**AV 280 Co-op Ed: Aviation Maintenance**.....3-12 credits  
 Offers on-the-job field experience in aviation maintenance that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers. Work schedules and work sites vary. Students earn college credit, which may apply toward their degree.

**AV 281 Powerplant**.....1-6 credits  
 Prerequisite: MTH 076 Powerplant maintenance, systems, and components. Technical information and laboratory projects to apply and understand theories, principles, and concepts. AV 281 consists of 24 credits, 576 lecture/lab hours. AV 281 is scheduled in 6 credits sections. Credits are issued on the basis of satisfactory completion of subtopics within each section.

**AV 282 Airframe Return to Service** .....1-6 credits  
 Prerequisite: AV 192, AV 193, AV 194, AV 195, AV 196, MTH 076, And MTH 086 Airframe structures, systems, and components. Technical information and practical application of theories, principles, and concepts.

**AV 283 Powerplant Return to Service** .....1-6 credits  
 Prerequisite: AV 192, AV 193, AV 194, AV 195, AV 196, MTH 076, And MTH 086 Powerplant systems and components. Technical information and practical application of theories, principles, and concepts.

**AV 289 Helicopter Maintenance** .....1-3 credits  
 Technical information and hands-on experience with the following topics: rotary-wing principles of flight, main rotor systems and blades, main transmission, tail rotor system, component sheet and logbook, rotor wing systems, inspections, operational checks, and helicopter components.

**Biology**

For information, contact Science, Bldg. 16/Rm. 156, 541.463.5446.

**BI 101 General Biology**.....4 credits  
 Fulfills a science requirement for non-science majors. General biology is taught either as a survey or through term-long special emphasis classes. For each quarter, several emphasis classes are available Note: BI 101, BI 102, BI 103 course numbers have suffixes to indicate different special emphasis topics. The general concepts covered in ALL BI 101 classes include the topics of atoms and molecules, cellular processes, genetics, photosynthesis, respiration, cell division, and protein synthesis. BI 101A, BI 101B, BI 101C, BI 101D, etc., are considered to be equivalent courses. Thus, only one of the BI 101's and one of the BI 102's and one of the BI 103's can be used to meet the science requirement, and any additional course credits will be used as electives for a Lane degree.

**BI 101E General Biology-Ocean Life Foundations** .....4 credits  
 Students learn about the life processes of marine organisms at the cellular and organismal level. They discover how each organism is adapted to living in estuaries, rocky intertidal areas, sandy beaches and the open ocean. Marine organisms will be used to demonstrate processes that involve photosynthesis, cell division, genetics, and cell structure. The nature of currents, tides, and plate tectonics and their influence on ocean life will be discussed, as will human impacts and efforts to sustain viable ocean ecosystems. Lecture material will be supplemented with discussion of current issues, DVD's, student research and weekend field trips.

**BI 101F General Biology-Survey of Biology**.....4 credits  
 A survey course providing an overview of the molecular and cellular basis of life. Through lab, Internet explorations, computer activities, lecture, group projects, and discussions, students will study cell structure and function, including diffusion, photosynthesis, respiration, cell division, and genetics. Students will also discuss current issues related to these topics, such as gene therapy, cloning, cancer, and global climate change. This course may be offered through Distance Learning.

**BI 101I General Biology-Botanical Beginnings**.....4 credits  
 Plant characteristics and functions are studied to explore cellular and molecular processes. We begin by determining what characteristics distinguish plants from other organisms as we examine the structure of the plant body. Investigation of plant cell structures, chemistry, photosynthesis, respiration, cell division and genetics provide a basis to understand the foundational role plants play in ecosystems.

**BI 101J General Biology-Unseen Life on Earth** .....4 credits  
 Introduces the student to the smallest organisms on the planet.

Microbes may be small, yet they are crucial for the survival of all life forms, from large to tiny, from mountaintop to sea floor. Students will explore the diversity of bacteria, fungi, and viruses and their impact on the planet and on humans the cellular workings of microbes and the contributions of microbes to human health and food supplies. Students will perform lab activities at home. Available through Distance Learning.

**BI 101K General Biology: Introduction to Genetics**.....4 credits  
 The course introduces students to the rapidly evolving and increasingly relevant world of genetics. Cell division, structure, and metabolism will be demonstrated through explorations of common and rare human genetic diseases. Modern genetic technologies will be explained in the context of societal applications such as identity testing and biotechnology. Students will learn the different types of genetic tests as well as when, how, and on whom they are performed.

**BI 102 General Biology**.....4 credits  
 Fulfills a science requirement for non-science majors. General biology is taught either as a survey or through term-long special emphasis classes. For each quarter, several emphasis classes are available. Note: BI 101, BI 102, BI 103 course numbers have suffixes to indicate different special emphasis topics. The general concepts covered in ALL BI 102 classes include the topics of homeostasis (the organism in balance), and body systems. Therefore, BI 102A, BI 102B, BI 102C, BI 102D, etc., are considered to be equivalent courses. Thus, only one of the BI 101's and one of the BI 102's and one of the BI 103's can be used to meet the science requirement, and any additional course credits will be used as electives for a Lane degree.

**BI 102B General Biology-Jungle Biology** .....4 credits  
 This course explores how plants, people and other organisms live together in tropical rainforest ecosystems. Students examine physiological systems of plants and animals and how they are adapted to tropical environments individually and symbiotically. Students explore indigenous people's use of tropical rainforests. They investigate the current status of rainforests and evaluate factors which do or do not support our use of these forests.

**BI 102C General Biology-Marine Biology**.....4 credits  
 Students will be introduced to the fascinating creatures that live in the sea, their unique environment and incredible diversity. They will identify organisms from microscopic plankton, to sponges, seastars and other invertebrates, as well as bony fish and sharks. The classification, anatomy, physiology, homeostasis and unique ecological adaptations of marine organisms will be explored. The focus of the class will be on life along the Oregon coast. The role of humans in the sustainability of these habitats will also be examined. Class discussions, computer work, experiments in the wet lab and weekend field trips to tide-pool areas will be conducted.

**BI 102D General Biology-Survey of Biology**.....4 credits  
 An overview of whole organisms examining structure and function of tissues, organs, and organ systems. Through lab, internet explorations, computer activities, lecture, group projects and discussions, students will study many body systems, which may include digestive, circulatory, immune, respiratory, excretory, nervous, musculoskeletal, and reproductive. The structure and function of plants may also be included. The class will discuss a variety of current issues related to these topics, such as organ transplants, AIDS, drug addiction, vaccines, and stem cell research.

**BI 102E General Biology-Animal Biology** .....4 credits  
 This course presents an overview, from an evolutionary perspective, of the vertebrate animals: fish, amphibians, reptiles, birds, and mammals. Emphasis is placed on structure and physiology, unique adaptations to different habitats, and natural history of the different animal groups. The course includes laboratory, lecture, discussion, computer, internet, and group activities. The class will also discuss a variety of current issues related to these topics, such as endangered species, habitat loss, effects of pollution, and captive breeding programs.

**BI 102G General Biology: Genetics and Society** .....4 credits  
 The relationship between inheritance, genetic conditions and human body systems they affect. Current issues in genetics and their impact on ethics and values are integrated into the study of human genetic variations and disorders. This course may be offered through Distance Learning.

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

**BI 102H General Biology-Forest Biology**.....4 credits

Forest Biology provides an introduction to the discipline of comparative biology. The emphasis is on developing a general understanding of forest organisms and their structural and physiological adaptations to one of the most important ecosystems on earth: the coniferous forest of the Pacific Northwest. Through lab and field investigations, computer activities, lecture, and discussions, students will study plant and animal body systems and their requirements for nutrition, growth and reproduction, function of the vascular system and responses to pathogens. Throughout the course students will explore connections between the biological interactions that take place in forests and human activity that affects forest organisms. Community service projects in forest biology may be integrated into course activities. All in-class field trips are required and there may be one out-of-class required trip.

**BI 102I General Biology-Human Biology** .....4 credits

Explores the human body, including the following human organ systems: circulatory, respiratory, urinary, reproductive, nervous, muscular, skeletal, lymphatic, digestive, and endocrine. The course will be offered as a web-based instructional unit. Course content will be presented on a CD-ROM with multiple WWW linkages. May be offered through Distance Learning.

**BI 102J General Biology: Ethnobotany**.....4 credits

Explores the Native uses of plants by the original peoples of the Pacific Northwest, past and present, in class and through required field trips. Addresses world views and belief systems of Native people regarding plants, and how these views and beliefs were affected by non-Native explorers and settlers. Introduces the structure and function of plants and how those features allow plants to be useful to people. Examines structure and function of certain human organ systems and the ways in which plants do and do not affect us. The question will be addressed which is more sustainable, an indigenous or a modern way of interacting with the plant world and with each other.

**BI 103 General Biology**.....4 credits

Fulfills a science requirement for non-science majors. General biology is taught either as a survey or through term special emphasis classes. For each quarter, several emphasis classes are available. Note: BI 101, BI 102, BI 103 course numbers have suffixes to indicate different special emphasis topics. The general concepts covered in ALL BI 103 classes include the topics of ecology, evolution and the classification and natural history of organisms. Therefore, BI 103A, BI 103B, BI 103C, BI 103D, etc., are considered to be equivalent courses. Thus, only one of the BI 101's and one of the BI 102's and one of the BI 103's can be used to meet the science requirement, and any additional course credits will be used as electives for a Lane degree.

**BI 103A General Biology-Birds of Oregon** .....4 credits

Students will explore the natural history and incredible diversity of birds in Oregon. They will learn how to identify many Oregon species as well as study bird behavior, habitat use, evolution, classification, adaptations, and ecological relationships. Field trips, laboratory exercises, lecture, discussion, Internet, group and computer activities will be utilized in the learning process. Students will also discuss current issues related to these topics, such as endangered species, effects of humans on bird populations, and global climate change. A variety of field trips will include the Oregon coast, Willamette Valley, and other Oregon birding sites.

**BI 103B General Biology-Field Biology** .....4 credits

Students will study the structure and function of different environments and habitats, along with the plants, animals and other organisms that live in them. Topics will include evolutionary and ecological relationships, life cycles, identification, plant-animal interactions, and natural history. Students will also discuss current issues related to these topics, such as global climate change, endangered species, effect of overpopulation and pollution, and conservation efforts. Field trips, laboratory exercises, lecture, discussion, Internet, group and computer activities will be utilized in the learning process. One section each summer may be taught in Costa Rica.

**BI 103D General Biology: Sea Birds and Mammals**.....4 credits

An introduction to the biology of marine birds, seals, sea lions,

manatees, dolphins and whales. Students will learn how to identify and classify these organisms and study their unique anatomical and physiological adaptations as a framework for evolutionary processes and ecological interactions. The role of humans in the sustainability of these magnificent creatures will also be examined. Classroom discussions are supplemented with computer work, DVD's, examination of specimens and weekend field trips.

**BI 103E General Biology: Survey of Biology** .....4 credits

An overview of large-scale biological patterns, including animal and plant diversity, evolution, and ecology. Students will learn how the theory of evolution, including natural selection, explains why there are so many different kinds of plants and animal species in the world with such diverse and interesting life styles. The principles of ecology and human impact on the natural world will also be studied. Field trips, laboratory exercises, lecture, discussion, internet and computer activities will be utilized in the learning process. May be offered through Distance Learning.

**BI 103F General Biology-Wildflowers of Oregon**.....4 credits

Our region's flowering plants and their habitats provide the framework to learn about plant diversity, ecological and evolutionary processes. Students will study flower characteristics to aid in identification and how natural selection explains why there are so many different kinds of plants and animal species in the world with such diverse and interesting life styles. Field trips to a diversity of local ecosystems enhance the study of natural history, and habitat conservation and restoration efforts.

**BI 103G General Biology: Global Ecology** .....4 credits

Students learn to identify many of the organisms living in several ecological regions found in Oregon and to relate this history and its diversity to ecological and evolutionary concepts. Students explore how the activities and values of Native Americans relate to these natural environments, and they examine basic ecological concepts through scientific and indigenous eyes. Students evaluate possible human threats to our natural world and address the question of how can we most sustainably interact with these ecosystems. This course requires field trip participation.

**BI 103H General Biology-Mushrooms**.....4 credits

Through field, classroom, and laboratory work this course will help students identify and develop an understanding of mushroom evolution, structure, function and place in the ecology of the areas we study. Required Saturday or Sunday trips to the Cascades and Central Oregon Coast are included in the field work.

**BI 103J General Biology: Forest Ecology**.....4 credits

Basic ecological and evolutionary processes and interrelationships in our local forests and their importance to humans will be explored. Identification of major trees, shrubs and wildlife through extensive field work will increase the student's awareness of ecosystems. Old Growth forest ecosystems and current forest issues will also be explored. Field trips are required.

**BI 103K General Bio-Animal Behavior** .....4 credits

Students will explore the interesting and sometimes bizarre behavior of animals in both an ecological and evolutionary context. The study of behavior will lead to a consideration of evolutionary mechanisms and the ways that behaviors may represent adaptations to the environment. Students will gain an appreciation for behavioral conservation and will learn to critique popular literature about animal behavior. Classroom activities will be supplemented with visits to zoological centers, laboratories and field work.

**BI 103L General Biology: Evolution & Diversity** .....4 credits

Scientific advances over the past century have made evolution theory one of most grand and unifying theories in the biological sciences. It not only provides an explanation for the radiation of species on our planet, but also allows critical advances in our understanding of many areas of science including ones of agricultural and medical relevance. The layout of the course will utilize a backward chronology of the history of the Earth, that begins with a study of humans and modern mammals and ends with investigations into the origins of life. This framework will explore the diversity of life by using examples from the different Kingdoms of Life to explain more complex biological topics, such as methods of speciation, molecular genetics/inheritance, adaptive radiation, plate tectonics, and ecological concepts. This course may be offered through Distance Learning.

\* Note: BI 101, BI 102, BI 103 course numbers have suffixes to indicate different special emphasis topics. BI 101E, BI 101F, BI 101I, BI 101J, etc., are considered equivalent. Thus, only one of the BI 101's and one of the BI 102's and one of the BI 103's can be used to meet the science requirement.



**BI 103M General Biology: Biodiversity&Sustainability** .....4 credits  
 This course uses the biological principles associated with evolution, taxonomy and ecology to frame the principles of biological environmental sustainability, with frequent reference to social and economic issues associated with sustainability. Students will discover how the negative human impacts on biological ecosystems leading to the current mass extinction event may have long-term effects on global nutrient cycles. Exploring the evolutionary principles of natural selection and speciation will explain how the ecological damage of habitat fragmentation, edge effects and disruption of predator-prey and symbiotic relationships substantially endangers the nutrient cycles on which humans depend for their own survival. Unlike many of the other BI 103 emphasis courses, this course will place humans within the taxonomic realm of living organisms that may be facing endangerment or extinction.

**BI 112 Cell Biology for Health Occupations** .....3 credits  
 Corequisite: CH 112 This course introduces the Health Occupations student to the generalized human cell including its structure, function, cellular respiration and reproduction. Genetic concepts include DNA replication, transcription, translation, genes and inheritance. The chemistry of the cell and its components are examined as we build upon basic chemical concepts explored in CH 112. This class and CH 112 prepare students for the study of human organ systems in Human Anatomy and Physiology BI 231, 232, 233. Laboratories integrated with presentations and group activities include use of the microscope and examination of cells. This course combined with Chemistry for Health Occupations CH 112 satisfies the prerequisite for Human Anatomy and Physiology BI 231.

**BI 211 Principles of Biology** .....4 credits  
 BI 211 is the first course in a sequence and provides a foundation and a pre-requisite for the subsequent courses BI 212 and in BOTH Botany 213 and Zoology 213 at LCC. This sequence is designed for Science majors planning to transfer to a four-year institution. There is no Math, Chemistry or Writing requirement currently in place; however, college level Writing and Math abilities will be an advantage to success in this course. BI 211 is designed for biology majors as an introduction to the study of cellular form and function. The course will emphasize the interactions between cell structures and their chemical composition to understand biological processes and the evolution of life. Topics include study of natural selection and origin of cells, cell structures, biochemical pathways, energy flow and molecular genetics. The process of scientific investigation is experienced through participating in laboratory activities and reading and analyzing current scientific articles. Note: BI 211 was formerly named BI 201 Cellular Foundations. A student who has taken this class under previous names may not take it again under this new name and receive duplicate credit.

**BI 212 Principles of Biology** .....4 credits  
 Prerequisites: Grade of C- or better in BI 201 or BI 211 or grade of A- or better in BI 101F or BI 112 or instructor consent. Background knowledge of cell biology and biochemistry, specifically familiarity with metabolic pathways (especially aerobic cellular metabolism & photosynthesis), cell division and genetics is required. There is no Math, Chemistry or Writing requirement currently in place however college level writing and math abilities will be an advantage to success in this course. BI 212 is designed for biology majors as an introduction to the study of organism form and function. The emphasis will be on comparisons of 2 major kingdoms of organisms: Plants & Animals. The topics of evolution, diversity, anatomy and physiology of tissues, organs, and organ systems will be studied in both plants and animals. The course will include considerable lab work, including microscopic study of cells, tissues and organs and dissection of plant and animal material. This course replaces both BOT 202 and Z 202 in the Biology majors' sequence.

**BI 280 Co-op Ed: Biology** .....1-12 credits  
 This course provides the student with biology-related field experience. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**BI 297 Advanced Seminar in Biology** .....3 credits  
 Prerequisite: BI 211, BI 212, and BOT 213 or Z 213, equivalent courses or instructor consent. Advanced Seminar in Biology provides a small group setting for Biology majors to investigate

one or more complex problems in biology through in-depth reading and research, group discussion, fieldwork, reflection, and presentations. The course provides structured preparation for advanced college research in the sciences.

**BI 298 Independent Study** .....1-3 credits  
 A variable credit course based on independent study contracted between an instructor and a student.

**BOT 213 Principles of Botany** .....4 credits  
 Prerequisite: Grade of 'C-' or better in BI 211 and BI 212 or BI 201 and BOT 202 or Z 202 or instructor consent. This course or Z 213 completes the Life Science Majors sequence. There is no Math, Chemistry or Writing requirement currently in place; however, college level writing and math abilities will be an advantage to success in this course. Concepts of phylogeny, evolution and ecology will be explored using flowering plant (angiosperm) examples. We study major evolutionary trends in flowering plants and explore ecological mechanisms and selective pressures that underlay those trends. At least half the instruction takes place in the field examining plant associations in a variety of local ecosystems. We identify plants using field characteristics to become proficient in the use of botanical keys. These skills and concepts inform our phylogenetic studies. NOTE: BOT 213 was formerly named BOT 203 General Botany. A student who has taken this class under the previous name may not take it again under this new name and receive duplicate credit.

**GS 101 General Science (Nature of the Northwest)** .....4 credits  
 This course explores the geology, plants and animals of Oregon in three geographical areas: Central Oregon, the Willamette Valley and the coast. A comparison of these different habitats is made by discovering the similarities and differences in the geology, flora, and fauna. By going on field trips to each areas, students will learn how to identify various plants, fish, birds and mammals. Environmental awareness of local problems and possible solutions will be discussed especially with the Northwest-related problems of salmon decline and cutting of the old growth forests. Class discussions, student research and field trips will be a major part of this class.

**Z 213 Principles of Zoology** .....4 credits  
 Prerequisite: Grade of 'C-' or better in BI 211 and BI 212 or BI 201 and Z 202 or instructor consent. This course or BOT 213 completes the Life Science Majors sequence. There is no Math, Chemistry or Writing requirement currently in place; however, college level writing and math abilities will be an advantage to success in this course. Concepts of phylogeny, evolution and ecology will be explored using vertebrate animal examples. These themes will be examined through studies of comparative anatomy and physiology, natural selection, population genetics, phylogeny and evolution. There is a strong emphasis on activity-based learning, including data collection, analysis and presentation. Note: Z 213 was formerly named Z 203 General Zoology. A student who has taken this class under the previous name may not take it again under this new name and receive duplicate credit.

**Botany - See Biology**  
**Broadcasting - See Audio and Video Production**

**Business**

Also see Accounting, Administrative Assistant, Computers

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

**BA 101 Introduction to Business** .....4 credits  
 This is an introductory business survey course covering basic concepts and language of business, including the American economic system, business ethics and social responsibility, international business, the role of technology and the internet; organizational structures including the role of groups and teams and organizational culture; forms of business ownership including entrepreneurship and franchising; and the functional areas of business including management, marketing, accounting and finance, human resource management; and the legal environment.

**Course Fees**  
 Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.



Students will gain insight into the operations of business as well as practical experience with working on a team by participating in a team project to investigate a business, analyze its business practices, and present their findings in a report. May be offered through Distance Learning.

**BA 195 Professional Service & Development** .....2 credits

Prerequisite: BA 101, BT 112 (formerly BT 146), BT 120, and BT 123 (formerly BT 114), or instructor consent. This first year capstone course is an opportunity for students to explore the role of business concepts and skills in the social economy. Students will gain insights into the application of common business skills and experience in organizations. Each student will participate in an administrative service learning experience for up to 15 hours during the term and share their experience with peers through reflective presentations and papers. Students will also attend a series of seminars and workshops. Students will prepare a resume and attend informational interviews in the process of securing a service learning location. May be offered through Distance Learning.

**BA 206 Management Fundamentals** .....3 credits

Prerequisite: BA 101 or instructor consent. This course is a survey of management and what successful managers do. Course content includes planning, decision making, organizing, leadership, motivation, communication, control, and a thorough overview of the field of management. Covers the opportunities and challenges posed by a multi-cultural work force and the responsibilities of management in handling and motivating employees in the current business environment. Students should gain skills that can be immediately utilized to effectively work with and manage people. May be offered through Distance Learning. NOTE: This course may be an acceptable substitution for BT 245 Office Management which is no longer offered. Please see the Business Academic Advisor for options.

**BA 214 Business Communications** .....4 credits

Prerequisite: Pass a Language Skills and Proofreading test in the Testing office or BT 108 (formerly BT 180), and WR 121, or instructor consent. Introduction to communication theory and all forms of communication. Introduction to appropriate formatting of business documents. Emphasis in writing direct, indirect, and persuasive letters, and research and production of a formal report using word processing software. Emphasis is on grammar, formatting, tone, effectiveness, and overall mailability. Students will give business-related presentations that inform, recommend, and train. Students will be introduced to business presentation software and will use the software when giving presentations. May be offered through Distance Learning.

**BA 215 Accounting: Language of Business Decisions** .....4 credits

Prerequisite: BA 101 or instructor. Accounting: Language of Business Decisions is a survey of financial and managerial accounting topics. The course is designed for non-business majors (business minors) who may find themselves in entrepreneurial or executive leadership roles within an organization. Topics include overview of the accounting cycle; accounting principles; creation, review and interpretation of financial statements; using financial data for business decisions; cost behaviors; cost-volume profit analysis; and differential analysis. Because of the overlap between BA 211 and BA 215 only one of these courses will be counted toward a degree or certificate. May be offered through Distance Learning.

**BA 217 Budgeting for Managers** .....4 credits

Prerequisite: BT 165 or BA 211, or instructor consent. Recommend BT 123 MS EXCEL for Business (formerly BT 114). This course is designed to introduce the purpose and value of budgets, budget development, and budget implementation. Course topics include: the steps of creating a budget, the parts of a budget, gathering needed information for budgets, creating a product budget, planning and budgeting a project, presenting the budget, spending and tracking the budget, use of an HR budget, a small business budget, budgeting and human behavior, and mastering the overall budgeting process. May be offered through Distance Learning.

**BA 223 Marketing** .....4 credits

Prerequisite: BA 101 or instructor consent. As an initial study of the principles of marketing in our socio-economic system, this course stresses the important role marketing plays not only in businesses, but also in our everyday lives. Emphasis is placed on analysis of marketing strategies necessary to develop and market as well as provide ways of handling product and service development,

distribution, promotion, and pricing. Additional emphasis is placed on how managers should make marketing decisions which best create customer value. The course is designed for both business majors and non-majors. May be offered through Distance Learning.

**BA 224 Human Resource Management** .....3 credits

Prerequisite: BA 101 or instructor consent. This course is an introduction to Human Resource Management. The course is designed to explore the functions, roles, and value of Human Resources. Discussion topics include human resource planning, recruitment and selection; employee laws; performance appraisal systems; employee training and career development; pay systems; employee benefits, safety, and health; and labor unions. May be offered through Distance Learning. NOTE: This course may be an acceptable substitution for BT 245 Office Management which is no longer offered. See the Business Academic Advisor for options.

**BA 226 Business Law** .....4 credits

This class provides an overview of US business law, describes how each of the areas covered impact business, and examines various cases that relate to each area. It also covers the US Constitution, its origination, its role in determining law today, how it impacts business and how changes are made. This course will also cover a review of current legal topics that are impacting business today and the differences between Federal laws and some State of Oregon Laws and which ones take precedence. May be offered through Distance Learning.

**BA 242 Fundamentals of Investments** .....4 credits

This course provides an overview of the fundamentals of investments for individuals. Topics include risk/return relationships, economic indicators, characteristics of fixed income securities, stocks and derivatives, fundamental and technical analysis, taxation of investments and mutual fund evaluation. Students should have basic proficiency in MS Word and MS Excel; and math skills including fractions, decimals, ratios, and simple algebra. May be offered through Distance Learning.

**BA 249 Retailing** .....4 credits

Prerequisite: BA 101 and BA 223, or instructor consent. Retailing examines types of retail stores, merchandising, operations, store location and layout, internal organization, buying, customer relations, inventory control, and retail communications in the evolving global, high tech, retail to e-tail business environment. Students will focus on real-world examples and work on a broad spectrum of issues through Internet, team, and classroom activities. May be offered through Distance Learning.

**BA 250 Small Business Management** .....4 credits

Prerequisites: BA 101 and BT 123 (formerly BT 114), or instructor consent. An overview survey class exploring the many factors involved in successfully starting and running a small business. The range of subjects include start up concerns, entity selection, funding sources, choosing a location, marketing, advertising, insurance, pricing, legal aspects, compliance requirements, budgeting, and business plans. May be offered through Distance Learning.

**BA 251 Supervisory Management** .....3 credits

This course focuses on the role and responsibilities of the first-line supervisor or manager including analyzing business, dealing with change, staffing and scheduling, leadership, decision-making, and motivational skills, and managing teams. Covers the principles and practices of the supervisory role in management including the interpersonal and administrative skills, soft skills, and the technical and personal challenges. This course embraces a case-study approach focusing on the supervisory role and the skills needed to be effective. May be offered through Distance Learning.

**BA 261 Consumer Behavior** .....4 credits

Consumer behavior is one of the most exciting areas in the study of marketing. Everyday, all around us, the use of various media to inform, persuade, and influence our purchase decisions competes with other stimuli for our attention—and our hard earned money! In studying consumer behavior, you will learn how marketers identify and exploit these sources of influence—from learning about the way we process information and think how our relationships with others, even our dreams and aspirations, help shape our product choices and purchase decisions. May be offered through Distance Learning.

**BA 278 Leadership & Team Dynamics** .....4 credits

This course focuses on developing the leadership potential and ability of emerging and future student leaders. The course also

enhances students' understanding of teams and thus increases their effectiveness as team members. Participants will explore personal leadership philosophies, ethical issues related to leadership, strategies for identifying and articulating vision, and ways to empower effective teams. Students will gain a theory-based understanding of leadership topics and will work on practical leadership applications such as goal setting, evaluation and decision-making. May be offered through Distance Learning.

**BA 280 Co-op Ed: Business Management** .....3-12 credits  
This course provides the student with work experience related to supervision, management, and business operations. The student will have the opportunity to integrate theory and practice, develop skills and expand career knowledge.

**BA 280RM Co-op Ed: Retail Management** .....3-12 credits  
This course offers students relevant work experience related to retail operations. Students will have the opportunity to integrate theory and practice, develop skills, and expand career knowledge.

**BA 280SM Co-op Ed: Sales and Marketing** .....3-12 credits  
This course offers students relevant work experience related to sales and marketing. Students will have the opportunity to integrate theory and practice, develop skills and expand career knowledge.

**BA 281 Personal Finance** .....4 credits  
This course is a comprehensive introduction to personal finance. Class emphasis is on personal budgets, real estate ownership, intelligent use of consumer credit, credit institutions, insurance, personal investing, stocks, bonds, retirement planning, and mutual funds. The course is designed to provide an understanding of personal topics and the analytical tools necessary to optimize personal decision making in the subject area. May be offered through Distance Learning.

**BA 298 Independent Study: Business** .....1-3 credits  
A variable credit course based on independent study contracted between an instructor and a student.

**BT 112 Team Building Skills** .....3 credits  
This course examines the basics of building teams in the global business environment. Topics include: the team building process, workplace culture, online and interpersonal team communications, problem-solving and group decision-making, personality differences within teams, and motivation. Students will focus on team roles, creating effective teams, managing team conflict, managing stress, and developing team diversity. May be offered through Distance Learning. Note: BT 112 was formerly numbered BT 146. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**BT 253 Internet Marketing** .....4 credits  
This course is a good introduction for assisting marketers and marketing students in recognizing the value of Internet marketing resources and to demonstrate how to integrate these electronic tools into each stage of the marketing process. Online technology has greatly enhanced the process of Internet marketing and has facilitated electronic commerce. This course will show how the Internet allows marketers to conduct research on prospects needs and wants. It will show which tools can be used to collect data about customers and illustrates how Internet marketing resources bring into sharper focus the profiles and behaviors of targeted market segments. The course will show how to incorporate the Internet into the marketing mix, and how to determine if the Internet is a cost effective method. May be offered through Distance Learning.

**CAD, CADD - See Drafting**

**CAM - See Manufacturing**

**CNC - See Manufacturing**

**Career Development**

For information, contact the Counseling Department, Bldg. 1/103, 541.463.5299.

**CG 105 Money for College** .....2 credits  
Prerequisite: WR 115. Corequisite: WR 105. This course provides a systematic approach to researching and applying for scholarships. Topics include: creating a scholarship portfolio, Oregon Student Assistance Commission application, Lane Foundation application, print and internet resources, research strategies, and tips for effective scholarship interviews. You will

identify your skills, accomplishments, life experiences, values, and goals, then learn strategies to communicate them effectively on scholarship applications. Panels and guest speakers will share their perspectives on the scholarship process.

**CG 140 Career and Life Planning** .....1-3 credits  
Students learn a process for planning their lives and careers. Attention is given to self-assessment (What are my skills, interests, values, attitudes, motivational patterns?), decision making (How do I make decisions and what are some other ways of making them?), and the work world (How do I find what is available, and what do I need to do to pursue my goal?). Most students develop a personal action plan as an outcome of the class. May be offered through Distance Learning.

**CG 180 Co-op Ed: Extended Career Exploration** .....3 credits  
Prerequisite: CG 140 or instructor permission. This course is a special section of Cooperative Education designed for students who have narrowed their interests to a few careers and want to receive credit for investigating them and working toward a decision. Students work individually using a wide variety of activities ranging from internet research, reading, talking to people currently working in jobs of interest, to participating in actual work settings. This course can be a good continuation of Career and Life Planning CG 140. Access to a computer and internet is essential.

**Chemistry**

For information, contact Science, Bldg. 16/Rm. 156, 541.463.5446.

**CH 104 Introductory Chemistry 1** .....5 credits  
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. This three term sequence (CH 104, CH 105, CH 106) must be taken in order. It is designed for students who are in the health care fields and other non-science major programs and who need only an introduction to chemistry. This sequence acquaints students with the quantitative aspects of chemistry, and the foundation concepts/practices of inorganic, organic, and biological chemistry. The laboratory part of the course supports concepts addressed in the classroom and introduces standard laboratory procedures, safety considerations, and conservation principles. The laboratory and lecture/discussion sessions are taught by the same instructor in groups of approximately 24-30 students to provide for considerable individual assistance. The credits for CH 104 usually DO NOT count toward a science major's degree after the General Chemistry sequence is completed. An online version of Introductory Chemistry 1 may be offered through Distance Learning. Requirements include ready access to a computer with modem or other internet access, and working knowledge of keyboard/mouse functions, plain text format. Students will have electronic contact with one another and with the instructor. While the online format allows much of the work to be done any time of day and any day of the week, a total of four on-campus sessions will be held on the LCC main campus for labs, and exams. CH 104 course topics include beginning terminology, symbols, concepts, problem-solving techniques, and lab techniques for inorganic chemistry, the foundation of other branches of chemistry. The student who earns credit with a grade of 'C-' or better should be prepared to continue into CH 105. This course does not serve as a prerequisite for second year chemistry courses such as Organic Chemistry numbered 200's or 300's.

**CH 112 Chemistry for Health Occupations** .....3 credits  
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Corequisite: BI 112. This course will introduce Health Occupations students to the chemistry of human cells and their components. Organic and biochemistry concepts will be explored to develop and support understanding of cellular structure, function, and genetics, including cell reproduction and specialization within tissues of the human body. Lecture and laboratory will be integrated with group work and computer activities to provide the chemical foundation necessary for understanding the biology of cells. This course combined with Cell Biology for Health Occupations BI 112 satisfies the prerequisite for Human Anatomy and Physiology 1 BI 231.

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

- CH 114 Introduction to Forensic Chemistry** .....4 credits  
Introduction to Forensic Chemistry is designed to provide non-science majors an introduction to chemistry in a forensic context. Topics may include measurement, density, soil analysis, chromatography, organic and inorganic analysis, chemistry of fire and DNA. This course focuses primarily of the chemistry aspect of gathering scientific information in the context of forensics and may also demonstrate the interrelationships of chemistry, physics and biological sciences.
- CH 150 Preparatory Chemistry** .....3 credits  
Preparatory Chemistry is designed for students with little or no previous chemistry experience preparing to take General Chemistry (CH 221-223). This course will focus on the specialized language of chemistry, the methods of solving problems used by chemists, and calculations important in general chemistry. Topics covered will include measurement, significant figures, dimensional analysis, density, the language of chemistry (nomenclature), quantitative composition of compounds, stoichiometry, gases, solutions and heat. Note: MTH 095 is a prerequisite for CH 221 and may be taken concurrently with CH 150. This course may be offered through distance learning.
- CH 221 General Chemistry 1** .....5 credits  
Prerequisite: MTH 095 or above with grade of 'C-' or better or pass placement test. This three term sequence (CH 221, CH 222, CH 223) is for college transfer science and engineering majors. It must be taken in order. The classes are designed to prepare the student for further work in chemistry, biology, physics, many engineering fields, pre-medicine, and some allied health fields. General Chemistry focuses on inorganic chemistry and provides a basic understanding of the structure of matter, the changes matter undergoes, and the energy associated with those changes. Laboratory activities are designed to acquaint the student with standard laboratory procedures and to illustrate concepts discussed in lecture while emphasizing safety and conservation principles. Topics covered in General Chemistry include: basic concepts of chemistry, systems and units of measurement, chemical nomenclature, stoichiometry, thermochemistry, behavior of gases, atomic structure, chemical bonding and molecular structure, solution chemistry, condensed phases, acid base chemistry, kinetics, equilibrium, thermodynamics, electrochemistry, nuclear chemistry, and organic chemistry. The lab explores chemical safety and risk assessment, methods of measurement, chemical changes, separations, volumetric (titrametric) analysis, synthesis, spectroscopy and calorimetry. The current order of presentation is available at: <http://www.lanec.edu/science/chemistr/chemis.htm>. General Chemistry 1 is the first term of a three term sequence. NOTE: Preparatory Chemistry, CH 150 is recommended as a preparatory course for those who have little or no chemistry background.
- CH 221S Chemistry Problem Solving** .....1 credits  
Co-requisite: CH221 Chemistry Problem Solving (CHPS) is intended to improve student success in CH221. CHPS will provide students additional, structured practice with topics discussed in CH221 lecture and lab. Study skills and problem solving strategies important to student success will also be discussed. CHPS will benefit students with little or no previous experience in chemistry as well as students wanting additional practice outside of class.
- CH 222 General Chemistry 2** .....5 credits  
Prerequisite: Grade of 'C-' or better in CH 221 General Chemistry 2 is the second term of the sequence described under CH 221.
- CH 223 General Chemistry 3** .....5 credits  
Prerequisite: Grade of 'C-' or better in CH 222 General Chemistry 3 is the third term of the sequence described under CH 221.
- CH 241 Organic Chemistry** .....5 credits  
Prerequisite: Grade of 'C-' or better in CH 222 This three-term sequence is intended for science majors and health science students. It is a systematic coverage of aliphatic and aromatic chemistry. A survey of selected biologically important compounds is included during part of CH 243. There are three main areas of study. 1) Structure determination by use of spectroscopic data and characteristic reactions of functional groups. 2) Reaction mechanisms, wherein reaction feasibility and rates are related to molecular structure. 3) Synthetic sequences in which complex molecules are built up from simple precursors. Labs are designed to acquaint the student with typical organic preparative procedures. Most of the compounds prepared in lab are analyzed by infrared spectroscopy. The low student/instructor ratio in lab allows

considerable personal assistance. CH 241 is the first course in a three term sequence designed for science and health science majors. This course is designed to introduce students to organic functional groups with an emphasis on hydrocarbons and their reactions. Topics will also include bonding theory, nomenclature, and spectroscopy. Considerable time is spent on the fundamentals of reaction mechanisms. The laboratory introduces organic synthesis techniques and products are analyzed using various techniques.

**CH 242 Organic Chemistry** .....5 credits  
Prerequisite: Grade of 'C-' or better in CH 241 This is the second course in a three term sequence described under CH 241, designed for science and health science majors. Topics will typically include nomenclature, structure, and reactions of alcohols, ethers, aromatics, conjugated systems, aldehydes, and ketones. The laboratory focuses on organic synthesis techniques and products are analyzed using various techniques.

**CH 243 Organic Chemistry** .....5 credits  
Prerequisite: Grade of 'C-' or better in CH 242 This is the third course in a three term sequence described under CH 241, designed for science and health science majors. Topics will typically include nomenclature, structure, and reactions of carbonyl containing compounds, nitrogen containing organic compounds, and conjugated/aromatic systems. A significant emphasis will also be made on organic compounds of biochemical significance. The laboratory focuses on organic synthesis techniques with products analyzed using various techniques.

**CH 280 Co-op Ed: Physics-Chemistry** .....1-12 credits  
This course provides the student with chemistry-related field experience. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**CH 298 Independent Study** .....1-3 credits  
A variable credit course based on independent study contracted between an instructor and a student.

**GS 105 Physical Science** .....4 credits  
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. In the GS 104, GS 105 and GS 106 course sequence for non-science majors, emphasis is placed on basic principles that tie the physical sciences together. GS105 topics are selected from the standard first year of chemistry, such as periodic table of the elements, chemical formulas, chemical reactions including acids and bases, energy, entropy, gas laws, solutions and simple organic structures. This class includes several standard chemistry labs, plus demonstrations in the classroom and some work with molecular models. It is not necessary to take all three, GS 104, 105 and 106, nor is it necessary to take these classes in order.

**Child Development - See Early Childhood Education**

**College Preparation - See Study Skills and College Prep**

### College Success

For Information, contact the Counseling Department, Bldg. 1/Rm. 103, 541.463.5299

**CG 100 College Success** .....1-3 credits  
This course presents a systematic approach to solving the problems that interfere with student success and satisfaction. Using an experiential format, students will apply proven techniques and strategies to academic and personal situations they experience during the term. The resulting acquisition of new self-management skills will enhance school performance. May be offered through Distance Learning.

**CG 100A College Success** .....1 credits  
This course is the first block of the three credit CG100 College success course. Students will study the following topics: Welcome to College, The First Step, Ideas are Tools, Finding the Time, Looking Ahead, You've Got a Great Memory and Muscle Reading.

**CG 100B College Success** .....1 credits  
Prerequisite: CG 100A. This course is the second block of the three credit CG100 College Success course. Students will study the following topics: Reading Challenges, Taking Notes, Challenges



Worth Noting, Preparing for the Test, This is Not a Test, Thinking Creatively and Thinking Critically.

**CG 100C College Success**.....1 credits  
 Prerequisite: CG 100A and CG 100B. This course is the third block of the three credit CG100 College Success course. Students will study the following topics: Math and Science: A 3-D Solution; Research: Solving a Mystery; Writing well - The First Draft; and Writing Well - The Final Presentation.

**Communication - See Speech Communication**

**Computer Hardware Repair - See Electronics**

**Computers: Introduction/Information Systems/Computer Science**

For information about classes with course numbers that begin with: CIS or CS - Contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5826.

BT - Contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

EL or SKD - Contact Academic Learning Skills, Center Bldg./Rm. 210, 541.463.5439.

**BT 251 E-Business Fundamentals** .....3 credits  
 Prerequisite: Previous experience with Web browsers and e-mail. A critical thinking course requiring students to determine how Internet tools can be applied to business situations. Students will learn how the Internet has changed traditional business activities and business communications. They will explore the differences between Intranets, Extranets, and the Internet. They will discover the security risks from inside and outside the company and explore how to create security policies to help protect the organization. Students will collaborate to complete research projects and present their results, and will focus on company objectives, marketing and public relations, and commercial viability. May be offered through Distance Learning.

**BT 252 Web Tools: Photoshop & Dreamweaver**.....4 credits  
 Learning the basics of the Web tools Photoshop and Dreamweaver to facilitate the retail/wholesale aspects of Internet business. Photoshop and Dreamweaver software required, or access to the computer programs to complete assignments. May be offered through Distance Learning.

**CIS 100 Computing Careers Exploration**.....2 credits  
 This course introduces the field of computer technology through the introduction of fundamental technical skills and concepts. Students will understand how hardware, software and networks are organized to create computer information systems; how these systems are used by organizations; and the roles of information technology professionals in creating and maintaining these systems. This course provides an orientation for students who are considering programs of study and careers in the computing field. Students will learn about the degree and certification programs available, the knowledge and skills needed for entry level positions, the computer industry job market, current trends in the computer industry, and professional development and ethical issues that confront information professionals.

**CIS 101 Computer Fundamentals**.....3 credits  
 A hands-on introduction to personal computers and application software. Students will learn basic computer terminology, the role of computers in society, and the use of word processing, spreadsheet, presentation, and Internet software, including e-mail. May be offered through Distance Learning.

**CIS 102 Problem Solving with Computers** .....4 credits  
 CIS 102 introduces students to methods and tools for solving problems in an information systems environment. Students practice finding solutions using known problem-solving methods, and learn how to use spreadsheet and drawing software as problem-solving tools. The course is designed as an introductory course for several CIT Department degree programs. May be offered through Distance Learning.

**CIS 103 Computer Fundamentals: Systems at Work** .....4 credits  
 An introductory course in computer technology. Provides a general overview of computer hardware and software. Hands-on training for performing computer maintenance, such as backing up, cleaning and de-fragmenting hard disks; doing basic hardware upgrades; protecting a computer system from outside intruders; installing new software; and setting up a peer-to-peer network for file and printer sharing.

**CIS 125D Software Tools 1: Databases** .....4 credits  
 Prerequisite: Basic Computer Literacy. This course provides students with the concepts and skills required to use relational databases in the solution of non-trivial problems. Students will be introduced to fundamental relational database concepts, vocabulary and functionality. Through hands-on exercises, students will demonstrate the implementation of those concepts in a representative relational database package. Students will review computer related problem solving skills and will apply those skills by designing, implementing, testing, debugging and documenting relational database solutions to case problems.

**CIS 125G Software Tools 1: Game Development** .....4 credits  
 This course is an introduction to the field of game development. It includes a survey of computer game categories and platforms, an overview of the game development process, and an introduction to tools used for graphics development and game development. Students in this course will create several elementary computer games.

**CIS 125SL Introduction to Second Life**.....4 credits  
 This course is an introduction to immersive worlds, such as Second Life. It includes a survey of current immersive worlds, information about developing and customizing an avatar, and creating and animating objects within such worlds. Students will explore the world of Second Life and develop items on the Lane Community College Island.

**CIS 135 Software Tools 2: Integrating Applications** .....4 credits  
 Prerequisite: CIS 102, or CIS 125D, or instructor consent. Course is designed to give students hands on experience on how to use an integrated software applications package to create small solutions for common business problems using spreadsheet, database, word processor, desktop publishing, VBA macro editor, and Web based tools. The course material is useful for students who will provide user support for applications software packages.

**CIS 135G Software Tools 2: Game Development** .....4 credits  
 Prerequisite: CIS 125G and CS 133G, or instructor consent. This course builds upon the material covered in CIS 125G. Topics covered include physics simulation, user controls, graphical methods, animation issues, and script writing for game building tools. Students will work with an industry standard game development platform and will design and create several games.

**CIS 135W Advanced Computer Applications: Web 2.0** .....3 credits  
 This course provides a hands-on introduction to Web 2.0 technologies, including blogs, forums, wikis, podcasting and videocasting. Students learn the principles and technologies behind Web2.0, and also learn about online Web2.0 strategies that companies use. Web 2.0 is user participation centric and its online communities have become important to business and e-commerce. Students will complete project work in Web2.0 technologies that are important in online business, social networking and computer-based collaboration.

**CIS 140 Operating Systems: Managing Windows** .....4 credits  
 Introduction to Windows and operating system components. Provides hands-on experience maintaining and configuring Windows, sharing folders, assigning permissions, managing users and groups, and using administrative tools. In addition, file and disk management, file compression, and backup software are covered. This course has a hands-on focus. May be offered through Distance Learning.

**CIS 140B Operating Environments: Macintosh** .....1 credits  
 Introduction to use of the Apple Macintosh computer. Provides a study of the Macintosh operating system from the end-users point-of-view. Provides experience with system commands and options, file and folder (subdirectory) management, how to run application programs, the use of common utility programs and tools, and how to make effective use of the operating environment on the computer.

**CIS 140S Operating Environments: Windows** .....1 credits  
 Introduction to using Windows Vista. Provides a study of the Windows Vista operating system from the end-users point-of-view. Provides experience with system commands and options, file and

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.



folder (subdirectory) management, how to run application programs, the use of common utility programs and tools, and how to make effective use of the operating environment on the computer.

**CIS 140U Introduction to Unix/Linux** .....4 credits  
This course introduces the student to the Unix/Linux operating system. It provides experience using the graphical user interface as well as the command line to run applications, do file management, and to do basic system administration. Students will learn the fundamental Unix/Linux command set, editors, scripting, and will install the operating system and be introduced to file system security.

**CIS 178 Introduction to the Internet** .....4 credits  
Prerequisite: Previous Windows-based computer experience is required, or instructor consent. The course provides a background to the nature and history of the Internet, hands-on experience using a variety of Internet tools, and opportunity to practice the development of on-line search skills. May be offered through Distance Learning.

**CIS 199 Special Studies:** .....4 credits  
See department for topics.

**CIS 199OL Special Studies:** .....1-3 credits  
See department for topics.

**CIS 225 Computer End-User Support** .....4 credits  
Prerequisite: CIS 102, CIS 125D, and CS 179, or instructor consent. Course prepares students to support end-users in a variety of organizational settings. Topics include the end-user support function in an organization, techniques to develop and deliver training modules, and strategies to provide ongoing technical support to end-users. Emphasis is on solving problems with users, needs analysis, troubleshooting, and interaction with users. Taught in a workbench lab environment.

**CIS 226 Advanced Computer User Support** .....4 credits  
Prerequisite: CIS 225 or instructor consent. A capstone course for majors in the Computer User Support program, this course provides students the opportunity to demonstrate their readiness for the workforce through a series of activities designed to set up and operate a simulated Help Desk for a business. Course activities build on those learned in earlier user support courses and enable students to build their skills prior to entry into the job market. Taught in a workbench lab environment.

**CIS 227 Systems Support** .....4 credits  
Prerequisite: CIS 135, CIS 225, and ELT 287 or instructor consent. Taught in a workbench environment and emphasizes troubleshooting and problem solving, and building End User support skills. Course provides practical experience with common computer applications software problems and hardware problems.

**CIS 227N Systems Support: Network and Operating Systems** .....4 credits  
Prerequisite: CIS 140 and CS 179, or instructor consent. Focuses on the support of MS Windows. Topics discussed include installation, TCP/IP, system policies, the Windows Registry, monitoring the computer, and performance tuning. Troubleshooting network boot up and printer problems are also discussed. The course has a hands-on emphasis using Windows Administrative tools to manage the workstation.

**CIS 244 Systems Analysis** .....4 credits  
Prerequisite: CIS 125D or instructor consent. This course provides students with an introduction to the concepts, skills and tools used in Systems Analysis. A systems analyst participates in the process of understanding and creating a detailed specification of the functionality that must be provided by an information system. Students will develop systems analysis skills by completing a small group case project. Topics covered include object-orientation, web-based applications, and software engineering methodologies.

**CIS 245 Managing Technology Projects** .....4 credits  
Prerequisite: Minimum one year Windows-based computer experience is required, or instructor consent. CIS 245 Managing Technology Projects covers essential skills needed to manage small-scale technology projects. The course features the 5 phases of project management: definition, planning, implementation, monitoring, and termination. The emphasis is on the tools, practical methods and strategies that technology professionals use to manage successful projects and teams.

**CIS 247 Information Analysis and Visualization** .....4 credits

Prerequisite: MTH 065, and GIS 245 or CIS 125D, or instructor consent. CIS 247 introduces the field of information analysis: how information is designed, organized, analyzed, visualized, used and misused. The course emphasizes the use of software tools to work with data to communicate information effectively through descriptive statistics and narratives, graphical visualization and map applications. The course assumes participants have taken CIS 101 Computer Fundamentals, or CS 120 Concepts of Computing, or have an equivalent understanding of basic computer literacy concepts, and have experience as a user of the Windows operating system and applications software.

**CIS 297 Programming Capstone** .....5 credits  
Prerequisite: CS 296A and CIS 244, or instructor consent. This course is an advanced course in programming methods with an emphasis on development of database related applications for the web. The course ties together topics covered in the first and second year of the programming curriculum. It emphasizes practical application and working knowledge and is project oriented. One modern and representative web server/web development technology will be used for implementation.

**CS 120 Concepts of Computing: Information Processing** .....4 credits  
NOTE: This course is the preferred substitution for CIS 103, for business program majors, see the Business Academic Advisor for options. This course surveys the fundamental concepts and principles of computer systems and information processing. It is intended as a first course for those interested in a general survey of the computer science and information technology field. Students will become conversant with a wide range of topics in the field, including the basics of computer hardware and software, operating systems, word processing, spreadsheets, database management, network and internet communications, security, and the impact of computers on individuals and society. May be offered through Distance Learning.

**CS 133C# Beginning Programming: C#** .....4 credits  
Prerequisite: CIS 102 or CS 133G or CS 133JS or CS 161. This is the first in a sequence of 2 courses that teaches students to develop desktop applications in the .NET environment. The course introduces students to fundamental programming concepts as well as the syntax of the C# programming language and the Visual Studio 2008 development environment.

**CS 133G Beginning C++ Programming for Games** .....4 credits  
This course provides an introduction to programming using the C++ language in a game development environment. You will be exposed to the concepts and tools involved in C++ software development. Most of the programming assignments for the class involve relatively simple games. There are no explicit pre-requisites for the course, but you are expected to be familiar with general computer usage and the Windows environment.

**CS 133JS Beg. Programming: JavaScript** .....4 credits  
Prerequisite: CS 195 Web Authoring I (formerly CIS 125H) or instructor consent. This course provides students with the concepts and skills required to create dynamic, interactive Web pages using client side JavaScript. Students will learn the Document Object Model (DOM), event handlers, rollovers, arrays, functions, string manipulation, dates, and form validation. May be offered through Distance Learning.

**CS 160 Orientation to Computer Science** .....4 credits  
This course explores the discipline and profession of computer science. It provides an overview of computer hardware and software architecture, the study of algorithms, software design and development, data representation and organization, problem-solving strategies, ethics and the history of computing and its influences on society. The student is exposed to both low-level and high-level programming languages. May be offered through Distance Learning.

**CS 161 Computer Science 1** .....4 credits  
Prerequisite: CS 133G or CS 133JS or CS 160 or MTH 111 or higher, or instructor consent. This course is an introduction to the application of the principles of software design, development and testing. It includes problem solving, algorithm and program design, data types, and program control structures. It introduces the development tools and object-oriented programming using the JAVA language.

**CS 162 Computer Science 2** .....4 credits  
Prerequisite: CS 161 or instructor consent. This course is a continuation of Computer Science 1. Topics covered include more

advanced Object-Oriented programming concepts, searching and sorting, linear data structures, stream and file I/O, recursion, exception handling, and graphical user interface programming.

**CS 179 Introduction to Computer Networks** .....4 credits  
Prerequisite: CIS 140 or instructor consent. An introduction to computer networks with emphasis on theory and concepts. Provides a general overview of the networking field as a basis for continued study. Topics include network protocols and topologies, local area network architectures, the client-server model and internetworking devices. Provides experience using a local area network. May be offered through Distance Learning.

**CS 188 Wireless Networking** .....4 credits  
Prerequisite: CS 179 or instructor consent. This course introduces the student to wireless computer networking. It provides practical experience in installing, managing, and troubleshooting wireless local area networks (WLANs). Students will learn the basic concepts and terminology of WLANs and will learn how to configure the hardware components to make a wireless network functional. Wireless security threats and methods for avoiding breaches of security are covered. When the student finishes the course, he/she will have a solid understanding of wireless networking concepts and will have the basic skills needed for installing such a network and making it secure. The course has a hands-on focus.

**CS 195 Web Authoring 1** .....  
Prerequisite: Basic computer literacy. This class provides basic internet concepts, XHTML syntax and coding, an introduction to Cascading Style Sheets (CSS) code and layout techniques, basic web media and interactivity using dynamic methods (DHTML), and information on web page promotion. This is a hands-on class in which students use lab time to work through textbook examples and then complete end-of-chapter case studies for homework. Systematic instruction is provided on all of the fundamental XHTML, XML, CSS, and DHTML elements required to build web pages. Students use a file transfer protocol (FTP) client program to edit and update online web pages. May be offered through Distance Learning.

**CS 206A Coop Ed: Computer Networks Seminar 1** .....1 credits  
The Computer Networks Cooperative Education Seminars will provide ways for students to increase their understanding of industry expectations, as well as develop job search tools and skills. The content is designed to help students present themselves to employers in a competent and professional manner, and to move initially into their cooperative education internships and then into their professional careers. The emphasis in CS 206A is preparing for the cooperative education internship.

**CS 206B Coop Ed: Computer Networks Seminar 2** .....1 credits  
Prerequisite: CS 206A. This course is a continuation of CS 206A, and continues to provide ways for students to increase their understanding of industry expectations, as well as develop job search tools and skills. The content is designed to help students present themselves to employers in a competent and professional manner. The emphasis in CS 206B is to provide additional skills that will help graduates find employment.

**CS 233C# Intermediate Programming: C#** .....4 credits  
Prerequisite: CS 133C#. This is the second in a sequence of 2 courses that teaches student to develop desktop applications in the .NET environment. The course introduces intermediate level programming concepts and skills and C# syntax language and allows students to develop object oriented, data driven applications.

**CS 233G Intermediate C++ Programming for Games** .....4 credits  
Prerequisite: CS 133G or instructor consent. This course builds upon CS 133G, covering more advanced programming concepts while providing the opportunity to further develop C++ programming skills. Students will develop games working with an industry standard game engine or graphics library. Object oriented concepts will be used in programming exercises.

**CS 234G Advanced C++ Programming for Games** .....4 credits  
Prerequisite: CS 233G or instructor consent. This is the final course in the C++ programming sequence. It builds on the other two courses by teaching concepts in systems design and integrated project development. Students will learn the tools that are required for larger projects and how to design for quality and performance. Students will work in groups with an industry standard game engine or graphics library. They will design and code a non-trivial project.

**CS 235G SWTools 3: Game Development** .....4 credits  
Prerequisite: CIS 135G and CS 234G. This is the final course in the Game Development Sequence. Students will focus on designing and developing a non-trivial project in a team environment. This course will merge programming skills with the use of a game development environment. Topics covered will include graphics, sound, animation, object oriented programming, user interface, and software engineering.

**CS 240U Advanced Unix/Linux: Server Management** .....4 credits  
Prerequisite: CIS 140U and CS 179, or instructor consent. The course covers network administration of Unix/Linux. Topics include: operating system installation, configuration, troubleshooting, user and group account management, network printing, application installation and sharing, network server configuration (for example: DHCP, DNS, NFS, Apache, and Web 2.0), and interoperability with other network operating systems.

**CS 253 Computation for Computer Graphics** .....4 credits  
Prerequisite: MTH 111 and CS 233G. This course introduces students to the computational methods used for displaying and rendering graphical images in computer simulations and games. The course will combine a discussion of each method with programming exercises demonstrating how to apply it. Students will both create programs and work with graphical display engines in their exercises.

**CS 260 Data Structures 1** .....4 credits  
Prerequisite: CS 162 or CS 233G, and MTH 111 or higher, or instructor consent. This course is intended primarily for students seriously interested in computer science. Students will demonstrate the usage of using advanced data structures, including linked-lists and tree structures using pointers, and advanced structure programming methods through a variety of programming projects.

**CS 271 Computer Architecture and Assembly Language** ....4 credits  
Prerequisite: CS 161 or CS 133G or CS 227N, or instructor consent. An introductory course in computer architecture and programming in assembly language. Topics include computer organization, micro-processor design, logic gates and boolean algebra, data representations and manipulation, arithmetic operations, branching instructions, data editing, and input/output. Lab work provides experience working with an assembly language performing arithmetic, input/output, and table look-ups.

**CS 275 Database Program Development** .....4 credits  
Prerequisite: CIS 125D or instructor consent. This is an introduction to production-scale, back-end relational database environments. Included in the course are discussion and application of data structures, database models, database design, and program and query development using an Oracle relational database environment.

**CS 279W Windows Server Administration** .....4 credits  
Prerequisite: CIS 227N and CS 179, or instructor consent. This course introduces concepts of Windows Server and network administration. Topics include server installation, Active Directory, network printing, user account and group management, web services, network troubleshooting, group policy objects, and server and network monitoring. This course has a hands-on focus.

**CS 280CN Co-op Ed: Computer Network Operations** .....3-12 credits  
This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers in the computer network field. Cooperative Education is a required course for the Computer Network Operations degree.

**CS 280DP Co-op Ed: Data Processing** .....1-12 credits  
This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers.

**CS 280GD Co-op Ed: Simulation & Game Development** 3-12 credits  
Cooperative Education is an important part of the Simulation and Game Development Degree program. It provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options, and network with professionals and employers in the computer programming field. Cooperative Education is a required course for Simulation and Game Development degree.

**CS 280PR Co-op Ed: Programming**.....3-12 credits

This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers in the programming field. Cooperative Education is a required course for the Computer Programming degree.

**CS 280US Co-op Ed: Computer User Support**.....3-12 credits

This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers in the computer user support field.

**CS 284 Network Security Fundamentals** .....4 credits

Prerequisite: CS 279W, or instructor consent. This course covers fundamental computer and network security concepts from the security plus certification material. It emphasizes securing the operating system, applications, media, network devices, web pages, e-mail, and other network services. In addition, types of attacks, digital certificates, keys, and designing and implementing security policies and procedures are discussed. This course has a hands-on focus.

**CS 285 Operating System Hardening**.....4 credits

Prerequisite: CS 240U, CS 279W, and CS 284, or instructor consent. This course gives the students a real world understanding of the vulnerabilities that exist in today's operating systems and gives practical, hands-on experience resolving and/or mitigating the vulnerabilities. We will use real systems (like Windows Server and Linux), the latest security resolution guidance, industry accepted tools to apply the resolutions, and industry accepted tools to measure the effectiveness of the resolutions. When the student finishes this course, they will have a solid understanding of actual threats to computer systems and the resolutions to mitigate those threats and vulnerabilities. This course has a hands-on focus.

**CS 286 Firewalls and VPNs** .....4 credits

Prerequisite: CS 284 and CS 289, or instructor consent. This course gives the students a real world understanding of how firewalls and VPNs can be used to enhance the protection of internal networks. It gives hands-on experience installing, configuring and managing firewalls and VPNs. Commercial firewalls, VPNs, security configuration guidance tools, and tools to monitor the effectiveness of the solutions will be used. You will examine best practices for protecting DNS services, HTTP, and SMTP. You will explore proven strategies for defending your networks against unauthorized access, denial-of-service, the weaknesses of firewall architectures, security processes, address translation, content filtering, spoofing, and other advanced issues. This course has a hands-on focus.

**CS 289 Cisco Router and Switch Administration**.....4 credits

Prerequisite: CS 179, and CS 279W or CIS 140U, or instructor consent. This course primarily covers configuring and managing Cisco routers and switches. It deals with modern networking processes and protocols emphasizing protocols used at the OSI models data link, network, and transport layers. Functions of internetworking devices will be discussed such as hubs, bridges, routers, and switches with particular emphasis on routers. Wide area networking technologies are also covered. Students will learn to configure and manage routers and switches through hands-on lab work and learn to use protocol analysis software.

**CS 295A Web Development 1: ASP.NET** .....4 credits

Prerequisite: CS 133JS and CS 133C#, or instructor consent. This is the first in a sequence of 2 courses that teaches student who have a working knowledge of C# and Visual Studio to develop web based applications in the .NET environment. This course introduces students to server side web programming concepts as well as the ASP.NET framework.

**CS 295P Web Development 1: PHP**

Prerequisite: CS 133JS or instructor consent. This course provides students who have working knowledge of XHTML and client-side JavaScript with an introduction to server-side web programming using PHP. Students will begin to develop the concepts and skills necessary to develop dynamic, data driven web sites. May be offered through Distance Learning. Note: CS 295P was formerly named CS 195 - Web Development 1 and CS 295 - Web Development 1. A student who has taken this class under previous names may not take it again under this new name and receive duplicate credit.

**CS 296A Web Development 2: ASP.NET** .....4 credits

Prerequisite: CS 295A, or instructor consent. This is the second in a

sequence of 2 courses that teaches student who have a working knowledge of C# and Visual Studio to develop web based applications in the .NET environment.

**CS 296P Web Development 2: PHP**

Prerequisite: CS 295 or CS 295P, or instructor consent. This is the second course in the (server-side) Web Development sequence. It provides students who have working knowledge of server-side web programming with the concepts and skills necessary to develop dynamic, data driven, object oriented web based applications. Note: CS 296P was formerly named CS 295 - Web Development 2 and CS 296 - Web Development 2. A student who has taken this class under previous names may not take it again under this new name and receive duplicate credit.

**CS 297G Simulation & Game Development Capstone** .....4 credits

Prerequisite: CS 234G and CS 235G. This is the final course in the Simulation and Game Development Program. This course ties together the topics covered in the first and second year courses of the computer simulation and game development program. It emphasizes the application of this knowledge in a project oriented environment. Students will work in teams creating a working, non-trivial simulation or game built on an industry standard engine programming in C++ and using industry standard tools.

**CS 298 Independent Study: Computer Science** .....1-4 credits

A variable credit course based on independent study contracted between an instructor and a student.

**SKD 030 Using Computers to Write 1**.....1-3 credits

Prerequisite: Keyboard familiarity. This course introduces students to word processing on the PC as well as basic grammar concepts. Concurrently, students will improve and enhance their academic writing skills using the word processor as a tool. Adaptive technology may be used for students with physical or learning disabilities. For a description of this ALS class in Spanish, see <http://www.lanec.edu/als/classesenspanol.htm>.

**SKD 035 Using Computers to Write 2**.....1-3 credits

Prerequisite: Keyboard familiarity, skills taught in SKD030. Course continues the instruction of word processing on the PC. Students learn intermediate techniques they can use when producing papers for college. Concurrently, students improve and enhance their academic writing and research skills using the word processor as a tool. Skills necessary for students electing to take on-line courses are included.

**SKD 040 Using Computers to Map Concepts** .....3 credits

Prerequisite: Keyboard familiarity. This course introduces students to computer-based strategies that will allow them to represent information visually in meaningful formats. They will also learn to use the computer to organize and synthesize information from multiple sources.

## Computers: Keyboarding

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

**BT 010 Computer Keyboarding**.....1-3 credits

Introduction to the computer keyboard with mastery of the alphabetic, punctuation, and numeric keys by way of the touch system. Very basic introduction on using the computer and keyboarding software. Basic formatting of personal business letters, academic reports, and title pages. May be offered through Distance Learning.

**BT 015 Keyboard Skillbuilding 1** .....1-3 credits

Prerequisite: Typing with 25-30 wpm on a three-minute timing. Development of speed and accuracy utilizing a diagnostic approach to individual skill assessment and prescribed drill work. May be offered through Distance Learning.

**BT 016 Keyboard Skillbuilding 2** .....1-3 credits

Prerequisite: Typing with 30-35 wpm on a three-minute timing. Development of speed and accuracy utilizing a diagnostic approach to individual skill assessment and prescribed drill work. May be offered through Distance Learning.

**BT 017 Keyboard Skillbuilding 3** .....1-3 credits

Prerequisite: Typing with 35+ wpm on a three-minute timing. Development of speed and accuracy utilizing a diagnostic approach to individual skill assessment and prescribed drill work. May be offered through Distance Learning.

**SKD 025 Keyboarding for Personal Use** .....3 credits



This course teaches keyboarding basics in order to develop appropriate speed and accuracy to meet personal academic goals. Adaptive technology may be used for students with physical or learning disabilities. This course is intended as a one-term introduction to keyboarding and may also be taught in hybrid format (combination of in-class and online instruction.) For a description of this ALS class in Spanish, see [lanecc.edu/als/classesenspanol.htm](http://lanecc.edu/als/classesenspanol.htm).

**Computers: Software Application**

For information about classes with course numbers that begin with:

CIS or CS - Contact the Business and Computer Information Technology, Bldg. 19/Rm. 137, 541.463.5826.

BT - Contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

**BT 120 MS WORD for Business** .....3 credits  
 Prerequisite: Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute. The Business Department offers free placement tests to assist students in determining their skill levels. Students who are unable to meet the minimum requirements should consider completing BT 010 Computer Keyboarding before enrolling in this course. Additional testing information and schedule details are available at: [www.lanecc.edu/business/testing](http://www.lanecc.edu/business/testing). As an introduction to the entry-level business word processing objectives of MS Word, this course emphasizes information and training on working with the Windows operating environment; creating, editing, formatting, paginating, and printing documents; applying document refinements; using templates; working with graphics; and managing documents. Application of a variety of documents includes letters with envelopes/labels, memos, reports, tables, and newsletter-style columns with headers and footers. May be offered through Distance Learning.

**BT 121 WordPerfect for Business**.....3 credits  
 Prerequisite: Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute. The Business Department offers free placement tests to assist students in determining their skill levels. Students who are unable to meet the minimum requirements should consider completing BT 010 Computer Keyboarding before enrolling in this course. Additional testing information and schedule details are available at: [www.lanecc.edu/business/testing](http://www.lanecc.edu/business/testing). As a comprehensive introduction to WordPerfect, this course emphasizes information and training on creating, editing, formatting, and printing documents; managing and enhancing documents using fonts, document properties, tab settings and correction tools; manipulating and organizing text using headers and footers, tables, and mail merge; and using special features and graphic elements. A variety of practical applications include letters, memos, reports, tables, resumes, and other business-related documents. May be offered through Distance Learning. Note: BT 121 was formerly numbered BT 125. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**BT 122 MS POWERPOINT for Business**.....3 credits  
 Prerequisite: Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute. The Business Department offers free placement tests to assist students in determining their skill levels. Students who are unable to meet the minimum requirements should consider completing BT 010 Computer Keyboarding enrolling in this course. Additional testing information and schedule details are available at: [www.lanecc.edu/business/testing](http://www.lanecc.edu/business/testing). Using PowerPoint software, students create, modify, customize and preview slide show presentations. Students manage documents, work with text, visual elements, and program features that enhance slide shows. Design principles are applied to create professional looking presentations. May be offered through Distance Learning. Note: BT 122 was formerly numbered BT 118. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**BT 123 MS EXCEL for Business**.....4 credits  
 Prerequisite: CS 120 and MTH 020 or higher, or instructor consent. Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute and key 130-132 strokes per minute on an electronic calculator (or numeric keypad). The Business Department offers free placement tests to assist

students in determining their skill levels. Students who are unable to meet the minimum requirements should consider completing BT 010 Computer Keyboarding and/or BT 020 10-Key Calculators before enrolling in this course. Additional testing information and schedule details are available at: [www.lanecc.edu/business/testing](http://www.lanecc.edu/business/testing). This course introduces students to the use of Microsoft Excel to analyze questions found in a typical business setting. Students will create accurate, professional-looking spreadsheets and graphs. May be offered through Distance Learning. Note: BT 123 was formerly numbered BT 114. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**BT 124 MS ACCESS for Business** .....3 credits  
 Prerequisite: BT 123 (formerly BT 114) and MTH 060 or higher, or instructor consent. Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute and key 130-132 strokes per minute on an electronic calculator (or numeric keypad). The Business Department offers free placement tests to assist students in determining their skill levels. Students who are unable to meet the minimum requirements should consider completing BT 010 Computer Keyboarding and/or BT 020 10-Key Calculators before enrolling in this course. Additional testing information and schedule details are available at: [www.lanecc.edu/business/testing](http://www.lanecc.edu/business/testing). This hands-on application-oriented database course is designed to provide students with the basic functions and business applications of Microsoft Access. This course gives students the skills required to extract the data they need (queries), build efficient front-ends for that data (forms), and publish the results in an attractive and easy-to-read format (reports). May be offered through Distance Learning. Note: BT 124 was formerly numbered BT 115. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**BT 150 Business Web Pages**.....3 credits  
 Introduction to creating and maintaining business web pages, including business web concepts, use of XHTML, CSS, and incorporating business graphics into a business web page. Focus will be on project completion for a local business, not-for-profit agency, or a web project for the school. May be offered through Distance Learning. Note: BT 150 was formerly numbered BT 129. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**BT 163 QuickBooks** .....4 credits  
 Prerequisite: BT 123 (formerly BT 114) and BT 165, or instructor consent. This course introduces students to the use of QuickBooks for small business accounting. Attention is given to the application of the entire accounting cycle from the creation of a company file, to and including, the end-of-period closing for both service providers and merchandisers with an emphasis on planning and analysis. Students will also be introduced to report systems, manufacturing issues, payroll, client management, job tracking and other features of QuickBooks. Students will convert a manual practice set used in BT 165 to QuickBooks. The course will emphasize being both competent and efficient with QuickBooks. May be offered through Distance Learning. Note: BT 163 was formerly numbered BT 113. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit. This course may be an acceptable substitution for BT 175 Survey of Accounting Software which is no longer offered. Please see the Business Academic Advisor for options.options.

**BT 220 MS WORD for Business – Expert**.....3 credits  
 Prerequisite: BT 120 or instructor consent. Recommend the ability to accurately type at least 35 words per minute. The Business Department offers free placement tests to assist students in determining their skill levels. Business program majors not successfully passing the placement test at 35 words per minute will be strongly encouraged to complete BT 015 with a minimum grade of B- in the timing component before enrolling in this class. Additional testing information and schedule details are available at: [www.lanecc.edu/business/testing](http://www.lanecc.edu/business/testing). As an extension of MS WORD for Business, the expert course focuses on the application of advanced word processing and formatting features in the development of professional business documents. Topics include using workgroup collaboration and file sharing features; applying program features for lengthy, in-depth business documents; and learning methods for visually enhancing business documents. May be offered through Distance Learning.



**BT 223 MS EXCEL for Business-Expert** .....3 credits  
Prerequisite: BT 123 (formerly BT 114) or CIS 125S, and MTH 060 or higher, or instructor consent. Recommend the ability to accurately type 30 words per minute. The Business Department offers free placement tests to assist students in determining their skill levels. Students who are unable to meet the minimum requirements should consider completing BT 010 Computer Keyboarding before enrolling in this course. Additional testing information and schedule details are available at: [www.lanec.edu/business/testing](http://www.lanec.edu/business/testing). Advanced Excel functions for business problem solving. Focus on creation of effective business spreadsheets to assist managers in decision making. May be offered through Distance Learning. Note: BT 223 was formerly numbered BT 217. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**BT 228 Integrated Office Applications** .....4 credits  
Prerequisite: BT 120, BT 123 (formerly BT 114), BT 144, BT 220, and CS 120 or instructor consent. Recommend the ability to accurately type at least 40 words per minute. The Business Department offers free placement tests to assist students in determining their skill levels. Business program majors not successfully passing the placement test at 40 words per minute will be strongly encouraged to complete BT 016 with a minimum grade of B- in the timing component before enrolling in this class. Additional testing information and schedule details are available at: [www.lanec.edu/business/testing](http://www.lanec.edu/business/testing). In this advanced software applications course, students will review, apply, and expand software skills learned in earlier courses. Projects are designed to use the suite of MS Office applications, including MS Word, Excel, PowerPoint, and Access, to complete production tasks. Students will analyze data and produce professionally formatted business documents through application of integration principles. In completing simulated tasks and projects, students will plan, prioritize, and organize work; use initiative to make decisions about appropriate document appearance and format; and use and continue to develop professional human relations and communication skills. Students will continue the development of keyboarding skills through weekly practice and timings. May be offered through Distance Learning.

## Construction

For information, contact Advanced Technology, Bldg. 12/Rm. 201, 541.463.5380.

**CST 110 Blueprint Reading 1** .....3 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Provides skills in understanding blueprints. Emphasizes fundamentals of blueprint reading, including development of skills in understanding basic lines, views, dimensions, symbols, and notations.

**CST 111 Construction Orientation and Environment** .....2 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Introduction to the construction industry. Economic and environmental influences affecting the construction industry. Material will be presented covering the work in the construction field and professional opportunities open to construction graduates.

**CST 116 Construction Estimating** .....4 credits  
Prerequisite: CST 110 Study of techniques used to estimate construction materials and costs for residential and small commercial structures.

**CST 118 Building Construction** .....1-5 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Project work required to plan, design, and construct building structures. A variety of elements and topics related to the materials and methods used in the construction of buildings, including planning the site, foundation, framing, and interior and exterior finishing. This course through project work provides an orientation to electrical, mechanical, and plumbing systems. CST 118 consists of a total of 15 credits (264 hours). Majors should enroll in 5 credits per term for three terms to satisfactorily complete CST 118.

**CST 119 Building Construction Surveying** .....3 credits  
A beginning course in surveying concepts and techniques with application to building construction. Fundamentals of surveying methods and the use and care of surveying equipment as related to surveying tasks involved in building construction. Emphasis is placed on field practice. CONSTRUCTION MAJORS ONLY.

**CST 122 Construction Codes** .....2 credits  
Various codes specifying the standards of construction and the installation of electrical and plumbing fixtures. Building codes and the function of government agencies (state and local) charged with the administration and inspection of building construction will also be discussed.

**CST 199 Special Studies:** .....3 credits  
See department for topics.

**CST 211 Blueprint Reading 2** .....3 credits  
Prerequisite: CST 110 Advanced study related to the needs of the individual in the understanding and interpretation of blueprints for special features of design, fabrication, construction, and assembly.

**CST 280 Co-op Ed: Construction** .....3-12 credits  
This course provides the student with construction-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning college credit.

**LAT 131 Introduction to Landscape Construction** .....3 credits  
This course introduces common landscape construction techniques. Students will study fundamental concepts of soils, basic plant needs, irrigation, paving, and plant installation, and will apply their understanding in actual construction projects.

**LAT 141 Principles of Nursery Operations** .....2 credits  
Introduces all phases of nursery operations. Subjects covered will include: propagation techniques, container culture, field stock culture, and retail garden operations.

**LAT 155 Landscape Plants 1** .....4 credits  
Identification, characteristics, appropriate uses, and cultural requirements of plants used in landscaping in the Pacific Northwest. Students will become familiar with typical Pacific Northwest plant communities and basic ecological relationships; will learn to identify native and ornamental plants; and will learn how to select the right plant for the right place. Fall term course focuses on deciduous trees and shrubs.

**LAT 156 Landscape Plants 2** .....4 credits  
Prerequisite: LAT 155. Identification, characteristics, appropriate uses, and cultural requirements of plants used in landscaping in the Pacific Northwest. Students will become familiar with typical Pacific Northwest plant communities and basic ecological relationships; will learn to identify native and ornamental plants; and will learn how to select the right plant for the right place. Winter term course focuses on evergreen trees and shrubs.

**LAT 157 Landscape Plants 3** .....4 credits  
Prerequisites: LAT 155. Identification, characteristics, appropriate uses, and cultural requirements of plants used in landscaping in the Pacific Northwest. Students will become familiar with typical Pacific Northwest plant communities and basic ecological relationships; will learn to identify native and ornamental plants; and will learn how to select the right plant for the right place. Spring term course focuses on flowering trees and shrubs, vines, and ground covers.

**LAT 199 Special Studies:** .....3 credits  
See department for topics.

**LAT 280 Co-op Ed: Landscape** .....1-12 credits  
Prerequisite: Instructor approval. This course provides the student on-the-job learning experiences related to the landscape field in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with the practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**Cooperative Education/Internships**

For information, contact Cooperative Education, Bldg. 19/Rm. 231, 541.463.5203.

- AB 280 Co-op Ed: Auto Body and Fender, See page 179
- AIL 280 Co-op Ed: American Indian Language, See page 224
- AM 280 Co-op Ed: Automotive, See page 179
- ANTH 280 Co-op Ed: Anthropology, See page 172
- ART 280A Co-op Ed: Art and Applied Design, See page 178
- ART 280GD Co-op Ed: Graphic Design, See page 217
- AV 280 Co-op Ed: Aviation Maintenance, See page 180
- BA 280 Co-op Ed: Business Management, See page 184
- BA 280AA Co-op Ed: Administrative Assistant, See page 170
- BA 280AC Co-op Ed: Accounting, See page 170
- BA 280L Co-op Ed: Legal Assistant, See page 225
- BA 280SM Co-op Ed: Sales and Marketing, See page 184
- BI 280 Co-op Ed: Biology, See page 182
- CA 280 Co-op Ed: Culinary Arts, Second Year, See page 195
- CG 180 Co-op Ed: Extended Career Exploration, See page 184
- CG 280HS Co-op Ed: Human Services, See page 221
- CH 280 Co-op Ed: Physics-Chemistry, See page 185
- CJA 280 Co-op Ed: Criminal Justice, See page 193
- COOP 206S Sustainability Seminar, See page 256
- COOP 280 Co-op Ed
- COOP 280S Co-op Ed: Sustainability, See page 256
- COOP 280SL Co-op Ed: Service Learning .....1-12 credits  
Prerequisite: Instructor approval. This course provides students work experience with community partners in addressing real community needs. Students will use skills acquired at Lane in an instructional program designed to promote critical thinking, citizenship and civic responsibility. Students identify learning objectives and engage in faculty-led guided reflection activities. In this course students may develop skills, explore career options, and network with professionals while earning college credit.
- CS 206A Coop Ed: Computer Networks Seminar 1, See page 188
- CS 206B Coop Ed: Computer Networks Seminar 2, See page 188
- CS 280CN Co-op Ed: Computer Network Operations, See page 189
- CS 280DP Co-op Ed: Data Processing, See page 189
- CS 280GD Co-op Ed: Simulation & Game Development, See page 189
- CS 280H Co-op Ed: Health Informatics
- CS 280PR Co-op Ed: Programming, See page 189
- CS 280US Co-op Ed: Computer User Support, See page 189
- CST 280 Co-op Ed: Construction, See page 191
- DA 280 Co-op Ed: Dental Assisting, See page 199
- DH 280 Co-op Ed: Dental Hygiene, See page 201
- DS 280 Co-op Ed: Diesel, See page 201
- ED 280 Co-op Ed: Education, See page 205
- ED 280EC Co-op Ed: Early Childhood Education, See page 205
- ED 280SE Co-op Ed: September Experience, See page 206
- EMT 280P1 Co-op Ed: EMT Internship Part 1, See page 208
- EMT 280P2 Co-op Ed: EMT Internship Part 2, See page 208
- ENGR 280 Co-op Ed: Engineering, See page 210
- ENGR 280D Co-op Ed: Drafting, See page 202
- ENGR 280E Co-op Ed: Electronic Technology, See page 206
- ENGR 280M Co-op Ed: Manufacturing Technology, See page 229
- ENGR 280W Co-op Ed: Welding, See page 213
- ES 280 Co-op Ed: Ethnic Studies, See page 212
- FL 280IW Co-op Ed: International Work Experience, See page 224
- FN 206 Co-op Ed: Dietary Manager Seminar, See page 242
- FN 280 Co-op Ed: Nutrition
- FR 280 Co-op Ed: French , See page 225
- FT 280 Co-op Ed: Flight Tech, See page 216
- G 280 Co-op Ed: Geology, See page 204
- G 280ES Co-op Ed: Environmental Studies, See page 204
- GEOG 280 Co-op Ed: Geography, See page 216
- GIS 280 Co-op Ed: Geographic Information System, See page 216
- GS 280ST Co-op Ed: Science Technology, See page 205
- GWE 180 Co-op Ed: General Work Exper, See page 242
- GWE 280 Co-op Ed: General Work Experience, See page 242
- HE 280 Co-op Ed: Health Occupations, See page 218
- HIT 280 Co-op Ed: Health Records, See page 219
- HRTM 280 Co-op Ed: Hospitality Management, See page 196
- HST 280 Co-op Ed: History, See page 220
- J 280 Co-op Ed: Journalism, See page 223
- LAT 280 Co-op Ed: Landscape, See page 192
- MA 280 Co-op Ed: Medical Office Assistant, See page 236
- MDP 280 Co-op Ed: Multimedia, See page 237
- MTH 280 Co-op Ed: Mathematics, See page 235
- MUS 280 Co-op Ed: Music, See page 239

COURSE DESCRIPTIONS

- NRG 206 Co-op Ed: Energy Management Seminar, See page 209
- NRG 280 Co-op Ed: Energy Management, See page 209
- NRS 280 Co-op Ed: Nursing, See page 242
- OST 280 Co-op Ed: Occupational Skills, See page 243 (Not Financial Aid Eligible)
- PE 280 Co-op Ed: Physical Education, See page 212
- PE 280A Co-op Ed: Athletics, See page 212
- PE 280AR Co-op Ed: Aerobics, See page 212
- PE 280AT Co-op Ed: Athletic Training, See page 213
- PE 280C Co-op Ed: Coaching, See page 213
- PE 280F Co-op Ed: Fitness, See page 213
- PE 280H Co-op Ed: Community Health, See page 218
- PE 280M Co-op Ed: Fitness Management, See page 213
- PE 280R Co-op Ed: Recreation, See page 213
- PE 280RT Co-op Ed: Rehabilitation Therapies, See page 213
- PE 280W Co-op Ed: Wellness, See page 213
- PS 280 Co-op Ed: Political Science, See page 251
- PS 280LW Co-op Ed: Pre Law, See page 251
- PSY 280 Co-op Ed: Psychology, See page 252
- PTA 280A Co-op Ed: First Clinical Affiliation, See page 249
- PTA 280B Co-op Ed: Second Clinical Affiliation, See page 249
- PTA 280C Co-op Ed: Third Clinical Affiliation, See page 249
- RE 280 Co-op Ed: Real Estate, See page 252
- RT 280 Co-op Ed: Respiratory Therapy, See page 254
- SOC 280 Co-op Ed: Sociology, See page 255
- SP 280 Co-op Ed: Speech, See page 255
- SPAN 280 Co-op Ed: Spanish, See page 225
- TA 280 Co-op Ed: Performing Arts, See page 257
- WATR 206 Co-op Ed: Water Conservation Seminar, See page 258
- WATR 280 Co-op Ed: Water Conservation Technician, See page 258
- WR 280 Co-op Ed: English/Writing, See page 260

**Criminal Justice**

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

- CJA 100 Introduction to Criminal Justice 1 .....3 credits  
Philosophy and history of criminal justice agencies, American and foreign; analysis of the policies and practices of agencies involved in the operations of the criminal justice process from detection of crime; arrest of suspects, prosecution, adjudication, sentencing, and imprisonment to release. Also, the organization of criminal justice agencies; theories and current practices in corrections and crime prevention; The evaluation of contemporary criminal justice services; survey of professional career opportunities.
- CJA 101 Introduction to Criminology.....3 credits  
The study of deviant behavior as it relates to the definition of crime; crime statistics; theories of crime causation; crime typologies, the impact of crime, juvenile delinquency, and society's reactions to criminal behavior.
- CJA 110 Introduction to Criminal Justice 2.....3 credits  
This course is the second of a two-term Intro to Criminal Justice sequence. It focuses on the court system, processing of defendants, court organization, and the trial process. In addition, the class will provide an in-depth analysis of the corrections system and occupations, sentencing issues, parole and probation and the juvenile justice system.
- CJA 199 SS:.....3 credits  
See department for topics.
- CJA 201 Juvenile Delinquency .....3 credits  
A review of the historical reasons for the establishment of juvenile courts in the United States; an examination of the juvenile justice process; and an introduction to the functions of the various components of the system. Sociological concepts and theory of the adolescent subculture will be explored. Delinquency prevention aspects as well as treatment methodologies will be included. Oregon juvenile court law is examined.
- CJA 210 Criminal Investigation 1 .....3 credits  
Fundamentals of criminal investigation, theory, and history; crime scene to courtroom with emphasis on techniques appropriate to specific crimes.
- CJA 213 Interviewing and Interrogation .....3 credits  
This course will examine the dynamics of psychological persuasion existing as a product of criminal interrogations. The processes and techniques used will be the focus during the course with specific attention to the practical and legal limitations of achieving the goals of interviewing.



**CJA 214 Introduction to Forensic Science** .....4 credits

This course is an introduction to forensic science, crime scene investigations, physical evidence, and legal aspects of evidence, and is designed for all students interested in forensic science. The student will learn how to process crime scenes, the types of physical evidence that may be encountered, and how evidence is analyzed in the laboratory. Emphasis will be placed on the interpretation of analytical test results as they relate to the limitations of the evidence itself, how the evidence was collected, the case context, and other factors. The student will have hands-on laboratory exercises in analyzing and comparing physical evidence. Critical thinking and the application of the scientific method will be emphasized in all laboratory exercises. Class concepts will be reinforced with actual case examples whenever possible.

**CJA 220 Introduction to Criminal Law** .....3 credits

Historical development, philosophy of law and constitutional provisions, definitions, classification of crime and their application to the system of criminal justice; legal research, study of case law, methodology, and concepts of law as a social force.

**CJA 222 Criminal Law: Procedural Issues** .....3 credits

Developmental history in English common law and United States case law; constitutional and statutory provisions relative to arrest, search and seizure. Rights and responsibilities of citizens and criminal justice personnel and agencies.

**CJA 232 Correctional Casework** .....3 credits

Basic concepts of interviewing and counseling techniques used by corrections officers in one-to-one contacts with clients. To prepare the student for practice in the field of corrections, both adult and juvenile.

**CJA 243 Narcotics and Dangerous Drugs** .....3 credits

Introduction to the problems of substance abuse alcohol, drugs, narcotics in our society. This course is designed to equip criminal justice, social service, and other human service workers with increased background and knowledge of today's drug technology, including pharmaceuticals, over-the-counter agents, and illicit drugs.

**CJA 280 Co-op Ed: Criminal Justice** .....3-12 credits

Prerequisite: CJ 100 & CJ 110 or instructor permission. This course provides the student with criminal justice-related work experience in community organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options, and network with professionals and employers while earning credit toward a degree.

## Culinary Arts and Hospitality Management

For information, Contact Culinary Arts and Hospitality Management, Bldg. 19/Rm. 204, 541.463.3503.

**CA 110 Culinary Adventuring: Local Guest Chef Series** .....2 credits

Course may be repeated for credit. It is designed to offer students cooking instruction by well known and respected local chefs and food purveyors through lecture, demonstration, hands-on experiences and tastings. In keeping with national health and industry professional standards, our Culinary Arts and Hospitality Management Program requires adherence to strict safety and sanitation guidelines. Career Pathway Certificate students must follow proper uniform guidelines for work in Lane's kitchens. You are required to come to the first class and every class with the following clothing guidelines: comfortable and clean long pants, socks, and supportive shoes. Hair must be properly controlled and head covered. A chef coat, toque, and aprons will be provided for you.

**CA 120 Culinary Adventuring: Seasonal Baking and Pastry** .....2 credits

This course is required for the Career Pathways Certificate Program and offered as an elective for Culinary Arts Program students. It is designed to introduce students to the "rebirth" of regional cuisines and apply techniques in baking and pastry which reflect the local produce. Students will learn the history of seasonal fruits and vegetables and their local availability as well as Oregon agriculture and its organic and sustainable values. Holidays and cultural traditions are explored through seasonal recipes, and the local "flavor" is enhanced. With guided, hands-on instruction, students will acquire the fundamentals of baking with this season's fruits, vegetables, and herbs as well as prepare for the next season's

offerings. Offered all four terms. In keeping with national health and industry professional standards, our Culinary Arts and Hospitality Management Program requires adherence to strict safety and sanitation guidelines. Career Pathways Certificate students must follow proper uniform guidelines for work in Lane's kitchens. You are required to come to the first class and every class with the following clothing guidelines: comfortable and clean long pants, socks, and supportive shoes. Hair must be properly controlled and head covered. A chef coat, toque, and aprons will be provided for you.

**CA 121 Culinary Adventuring: The Composition of Cake** .....2 credits

This course is required for the Career Pathways Certificate Program and offered as an elective for Culinary Arts Program students. The class is designed to teach the classical fundamentals of baking and decorating cakes that taste great and look fabulous. With the demand in the food service industry for experienced and skilled cake bakers and decorators, students will learn essential skills to advance in the workforce. All components of making and decorating a cake will be covered such as cake layers, fillings, frostings, assembly, piping and decoration. Students will be introduced to working with specialty cake ingredients such as fondant and marzipan as well as become familiar with cake baking and decorating equipment. In keeping with national health and industry professional standards, our Culinary Arts and Hospitality Management Program requires adherence to strict safety and sanitation guidelines. Career Pathways Certificate students must follow proper uniform guidelines for work in Lane's kitchens. You are required to come to the first class and every class with the following clothing guidelines: comfortable and clean long pants, socks, and supportive shoes. Hair must be properly controlled and head covered. A chef coat, toque, and aprons will be provided.

**CA 122 Artisan Breads** .....2 credits

You will be inspired, challenged and learn all about Artisan Breads. You will roll up your sleeves and mix, ferment, punch down, shape, score, finish and bake doughs into delicious loaves. In keeping with national health and industry professional standards, our Culinary Arts and Hospitality Management Program requires adherence to strict safety and sanitation guidelines. Career Pathways Certificate students must follow proper uniform guidelines for work in Lane's kitchens. You are required to come to the first class and every class with the following clothing guidelines: comfortable and clean long pants, socks, and supportive shoes. Hair must be properly controlled and head covered. A chef coat, toque, and aprons will be provided for you.

**CA 123 Culinary Adventuring: International Baking & Pastry** .....2 credits

This course is required for the Career Pathways Certificate Program and offered as an elective for Culinary Arts Program students. The class will focus on learning the history of baking and pastry from a variety of global regions and countries as well as creating their authentic and traditional recipes, both sweet and savory. Focused primarily on classical baking and pastry techniques, the class will also explore additional cooking preparation styles used in different countries. In keeping with national health and industry professional standards, our Culinary Arts and Hospitality Management Program requires adherence to strict safety and sanitation guidelines. Career Pathways Certificate students must follow proper uniform guidelines for work in Lane's kitchens. You are required to come to the first class and every class with the following clothing guidelines: comfortable and clean long pants, socks, and supportive shoes. Hair must be properly controlled and head covered. A chef coat, toque, and aprons will be provided for you.

**CA 130 Culinary Adventuring: Oregon Wine Country** .....2 credits

This course is open to the public 21 years or older. The course introduces students to the process of winemaking as it relates to Oregon, especially the Willamette Valley. Over the eleven weeks' class period, winemakers from the Willamette Valley will discuss their wines and demonstrate how they complement foods. Students will taste wines with appropriate foods and evaluate the pairings. Local foods will be used whenever possible. One class will feature wine writers and what they look for in evaluating wines.

**CA 159 Kitchen Operations** .....2 credits

This course will give hospitality students an appreciation for the operation of a foodservice kitchen. The students will learn of all back-of-house operations including the fundamentals of food safety, sanitation, tools and equipment, basic cooking techniques, and fundamental skills that are required for a successful production kitchen.

**CA 160 Cooking Theories 1** .....5 credits  
Prerequisite: CG 203, MTH 025-MTH 095, and HRTM 105. In this class students will be exposed to and practice the fundamentals of food safety and sanitation, tools and equipment identification and safe use, and proper kitchen and personal hygiene. Introduction to key culinary concepts, terminology and history, as well as an overview of kitchen food products and their uses. Fundamental culinary math in relation to recipe comprehension and conversion will be practiced. Basic cooking theory, applications and techniques will be practiced in the preparation of stocks, soups and sauces, salads, and breakfast cookery.

**CA 160A Food Preparation and Production 1** .....3 credits  
Prerequisite or Corequisite: CA 175. This course is required for the Career Pathways Certificate Program\* and offered as an elective for Culinary Arts Program students. In this class students will be introduced to the fundamentals of food safety and sanitation; tools and equipment identification and safe use; proper kitchen and personal hygiene; key culinary concepts, terminology and history. Students will receive an overview of kitchen food products and their uses; the fundamentals of culinary math in relation to recipe comprehension, conversion and costing from the point of view of menu types and basic understanding of menu concepts; and will be introduced to basic cooking theory, including applications and techniques in the preparation of stocks, soups and sauces. \*In keeping with national health and industry professional standards, our Culinary Arts and Hospitality Management Program requires adherence to strict safety and sanitation guidelines. Career Pathways Certificate students must follow proper uniform guidelines for work in Lane's kitchens. You are required to come to the first class and every class with the following clothing guidelines: comfortable and clean long pants, socks, and supportive shoes. Hair must be properly controlled and head covered. A chef coat, toque, and aprons will be provided for you. Course only offered with sufficient enrollment.

**CA 160B Food Preparation and Production 2** .....2 credits  
Prerequisite: CA 160A, CA 175, or instructor approval. This course is required for the Career Pathways Certificate Program\* and offered as an elective for Culinary Arts Program students. In this class, which is a continuation of CA 160A, students will learn and practice: the fundamentals of food safety and sanitation; tools and equipment identification and safe use; proper kitchen and personal hygiene; key culinary concepts, terminology and history. Students will further review kitchen food products and their uses; the fundamentals of culinary math in relation to recipe comprehension, conversion and costing from the point of view of menu types and basic understanding of menu concepts; and will apply basic cooking theory, including in the preparation of stocks, soups and sauces. \*In keeping with national health and industry professional standards, our Culinary Arts and Hospitality Management Program requires adherence to strict safety and sanitation guidelines. Career Pathways Certificate students must follow proper uniform guidelines for work in Lane's kitchens. You are required to come to the first class and every class with the following clothing guidelines: comfortable and clean long pants, socks, and supportive shoes. Hair must be properly controlled and head covered. A chef coat, toque, and aprons will be provided for you. Course only offered with sufficient enrollment.

**CA 162 Cooking Theories 2** .....5 credits  
Prerequisite: CA 160, CA 175 and HRTM 105. Co-requisite: CA 184. In this class students will continue to be exposed to and practice key food safety and sanitation techniques and principles, tools and equipment identification and safe use, and proper kitchen and personal hygiene as it applies to a food service production setting. Introduction to key concepts, terminology and history of meat fabrication, charcuterie, and garde manger/buffets, as well as an overview of products and their uses in these settings. Intermediate culinary math in relation to recipe comprehension, conversion and costing will be practiced from the point of view of the recipes used in a meat fabrication production setting including cutting tests. Practice of basic meat fabrication, charcuterie and garde manger/buffet theory will be presented.

**CA 163 Cooking Theories 3** .....5 credits  
Prerequisites: CA 162. Corequisite: CA 185. In this class students will be exposed to and practice the fundamentals of food safety and sanitation, tools and equipment identification and safe use, and proper kitchen and personal hygiene as it applies to a bakeshop setting. Introduction to key baking concepts, terminology and history as well as an overview of bakeshop products and their uses.

Fundamental culinary math in relation to recipe comprehension, conversion and costing will be practiced from the point of view of baker's percentages. Basic baking theory, applications and techniques will be practiced in the preparation of yeast goods, quick breads, cookies, pies, cakes, and desserts.

**CA 163A Beginning Baking and Pastry** .....3 credits  
Prerequisite OR Corequisite: CA 175 WITH MIN. GRADE OF C-. This course is required for the Career Pathways Certificate Program\* and offered as an elective for Culinary Arts Program students. In this class students will be introduced to the fundamentals of food safety and sanitation, tools and equipment identification and safe use; proper kitchen and personal hygiene as it applies to a bakeshop setting; key baking concepts, terminology and history. Students will receive an overview of bakeshop products and their uses; fundamental culinary math in relation to recipe comprehension, conversion and costing will be learned from the point of view of bakeries percentages; basic baking theory, applications and techniques will be learned in the preparation of yeast goods, quick breads, cookies, pies, cakes and desserts. \*In keeping with national health and industry professional standards, our Culinary Arts and Hospitality Management Program requires adherence to strict safety and sanitation guidelines. Career Pathways Certificate students must follow proper uniform guidelines for work in Lane's kitchens. You are required to come to the first class and every class with the following clothing guidelines: comfortable and clean long pants, socks, and supportive shoes. Hair must be properly controlled and head covered. A chef coat, toque, and aprons will be provided for you.

**CA 163B Intermediate Baking and Pastry** .....3 credits  
Prerequisites: CA 163A or current Culinary Arts student status with instructor permission. This course is required for the Career Pathways Certificate Program\* and offered as an elective for Culinary Arts Program students. In this class, which is a continuation of CA 163B, students will practice the fundamentals of food safety and sanitation, tools and equipment identification and safe use; proper kitchen and personal hygiene as it applies to a bakeshop setting; key baking concepts, terminology and history. Students will further review bakeshop products and their uses; fundamental culinary math in relation to recipe comprehension, conversion and costing from the point of view of bakeries percentages; basic baking theory, applications and techniques will be practiced in the preparation of yeast goods, quick breads, cookies, pies, cakes and desserts.\*In keeping with national health and industry professional standards, our Culinary Arts and Hospitality Management Program requires adherence to strict safety and sanitation guidelines. Career Pathways Certificate students must follow proper uniform guidelines for work in Lane's kitchens. You are required to come to the first class and every class with the following clothing guidelines: comfortable and clean long pants, socks, and supportive shoes. Hair must be properly controlled and head covered. A chef coat, toque, and aprons will be provided for you.

**CA 163C Advanced Baking and Pastry** .....3 credits  
Prerequisites: CA 163A, CA 163B; or current Culinary Arts student status with instructor permission. This course is required for the Career Pathways Certificate Program\* and offered as an elective for Culinary Arts Program students. In this class, which is the final class following the sequence of CA 163A and CA 163B, students will practice the fundamentals of food safety and sanitation techniques and principles, tools and equipment identification and safe use; proper kitchen and personal hygiene as it applies to a bakeshop setting; key baking concepts, terminology and history. Through lectures, demonstrations, and participation, students learn the practice and development of techniques and skills expected of a working pastry chef in the industry. Under the direction of the instructor, the student will create custards, mousses, soufflé, frozen desserts, fruit desserts, chocolate and sugar techniques, dessert presentation, and specialty dessert techniques.\*In keeping with national health and industry professional standards, our Culinary Arts and Hospitality Management Program requires adherence to strict safety and sanitation guidelines. Career Pathways Certificate students must follow proper uniform guidelines for work in Lane's kitchens. You are required to come to the first class and every class with the following clothing guidelines: comfortable and clean long pants, socks, and supportive shoes. Hair must be properly controlled and head covered. A chef coat, toque, and aprons will be provided for you.



**CA 175 Foodservice Sanitation and Safety**.....2 credits  
This course presents the basics of food service and hospitality sanitation. The text examines a systematic approach to sanitation management by the use of control points and effective use of four basic resources. The National Restaurant Association (NRA) certificate exam will be issued upon completion of the course.

**CA 176 Concepts of Taste and Flavor** .....2 credits  
Prerequisite: CA 292. Co-requisite: CA 293. This class is designed to explore, examine and develop an understanding of the basics on how we taste foods. This class will cover the fundamentals, vocabulary and nuances of the taste, aroma, and texture of foods, and how these concepts interplay between food items and between food and beverages.

**CA 184 Dining Room and Kitchen Lab** .....3 credits  
Prerequisite: CA 160, MTH 025, HRTM 105, CG 203. Corequisite: CA162, Dining Room and Kitchen Lab 1 is designed to create authentic working conditions of a food service operation. It offers students learning experiences involving food preparation skill development, food theory, management and personnel responsibilities, and a progressive attitude toward food preparation and service. Students will be exposed to all aspects of restaurant work by rotating through at least 11 different job positions.

**CA 185 Dining Room and Kitchen Lab 2** .....4 credits  
Prerequisite: CA 184 and CA 162. Corequisite: CA 163. Beginning and intermediate level of line preparation. Preparation of menu items that are indigenous to the cultures of American, Continental and Asian cuisine. Line cooking, table service and organization of student restaurant. Participation in main kitchen in a variety of large scale food production activities.

**CA 186 Dining Room and Kitchen Lab 3** .....4 credits  
Prerequisite: CA163, and CA 185. A continuation of Dining Room and Kitchen Lab 2. Intermediate level of line preparation and dining room service. In this second term the student will gain more hands-on-experience with American, Continental, and Asian cuisines. The focus is on planning, production, preparation, and presentation of these dishes and an emphasis on speed and skills in main kitchen production activities.

**CA 187 Dining Room and Kitchen Supervision**.....4 credits  
Prerequisite: CA 186. Corequisite: CA 176. The last module of restaurant lab gives the second-year student an opportunity to manage the restaurant. Students will put their menu project to work and learn how to effectively manage first-year students. Emphasis will be on organizational skills, planning, advanced a la carte dining techniques, and training beginning students.

**CA 199 Special Studies**.....1-3 credits  
See department for topics.

**CA 199A Special Studies**.....1-3 credits  
See department for topics.

**CA 200 Restaurant and Menu Management** .....3 credits  
Co-requisite: CA 185. This course will enable the student to apply menu planning principles as an indispensable management tool for a variety of food service operations. The student will learn the fundamentals of dining room supervision, designation of responsibilities, organization, and customer relations. In addition, students will learn the basic setup and operation of a fully equipped bar with emphasis on wines, liquors, and special drinks.

**CA 225 Catering Lab** .....2 credits  
Prerequisites: CA 292; Corequisites: CA 293 and CA 187. Second year standing, Culinary Arts Program students only. Catering Lab is designed to create authentic working conditions in a catering environment. It offers student learning experiences involving running a full-service conference center catering operation, using the Center for Meeting and Learning and actual scheduled events. It includes: learning activities involving customer service, event menu planning, organizing catering workflow and production, plate and menu design, buffet presentation, safe food handling and sanitation, effective communication skills and evaluation for continuous improvement. Students will be involved in all aspects of the catering operation in the Center for Meeting and Learning

**CA 277 Culinary Competition Lab**.....2 credits  
Prerequisite: Instructor permission. This course provides an overview of the current standards of modern culinary competitions. Students create a competition standard judges packet, including recipes, equipment lists, photographs and timetable. Students will also participate in creating the project under three competition

standard settings and once as a judge for other students in the lab. Students who meet the criteria may have the opportunity to compete in an American Culinary Federation sanctioned competition.

**CA 279 Buffet and Banquet Planning** .....2 credits  
Prerequisite: CA 163 and CA 185. Second year standing, Culinary program or previous experience, both with department permission. This course covers the basics of planning, organizing, preparing and serving large dinner parties and buffets, including wine and beverage service. A heavy emphasis is placed on student participation and creativity. Students are involved in executing at least one major special event per term in coordination with the Hospitality portion of this class. This course is primarily open to Culinary Arts students and the focus is on back-of-the-house activities.

**CA 280 Co-op Ed: Culinary Arts, Second Year**.....3-12 credits  
This course provides the student with food service-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning college credit.

**CA 292 Advanced Cooking Theories 1 (Garde Manger)**.....3 credits  
Co-requisite: CA 186. This course will examine the principles of successful buffet management with particular emphasis on presentation, selection and purchase of foods and utilization of sanitation and storage techniques. Students will also develop garnishing skills and be introduced to the modern and traditional techniques in the preparation of cold entrees, pates, terrines, galantines, chaud-froid and ice carving.

**CA 293 Advanced Cooking Theories 2 (International)**.....3 credits  
Prerequisite: CA 292. Corequisite: CA 187. Advanced cooking and baking techniques used in dinner restaurants, featuring international cuisine. Techniques for set up and service of large functions involving participation in personnel assignment, food purchasing, dining room layout, table setting, and different table services. Students will prepare and serve two six-course meals.

**CA 294 Advanced Cooking Theories 3 ( American Regional)** 3 credits  
Prerequisites: CA 293. This course covers advanced cooking and baking techniques used in dinner restaurants, featuring regional American cuisine. Students learn techniques for set up and service of large functions involving participation in personnel assignment, food purchasing, dining room layout, table setting, and different table services. Students will prepare and serve a six-course meal.

**CA 297 Culinary Leadership: Principles and Practices**.....2 credits  
Prerequisites: CA 175, CA 176, CA 187, CA 200, CA 293, HRTM 105, HRTM 275, CG 203, MTH 025-MTH 095. Co-requisite: CA 294. This class is the culinary capstone for second year culinary students to be administered in the last term of their degree program. It is intended that this class be composed of three elements: a) final written ACF ‘Certified Culinarian’ test, b) final evaluation of core knowledge, leadership principles and fundamental financial practices and c) a service learning component.

**CA 299 Trends**.....1-8 credits  
See department for topics.

**CA 299A Trends**.....1-3 credits  
See department for topics.

**HRTM 104 Introduction to Travel and Tourism** .....3 credits  
This course is designed to provide students with a basic knowledge of tourism-related concepts, which will enable them to effectively apply those concepts to the hospitality industry. Students will consider the processes of how communities involved in service sector enterprises relate to the general concepts of sustainability, including environmental, social and economic impacts. From a conceptual and operational point of view, we will explore the idea of sustainability/sustainable development with an emphasis on community-based sustainable tourism development.

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

**HRTM 105 Restaurant Operations**.....3 credits  
This course offers a broad overview of restaurant operations. Topics include: bar and beverage management, front and back-of-the-house operations, and basic customer service skills.

**HRTM 106 Introduction to Hospitality Management**.....3 credits  
This course explores the hospitality industry touching upon topics such as hotel management, food and beverage management, event management, and the cruise industry. Discusses the personal and professional demands of hospitality management, managing human resources and the future industry. This course places an emphasis on Sustainable Standard Operating Procedures for the hospitality industry.

**HRTM 109 Principles of Meetings and Convention Management**3 credits

Students will identify the elements and techniques used in obtaining convention business. This course describes the different types of corporate meetings, the personnel who control these meetings, and the management skills and methods required to communicate with company executives.

**HRTM 110 Hospitality Sales and Marketing**.....3 credits  
Hospitality marketing is the study of marketing concepts, methods, and techniques used in the hospitality industry. Topics include: analyzing marketing opportunities; segmenting and targeting markets; marketing information and marketing research; marketing strategies; marketing planning and organization; and service operation and marketing with a focus on consumer behavior as it relates to environmentally friendly products and services.

**HRTM 120 Communications and Guest Relations** .....3 credits  
This course covers management of the total hospitality guest experience, from proper service techniques to motivating and empowering employees. It serves as a strong introduction to developing and maintaining quality customer service.

**HRTM 130 Hospitality Information Systems** .....3 credits  
This course will cover the technological side of the hospitality industry. Restaurant management systems (POS) and hotel property management systems (PMS) will be accessible to the students through the computer lab (hands-on) and the strategies for business intelligence and system procurement decisions will be discussed.

**HRTM 140 Security in the Hospitality Industry**.....3 credits  
This course summarizes issues surrounding the security needs of travelers, hotel guests, restaurant patrons, and ancillary business involved with the hospitality industry. The student will compare and contrast a wide variety of security and safety equipment and procedures. Guest protection, internal security for asset protection and OSHA regulations will be described as they relate to the hospitality industry.

**HRTM 150 At Your Service**.....2 credits  
Would you like to enhance your serving skills? Perhaps you would like to begin a career in the hospitality industry. At Your Service will help you develop the skills to become a professional server. Topics include exceeding guest expectations, suggestive selling techniques, wine and beverage service, and much more. All restaurant employees are encouraged to attend, including kitchen employees. Upon completion of this course the student will have a comprehensive knowledge of how to professionally serve the public in a restaurant setting.

**HRTM 199 SS:** .....2 credits  
See department for topics.

**HRTM 225 Hospitality Management Lab** .....2 credits  
Prerequisite: Open to Hospitality Management majors only or instructor approval. Hospitality Management Lab is designed to create authentic working conditions of a hospitality environment. Students are required to complete 30 hours in the Center for Meeting and Learning. This component offers student learning experiences involving the running of a full-service conference center operation, using the Center for Meeting and Learning for actual scheduled events. It includes learning activities involving customer service, event planning, meeting with clients, arranging for auxiliary services, catering planning, room set-up, day-of-event management, and evaluation for continuous improvement.

**HRTM 230 Hotel Operations 1** .....3 credits  
This course is intend to give the student an introduction to the hotel industry. General principles of hotel management including the basic working knowledge of various hotel departments will be

covered. This course places an emphasis on Sustainable Standard Operating Procedures for the hospitality industry.

**HRTM 231 Hotel Operations 2** .....3 credits  
Prerequisite: HRTM 230. This course will continue hotel operations with advanced emphasis on hotel operations and management, including several industry leaders serving as guest speakers.

**HRTM 260 Supervision in the Hospitality Industry** .....3 credits  
New and aspiring supervisors will find practical advice for dealing effectively with people in a hospitality work environment. Topics include effective communication, orientation and training, managing productivity, coaching, discipline, team building, managing conflict, and professional development.

**HRTM 265 Hospitality Financials 1** .....3 credits  
This course presents an overview of cost-control procedures including purchasing, storage, issuing, production, and financial topics for food and beverage, labor, and other expense areas in the hospitality industry. The curriculum will emphasize a hands-on approach to the subject.

**HRTM 275 Hospitality Financials 2** .....3 credits  
Prerequisite: HRTM 265. This course provides the student with the tools to understand the financial structure of a hospitality organization. The implementation of financial controls, including recipe and menu costing, will be discussed. Industry financial statements will be discussed and analyzed.

**HRTM 279 Buffet and Banquet Planning**.....2 credits  
Prerequisite: HRTM 225 and open to Hospitality Majors only. This course covers the basics of planning, organizing, and executing large banquets at the Center for Meeting and Learning. The students perform all front-of-the-house activities including advertising and promotion, dining room management, entertainment, reservations and seating, dining room service, and post event critique.

**HRTM 280 Co-op Ed: Hospitality Management** .....3-12 credits  
This course provides the student with hospitality management-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning college credit.

**HRTM 281 Restaurant Ownership** .....3 credits  
This course will discuss and develop systems and procedures for opening a restaurant. All essential elements for developing a restaurant concept including finding a location, negotiating a lease, financing, menu development, and staffing will be covered. This information will benefit the student in the development of a business plan.

**HRTM 286 Fundamentals of Wine, Spirits, and Beer** .....3 credits  
This course will introduce students to the world of wines, spirits, and beers. The history of beverages will be discussed with emphasis on the wine-making areas of the world with special attention to Oregon wines and food pairings. Students will learn how to cost alcoholic beverages and prepare a wine list. Beverage controls and Oregon Liquor Control Commission laws will be highlighted.

**HRTM 290 Hospitality Leadership**.....4 credits  
Prerequisite: HRTM 120 and HRTM 260. This course is the hospitality management capstone for second-year students to be administered in the last term of their degree program. The course will explore the leadership qualities of successful operators in the hospitality industry. It will also discuss the key elements of management theory and practice, including delivering quality service, communications, power and empowerment, team-building, diversity, coaching, and conflict management. A community service requirement of 20 hours is included.

## Dance

### Also see Physical Education

For information about classes with course numbers that begin with:

D - Contact Music, Dance and Theatre Arts, Bldg. 6/Rm. 205A, 541.463.5209.

PE - Contact Health and PE, Bldg. 5/Rm. 205, 541.463.5545.

**D 152 Dance Basics** .....2 credits  
This introductory course accommodates the pre-major and non-

major students. Introducing basic techniques of dance for students who have never taken a technique class, the class presents alignment principles, weight shifts, level changes and elements of movement such as use of space, shape and dynamics. Students develop a strong foundation in dance so they can proceed in their training in ballet, modern or jazz. Class is repeatable up to 12 credits.

**D 153 Pilates Mat Work**.....2 credits  
This class explores the Pilates method of body conditioning, a unique system of stretching exercises developed by Joseph H. Pilates. Students gain strength, flexibility, and balance through specific exercises, which emphasize uniting the body and mind. Class is repeatable up to 12 credits.

**D 154 Pilates Mat Work 2** .....2 credits  
This course builds on the fundamentals of Pilates with more advanced exercises. Students gain strength, flexibility and balance through specific exercises which emphasize uniting the body and mind.

**D 160 Dance Composition**.....3 credits  
Composition techniques are learned and applied, with specific emphasis on form, quality, spatial relationships, and rhythmic manipulation. Students in this course may present their work in the annual production of "The Works" Student Dance Concert. This is a required course for dance majors, and meets the Arts and Letters requirement for the AAOT degree. Class is repeatable up to 12 credits. Offered winter term only.

**D 172 Dancing the Fluid Body** .....2 credits  
This course explores the concepts of Continuum Movement, a somatic approach to understanding the body and its capacities. Specific breath and sound techniques are introduced to stimulate the fluidity of the body. Students explore wave motion and spiral movements varying from subtle micro-movements to dynamic full-bodied expression. Discussions of the body in relation to culture, anatomy, and ecology are springboards for movement explorations.

**D 173 African Dance** .....2 credits  
This class is an introduction to African dance. Students learn contemporary and traditional dances from Guinea while exploring rhythm and movement within the cultural context of community. Relevant history is explored through assigned readings, video, and class discussions. Class is repeatable up to 12 credits.

**D 175 Tap Dance Beginning**.....2 credits  
This class is an introduction to the technique of tap dance. Students learn the basic vocabulary and technique of the form in both individual exercises and in integrated choreographed sequences. The course will cover the basics of rhythm, including tempo, beat, meter, accent, syncopation, and musical structures. Improvisational skills will be developed as students integrate the understanding of tap technique with a sense of musicality and performance. The course will include a historical overview of the development and evolution of the form, in film, lectures, experientials and performance.

**D 176 Fluid Yoga**.....2 credits  
This Yoga class explores yoga postures, breath, and cultivates an inner listening to the waves and spirals present in our primarily fluid bodies. Emphasis is placed on developing a yoga practice that encourages creativity and fluidity. The history of Yoga and its evolution into western culture will be examined. Class is repeatable up to 12 credits.

**D 177 Modern Dance 1**.....2 credits  
This beginning level class for dancers with little or no previous dance experience, accommodates the pre-major and non-major student. Modern dance technique is introduced with focus on three-dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Given realistic progressive development, students repeat this level three times before advancing to Modern 2. Second and third terms offer an accelerated introduction to accommodate newcomers yet sustains the development of returning students. Class is repeatable up to 12 credits.

**D 178 Modern Dance 2**.....2 credits  
This intermediate level class accommodates the pre-major and non-major student. This class further develops the student's awareness of modern dance technique and vocabulary. Training continues with dance movements that incorporate: three-

dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Students deepen their understanding of these concepts while developing more sophisticated connections both in the body and in relation to space. Given realistic progressive development, students repeat this level for a full year or more. Class is repeatable up to 12 credits.

**D 179 Modern Dance 3**.....2 credits  
This intermediate-advanced level class accommodates the dance-major and non-major student. This class further develops the students awareness of modern dance technique and vocabulary. Training continues with more complex dance movements that incorporate: three-dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Students deepen their understanding of these concepts while developing more sophisticated connections both in the body and in relation to space. They learn longer movement sequences, which involve a more complex use of space, weight, time, and dynamic effort and quality variations. Given realistic progressive development, students repeat this level for three terms. Class is repeatable up to 12 credits.

**D 183 Body/Mind Stretch & Relaxation** .....2 credits  
This course explores the body-mind connection through stretch and relaxation exercises and techniques. The course is designed to increase body awareness and to integrate the body and mind in movement. Study of the skeleton, muscle, organ, fluid and nervous systems will enhance one's ability to stretch efficiently. Emphasis is placed on the parasympathetic nervous system, which is activated by internal focusing, eyes half-closed and slow, fluid movement.

**D 184 Hip Hop 1**.....2 credits  
This introductory course explores Hip-Hop dance vocabulary and style. The course addresses popular dance trends and street dance techniques. Students should be in good condition without chronic injuries. Class is repeatable up to 12 credits.

**D 185 Ballet 1**.....2 credits  
For dancers with little or no previous dance experience, this beginning level class accommodates the pre-major and non-major student. This class presents the fundamental principles and vocabulary of classical ballet. Second and third terms offer an accelerated introduction to accommodate newcomers yet sustains the development of returning students. Given realistic progressive development, students repeat this level three times before advancing to Ballet 2. Class is repeatable up to 12 credits.

**D 186 Ballet 2**.....2 credits  
This intermediate level class accommodates the pre-major and non-major student. This class develops the student's awareness of alignment and coordination in basic ballet vocabulary. Barre work builds understanding of ballet vocabulary and incorporates use of the spine and torso, outward rotation of the legs, articulation of the feet and use of the arms in port de bras. This class introduces more challenging center floor phrases, adagios, petit allegros and grande allegros. Given realistic progressive development, students repeat this level three times before advancing to Ballet 3. Class is repeatable up to 12 credits.

**D 187 Ballet 3**.....2 credits  
This intermediate-advanced level class accommodates the dance major and non-major student. Barre work builds on the student's ballet vocabulary. Focus is on technical execution, musicality, and line. This class presents more advanced for center floor phrases, adagios, petit allegros and grande allegros. Given realistic progressive development, students repeat this level for three terms. Class is repeatable up to 12 credits.

**D 188 Jazz Dance 1** .....2 credits  
This beginning level class accommodates the pre-major and non-major student. This class develops the student's alignment and coordination in basic jazz dance vocabulary. Jazz movements are introduced which incorporate: isolations of shoulders, hips, ribs, head, arms and legs; spatial awareness and rhythmic variations. Students are encouraged to take ballet and modern to augment their jazz training. Class is repeatable up to 12 credits.

**D 189 Jazz Dance 2** .....2 credits  
This beginning-intermediate level class accommodates the pre-major and non-major student. This class develops the student's alignment and coordination in jazz dance vocabulary. Training continues with jazz movements that incorporate syncopation of body parts, dynamics, and spatial and rhythmic variations.



Students are encouraged to take ballet and modern to augment their jazz training. Class is repeatable up to 12 credits.

**D 190 Jazz Dance 3** .....2 credits  
This intermediate level class accommodates the dance major and non-major student. This class continues to develop the student's understanding of jazz vocabulary and technique. Training continues with more complex jazz phrases that incorporate syncopation of body parts dynamics, and spatial and rhythmic variations. Students are encouraged to take ballet and modern to augment their jazz training. Class is repeatable up to 12 credits.

**D 194 Hip Hop 2** .....2 credits  
This intermediate level course explores Hip-Hop dance vocabulary and style. Students learn discipline and professionalism while exploring popular dance trends and street dance techniques. With emphasis on athleticism in dance, students are expected to be in good condition free of chronic injuries. Class is repeatable up to 12 credits.

**D 199 Special Studies** .....2 credits  
See department for topics.

**D 199A Special Studies:** .....1 credits  
See department for topics.

**D 251 Looking at Dance** .....4 credits  
This fun and enriching course focuses on various cultural and historical perspectives of dance. From Hip Hop to Classical Ballet, from Folk dance to World dance, students explore dance as an art form in its expressive, communicative, and aesthetic aspects. Students develop an understanding and appreciation for dance as a performing art. Meets Arts and Letters requirement for the AAOT degree. Writing 121 recommended.

**D 256 Body Fundamental/Body as Knowledge** .....4 credits  
This course introduces students to body systems including muscular, skeleton, organ, fluid, nervous, fascial and endocrine system. Re-patterning movement is introduced through various somatic disciplines such as: Bartenieff fundamentals, Laban Movement Analysis, Ideokinesis, and Body Mind Centering including Developmental Movement. Value is placed on embodiment of anatomy through movement, touch and imagination to gain insight into functions and movement potential. A required course for dance majors and a beneficial class for everyone. Meets Arts and Letters requirements for the AAOT degree and satisfies a University of Oregon dance major prerequisite. Required for Dance majors.

**D 257 Dance Improvisation** .....2 credits  
This course focuses on creating and developing new movement through dance improvisation in solos, duets, and groups. Students develop spontaneity, confidence, awareness, and concentration as they experience dance as a creative process. Students experiment with the elements of time, space, and energy as applied to the choreographic process. This course is a pre-requisite for D160 and D260. Class is repeatable up to 12 credits. Offered fall term only.

**D 260 Group Choreography** .....3 credits  
Group Choreography tools and techniques are learned and applied including canon, ground bass, antiphonal, and chance. Emphasis is placed on dynamics, special relationship, clarity and form. Students learn to articulate personal responses to choreographic projects, while supporting creativity and individuality. May be used to meet Arts and Letters requirement for the AA/OT degree Class is repeatable up to 12 credits. Offered spring term only.

**D 261 Dance Rehearsal and Performance** .....1-3 credits  
Designed to provide practical application of classroom theory and skills, this course is taken by participants in a dance concert or theatrical production of the department scheduled for public performance. May be repeated for maximum of nine credits. Class is repeatable up to 12 credits.

**D 298 Independent Study** .....1-6 credits  
A variable credit course based on independent study contracted between an instructor and a student.

**PE 187B Ballroom Dancing Beginning** .....1 credits  
Ballroom dance styles emphasizing the 'basics' and partnering techniques of social dance forms including foxtrot, swing, waltz, rumba, and cha-cha.

**PE 187M Latin Dancing Beginning** .....1 credits  
Introduction to basic Latin dances: Salsa, Cha-Cha, Rumba, American Tango, Cumbia and Merengue. Emphasis on good lead and follow and dance style technique.

**PE 187P Salsa Dancing** .....1 credits  
Learn the basic steps of salsa, intermediate and advanced combinations, spins and turns, and individual footwork. Emphasis on the basics of lead and follow, Latin hip motion, proper technique, and styling.

**PE 187S Swing Dancing** .....1 credits  
Introductory course will include basic instruction in single-time and triple-time East Coast swing, introduction to 8-count Lindy Hoop, and standard Fox Trot. Emphasis will be placed on leading and following, stylistic differences between the dances, and linking the different dances together. Open to all students; no prior experience in dance is necessary.

## Dental Assisting

For information, contact Health Professions, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Dental Assisting program to take these classes.

**DA 102 Advanced Clinical Experiences** .....3 credits  
Prerequisite: Currently enrolled in the Dental Assisting Program. Knowledge, techniques and communication skills for client management. Course will simulate a work day, and provide the student an opportunity to demonstrate a variety of expanded function chairside assisting and client care skills.

**DA 103 Dentistry Law and Ethics** .....2 credits  
Course content includes the development of dentistry and its related professions. Covers ethics and jurisprudence for dental professionals. A study of the Oregon Dental Practice Act, roles of the dental health team and an introduction to the dental office environment are also included in this course. This course may be taught online. May be offered through Distance Learning.

**DA 107 Dental Health Education 1** .....1 credits  
Prerequisite: Currently enrolled in the Dental Assisting Program  
This course covers the basic concepts of preventive dentistry including the study of plaque-related diseases, fluoride therapy, brushing and flossing techniques.

**DA 108 Dental Health Education 2** .....3 credits  
Prerequisite: DA 107 Lvl:CR Grd:C Must be taken in sequence. This course covers the practical application of preventive dentistry concepts. Topics will include patient motivation, coronal polishing, fluoride application, nutritional counseling, the recognition of normal and abnormal oral conditions and community service programs.

**DA 110 Health Sciences** .....3 credits  
The study of structure and function of the human body. Bacteriology and microbiology, are discussed. \*The first two terms of Anatomy and Physiology (passed with a grade of C or better) can be substituted for this course.

**DA 115 Dental Anatomy** .....3 credits  
Prerequisite: Currently enrolled in the Dental Assisting Program  
This course covers the study of head & neck anatomy with an emphasis of individual teeth and tooth surfaces using the universal numbering system.

**DA 192 Dental Materials** .....3 credits  
Prerequisite: Currently enrolled in the Dental Assisting Program.  
Course content covers the composition, clinical properties, preparation, use and storage of materials, and study model construction used in dentistry.

**DA 193 Dental Materials 2** .....3 credits  
Prerequisite: Currently enrolled in the Dental Assisting Program.  
Completion of laboratory procedures, such as amalgam and composite, die construction, Hawley retainer, bleaching trays, temporary crown construction, temporary restorations, and custom trays associated with specialties covered in Chairside Procedures 2 DA196

**DA 194 Dental Office Procedures** .....3 credits  
Prerequisite: Currently enrolled in the Dental Assisting Program.  
Principles of appointment planning, telephone techniques, case presentation, and management of client accounts. Teaching is done in a computer lab to support computerized instruction

## Course Fees

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.



- DA 195 Chairside Procedures 1**.....6 credits  
Prerequisite: Currently enrolled in the Dental Assisting Program. Basic chairside assisting procedures, such as preparation of client, oral evacuation techniques, instrument exchange, placement and removal of rubber dam, dental examination procedures, sterilization procedures, operative dentistry. Covers asepsis and infection control, and contains an introduction to clinical procedures used at Lane
- DA 196 Chairside Procedures 2**.....7 credits  
Prerequisite: Currently enrolled in the Dental Assisting Program. Course covers signs & symptoms of medical emergencies that may occur in the dental office. Specialties of dentistry, principle procedures, instrument set-ups, and clinical experience are also included.
- DA 210 Dental Radiology 1**.....4 credits  
Prerequisite: Currently enrolled in the Dental Assisting Program. Course covers historical background, terminology, and basic physics associated with x-ray generation and exposing radiographs. Radiological health and safety measures and legalities are included. Film technique, including exposing, processing, mounting and critiquing are covered in lecture and lab. Radiographic exposures on Dexter
- DA 211 Dental Radiology 2**.....2 credits  
Prerequisite: Currently enrolled in the Dental Assisting Program. Continuation of Dental Radiology 1 (DA 210). Provides basis for occlusal film projections and various extra-oral radiographs, including panoramic radiography. Students apply all skills learned in Fall term, and progress to exposure of radiological films on clinical patients. By the end of Winter Term, students may produce and submit the required State Board full mouth set of radiographs.
- DA 280 Co-op Ed: Dental Assisting**.....6-12 credits  
Prerequisite: Must be enrolled in the Dental Assisting Program. This course provides the student with dental assisting work experience in community businesses. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a certificate. Course content includes instruction on professional resumes, cover letters, interviewing and job search skills.
- EL 115H Effective Learning: Health Science Majors**.....3 credits  
This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

**Dental Hygiene**

For information, contact Health Professions, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Dental Hygiene program to take these classes.

- DH 107 Dental Infection Control and Safety**.....1 credits  
Prerequisites: Instructor Permission Introduction to the chain of infection, infectious and plaque associated diseases affecting the dental office environment and protection of the health care worker. Topics include bloodborne pathogens, federal regulations, dental office clinical asepsis protocol, LCC Exposure Control Program, management of waste, office safety programs, chemical and emergency plans. Competency in Infection Control protocols are evaluated during laboratory sessions. May be offered through Distance Learning.
- DH 113 Dental Anatomy and Histology**.....2 credits  
Prerequisite: Admission to the DH Program or consent of instructor The study of dental histology and morphology of the teeth and surrounding soft tissues. May be offered through Distance Learning.
- DH 118A Clinical Dental Hygiene 1**.....4 credits  
Prerequisites: Enrolled dental hygiene program or instructor consent. Co-requisites: DH118A and DH118B taken together and require simultaneous registration. introduction to basic instrumentation, assessment procedures, and clinical protocol for dental hygiene care. May be offered through Distance Learning.
- DH 118B Clinical Dental Hygiene 1 Lab**.....2 credits  
Clinical Lab required for DH 118A.

- DH 119A Clinical Dental Hygiene 2-Lecture Seminar**.....3 credits  
Prerequisites: Admission to program or instructor consent . Co-requisites: DH119A and DH119B are taken together and require simultaneous registration. Continuation of preclinical skills in instrumentation, evaluation of clients, treatment planning and client education. Didactic, laboratory and clinical instruction, with emphasis on removal of deposits, preparation for clients and the application of preventive dental procedures. Client care begins with the child, adolescent and adult patient with limited periodontal needs. May be offered through Distance Learning.
- DH 119B Clinical Dental Hygiene 2-Lab**.....4 credits  
Clinical Lab required for DH 119A.
- DH 120A Clinical Dental Hygiene 3:Lecture/seminar**.....3 credits  
Prerequisites: Admission to DH Program or instructor consent. Co-requisites: DH220A and DH220B are taken together and require simultaneous registration Lecture, instructional lab and clinical course focusing upon the dental hygiene process of care, advanced instrumentation techniques and treatment of the slight to moderate periodontal patient. May be offered through Distance Learning.
- DH 120B Clinical Dental Hygiene 3 Clinic Lab**.....4 credits  
Clinical Lab required for DH 120A.
- DH 132 Dental Materials for the Dental Hygienist**.....2 credits  
Prerequisites: Enrolled in DH Program or Instructor Permission. Composition, properties and manipulation of dental materials. Laboratory and clinical experience with dental materials. May be offered through Distance Learning.
- DH 139 Special Needs Dental Patient**.....2 credits  
Prerequisite: Enrolled in D H Program/Instructor Permission. Knowledge and skill development in assessment, diagnosis, planning and treatment of dental patients with developmental disabilities, complex medical problems and significant physical limitations. Development of critical thinking and problem solving skills in the care of patients with special needs, prevention of emergencies and selection of treatment. May be offered through Distance Learning.
- DH 220A Clinical Dental Hygiene 4-Lecture/seminar**.....2 credits  
Prerequisites: Admission to DH Program or Permission of Instructor Co-requisites: DH220A and DH220B are taken together and require simultaneous registration Lecture, instructional lab and clinical course focusing upon the dental hygiene process of care, advanced instrumentation techniques and treatment of the moderate to advanced periodontal patient. May be offered through Distance Learning.
- DH 220B Clinical Dental Hygiene 4- Clinical Lab**.....5 credits  
Clinical Lab required for DH220B. This version of the course will be offered beginning Summer 2008.
- DH 221A Clinical Dental Hygiene 5**.....2 credits  
Prerequisites: Admission in DH Program or instructor permission Co-requisites: DH221A and DH221B are taken together and require simultaneous registration Lecture, instructional lab and clinical course focusing on continuation of the theory and practice of the dental hygiene process of care, including advanced instructional theory and practice in therapeutic interventions for comprehensive dental hygiene care. May be offered through Distance Learning. This version of the course will be offered beginning Summer 2008.
- DH 221B Clinical Dental Hygiene 5 Clinic Lab**.....6 credits  
Clinical Lab required for DH221A. This version of the course will be offered beginning Summer 2008.
- DH 222A Clinical Dental Hygiene 6**.....2 credits  
Prerequisites: Admission in D H Program or instructor permission. Co-requisites: DH222A and DH222B are taken together and require simultaneous registration. Continuation of the practice of the Dental Hygiene process of care with focus on the integration of comprehensive dental hygiene care into the general dentistry practice setting. Competency testing will prepare students for WREB board examinations and Licensure. May be offered through Distance Learning. This version of the course will be offered beginning Summer 2008.
- DH 222B Clinical Dental Hygiene 6 Clinic Lab**.....5 credits  
Clinical Lab required for DH222A.
- DH 228 Oral Biology 1**.....4 credits  
Prerequisite: Admission to the DH Program or consent of instructor Identify, describe, and locate the bones of the skull, muscles, cranial nerves, blood vessels, and lymphatics of the head and neck; glands

COURSE DESCRIPTIONS

of the oral cavity; the tongue, the temporomandibular joint; and the alveolar processes. The student will also be able to explain and recognize terms and processes related to the development of the head, face and oral cavity. May be offered through Distance Learning.

**DH 229 Oral Pathology for the Dental Hygienist**.....3 credits  
Prerequisite: Admission to the DH Program or consent of instructor  
Concepts in general, systemic, and oral pathology. Emphasis on entities frequently encountered, clinical signs and symptoms, and concepts of differential diagnosis. May be offered through Distance Learning.

**DH 233 Anesthesia/Analgesia for Dental Hygiene Therapy** .3 credits  
Prerequisites: Admin. in DH Program or instructor Permission. The theories and practices of local anesthesia and nitrous oxide/oxygen conscious sedation. Review of anatomy, physiology, pharmacology, and emergency procedures associated with local anesthesia and NO2/O2 conscious sedation. Preparation for the administration of infiltration and block anesthesia in dental hygiene procedures. Laboratory and clinical experience in administration of local anesthesia and N2O/O2. May be offered through Distance Learning.

**DH 234 Trends and Issues in Dental Hygiene**.....2 credits  
Prerequisite: Admission to the DH Program or consent of instructor. Exploration of current trends and issues in the profession, ethics and jurisprudence, practice management and researching employments opportunities for the dental hygienist. May be offered through Distance Learning.

**DH 237 Community Dental Health**.....3 credits  
Prerequisites: Admission to DH Program or Instructor permission  
An introduction to dental public health practices. Emphasis on use of an evidence based philosophy for incorporating scientific literature into community dental health practices. Instruction in basic research, statistical concepts and electronic data bases. Program planning is emphasized. Field work in public health clinics, with community groups for dental presentations and in public dental programs. May be offered through Distance Learning.

**DH 238 Community Dental Health**.....1 credits  
Prerequisites: Acceptance into Dental Hygiene Program.  
Preparation of a community dental health portfolio demonstrating implementation of dental health program plans and participation in field work assignments. Portfolio projects focus on the identification of community groups and development of sound approaches to dental public health needs. The student participates in field work assignments and student initiated community health promotion projects. May be offered through Distance Learning.

**DH 243A Oral Roentgenology**.....2 credits  
Prerequisite: Admission to the DH Program or consent of instructor. Co-requisite: DH 244A and DH 244B are taken together and require simultaneous registration. Historical background, terminology; concepts and principles of x-radiation, x-ray generation, radiologic health and safety measures; normal radiographic dental anatomy; radiographic legalities. Film technique, including critiquing, exposing, processing, and mounting. Laboratory provides skills in dental radiographic exposure on manikins as well as processing techniques. May be offered through Distance Learning

**DH 243B Oral roentgenology: Lab**.....1 credits  
Clinical Lab. Lab required for DH 243A.

**DH 244A Oral Roentgenology**.....1 credits  
Prerequisite: Admission to the DH Program or consent of instructor  
Continuation of Oral Roentgenology 1. Radiologic interpretive knowledge and skills are introduced as a diagnostic aid to assist with dental hygiene diagnoses. Patient management skills, pedodontic, edentulous, occlusal, panoramic and accessory radiographic techniques are included. Intraoral panoramic and digital radiography on patients and practicing film interpretation skills on completed client radiographs. May be offered through Distance Learning. Lab required for DH 244A.

**DH 244B Oral Roentgenology: Lab** .....1 credits  
Clinical Lab required for DH 244A.

**DH 254 Pharmacology** .....3 credits  
Prerequisite: Admission to the DH Program or consent of instructor. An introduction to various drugs used in the practice of dentistry; an intro to the most commonly prescribed drugs that

students might encounter on a patient's medical history. Students will study nomenclature, classification, dosage, contraindications, and effects of pharmacologic compounds. May be offered through Distance Learning.

**DH 270 Periodontology 1**.....2 credits  
Prerequisites: Enrolled in DH Program or instructor permission  
The study of the normal periodontium, periodontal pathology, etiology and principles of periodontal disease, examination procedures, principles of periodontal therapy, non surgical periodontal therapy and prevention modalities. American Academy of Periodontology classifications of periodontal disease, maintenance considerations and referral for specialized periodontal care are presented. May be offered through Distance Learning.

**DH 271 Periodontology 2**.....1 credits  
Full Prerequisites: Accepted in DH Program or instructor permission  
Treatment of the moderate to advanced periodontal patient, selection of surgical procedures and maintenance. The course reviews periodontal and restorative considerations, occlusion and TMJ disorders, periodontal surgery, dental implant and maintenance, periodontal emergencies and a review of evidence based periodontal research. Specialty office visit to observe treatment modalities. May be offered through Distance Learning.

**DH 275 Dental Hygiene Restorative Functions 1** .....2 credits  
Admission in Dental Hygiene Program or Instructor Permission  
Restorative Functions 1 content includes tofflemier placement, wedge, etiology of the decay process, cavity preparation, properties of amalgam, maintenance of dental anatomy, occlusal considerations, and amalgam placement and finishing. Laboratory and clinical practice for skill development. May be offered through Distance Learning.

**DH 276 Restorative Functions 2** .....1 credits  
Prerequisites: Admission in Dental Hygiene Program or Instructor Permission.  
Restorative Functions 2 content includes amalgam polishing; direct placement esthetic materials composition and classification; handling, placement and finishing; light cure techniques; and anatomical considerations for anterior and posterior composite placement. Laboratory and Clinical Practice for skill development. May be offered through Distance Learning.

**DH 280 Co-op Ed: Dental Hygiene** .....3-12 credits  
This course provides the student with dental hygiene work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world.

**DH 298 Independent Study**.....1-4 credits  
Prerequisite: Admission to the DH Program or consent of instructor  
See department for topics. A variable credit course based on independent study contracted between an instructor and a student.

**EL 115H Effective Learning: Health Science Majors** .....3 credits  
This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

**Design - See Art, Studio and Graphic Design**  
**Diesel and Heavy Equipment**

For information, contact Advanced Technology, Bldg. 12/Rm. 201, 541.463.5380.

**DS 154 Heavy Duty Braking Systems**.....1-12 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis, and repair of heavy duty braking systems. Technical information and shop projects to apply and understand theories and principles include: fundamentals of braking and applied preventive maintenance program - trucks/tractors; disk/cam brake systems; anti-lock air brake systems; heavy duty wedge brakes; power assist units; truck/tractor air brake system components; and diesel engine and exhaust brakes and retarders in on and off highway heavy duty equipment.

**Course Fees**  
Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

**DS 155 Heavy Equipment Hydraulics** .....1-12 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis, and repair of on and off highway heavy equipment hydraulics. Technical information and shop projects to apply and understand theories and principles include: introduction to hydraulics; electro-hydraulic systems, pilot controlled hydraulic systems, hydraulic system components; reservoirs, hydraulic seals, filters, pumps, accumulators, oil coolers, valves, actuators, connectors, conductors, circuits, fluid couplings, and torque converters; and on and off highway automatic transmissions

**DS 158 Heavy Equipment Chassis and Power Trains**.....1-12 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosing, testing, and repair of heavy equipment chassis and power trains. Technical information and shop projects to apply and understand theories and principles include: frames; suspensions; conventional steering systems; track-type undercarriages; final drives and steering mechanisms; clutches; standard transmission; on and off highway automatic transmissions; drive lines; front- and rear-drive carrier units ; heavy duty tires, wheels, and rims; and wheel hubs, dead and live axles of on and off highway diesel equipment.

**DS 256 Diesel and Auxiliary Fuel Systems**.....1-12 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis, and repair of diesel and auxiliary fuel systems. Technical information and shop projects to apply and understand theories and principles include: alternative type fuel systems; diesel fuel systems including mechanical and electronic diesel engine controls; and diesel engine performance analysis of on and off highway current model engines.

**DS 257 Diesel Electrical Systems** .....1-12 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosis, testing, failure analysis and repair of heavy duty diesel electrical/electronic systems. Technical information and shop projects to apply and understand theories and principles include: electrical fundamentals, batteries, starting, charging, lighting, and electronic control systems, multiplexing, heavy duty electrical circuits, electrical connectors, conductors, and air conditioning systems of on and off highway diesel equipment.

**DS 259 Diesel Engines and Engine Overhaul** .....1-12 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Operation, diagnosing, testing, failure analysis overhaul and repair of on and off highway diesel engines. Technical information and shop projects to apply and understand theories and principles include: the development of the diesel engine; diesel engine operating principles; failure analysis; the cylinder block and components; cylinder head and components; crankshaft, main, rod and cam, bearings, vibration damper, flywheel, and flywheel housing; pistons, rings, and connecting rod assembly; camshaft and timing gear train; lubrication systems and lube oil; cooling systems and coolant; intake systems; exhaust systems; turbochargers and superchargers; hand tools, precision measuring tools, fasteners, and shop equipment.

**DS 260 Lift Truck/Material Handling Equipment** .....1-12 credits  
 Prerequisite: Instructor Consent. Operation, diagnosing, testing, and repair of lift trucks and other material handling equipment. Technical information and shop projects to apply and understand theories and principles include mast/upright mechanisms, diesel, gas, electric, and L.P. lift trucks, periodic maintenance, and schematics.

**DS 280 Co-op Ed: Diesel**.....3-12 credits  
 This course provides the student with diesel-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning college credit.

**Drafting**

For information, contact Advanced Technology, Bldg. 12/Rm. 201, 541.463.5380.

**DRF 100 Reading and Conference** .....1-3 credits  
 Prerequisite: Instructor consent A flexible course, offering all students in drafting classes an opportunity for remedial, supplemental, and developmental training.

**DRF 121 Mechanical Drafting**.....4 credits  
 Prerequisite: DRF 167 and DRF 142. An introduction to the current ASME Y14.5M Dimensioning and Tolerancing standard. Develops basic skills in mechanical drafting, including dimensioning, section, and auxiliary views. Students will improve drafting quality and develop drawing production speed.

**DRF 137 Architectural Drafting-Plans**.....4 credits  
 Prerequisite: DRF 167 and DRF 208 Or Instructor Consent. Architectural drafting techniques, methods and procedures, layout and drafting of standard residential working drawings for a 1,200 sq. ft. building.

**DRF 142 Graphic Concepts** .....2 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. An introductory course in drafting graphic concepts for the drafting program and transition to the CAD courses. Course includes Windows file management, measuring and sketching techniques, geometry of objects, drafting standards, lettering, and project setup procedures.

**DRF 167 CAD 1**.....4 credits  
 Prerequisite: Basic computer literacy and minimum reading score of 68 OR RD 080 OR Prior College. Introduction to computer-aided drafting using AutoCAD or equivalent software in architectural and mechanical drafting. Basic drawing, dimensioning, editing, and set-up commands to produce working drawings. May be offered through Distance Learning.

**DRF 168 CAD 2**.....4 credits  
 Prerequisite: DRF 167. Intermediate course in computer-aided drafting using AutoCAD or equivalent software in architectural and mechanical drafting. Text and dimensioning in more depth, Paper Space setup and plotting, references and blocks, and some customizing tools. May be offered through Distance Learning

**DRF 203 Electrical Drafting**.....2 credits  
 Prerequisite: DRF 167 Drafting techniques required for electrical and electronic fields. Schematics, wiring and routing diagrams, logic and printed circuit layout design and drawings.

**DRF 205 Drafting: Structures** .....4 credits  
 Prerequisite: DRF 167 MTH 076 and MTH 086 or instructor consent. Graphical methods to investigate forces applied to rigid bodies at rest, including beams and trusses. The course covers types of structures, how structures carry loads, vectors, moment, equilibrium, and the construction of load, shear, and moment diagrams for simple beams. Students will use CAD for graphical solutions; students without CAD skills who are able to use trigonometry for problem solving may also enroll in this class.

**DRF 206 Co-op Ed: Drafting Seminar**.....2 credits  
 Prerequisite: DRF 168. The Drafting Cooperative Education Seminar provides ways for students to increase their understanding of industry expectations, as well as develop job search tools and skills. The content is designed to help students present themselves to employers in a competent and professional manner, and to move initially into their cooperative education internships, and then into their professional careers.

**DRF 207 Drafting: Strength of Materials** .....4 credits  
 Prerequisite: MTH 076, MTH 086, and DRF 205. Stresses and strains that occur within bodies; material properties including elasticity; shape properties including centroids, moments of inertia, and section modulus; flexural stress in beams; and buckling in columns.

**DRF 208 Residential Buildings**.....4 credits  
 Prerequisite: DRF 167. An investigation of light frame construction techniques and the production of residential construction drawings. Topics: residential construction materials, components and systems related to wood frame structures. Students will work from sketches of a residential structure to produce detail drawings.

**DRF 210 Commercial Buildings** .....4 credits  
 Prerequisite: DRF 137, DRF 167, and DRF 208. Fundamentals of building materials, construction techniques, processes and procedures used in commercial structures. Students examine the creation of construction documents and working drawings for a light commercial building project.

**DRF 211 Mechanical Systems and Environmental Design**...4 credits  
 Prerequisite: DRF 137, DRF 167, and DRF 208. This course studies the fundamental principles, technologies, and drawings related to building plumbing and heating, ventilating and air conditioning (HVAC) systems in buildings. Emphasis is also on energy-efficient design and construction.



**DRF 220 Building Information Modelling**.....4 credits  
Prerequisites: DRF 167. The student will create a virtual building using an advanced computer-aided drafting/design program that utilizes a 3D feature-based parametric solid modeler. The students will then generate a bill of materials, create a photo-realistic rendering, and produce a set of drawings to include floor plans, elevations, sections, and details.

**DRF 232 Mechanical Design**.....4 credits  
Prerequisite: DRF 121, DRF 142, and DRF 167. Methods used in creating mechanical drawings, including weldments, fasteners, assembly drawings, bills of material, and revisions.

**DRF 233 Geometric Tolerancing**.....4 credits  
Prerequisite: DRF 121, DRF 142, and DRF 167. Detailed study of the geometric tolerancing portion of the current American Society of Mechanical Engineers (ASME Y14.5M) Dimensioning and Tolerancing standard.

**DRF 234 Power Trains and Accessories Design**.....4 credits  
Prerequisite: DRF 121, DRF 142, and DRF 167. A study of mechanisms for transmitting power: four-bar linkages, cams, gears, V-belts, and roller chain. Includes kinematic schematics, cam displacement diagrams, gear drawings, gear ratios, and design of V-belt and chain drives.

**DRF 245 Solid Modeling**.....3 credits  
Prerequisite: DRF 167. Fundamentals needed to create and edit part and assembly models. Topics include: Creating Sketched Features, Adding Placed Features to Parts, Assembly Modeling Fundamentals, Advanced Design Tools and Creating Parts Lists.

**DRF 298 IS: Technical Drafting** .....1-12 credits  
Prerequisite: Instructor consent. An individualized study experience designed to allow the student with basic skills to initiate individual projects, with instructor approval, which will enable him/her to explore further some specific design, method, construction, project or medium-repeatable. Maximum 12 credits.

**ENGR 280D Co-op Ed: Drafting** .....3-12 credits  
This course provides students on-the-job learning experience in business, industry and governmental sites in the community. Students will have the opportunity to integrate theory and practice gained in classroom with practical experience in the professional world. In this course students may develop skills, explore career options, and network with professionals and employers while earning college credit. Cooperative Education is a required class for the Drafting AAS degree.

#### Drama - See Theatre Arts

#### Early Childhood Education

For information, contact Child and Family Education, Bldg. 24, 541.463.5287.

**ECE 110 Observing Children's Behavior**.....1 credits  
Study of objective techniques for observing and recording children's behavior. Some focus on linkages between observing and curriculum planning. Class is primarily a lecture format that includes on-site observations.

**ECE 120 Introduction to Early Childhood**.....2 credits  
Required course for ECE majors-no prerequisite. Course is designed to overview the field of early childhood education. It explores career options, types of programs, history, advocacy and personal qualities of successful child care professionals.

**ECE 130 Child Care and Guidance** .....3 credits  
Acquaints student with the logic and ethics of developmentally appropriate guidance of children aged birth through five years: Focuses on discipline and guidance, social and emotional behavior patterns, daily routines. Instruction regarding child behavior and child management techniques will be given through lectures, visual presentations, and classroom discussions.

**ECE 140 Theory & Supervised Teaching 1** .....3 credits  
Designed to provide the student with actual experience in the supervision, guidance, and care of young children based on the standards of NAEYC for Early Childhood Professional Preparation. This is work experience in a lab-school child-care facility. Students have specific assignments and responsibilities and must demonstrate competencies for a grade. They are given the opportunity to observe appropriate curriculum and have increasing responsibility to carry out age appropriate curriculum activities. They learn to demonstrate consistent appropriate guidance and developmentally appropriate curriculum.

**ECE 150 Creative Activities for Children**.....3 credits  
Introduces students to creative activities suitable for preschool children: art, children's literature and storytelling, music, rhythms, games, finger-plays, and dramatic play. Development of the student's creative imagination will be stressed. Lectures and demonstrations are combined with laboratory experiences in the use of various media.

**ECE 160 Exploring Early Childhood Curriculum** .....4 credits  
Students will gain understanding and experience in planning daily and weekly program activities for young children. There is an emphasis on planning appropriate experiences based on observation of children and knowledge of early childhood learning strategies. Students will plan a variety of curriculum experiences which are developmentally appropriate for preschool-age children. Included will be a study of the theories, types and benefits of play as the basis of curriculum planning.

**ECE 170 Infants and Toddlers**.....4 credits  
The course is designed to examine the growth and development of infants and toddlers in a group setting. Optimum infant and toddler development and safety will be studied. Lectures, in-class discussions, and visual media offer a varied presentation.

**ECE 199 SS:**.....2 credits  
See department for topics.

**ECE 210 Applying Early Childhood Curriculum**.....4 credits  
Prerequisites: ECE 160. Study and evaluation of various approaches to Early Childhood Education, including cognitive, emergent, and unit-based programs. Practice in planning and teaching based on a variety of developmental theories and methods. Study of science and math methods and materials, movement and outdoor games is included. This is an advanced course in Early Childhood Education curriculum focusing on group care for young children. The prerequisite course is Exploring Early Childhood Curriculum: ECE 160. If this class is taken out of sequence, please see the instructor before continuing with the course.

**ECE 230 Parent-School-Community Relations** .....3 credits  
Designed to help the student understand and develop methods and procedures for fostering effective parent, school and community relations: development of methods and techniques in preparation for and delivery of a parent conference, understanding how community agencies can best serve parents and children in relation to school programs, and practical experience in communication skills with parents. Laws covering child abuse and signs of child abuse are covered. Medical aspects of child care, including understanding and preventing the spread of infectious disease and management and prevention of accidents and injuries are also covered.

**ECE 240 Theory & Supervised Teaching 2** .....4 credits  
Prerequisite: ECE 140. Theory & Supervised Teaching 1. Designed to provide the student with actual experience in the supervision, guidance and care of young children based on the standards of NAEYC for Early Childhood Professional Preparation. This is work experience in a lab school child care. Students have specific assignments and responsibilities and must demonstrate competencies for a grade. They are given the opportunity to observe appropriate curriculum and have increasing responsibility to plan and carry out age-appropriate curriculum activities. They learn to demonstrate consistent appropriate guidance and developmentally appropriate curriculum. Minimum credit sign up—see division.

**ECE 250 Infant and Toddler Environments** .....3 credits  
Prerequisite: ECE 170 - Infants and Toddlers. For prospective infant-toddler caregivers. Course will include: a) how suitable materials and a carefully planned physical environment can enhance optimum development; b) how to staff a center appropriately; c) brief overview of infant-toddler development ; d) basic care giving techniques; e) how to plan activities; and f) resources and references.

**ECE 253 Diversity Issues in Early Childhood Education**.....3 credits  
This course explores the concept of human diversity in early childhood settings. It will specifically include an awareness and appreciation of issues of ability, belief, class, culture, gender,

#### Course Fees

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.



language, race, and family experiences as they affect the development of the young child and his or her family. An exploration of how children develop awareness and attitudes regarding diversity will be included. Students will also evaluate and develop appropriate materials and methods to increase children's awareness and appreciation of diversity.

**ECE 260 Administration of Child Care Centers**.....4 credits  
An overview of administrative management issues in the establishment and operation of child care centers, with an emphasis on full day programs. Overall program planning, organizational structure, budgeting, personnel management, and legal aspects of child care. State licensing rules are included.

**HDFS 226 Child Development** .....3 credits  
Study of the physical, social-emotional, and intellectual development of the child from birth through adolescence. Some emphasis on prenatal influences. A survey of various child-study approaches. Instruction and experience in observing and recording the behavior of young children. Study of adult-child differences, value of play, and discipline. Required for ECE majors.

**HDFS 227 Children Under Stress** .....3 credits  
Prerequisite: HDFS 226. Designed to acquaint the student with the social, economic, and cultural factors which contribute to a child's developmental experiences in such a way as to inhibit or enhance his/her best growth. Emphasis will be placed on the family, the educational system, and socio-cultural environments. Required for Early Childhood Majors

**HDFS 228 The Exceptional Child** .....3 credits  
The development, needs, and behavior of preschool aged children with special needs. Generalizations and practical hints to help integrate children with special needs into childcare programs. An overview of inclusion, along with a focus on specific disabilities is covered, including autism spectrum disorder, speech and language, and attention deficit disorder.

**HDFS 229 Middle Childhood - Ages 6-12**.....3 credits  
A program elective for Early Childhood majors. This course is a study of the physical, psychosocial, and cognitive development of the child in the middle years of childhood, ages six through twelve. Attention is given to the subculture of the society of children with the impact of peers and family. The development of moral and religious judgment is studied, as well as the accompanying attitudes toward specific problems such as death, politics, and prejudice. School programs are examined with implications of matching skills to be taught with a child's learning style. Curriculum methods and learning activities in appropriate content areas are explored.

**HDFS 233 Parenting** .....3 credits  
Provides an introduction to the many aspects of parenting including advantages and disadvantages, parenting roles, stages of parenthood, and special situations (single and step-parenting, extended families, and parenting exceptional children). The course format includes reading assignments from the textbook, forum discussions of reading, group project.

**HDFS 298 IS: Child Development**.....1-6 credits  
Prerequisite: HDFS 226 - Child Development

**Earth and Environmental Science**

For information, contact Science, Bldg. 16/Rm. 156, 541.463.5446.

**ENVS 181 Terrestrial Environment**.....4 credits  
The Environmental Science sequence ENVS 181, 182 and 183 studies how humans interact with natural systems and explores environmental sustainability. Students may take these courses in any order. The courses satisfy the lab science requirement for the AAOT degree. Sections may offer field trips with fees. ENVS 181 emphasizes the interactions between humans and natural land-based systems. Students study terrestrial ecology and biodiversity, agriculture, soil resources, waste disposal, urbanization, and the economics of sustainability. The course examines environmental degradation, but stresses solutions such as conservation, making waste into resources, and making production sustainable. Students study how to improve collective and personal effects on terrestrial systems that help sustain life.

**ENVS 182 Atmospheric Environment and Population** .....4 credits  
Environmental Science 182 is a lab course that stresses the interactions between humans and the atmosphere. Students study weather, climate, sustainability of plant and animal biomes,

population, and human influences on climate change. Topics also include air pollution, ozone depletion, global warming, and ice and glacier loss. Students study how to improve shared and personal effects on atmospheric systems that help sustain life. More information about the course sequence is at ENVS 181.

**ENVS 183 Aquatic Environment**.....4 credits  
Environmental Science 183 is a lab course that studies the interplay between humans and the freshwater and marine environments. It emphasizes the biological, geological, chemical, and human connections in aquatic environments. The course explores the diversity of aquatic life, sustainability of fisheries and water resources, ocean circulation and climate, stream runoff, and water pollution. Students investigate improving combined and individual effects on aquatic systems that help sustain life. More information about this sequence is at ENVS 181.

**ENVS 184 Global Climate Change** .....4 credits  
Environmental Science 184 is a lab course that surveys the scientific basis of global climate change. Students analyze the geologic history and scientific data of past and present climate change and review climate models, future predictions, human contributions to and consequences of climate change. They study factors that influence the climate system, like sun-Earth cycles, greenhouse effect, coal and energy options, carbon sequestration, glaciers, the ocean/atmosphere system, feedbacks, and tipping points. Students investigate how to reduce collective and personal effects on the climate. This course satisfies lab science requirements for the AAOT degree. Students may take ENVS courses in any order; however, they are strongly recommended to take ENVS 182, G 102, G 202, GS 106 or GEOG 141 prior to taking this course.

**G 101 Earth's Dynamic Interior** .....4 credits  
The Geology 101, 102, 103 sequence is an introduction to physical and historical geology. The courses fulfill the AAOT science with laboratory requirements for non-science majors. G 101 and 102 can be taken in either order. Students are strongly advised to complete G 101 or G 102 before enrolling in G 103. Sections may offer a field trip, with a fee. Geology 101 explores the geology of Earth's internal structure, how rocks and minerals form, and how plate interactions cause earthquakes, create volcanoes and build mountains. In labs students describe and identify minerals and rocks, use earthquake data, and interpret simple geologic maps and structures.

**G 102 Earth's Dynamic Surface**.....4 credits  
Geology 102 is an introduction to environmental geology and landscape development. It examines the interactions among humans and geologic processes that actively shape Earth's surface and the hazards and environmental problems they create. These involve erosion, deposition, weathering, soils, landslides, floods, groundwater, oceans, coastal erosion, melting glaciers, desertification, and climate changes. Students study the sustainability of human activities in light of these processes. In labs students work with common minerals and rocks, use physical and/or computer models to understand these surface processes, and use topographic maps and air photos to identify landforms. More information about this sequence is at G 101.

**G 103 Evolving Earth**.....4 credits  
Geology 103 surveys the geologic history of the Earth and life through time, and includes the topics of sedimentary environments, fossilization, plant and animal evolution. Students will also study how plate tectonics helped to build the North American continent. In labs students study fossils, interpret the ages and relationships of rock layers, and use geologic maps and cross-sections to decipher Earth's history. Students are strongly advised to complete G 101 or G 102 before taking G 103. More information about the sequence is at G 101.

**G 146 Rocks and Minerals**.....4 credits  
Geology 146 examines the relationships among rocks, minerals, gems and society. In lecture and lab sessions, students explore how rocks, minerals and gems form, their classification, symmetry, textures and structures, how to recognize them and how they are used. Students learn how to use rocks to decipher geologic history. The course also covers economic geology-resources that come from rocks, minerals and fossil fuels. It reviews mining methods including strip and mountain-top removal mining and their environmental impacts. Students explore energy alternatives and resource conservation options. A local field trip is included. Sections may have additional field trips with fees. G 146 meets

AAOT requirements as a laboratory science course. Students may take G 146 as a stand-alone course or following G 101 or G 102 or G 103.

**G 147 National Parks Geology** .....4 credits  
National Parks Geology emphasizes the geologic setting, history, plate tectonics, and landform development in selected national parks and monuments. The class presents topics accessible to non-science majors that extend from the roots of ancient (Precambrian) mountain ranges, through the multiple layers in the Grand Canyon, to the recent eruptions of the Cascade Range and Yellowstone, with many parks in between. In labs students examine rock samples and use topographic and geologic maps. G 147 meets AAOT requirements as a laboratory science course. Sections may have a field trip with a fee. Students taking G 147 will benefit from having completed at least one term of geology prior to taking this course.

**G 201 Earth Materials & Plate Tectonics** .....4 credits  
The Geology 201, 202, 203 sequence is intended for science majors planning to transfer to a four-year institution or other students with a strong interest in geology. In each course, students complete individual and team case studies and presentations of selected geological regions, along with additional problem-solving activities. Sections may offer a field trip, with a fee. Students may take either G 201 or G 202 as their initial course. G 201, 202 and 203 meet AAOT requirements as laboratory science courses. Geology majors should enroll in G 201, 202, 203. Geology 201 emphasizes the formation of minerals and the origins of igneous, sedimentary and metamorphic rocks. The course investigates how plate tectonics influences the structure of the Earth, mountain building, rock deformation, magnetism, earthquake activity, and volcanism. In labs students identify and describe minerals and rocks, use earthquake and other geophysical data, interpret geologic structures and geologic maps, and apply plate tectonics theory to settings around the world.

**G 202 Earth's Surface Systems** .....4 credits  
Geology 202 analyzes the geologic processes that shape the Earth's surface and human interactions with them. Topics include erosion, deposition, weathering, soil formation, mass wasting, streams, groundwater, coastal processes, glaciers, deserts, and climate. The course emphasizes a systems approach, connecting surface processes, plate tectonics and global climate changes. Students evaluate the sustainability of human activities influencing these systems. In labs students review rocks and minerals, and use analytical tools to identify landforms and understand depositional systems and hazardous geological processes. Tools include geologic and topographic maps, aerial photos, Web resources, and satellite imagery. More information about this sequence is at G 201.

**G 203 Evolution of the Earth** .....4 credits  
Prerequisite: Grade of C- or better in G 101 or G 102 or G 201 or G 202. Geology 203 applies geologic principles of plate tectonics, surface processes and evolution to interpret Earth's geologic history. The course emphasizes how plate motions have built and rearranged continents, changed environments through geologic time. The course also explores how plate motions and other factors influence the distribution, evolution and extinction of plants and animals over time. In labs students recognize and describe fossils, interpret age relationships and stratigraphy, and use geologic maps and cross-sections to interpret complex regions. Students use principles of historical geology to develop geologic case studies from around the world. Students must have completed at least one previous term of geology or have permission from the instructor to enroll. More information about the sequence is at G 201.

**G 280 Co-op Ed: Geology** .....1-12 credits  
This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals in the geology field.

**G 280ES Co-op Ed: Environmental Studies** .....1-12 credits  
This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers in the environmental studies field.

**G 298 Independent Study** .....1-3 credits  
A variable credit course based on independent study contracted between an instructor and a student.

**GS 106 Physical Science** .....4 credits  
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test or instructor's permission. The General Science 104, GS 105, and GS 106 course sequence satisfies AAOT lab science requirement for non-science majors. The sequence emphasizes basic principles that tie the physical sciences together. GS 106 introduces topics from the Earth and space sciences. Students study Earth Science topics such as atmosphere, weather, climate and its changes, geologic time, and Earth's surface and interior processes. Emphasis is placed on the geologic hazards: floods, climate change, volcanoes, earthquakes, and the impact of physical processes on human society. Students explore topics from space sciences and cosmology, from small moons and planets to giant galaxies and beyond. Labs include graphs, maps, cross-sections, rocks, minerals, and space and planetary imagery. Students may take GS 104, 105 and 106 in any order.

**GS 142 Earth Science: Earth Revealed** .....3-4 credits  
General Science 142 Earth Revealed is an introductory geology course that integrates topics of Earth's history, plate tectonics, rock types, minerals, volcanism, earthquake activity, weathering, rivers, groundwater, glaciers, and coastal landforms. Students may earn a fourth credit by doing laboratory exercises designed for completion at home. This course is offered through Distance Learning.

**GS 147 Oceanography** .....3-4 credits  
General Science 147 Oceanography provides an overview of the basic geological, physical, chemical, and biological processes that occur in the world ocean. Topics include geology of the seafloor, tectonic plate interactions, seawater properties, waves, currents, tides, ocean life and biodiversity, and marine pollution. Students may earn a fourth credit if they complete laboratory exercises, several of which are designed to do at home. This course is offered through Distance Learning.

**GS 280ST Co-op Ed: Science Technology** .....1-12 credits  
This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers in the science technology studies field.

## Economics

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

**ECON 200 Principles of Economics: Introduction to Economics** .....3 credits  
First term of a three-term sequence in principles of economics. Introduces the basic economic concepts of scarcity, choice production possibilities, and market operations. Also includes economic measurements, and the circular flow of income, and the role of government. MTH 111 College Algebra and sophomore standing recommended. May be offered through Distance Learning.

**ECON 201 Principles of Economics: Introduction to Microeconomics** .....3 credits  
Prerequisite: ECON 200 or ECON 202. Second term of a three-term sequence in principles of economics. A study of basic microeconomics including elasticity, profits the operations of the four market structures, government policies toward business, and resource markets. MTH 111 College Algebra and sophomore standing recommended. May be offered through Distance Learning.

**ECON 202 Principles of Economics: Introduction to Macroeconomics** .....3 credits  
Prerequisite: ECON 200 or ECON 201. Third term of three-term sequence in principles of economics. Study of basic macroeconomics including alternative macroeconomic models of the level of economic activity, money and banking, fiscal policy and monetary policy. MTH 111 College Algebra and sophomore standing recommended.

**ECON 204 Introduction to International Economics** .....4 credits  
Introduces principles of international development, trade, and finance. Topics include: history of international development, alternative trade theories, trade restrictions, trade liberalization, free

## Course Fees

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

trade agreements, international economic institutions, exchange rates. Labor and capital migration are covered, time permitting.

**ECON 250 Class, Race and Gender in the US Economy** .....4 credits

This course examines the economic causes of social stratification within the labor market, based upon class, race and gender. Topics include: earnings and employment disparities; uneven poverty rates; differential access to housing, health, and education; and economic discrimination. This course examines how the market both enables and obstructs various social groups in their participation in the promise of the 'American Dream'. Presented from a political-economy perspective recognizing that economic discrimination is both a measurable and enduring characteristic of market economies.

**ECON 260 Introduction to Environmental and Natural Resource Economics: Water** .....4 credits

This course introduces the fundamental economic concepts, methods, and policy options used to analyze the interaction between the economy and the natural environment, including natural resources. Major topics covered include the economics of: pollution and environmental protection; resource extraction and depletion; externalities and public goods; and sustainability and resilience. Methods of economic analysis introduced include: cost-benefit analysis; valuation of environmental services, and impact analysis. Policy options considered include: property rights, effluent controls, emission charges, tradable pollution permits, and regulatory restrictions. Meets course requirements for the Water Conservation Technician program.

**ECON 298 IS:** .....1-3 credits

A variable credit course based on independent study contracted between an instructor and a student.

## Education

**Also see Early Childhood Education**

For information, contact Cooperative Education, Bldg. 19/Rm. 231, 541.463.5203.

**ED 100 Introduction to Education** .....3 credits

Students will learn about teaching as a career and education as a discipline. They will focus on the philosophy and history of education in a limited way, completing projects connected with both as they work with the instructor, one another, and at the computer to learn about teaching and learning.

**ED 130 Comprehensive Classroom Management** .....3 credits

This course provides a foundation in comprehensive classroom management theory and application. Students will gain an understanding of appropriate techniques for managing a classroom as well as problem solving for effective handling of unproductive student behaviors both in the classroom and in other settings such as the playground, assemblies, cafeteria, and field trips.

**ED 131 Instructional Strategies for Education Professionals** 3 credits

This three-credit course provides the learner with instructional strategies that research shows can have a positive impact on K-12 student achievement. Guiding principles based on validated instructional research, case studies, and classroom examples are provided to give learners tools to use in the classroom. This course provides valuable instructional pedagogy for paraprofessionals, current, teachers, and prospective teachers.

**ED 200 Foundations of Education Seminar** .....3 credits

The Foundation of Education Seminars are designed for students considering careers in elementary or secondary education. They are taught in a two-term sequence, generally in conjunction with a practicum in an elementary, middle, or high school classroom. Students learn about classroom management, the history of education as a discipline, and curriculum design. Each student creates a fiction or nonfiction picture book and learns about project learning as a teaching strategy.

**ED 201 Foundations of Education Seminar Part 2: Instructional Strategies Language Arts** .....3 credits

The Foundation of Education Seminars, designed for students considering careers in elementary or secondary Education, are taught in a two-term sequence (generally in conjunction with a practicum in an elementary, middle, or high school classroom). Students learn about: classroom management, educational philosophy, and the legal, political and economic foundations of education. They learn how to teach language arts through reading and writing in the content areas. They are introduced to the nature of the reading process and writing process and learn how to link literacy instruction and assessment to state content standards.

**ED 225 Multiple Intelligences-Motion** .....3 credits

Using the latest findings in brain research, this dynamic teaching intensive challenges participants to approach creative movement as an essential tool for cognitive, social and emotional learning for children of all abilities. With a focus on sequential, comprehensive and integrative curriculum, this workshop bridges the gap between arts and academia. In daily hands-on brain-compatible concept-based dance activities, participants define, explore and create best practices in education for every child. No prior dance experience necessary.

**ED 258 Multicultural Education** .....3 credits

This course addresses the philosophy, activities, methodologies, and curriculum to develop a culturally sensitive and responsive educational setting in the classroom, school, and district. This class will enable students to meet the needs of all students from a variety of diverse backgrounds. Students will understand the impact of culture on individual perception, learning, and group dynamics. Areas that will be studied are equity, diversity, and social justice as related to education.

**ED 280 Co-op Ed: Education** .....3-12 credits

In this course students explore teaching as a career while working with mentor teachers in elementary, middle, or high school classrooms. Students may take this course for multiple terms and work with different age groups in different school cultures. Students serve teachers and children by putting up bulletin boards, grading papers, attending meetings, preparing art projects, working with individuals, working with small groups, assembling science and art kits, and even by teaching occasional whole class lessons.

**ED 280EC Co-op Ed: Early Childhood Education** .....3-12 credits

This course offers students an opportunity to gain work experience in Early Childhood Education, and is for students with sixth term standing in the ECE degree program. Cooperative Education offers internship opportunities in a variety of early childhood settings. Students earn college credit and a grade for on-the-job work experience related to their education and career goals. The field experience is supervised by college ECE faculty and qualified staff at the site, and includes a required weekly seminar.

**ED 280SE Co-op Ed: September Experience** .....3-12 credits

Students begin the school year with a cooperating teacher during the last week of August (end of summer term) and help set up the classroom and its routines for the year that follows. During the three weeks they spend together, students and classroom teachers develop strong bonds as they begin the year with children who see them as an integral part of their classroom communities. Students earn three credits for three weeks of work when they can focus on the creation of the classroom environment. For most education majors, this is their favorite practicum. Students should take one term of seminar ED 200, ED 130, or ED 131 before beginning this practicum.

**ED 299 Trends:** .....1-3 credits

See department for topics.

## Electronics

For information, contact Advanced Technology, Bldg. 12/Rm. 201, 541.463.5380.

**ENGR 280E Co-op Ed: Electronic Technology** .....3-12 credits

This course provides the student on-the-job electronics learning experiences in business and industrial sites in the community. The student will have the opportunity to integrate theory and practice gained in the classroom with the practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree. Cooperative Education is a required class for the Electronic Technology Program.

**ET 100 Reading and Conference** .....1-3 credits

Prerequisite: Instructor consent A flexible course offering all students in electronics classes an opportunity for remedial, supplemental, and developmental training.

**ET 121 Shop Practices** .....2 credits

Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. This class addresses aspects of industrial and work site safety, introduces concepts in power distribution systems and focuses on identifying discreet components used in the electrical and electronic trades. In addition to identification, the student will learn the skills necessary to use vendor catalogues and/or websites to procure several different types of components. Those parts will



be used, along with common and trade specific tools, in order to complete a final fabrication project.

**ET 129 Electrical Theory 1**.....4 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. First course of a two-term sequence in electrical theory. The first term defines the basic electrical units, the basic laws of electrical theory as they apply to DC circuits such as series, parallel, and series-parallel circuits. AC waveforms and AC circuit components are introduced. Electronic test equipment such as the digital multimeter, oscilloscope and function generator is used to measure electrical signals and troubleshoot basic electrical circuits. May be offered through Distance Learning.

**ET 130 Electrical Theory 2**.....4 credits  
Prerequisite: ET 129 Second course of a two-term sequence in electrical theory. This course covers basic AC circuits and components, right triangle mathematics, RLC circuits, filters, and resonant circuits and RL/RC transient circuits. In the lab students will build and troubleshoot basic AC circuits using the oscilloscope, function generator, and DMM.

**ET 145 Semiconductor Devices 1**.....4 credits  
Prerequisite: ET 129 First course of a two-term sequence in the study of solid state semiconductor theory. ET 145 begins with the characteristics and use of both zener and general purpose diodes in common circuits. The second part discusses the operation of NPN and PNP bipolar transistors and common amplifier configurations.

**ET 146 Semiconductor Devices 2**.....4 credits  
Prerequisite: ET 145 Second course of a two-term sequence. Transistor theory is expanded to include the operation and use of Field Effect Transistors. The basic use of Silicon Controlled Rectifiers, Triacs, operational amplifiers and 555 timers are also explored in this course.

**ET 151 Digital Electronics 1** .....4 credits  
Prerequisite: ET 129 And MTH 060 Introduction to digital techniques, with emphasis on number systems, binary arithmetic, elements of logic, analysis and synthesis of combinational logic circuits, implementation of logic circuits using the MSI basic and/or/not building blocks. The last part of the course introduces Flip, Flop and Latch Memory components, FFs and methods of analyzing and troubleshooting, clocked sequential circuits. May be offered through Distance Learning.

**ET 152 Digital Electronics 2** .....4 credits  
Prerequisite: ET 129 And ET 151 Second of a two-course sequence in basic digital theory, using the fundamental building blocks learned in ET 151 to develop more complex circuits. The course is laboratory-focused to build, test and troubleshoot digital systems. A car warning system, adder/subtractor circuits, and a digital function generator are examples of laboratory projects that develop an understanding of more, advanced digital principles.

**ET 201 Industrial Instrumentation**.....4 credits  
Prerequisite: Second year standing. Course covers the elements that define a manufacturing controlled process. The course begins at the system level with basic statistical terms and spreadsheet data analysis. The second part discusses physical transducers and signal conditioning. The third part introduces analog to digital data conversion topics and the final part covers DC and stepper and motors.

**ET 229 Motors 1** .....4 credits  
Prerequisite: Second year standing. This class addresses the theory, operation and control of AC and DC motors. Emphasis will be placed on the use of motors in manufacturing and HVAC industries. Line diagram logic, starters and frequency drives will be studied along with techniques in accelerating and decelerating motors.

**ET 232 Programmable Controllers 2**.....4 credits  
Prerequisite: Second year standing. Introduction to the robot and its capabilities. This class explores the various tasks that robots are programmed to perform. Interfacing between robots, microcontrollers and PLC's are practiced with an emphasis on troubleshooting.

**ET 234 Programmable Controllers I**.....4 credits  
Prerequisite: Second year standing. The course covers the basics of relay and ladder logic technology as it pertains to Programmable Logic Controllers. Techniques in programming are explored and an emphasis is placed on interfacing I/O devices to the PLC. More advanced topics such as timers, counters, and sequencers are also covered.

**ET 239 Microprocessor Applications**.....4 credits  
Prerequisite: Second year standing. Microcontroller structure and usage. Microcontrollers are computers on a chip. Their use becomes more common as digital techniques become more common. ET 239 uses a microcontroller and Basic as the programming language. Tops down programming techniques are used to control processes to measure distance, temperature, drive motors and convert signals to digital levels.

**ET 241 Motors 2** .....4 credits  
This class prepares the student to troubleshoot various types of electrical problems through the use of standard test equipment, interpretation of schematics, and the development of analytical skills. Several common types of electro-mechanical failures will be emulated in a classroom environment with emphasis being placed on control circuitry common to the manufacturing and HVAC industries. In addition, standard mechanical maintenance practices will be examined.

**ET 281 Radiotelephone & Communication Equipment** .....4 credits  
Prerequisite: Second year standing or instructor consent The principles of radio communications systems including Amplitude and Frequency Modulations are explored. This class also includes the examination of basic telephone systems.

**ET 287 Microcomputer Hardware** .....4 credits  
Prerequisite: Instructor Consent. Current technology of specific PC hardware components. Installation and troubleshooting of these components include memory, video display, clock speeds, microprocessor differences, disk drives, input devices, and ports. The physical connection within a network, including cabling and installation of Network Interface Cards, is introduced. Hardware troubleshooting techniques emphasized.

**ET 298 Independent Study**.....1-12 credits  
Prerequisite: Instructor consent An individualized study experience designed to allow the student with basic skills to initiate individual projects, with instructor approval, which will enable him/her to explore further some specific design, method, construction, project or medium. Repeatable. Maximum 12 credits.

## Emergency Medical/Paramedic

For information, contact Health Professions, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Emergency Medical/Paramedic program to take these classes.

**EL 115H Effective Learning: Health Science Majors**.....3 credits  
This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

**EMT 151 Emergency Medical Technician Basic Part 1** .....5 credits  
This course is part 1 of an Emergency Medical Technician - Basic level. Successful completion of this two part course gains eligibility to sit for the Oregon State EMT-B certification exam and/or the National EMT-B certification exam. This course provides instruction in a variety of medical and trauma related emergencies. This is a demanding course designed for those who will function within an emergency medical services system. Supplies and equipment used is consistent with the tools of the trade. Fire departments and private ambulance services that respond to 911 emergencies carry very specific equipment and operate within very specific parameters. Students are taught how to apply their skills within this structure. This course is also a required component of the Associate of Applied Science Degree in Emergency Medical Technology.

**EMT 152 Emergency Medical Technician Basic Part 2** .....5 credits  
Prerequisite: EMT 151. This course is Part 2 of an Emergency Medical Technician - Basic level. Successful completion of this two part course gains eligibility to sit for the Oregon State EMT-B certification exam and/or the National EMT-B certification exam. This course provides instruction in a variety of medical and trauma related emergencies. This is a demanding course for those who will function within an emergency medical services system. Supplies and equipment used is consistent with the tools of the trade. Fire departments and private ambulance services that respond to 911 emergencies carry very specific equipment and operate within very specific parameters. Students are taught how to apply their skills within this structure. This course is also a required component of the Associate of Applied Science Degree in Emergency Medical Technology.

**EMT 169 Emergency Medical Technology Rescue**.....3 credits  
Elementary procedures of rescue practices, systems, components, support, and control off rescue operations including ladder procedures and basic rescue tools. Introduction to techniques and tools of patient extraction, emphasizing application to traffic assistance, as required for paramedic certification.

**EMT 170 Emergency Response Communication/Documentation**.....2 credits  
Covers principles of therapeutic communication, verbal, written, and electronic communications in the provision of EMS, documentation of elements of patient assessment, care and transport, communication systems, radio types, reports, codes, and correct techniques.

**EMT 171 Emergency Response Patient Transportation** .....2 credits  
Covers ambulance operations, laws, maintenance and safety, emergency response driving and route planning.

**EMT 175 Introduction to Emergency Medical Services** .....3 credits  
Explores the role and responsibilities of a paramedic, to include: different kinds of emergency medical services systems, applicable Oregon law, relationship with governmental regulatory agencies, exposure risk to infectious disease and exposure to critical incident stress.

**EMT 196 Crisis Intervention**.....3 credits  
Designed to provide students pursuing a degree in Emergency Medical Technology with the knowledge to effectively manage psychological emergencies. Included in this course: understanding and managing acute stress reactions, suicide, rape and sexual assault, child abuse, death and dying, drug and alcohol emergencies, burnout of the emergency worker and coping with job-related stress.

**EMT 270 Emergency Medical Technology-Paramedic Part 110** credits  
Corequisite: EMT 271. Course is part 1 of a 3 part course in paramedic education. This course covers the knowledge, skill and behaviors necessary to function effectively as a member of an emergency response team at the EMT-Paramedic level. This course focuses on general principals of pathophysiology, airway management and ventilation, venous access, pharmacology, patient assessment, clinical decision making and cardiovascular emergencies. Cognitive and psychomotor objectives are measured for competency by a combination of written and/or practical exams. Affective objectives are evaluated throughout the course by using the Professional Behavior Evaluation instrument and, when necessary, Professional Behavior Counseling. Successful completion is required for entry into EMT272. Successful completion is required to meet AAS/EMT-P requirements. Program graduates are eligible to take the Oregon State/National EMT-Paramedic exam.

**EMT 271 Emergency Medical Technology-Paramedic Clinical Part 1** .....1 credits  
Corequisite: EMT 270. This course is part 1 of a 3 part clinical experience that includes direct patient care related outcomes necessary for completion of program objectives. The use of multiple departments within the hospital enables the student to see a wide distribution of patient situations. In the emergency department, which most closely approximates the types of patients that paramedics see, students are presented with a variety of patient presentations and complaints, important elements in building up a library of patient care experiences to draw upon in future clinical decision making responsibilities. This experience takes place within a hospital/clinical environment and under direct supervision. All skills are first taught in the classroom before being performed in the clinical setting. Criminal background check and drug testing required.

**EMT 272 Emergency Medical Technology-Paramedic Part 2** .....10 credits  
Prerequisite: EMT 270, EMT 271. Corequisite: EMT 273. Course is part 2 of a 3 part course in paramedic education. This course covers the knowledge, skill and behaviors necessary to function effectively as a member of an emergency response team at the EMT-paramedic level. This course focuses on prehospital trauma care, medical emergencies, emergency childbirth, care of the newborn, neonate and pediatric patient. Cognitive and psychomotor objectives are measured for competency by a combination of written and/or practical exams. Affective objectives are evaluated throughout the course by using the Professional Behavior Evaluation instrument and, when necessary, Professional

Behavior Counseling. Successful completion is required for entry into EMT274. Successful completion is required to meet AAS/EMT-P requirements. Program graduates are eligible to take the Oregon State/National EMT-Paramedic Certification Exam.

**EMT 273 Emergency Medical Technology-Paramedic Clinical Part 2**.....3 credits  
Prerequisite EMT 270, EMT 271. Corequisite: EMT272 This course is part 2 of a 3 part clinical experience that includes direct patient care related outcomes necessary for completion of program objectives. The use of multiple departments within the hospital enables the student to see a wide distribution of patient situations. In the emergency department, which most closely approximates the types of patients that paramedics see, students are presented with a variety of patient presentations and complaints, important elements in building up a library of patient care experiences to draw upon in future clinical decision making responsibilities. This experience takes place within a hospital/clinical environment and under direct supervision. All skills are first taught in the classroom before being performed in the clinical setting. Criminal background check and drug testing required.

**EMT 274 Emergency Medical Technology-Paramedic Part 3**.....4 credits  
Prerequisites: EMT 272, EMT 273. Corequisite: EMT 275. Course is part 3 of a 3 part course in paramedic education. This course covers the knowledge, skill and behaviors necessary to function effectively as a member of an emergency response team at the EMT-Paramedic level. This course focuses on prehospital toxicological emergencies, environmental emergencies, and geriatric emergencies. This course also teaches how to integrate the principles of assessment based management to perform an appropriate assessment and implement the management plan for patients with common complaints. Cognitive and psychomotor objectives are measured for competency by a combination of written and/or practical exams. Successful completion is required for entry into EMT280P2. Successful completion is required to meet AAS/EMT-P requirements. Program graduates are eligible to take the Oregon State/National EMT-Paramedic Certification Exam.

**EMT 275 Emergency Medical Technology- Paramedic Clinical Part 3** .....4 credits  
Prerequisites: EMT 272, EMT 273. Corequisite: EMT 274. This course is part 3 of a 3 part clinical experience that includes direct patient care related outcomes necessary for completion of program objectives. The use of multiple departments within the hospital enables the student to see a wide distribution of patient situations. In the emergency department, which most closely approximates the types of patients that paramedics see, students are presented with a variety of patient presentations and complaints, important elements in building up a library of patient care experiences to draw upon in future clinical decision making responsibilities. This experience takes place within a hospital/clinical environment and under direct supervision. All skills are first taught in the classroom before being performed in the clinical setting. Criminal background check and drug testing required.

**EMT 280P1 Co-op Ed: EMT Internship Part 1**.....3 credits  
Prerequisite: EMT 2792 EMT 273 Corequisite EMT 274. Course is part 1 of a 2 part paramedic field internship. During the field internship the student is assigned to a 911 ambulance under the close supervision of a paramedic preceptor. The course begins as a field clinical experience where the student learns to synthesize cognitive and psychomotor skills learned earlier in the program. An assigned paramedic preceptor helps the student identify pertinent findings and how to prioritize treatment and transport decisions. The second phase of this course is an evaluative phase of the program. Field internship provides the student with an opportunity to serve as team leader in a variety of prehospital advanced life support emergency medical situations. The student is evaluated as to their ability to integrate all of the didactic, psychomotor skills, and clinical instruction to serve as an entry level paramedic. This course will be offered during spring term.

**EMT 280P2 Co-op Ed: EMT Internship Part 2**.....5 credits  
Prerequisite: EMT 274, EMT 275. Course is part 1 of a 2 part paramedic field internship. During the field internship the student is assigned to a 911 ambulance under the close supervision of a paramedic preceptor. The course begins as a field clinical experience where the student learns to synthesize cognitive and psychomotor skills learned earlier in the program. An assigned paramedic preceptor helps the student identify pertinent findings

and how to prioritize treatment and transport decisions. The second phase of this course is an evaluative phase of the program. Field internship provides the student with an opportunity to serve as team leader in a variety of prehospital advanced life support emergency medical situations. The student is evaluated as to their ability to integrate all of the didactic, psychomotor skills, and clinical instruction to serve as an entry level paramedic. The course will be offered summer term as an 8-week course.

## Energy Management

For information, contact Science, Bldg. 16/Rm. 156, 541.463.5446.

**NRG 101 Introduction to Energy Management** .....3 credits  
Prerequisite: Program Admittance. This course defines the need for energy management as an integral part of society at all levels. Students will understand basic energy accounting and analysis protocol. The course will also present the various vocational opportunities available to energy management students through lectures, video and guest speakers.

**NRG 102 Blueprint Reading: Residential and Commercial** .3 credits  
Basic Blue Print Reading for residential and commercial buildings is designed to deal with the reading of commercial architectural plans, examining their characteristics, service, and maintenance of electrical, plumbing, HVAC, and energy management related design and materials. Introductory drafting and plans drawing skill will be presented including sketches, free hand and cutting plan methods.

**NRG 103 Sustainability in The Built Environment** .....3 credits  
Prerequisites: Entry into the Energy Management Program. This course will help students understand the relationship of sustainability and buildings by addressing the "Three Es of Sustainability" in the built environment. Students will explore the ENVIRONMENTAL influence of buildings on air and water quality and waste streams; discover the ECONOMIC benefits of reduced operating costs, improvement of occupant productivity, optimization of life-cycle economic performance; and SOCIAL EQUALITY benefits by enhancing occupant comfort and health, heighten aesthetic qualities, minimizing strain on local infrastructure, improving overall quality of life. The course will use the Leadership in Energy and Environmental Design framework education.

**NRG 111 Residential/Light Commercial Energy Analysis**.....3 credits  
Corequisite: PH 102 .Topics include the following: residential/light commercial heating systems; heat transfer through building envelope; degree days; sources of internal heat gains; heat loss calculations, indoor air pollution; codes and regulations. Spreadsheets will be used.

**NRG 112 Commercial Energy Use Analysis** .....4 credits  
Prerequisite: NRG 111 and NRG 121 and MTH 095 or Math Placement Test. Emphasis is on the analysis of energy use in commercial buildings. Topics include utility bill analysis, audit data, identifying energy efficiency measures, use of micro-dataloggers, energy savings and investment calculations, audit report writing. Students will complete a supervised field audit.

**NRG 113 Building Energy Simulations** .....4 credits  
Prerequisite: NRG 112 and MTH 095 or Math Placement Test The course covers the variety of computer programs available for analyzing commercial buildings. Topics include BIN methodology, hourly simulations and an overview of current programs on the market such as eQuest. Students perform supervised computer simulations.

**NRG 121 Air Conditioning System Analysis** .....3 credits  
Prerequisite: PH 101 Students will investigate the physical principles of heating ventilation, and air conditioning systems commonly found in the commercial setting. Topics will include: the energy equation, change of state, and refrigeration. The course will also cover sensible and latent heat equation, psychometrics, heat and cooling load equations, solar effects, effects of thermal mass, central forced air furnaces, SEERs, EERs, AFUEs, fuels, and unitary single zone and multi-zone secondary systems.

**NRG 122 Commercial Air Conditioning System Analysis** ....3 credits  
Prerequisite: NRG 121 This course is the second class in a two-course sequence. Students completing this course will be able to identify commercial HVAC system types and the general energy impact of each type. Calculations of system equipment efficiencies will be used to determine EER, SEER, AFUE, COP, combustion and seasonal efficiency in boilers, balance point partial load efficiency,

and Bin analysis. Students will investigate HVAC delivery systems that will include fans pumps dampers, control valves, and ducting. The course will require field work where students will identify and perform calculations on equipment through nameplate and manufactures data takeoffs.

**NRG 123 Energy Control Strategies** .....4 credits  
Prerequisite: NRG 122 and NRG 124. Topics include building system control theory and devices, including electric, pneumatic, and digital controls. An emphasis is placed on identifying and understanding control strategies related to energy using systems and methods to estimate energy savings. Hands on labs reinforce device identification and students complete an energy efficiency controls calculation project.

**NRG 124 Energy Efficiency Methods** .....4 credits  
Prerequisite: PH 102. Corequisite: NRG 121. A systems approach is used to analyze the input, output, and efficiency of commonplace energy conversion devices. Included are motors, fans, pumps, heat engines, domestic hot water heaters, furnaces, boilers, refrigeration devices, and heat pumps. In so doing students (1) become fluent in the use of the many different units used to denote and measure energy/power (2) learn what quantities need to be measured to determine energy/power in different systems (3) determine the energy/cost savings associated with different efficiency improvement strategies.

**NRG 131 Lighting Fundamentals** .....3 credits  
Prerequisite: PH 101 and PH 102 or Instructor Consent. Topics include assessment of quantity and quality of light, light sources, luminaries, lighting controls, manufacturer lamp and ballast specifications, lighting power density, lighting-HVAC interactions, retrofit opportunities, cost savings analysis, and lighting codes/regulations. Course requirements include a directly supervised lighting audit project.

**NRG 132 Lighting Applications** .....3 credits  
Prerequisite: NRG 131 and MTH 095 or Math Placement Test. Topics in this course will include a review of terminology and lighting fundamentals. Students will critically evaluate lighting systems, luminaries and associated components. Understand and perform various types of illuminance calculations, including point-by-point, lumen method, and computerized procedures. Students will become familiar with the IES Illuminance selection procedure and IES recommended practices for various space types. Formulate objectives and develop an understanding of lighting applications, issues and concerns. Students will work effectively as a member of a team in the development of lighting

**NRG 141 Energy Investment Analysis** .....3 credits  
Prerequisite: NRG 111 or Instructor Consent. Topics include: interest, simple payback and life-cycle cost analysis, time value of money, cash flow equivalence, cost-benefit analysis, effects of tax credits, depreciation, inflation and/or escalating fuel costs on energy investments, and cost estimating procedures. The emphasis will be on analysis of energy investments using spreadsheets to consider total cost-benefits over the life of the investment.

**NRG 142 Energy Accounting** .....3 credits  
Prerequisite: BT 114 Course will include review of energy units, data gathering for energy accounting utility rates and schedules, energy data organization, adjusted baselines, cost avoidance, load factor, data analysis, data presentation, use EPA's Portfolio Manager software.

**NRG 154 Alternative Energy Technologies** .....3 credits  
A survey of the sources of energy that may be used to increase energy supply in the Pacific Northwest. Included are geothermal, wind, low head hydro, solar and biomass. Environmental, social and economic advantages of each source are assessed.

**NRG 155 PV System Design and Installation 1** .....4 credits  
Prerequisite: PH 101 and PH 102 and MTH 095 or Math Placement Test. Corequisite: NRG 157. This hands-on course will cover the National Electrical Code (NEC) specifics concerning photovoltaic (PV) installation article 690. Code compliant wiring of modules, inverters, charge controllers, and batteries will be explored in detail. Students will use materials designed for installation practice both indoors and out.

**NRG 156 PV System Design and Installation 2** .....4 credits  
Prerequisite: NRG 155 This hands-on course is a continuation of NRG 155. Students will learn the unique differences between grid intertie and off-grid systems and associated components. Students



will use the NEC as it relates to PV installation. Safety on the job will be emphasized.

**NRG 157 Renewable Energy Systems**.....3 credits  
Prerequisite: First Year of Energy Program; Corequisite: NRG 141  
This course will provide an overview of the Solar PV and Solar Thermal industry. Topics include PV theory, an introduction to PV and thermal system types and efficiencies, solar site evaluation, available solar radiation, tools used in the solar industry, and the economics of solar.

**NRG 158 Thermal Design and Installation 1** .....4 credits  
Prerequisite: PH 101 and PH 102 and MTH 095 or Math Placement Test. This hands-on course will first cover the Oregon Plumbing code as it relates to solar Domestic Hot Water (DHW) system installation. System type, tanks, controls, pumps, valves, mounting systems and installation safety will be discussed and demonstrated. Students will use materials designed for installation practice both indoors and out.

**NRG 159 Thermal Design and Installation 2** .....4 credits  
Prerequisite: NRG 158 This hands-on course will continue the discussion from Thermal 1 regarding the Oregon Plumbing code as it relates to solar Domestic Hot Water (DHW) system installation. A continuation of the system type, tanks, controls, pumps, valves, mounting systems and installation safety discussion that began in Thermal 1 will be investigated in greater depth.

**NRG 162 Solar Photovoltaics System Design and Installation 3** .....4 credits  
Prerequisites: NRG155 and NRG156. Students will understand the performance characteristics, applied electrical code, associated electrical equipment with an emphasis on battery electrical storage systems, and skills necessary for the design and installation of photovoltaic energy systems. Students will install a 2kW system and obtain the North American Board of Certified Energy Practitioners Entry Level Certificate.

**NRG 171 Materials Management / Solid Waste Management for Institutions** .....3 credits  
This course will focus on materials procurement, materials disposal, the supply chain, and material acquisition waste avoidance. Students will be presented various examples of supply chains and how to establish a sustainable procurement program for an organization. Students will learn how to work with vendors to get the information needed to make responsible procurement decisions and then how to prioritize procurement decisions. Students will learn about consumption, waste, and climate change. International and community environmental justice issues will be presented and discussed. Waste avoidance and the zero waste concept will be discussed in detail focusing on product stewardship and take-back programs. Field Trips will be part of the curriculum.

**NRG 172 Understanding the LEED Framework & Green Buildings**.....3 credits  
LEED Green Building Rating System was developed by the US Green Building Council. LEED provides a complete framework for assessing building performance and meeting sustainability goals. This framework helps define "Green Building" by establishing a common standard of measurement. Based on well-founded scientific standards, LEED emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. This course will fully investigate the LEED Framework.

**NRG 173 Carbon Footprints for Climate Action in Complex Organizations**.....4 credits  
This course teaches students how to conduct a greenhouse gas inventory for a complex organization in order to manage and reduce emissions on an on-going basis. This process will include reviewing existing protocols, setting inventory boundaries, collecting data for a wide range of direct and indirect emissions sources, making calculations (including practicing estimation techniques), and reporting results. Additionally, students will review basic climate science and will learn about both the physical and regulatory changes that are occurring and anticipated as a result of climate change. The course will include a brief overview of climate policy at the international, federal, regional, state, and local

levels in order to build the business case for conducting an inventory.

**NRG 174 Conducting a Full Sustainability Assessment**.....4 credits  
Conducting a sustainability assessment requires research into appropriate indicators and benchmarks for the specific building or organizational end-use. This course will discuss how to select indicators and benchmarks, evaluate them and how to report findings. The course will concentrate on setting goals for performance, selecting and making appropriate calculations and then accurately reporting performance. .

**NRG 206 Co-op Ed: Energy Management Seminar** .....1 credits  
The Energy Management Cooperative Education Seminar will provide ways for students to increase their understanding of industry expectations, as well as develop job search tools and skills. The content is designed to help students present themselves to employers in a competent and professional manner, and to move initially into their cooperative education internships; then into their professional careers.

**NRG 280 Co-op Ed: Energy Management**.....3-12 credits  
This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers in the energy management field. This course is a required course in the Energy Management degree.

**NRG 298 Independent Studies** .....1-3 credits  
A variable credit course based on independent study contracted between an instructor and a student.

**Engineering Transfer**

Also see Drafting, Electronics and Physics

For information, contact Math, Bldg. 16/Rm. 166, 541.463.5392,

**ENGR 101 Engineering Orientation**.....3 credits  
Prerequisite or Corequisite: MTH 251, or MTH 252, or MTH 253, or MTH 254, or MTH 255, or MTH 256 or MTH 253 or 261 completed with a C- or better within the past four terms. An introduction to engineering, its evolution, ethics, and methods. An overview of various engineering disciplines and curriculum requirements, an introduction to a variety of modeling and analysis methods, written and oral communication activities, discussion of professional ethics and social implications of engineering work. The course includes visits by guest speakers, possible field trips, introductory activities on measurement methods, data collection, use of electronic spreadsheets and the internet, group projects and/or oral and written reports.

**ENGR 115 Engineering Graphics** .....3 credits  
Prerequisite or Corequisite: MTH 112. An introduction to graphic communication, including visualization, multiview and pictorial projections, sections, auxiliary views, and ASME dimensioning and tolerancing standards. Graphic concepts are applied using freehand sketching and CAD.

**ENGR 199 SS:** .....3 credits  
See department for topics.

**ENGR 211 Statics**.....4 credits  
Prerequisite: MTH 252 and PH 211 Principles of statics of particles and rigid bodies are studied with a vectorial approach. Particular attention will be given to the composition, resolution and equilibrium of coplanar and non-coplanar force systems; two dimensional trusses and frames; centroids and moments of inertia of plane areas; coulombic friction; and the distribution of shear and bending moments in simple beams. A programmable graphics calculator comparable to the TI-83+ or TI-89 is recommended.

**ENGR 212 Dynamics** .....4 credits  
Prerequisite: ENGR 211 and MTH 254 and PH 211 This is a fundamental dynamics course of particles and rigid bodies. Topics include kinematics and kinetics of particles and kinematics of rigid bodies; Newton's second law of motion; rectilinear and curvilinear motion; linear and angular momentum; principles of work and energy; impulse and momentum and D'Alembert's Principle.

**ENGR 213 Strength of Materials** .....4 credits  
Prerequisite: ENGR 211 and MTH 253 Course presents theory of stress and strain, shear, bending, torsion and combined stresses; temperature induced stresses, and elements of indeterminate analysis. Additional topics include axially loaded members, thin-walled pressure vessels, torsional and flexural loading, failure theory and column buckling.

COURSE DESCRIPTIONS

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

**ENGR 221 Electrical Fundamentals 1** .....4 credits  
 Prerequisite: PH 212. Linear circuits will be analyzed via Kirchoff's Laws using idealized circuit elements. Steady state and sinusoidal responses of passive and active circuits will be addressed. The course emphasizes a combination of conceptual understanding, mathematical analysis, lab experiments and computer simulations. This course is designed for engineering majors.

**ENGR 280 Co-op Ed: Engineering** .....3-12 credits  
 This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers in the engineering field.

<b>English - See Literature, Writing</b>
<b>English as a Second Language - See Study Skills</b>
<b>Environmental Science - See Earth and Environmental Science</b>

**Ethnic Studies**

For information about classes with course numbers that begin with:  
 ES - Contact Social Science, Center Bldg./Rm. 403, 541.463.5427.  
 CG - Contact the Counseling Department, Bldg. 1/103, 541.463.5299.

**CG 199 Special Studies:** .....1-3 credits  
 See department for topics.

**ES 101 Historical Racial & Ethnic Issues**.....4 credits  
 This course explores the nature and complexity of racial and ethnic diversity in U.S. society. Using current developments in ethnic studies scholarship, we will examine the social construction of race and ethnicity, theories of prejudice, and a historical overview of various ethnic and racial groups. The course concludes with a comparative analysis of the intersection between race, class, and gender. ES 101 and ES 102 do not have to be taken in sequence.

**ES 102 Contemporary Racial & Ethnic Issues**.....4 credits  
 This course explores the nature and complexity of racial and ethnic diversity in U.S. society. Using current developments in ethnic studies scholarship, we will examine multiple sources of discrimination, and how discrimination impacts self and society. We will also review the contemporary and experiences and issues facing various ethnic and racial groups. The course concludes with strategies for overcoming exclusion. ES 101 and ES 102 do not have to be taken in sequence.

**ES 111 Chicano/Latino Leadership 1: Quien Soy?**  
**Quienes** .....2-4 credits  
 This course will examine the diversity that resides within the Chicano, Mexicano, Latino, Hispanic and Caribbean cultural experience in the Americas. The class will provide a framework for understanding the ways in which distinctive social and cultural patterns arose, thus, bringing awareness of contemporary expression and their historical basis. We will explore root causes to explain how the attitudes and behaviors of the Latino community were shaped. We will assess the ability to survive as Raza by fashioning syncretic adaptive strategies to the changing conditions since 1492. A theory of transformation model will be a guiding theme of the class as students will be challenged to create a leadership that will create a leadership that will transform the condition of the Chicano/Latino community.

**ES 112 Chicano/Latino Leadership 2: Cultural Heroes**.....2-4 credits  
 This class will explore the concept of cultural heroes within the context of the Chicano/Latino experience. We will identify socio-historic processes that serve to highlight or diminish Chicano/Latino cultural heroes. Students will discuss and create strategies in which to celebrate and honor Chicano/Mexicano, Latino, Hispanic and Caribbean cultural heroes in school and community events. In addition, this class will explore the contributions and achievements of Chicano/Latinos in the Americas. We will survey the Chicano/Latino historical presence in the social, economic, political and cultural landscape of the United States and identify socio-historic processes that serve to highlight or diminish Chicano/Latino contributions and achievements. A theory of transformation model will be a guiding theme of the class as students will be challenged to create a leadership that will transform the condition of the Chicano/Latino community.

**ES 113 Chicano/Latino Leadership 3: Affirmation & Resistance** .....2-4 credits  
 This class will examine the impact of La Leyenda Negra (The Black

Legend), Manifest Destiny and negative images assigned to Spanish/Mexican and Latino culture in the United States and Latin America. In addition, this class will provide a critical examination of Chicano/Latino cultural expressions in the public discourse with a focus on cultural/ethnic celebrations. We will explore the production of Chicano/Latino culture and cultural celebrations (e.g. Cinco de Mayo) via mainstream popular culture and culture produced by and for Chicano/Latinos. A theory of transformation model will be a guiding theme of the class as students will be challenged to create a leadership that will transform the condition of the Chicano/Latino community.

**ES 199 Special Studies:** .....4 credits  
 See department for topics.

**ES 211 Chicano/Latino Experience: Historical and Ideological Perspectives** .....4 credits  
 This course focuses on the historical origins of the largest Latino population in the U.S. The course begins with an exploration of the consequences of contact between the different worldviews of Mesoamericans and Europeans, and examines how Mexican natives and mestizos came to be viewed as 'foreigners' in their ancestral homeland. Throughout the course, we will review historical and contemporary indigenous cultural survival efforts.

**ES 212 Chicano/Latino Experience: Political and Ideological Perspectives** .....4 credits  
 This course examines the efforts of Mexican Americans to achieve equality and self-determination through the twentieth century. Special attention will be paid to the emergence of multiple ideological and culturally nationalistic social justice movements that evolved into a unifying Chicano Movement of the late 1960s and early 70s. Finally, this course explores the continuing evolution and emergence of contemporary Chicano/Latino social justice movements.

**ES 213 Chicano/Latino Experience: Contemporary Identity and Cultural Issues** .....4 credits  
 This course explores the historical and contemporary identity/cultural issues affecting the largest Latino communities in the United States. We will review theories of ethnic identity development, as well as the social and political construction of 'race'. This course also examines how U.S. foreign policy in Latin America has influenced perceptions within and outside of the Latino community. Finally, we review the use of pan-ethnic labels and their function in the construction of an all-encompassing Hispanic Nation.

**ES 221 African American Experience: Down From the Pyramids, Up From Slavery 10,000 BCE - 1877** .....4 credits  
 The focus of this course is on African, Afro-European, Afro-Native American, Caribbean, South and North American Maroon societies. In this course we examine various cultural constructs through which Africans in America understand and influence the world. The chronology of this course encompasses Dynastic Egypt, pre-European Conquest Africa, pre-Columbian America, to Post Reconstruction America 1877. ES 221, 222, and 223 examine culture, identity, gender and women's roles, economics, and African and Native American responses to systematic oppression towards goals of individual and group liberation. May be offered through Distance Learning.

**ES 222 African American Experience: Aspiration 1877 - 1945** .....4 credits  
 This course examines African, Afro-European, Afro-Native American, and African-American contributions to various liberation movements in the Americas. We examine various cultural constructs through which Africans in the Americas understand and influence the world. The chronology of this course encompasses Post-Reconstruction America to the end of World War II. ES 221, 222, and 223 examine culture, identity, gender and women's roles, economics, and African and Native American responses to systematic oppression towards goals of individual and group liberation. May be offered through Distance Learning.

**ES 223 African American Experience: A Luta Continua: The Struggle Continues 1945 to Present** .....4 credits  
 Contemporary African, Afro-European, Afro-Native American, Caribbean, and Africans in South and North America are examined in this course. The chronology of this course encompasses World War II to the present and confronts issues such as prison incarceration rates, the 'War on Drugs', Affirmative Action backlash, and Multiculturalism, as well as the cultural influences of gospel,

jazz, rock and roll, and liberation movements. ES 221, 222, and 223 examine culture, identity, gender and women's roles, economics, and African and Native American responses to systematic oppression towards goals of individual and group liberation. May be offered through Distance Learning.

**ES 231 Asian American Experience: First and Second Generations**.....4 credits  
 This course will focus primarily on the experiences of first-and second-generation Asian Pacific Americans through personal narratives, historical texts, documentaries essays, and creative works. Material will cover a wide historical period, from the mid-1800s to the present, and will include the experiences of individuals from a number of different groups, comparing and contrasting the similarities and differences of their experiences.

**ES 232 Asian American Experience: Social Movements of the 20th Century** .....4 credits  
 Throughout the 20th century, Asian Americans and Pacific Islanders have been discriminated against in various arenas (e.g., immigration, employment, political, education, housing, social, etc.). This course examines how Asian Americans and Pacific Islanders have responded to institutional forms of oppressions. Students will read and discuss works of various Asian American writers, scholars, and political activists to place Asian American social movements within a larger context of U.S. history.

**ES 233 Asian American Experience: Contemporary Issues in Asian America**.....4 credits  
 Where and how do Asian Pacific Americans fit into contemporary U.S. society and culture? This course will examine current situations and issues faced by Asian Pacific Americans such as recent immigration trends, anti-Asian violence and anti-immigrant sentiment, the Hawaiian sovereignty movement, African American/Korean American conflict, LGBT issues, multiracial identities, and interracial marriage. This course will also examine contemporary cultural production by Asian Pacific Americans.

**ES 241 Native American Experience: Consequences of Native American & European Contact**.....4 credits  
 This course deals with Native Americans and Alaskan Native cultures and history, both prior to and immediately following, contact with Europeans during the past five hundred years. The course is divided into two general segments: First, the course will explore Native cultures in their traditional settings, before the arrival of outsiders. It surveys the great diversity of lifestyles, belief systems, languages, social and political structures, and creative expressions, which characterize the numerous tribal communities of the North American continent. Second, the course focuses on the major European encounters with native societies, beginning with the expedition of 1492 and extending into the Twentieth Century. The disparate responses and resistance strategies of various indigenous populations confronting the ideological and physical intrusion of Europeans is studied. ES 241, 242, or 243 courses may be taken at any time, in any order, with no prerequisites

**ES 242 Native American Experience: Nineteenth Century Federal-Indian Relations**.....4 credits  
 This course focuses on nineteenth century United States and Canadian federal-native relations. In the nineteenth century, the United States and Canadian federal governments took different yet similar paths in how they dealt with the sovereign Native peoples within their borders. While no single course can adequately deal with the complexity of the subject matter surveyed, it is organized to help understand the public policies and events shaping tribal life in North America during this period. In the nineteenth century, paternalistic attitudes held by the dominant culture, created federal government policies whose effects can still be found today in the lived experiences of Native Americans.

**ES 243 Native American Experience: Contemporary Native American Issues** .....4 credits  
 This course explores contemporary relationships between the United States government, Native Americans, Alaskan Natives, and Native Hawaiians. Particular attention is paid to tribal sovereignty, treaty rights, land and resource ownership and use, religious and identity renewal, Native American political activism, education, and

social and economic issues in contemporary rural and urban Native America. This course also focuses on various positive interactions and alliance-building relationships between Native Americans, the dominant society, and other groups of people of color in the U.S. ES 241, 242, or 243 courses may be taken at any time, in any order, with no prerequisites.

**ES 244 Native American Story Telling**.....4 credits  
 This course is designed for students to experience the art of teaching and learning in the oral tradition adopted from the Native American traditions of the instructor. Students will be required to learn the socio/cultural context in which some Native American stories are based. Students will gain an understanding of the term "tribal" by doing some research on their own ethnic tribal roots and compare it to the definition presented by the instructor. Rather than learning different tribal stories and discussing them, students will learn the social, cultural and environmental grounds for Native American stories, create their own stories, present them to class and the class will learn them (all done orally), and then discuss the stories.

**ES 250 Class, Race and Gender in the US Economy**.....4 credits  
 This course examines the economic causes of social stratification within the labor market based upon class, race and gender. The course uses a political economy perspective to examine issues such as earnings and employment disparities, uneven poverty rates, differential access to housing, health and education. We will examine how the market both removes and produces obstacles, which restrict many social groups from fully participating in the promise of the 'American Dream.' We will examine the common goals, aspirations and struggles shared by diverse social groups, while recognizing that socio-economic discrimination is still an enduring and measurable characteristic of market economies. Attention will be placed upon gaining an understanding of the impact of discrimination from the perspective of the affected groups through firsthand accounts.

**ES 280 Co-op Ed: Ethnic Studies** .....3-12 credits  
 This course provides the student with ethnic studies-related work experience. The students will have the opportunity to integrate theory and knowledge gained in the classroom with practical experience in the field. Ethnic Studies co-op students are encouraged to work with local service agencies that serve underrepresented minority communities or organizations that operate from a social justice perspective. In this course a student may develop skills, explore career options, and network with professionals while earning college credit.

**ES 298 Independent Study:** .....1-4 credits  
 A variable credit course based on independent study contracted between an instructor and a student.

**Exercise and Movement Science**

For information, contact Health and PE, Bldg. 5/Rm. 205, 541.463.5545.

**PE 135 Applied Exercise Physiology 1** .....3 credits  
 Prerequisite: PE 295 and PE 194T. Exercise metabolism and fuel sources for energy, cardiovascular response to activity, basic functioning of physiological systems, and musculoskeletal adaptations to acute exercise, and long-term physical training. Designed for students preparing for the fitness industry, pre-physical therapy, cardiac rehabilitation, teaching or coaching. Course content and information will also help prepare students for national certification exams. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

**PE 194F Professional Activity: Fitness Assessment and Exercise Prescription-Field Techniques**.....3 credits  
 Prerequisite: Program Admission. Basic fitness principles and techniques for physical fitness assessments including cardiovascular endurance, blood pressure, joint flexibility, body composition, muscular strength and endurance, and skill related fitness. ACSM exercise testing and prescription guidelines will serve as the foundation for this course. Topics include health screening, informed consent, field test protocols, data interpretation, and exercise prescription. Students will have opportunities for practical experience in assessing fitness levels and developing appropriate exercise prescription for apparently healthy individuals as well as special populations such as children and adolescents, physically challenged, pregnant and postpartum women, and older adults. Course content and information will help

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.



prepare students for national certification exams. Students must be accepted into the Exercise and Movement Science Program to be eligible to take this course

**PE 194L Fitness Assessment and Exercise Prescription-Laboratory Techniques** .....3 credits  
Prerequisite: PE 235. Advanced physical fitness testing procedures performed in a laboratory setting. Students will learn health screening and risk appraisal guidelines. Fitness tests performed will include bioelectrical, Omegawave, ECG, and anaerobic capacity, as well as submaximal testing protocols and maximal oxygen uptake testing using gas analysis. Students will assess test results and then prescribe appropriate exercise for a variety of populations. Students will further learn to identify the effects of common pharmacological agents on heart rate, blood pressure, and exercise capacity, and identify guidelines for termination of exercise testing. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

**PE 194S Professional Activity: Principles of Strength Training and Conditioning Instruction** .....2 credits  
Prerequisite: Program Admission. Fundamental techniques of resistance training, and programs/systems of conditioning. Includes safety concerns, flexibility exercises, exercise modalities, aerobic conditioning, exercise prescription, exercise principles. Designed for those students who wish to be personal trainers, group exercise instructors, teachers/coaches or work in a private/corporate fitness setting. Course content and information will help prepare students for national certification exams. Students must be accepted into the Exercise and Movement Science Program to be eligible to take this course.

**PE 194T Professional Activity: Techniques of Leadership Training** .....2 credits  
Prerequisite: PE 194F, PE 194S, PE 196 Introduction to and experience with a variety of fitness and coaching leadership methods and skills. Safety, motivation, communication, group and team organization, lesson and practice planning, and much more are covered in a lecture-lab setting. Students will experience leading/teaching in class assignments in their choice of fitness activities. This comprehensive course in learning how to teach and lead is applicable to both personal trainers and group fitness leaders. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

**PE 196 Applied Anatomy and Kinesiology** .....3 credits  
Prerequisites: Program Admission. Basic kinesiological principles of movement and exercise. Includes major muscle groups, and joints, as well as the planes of movement, and basic biomechanical factors. Basic understanding of the major muscle groups including origins, insertions and actions. Basic kinesiological concepts will be taught. Course content and information will help prepare students for national certification exams. Students must be accepted into the Exercise and Movement Science Program to be eligible to take this course.

**PE 199F Special Studies:** .....1 credits  
Prerequisite: PE 235 Current topics in health, fitness, and exercise science are addressed. See department for details. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

**PE 235 Applied Exercise Physiology 2** .....3 credits  
Prerequisite: PE135. A continuation of PE135 Applied Exercise Physiology I for students in the second year of the Fitness Specialist Program. Topics include exercise for unique populations (e.g., individuals with obesity, coronary disease, chronic obstructive pulmonary disease, diabetes, musculoskeletal disorders or other degenerative diseases, as well as children, adolescents, older adults, and male/female populations), environmental considerations during exercise, conditioning for optimal performance, and nutritional principles related to exercise. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

**PE 280 Co-op Ed: Physical Education** .....1-12 credits  
Prerequisite: Instructor approval. This course provides the opportunity for supervised work experiences in a Physical Education program on campus or in a public or private school setting. Students may gain knowledge, develop skills, gain teaching experience, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Exercise and Movement Science Program, there is an enrollment minimum of 3 credits for this course.

**PE 280A Co-op Ed: Athletics** .....1-12 credits  
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in the non-coaching aspects of an athletic program on campus or in a public or private work site in the community. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Exercise and Movement Science Program, there is an enrollment minimum of 3 credits for this course.

**PE 280AR Co-op Ed: Aerobics** .....1-12 credits  
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in an aerobic fitness program on campus or in a public or private work site in the community. Students may gain knowledge, develop skills, gain teaching experience, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Exercise and Movement Science Program, there is an enrollment minimum of 3 credits for this course.

**PE 280AT Co-op Ed: Athletic Training** .....1-12 credits  
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in an athletic training environment that deals with injuries related to fitness and sports, including injury care, prevention, and rehabilitation methods and techniques. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be on or off campus, paid or non-paid. Note: For students who are not currently enrolled in the Exercise and Movement Science Program, there is an enrollment minimum of 3 credits for this course.

**PE 280C Co-op Ed: Coaching** .....3-12 credits  
Prerequisite: Instructor approval. This course provides an opportunity for supervised coaching experiences on campus or in a public or private program in the community. Students may gain knowledge, develop skills, get coaching experience, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid.

**PE 280F Co-op Ed: Fitness** .....1-12 credits  
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in a professional fitness program on campus or in a public or private work site in the community. Students will have the opportunity to integrate theory and practice gained in the classroom with practical experience in a professional work environment. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Exercise and Movement Science Program, there is an enrollment minimum of 3 credits for this course.

**PE 280M Co-op Ed: Fitness Management** .....1-12 credits  
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in the management aspects of a professional fitness program, on campus or in a public or private worksite in community. Students will have the opportunity to integrate theory and practice gained in the classroom with practical experience in a professional work environment. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Exercise and Movement Science Program, there is an enrollment minimum of 3 credits for this course.

**PE 280R Co-op Ed: Recreation** .....1-12 credits  
Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in a recreational

program on campus or in a public or private work site in the community. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Exercise and Movement Science Program, there is an enrollment minimum of 3 credits for this course.

**PE 280RT Co-op Ed: Rehabilitation Therapies** .....1-12 credits  
 This course provides students with an opportunity to work in an environment that deals with rehabilitation methods and techniques related to injury, illness and aging. Students may gain technical skills and knowledge under the guidance of a health care professional. Call for orientation times.

**PE 280W Co-op Ed: Wellness** .....1-12 credits  
 Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in an employee wellness or similar program, on campus or in a public or private work site in the community. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Exercise and Movement Science Program, there is an enrollment minimum of 3 credits for this course.

**PE 294 Foundations of Fitness Management** .....3 credits  
 Prerequisite: PE 194L. Introduction to management topics specific to the fitness industry, including fitness program administration, safety and legal liability, facility management, equipment acquisition and maintenance, corporate fitness practices, and employee wellness programs. Students will also be guided in job search practices and resume development. Learning experiences will include lectures, field trips, presentations by fitness professionals, individual projects, group projects, and computer assignments. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

**PE 295 Injury Prevention & Management** .....3 credits  
 Prerequisite: PE196, PE 194F, PE 194S. Students will learn how to prevent, recognize and rehabilitate common injuries that may occur during activity. This course is designed to provide the conceptual framework for learning how to develop exercise prescription for individuals with physical limitations due to injury. It will include methods on how to select exercise progressions, how to teach exercises to clients, appropriate exercise guidelines for repetitions and sets, and an outline for the amount of time needed for the client to return to full activity. The use of ACSM guidelines for exercise prescription will be the foundation. Course content and information will help prepare students for national certifications. Students must be accepted into the Exercise and Movement Science Program and be in good academic standing to be eligible to take this course.

**Fabrication and Welding**

For information, contact Advanced Technology, Bldg. 12/Rm. 201, 541.463.5380.

**ENGR 280W Co-op Ed: Welding** .....3-12 credits  
 This course provides the student with welding-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning college credit toward a degree.

**RTEC 100 Basic Career Technical Skills** .....2-6 credits  
 This course explores the basic skills for entering technical careers such as mechanics, manufacturing, aviation, electronics, etc. The course includes; safety, math, tools, basic electricity, basic hydraulics, employability skills, rigging, blue prints, and communication. Students may not receive credit for both RTECH 100 and APPR 101.

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

**WLD 105 Fundamentals of Fabrications and Welding** .....2-12 credits  
 This course integrates the fundamentals of trade skills (safety, tools, employability skills, rigging, blueprints, electricity, mathematics and communications) with basic welding and metal fabrication skills. Students will study industrial level welding and fabrication techniques involving layout, form processing, fitting, welding and finishing.

**WLD 111 Blueprint Reading for Welders** .....3 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. This course provides instruction necessary to interpret blueprints that are typically used by metal fabrication shops. Emphasis is placed on understanding types of lines, dimensioning, views, notations, abbreviations and welding symbols.

**WLD 112 Fabrication/Welding 1** .....12 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Comprehensive skills necessary for the fabrication of metal products. This course introduces basic blueprint reading and shop fabrication techniques, shielded metal arc, wire drive, and gas tungsten arc welding processes. These skills are learned in the context of assigned and graded practice projects. Students may also have the opportunity to practice these skills in the production of actual metal products, some of which may be marketed.

**WLD 113 Fabrication/Welding 2** .....12 credits  
 Prerequisite: WLD 112 or WLD 111 and WLD 121 and WLD 143 and WLD 242 or instructor consent Comprehensive skills necessary for the fabrication of metal products. This course builds and advances skills previously learned. Instruction and practice in blueprint reading, shop fabrication techniques, shielded metal arc, wire drive, and gas tungsten arc welding is provided. In addition to practice projects, students may have the opportunity to fabricate actual metal products, some of which may be marketed. Under certain circumstances, this class may be taken as an introductory course.

**WLD 114 Fabrication/Welding 3** .....12 credits  
 Prerequisite: WLD 112 and WLD 113 or WLD 111 and WLD 121 and WLD 122 and WLD 143 and WLD 154 and WLD 242 and WLD 256 or instructor consent Comprehensive skills necessary for the fabrication of metal products. This course builds and advances skills previously learned. Instruction and practice is given in calculating material costs, shop fabrication techniques, wire drive welding, and gas tungsten arc welding. In addition to practice projects, students may have the opportunity to fabricate actual metal products, some of which may be marketed.

**WLD 121 Shielded Metal Arc Welding 1** .....1-4 credits  
 Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Skill development in electric arc welding, understanding and practicing safe work methods in the welding shop and welding in all positions (flat, horizontal, overhead, and vertical), using the shielded metal arc process.

**WLD 122 Shielded Metal Arc Welding 2** .....1-4 credits  
 Prerequisite: WLD 121 or performance test and written examination Skill development in electric arc welding. Training in the selection of electrodes and their use on metals of varying thicknesses, and continued training in oxyacetylene cutting. Welding using a wide variety of electrodes and metal thicknesses. The student will be instructed in safe work habits and the optimum use of materials and equipment.

**WLD 139 Welding Lab** .....1-6 credits  
 Prerequisite: Instructor consent and minimum reading score of 68 OR RD 080 OR Prior College. Only available to students who have taken or are registered in the arc welding, wire drive processes, and/or fabrication/welding sequence. This is an opportunity for additional time in the welding lab.

**WLD 140 Welder Qualification (Cert): Wire Drive** .....3 credits  
 Prerequisite: WLD 143 or WLD 154 or WLD 112 or WLD 113 or WLD 114 or instructor consent This course studies the purpose and standards of American Welding Society welder qualification tests. It also provides instruction and practice in the preparation, welding and finishing of test specimens to code standards using wire drive processes.

**WLD 141 Welder Qualification (Cert): SMAW** .....3 credits  
 Prerequisite: WLD 122 or WLD 112 or WLD 113 or WLD 114 or instructor consent This course studies the purpose and standards of American Welding Society welder qualification tests. It also provides instruction and practice in the preparation, welding and finishing of test specimens to code standards using shielded metal arc welding processes.

COURSE DESCRIPTIONS

**WLD 142 Pipe Welding Lab: Carbon Steel** .....3 credits  
Prerequisite: WLD 121 and WLD 122 or WLD 121, 143 and 154 or WLD 114, 215, 216 or 217 or instructor consent. This is a hands-on course that instructs in set-up procedures and welding techniques required to weld carbon steel pipe in various positions. The code taught will be that of the American Welding Society (AWS). The scope of the course is limited to the practicing of pipe welding techniques. At additional cost, a student may take an AWS pipe welder qualification code test to be arranged with the instructor.

**WLD 143 Wire Drive Welding 1** .....1-4 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Skills development in gas metal arc welding (GMAW) of carbon steel. Students will be instructed in proper care, set-up and use of GMAW equipment. Preparing weld test specimens and performing weld tests is included in this course.

**WLD 151 Fundamentals of Metallurgy** .....1-3 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Physical, chemical and mechanical nature of carbon and alloy steels. Includes study of the purpose and practice of various thermal treatments and cold working processes common to metal using industries.

**WLD 154 Wire Drive Welding 2** .....1-4 credits  
Prerequisite: WLD 143 or instructor consent Technology and application of wire drive processes using gas shielded cored wire.

**WLD 159 Wire Drive Welding 3** .....1-4 credits  
Prerequisite: WLD 143 or instructor consent. Technology and application of the wire drive processes using self shielded cored wire.

**WLD 160 Wire Drive Welding 4** .....1-4 credits  
Prerequisite: WLD 143 and WLD 154. This course provides technical information about, and practice in, Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW) that builds on knowledge and skills learned in Wire Drive Welding 1 and 2. Instruction in material preparation and testing of coupons will also be provided.

**WLD 165 Industrial Welding Practices** .....3 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. This course is designed for the advanced welder who has had limited or no industrial experience. Making quality weldments in typical industrial situations where circumstances are often less than ideal. The student will learn how to weld joints that are difficult to access, not directly visible, have surface contamination, or evolve contaminants in the presence of welding heat.

**WLD 215 Fabrication/Welding 4** .....12 credits  
Prerequisite: Second year standing or instructor consent This course instructs in the skills and technology associated with fabrication of metal products. Welding practice is provided in wire drive, SMAW and GTAW processes. Fabrication skills taught include blueprint reading, metal layout, part preparation and assembly and final finishing. Also studied are concepts in ferrous metallurgy and their applications. Products may be manufactured in the process of learning skills that may be sold.

**WLD 216 Fabrication/Welding 5** .....12 credits  
Prerequisite: Second year standing or instructor consent. This course instructs in the skills and technology associated with fabrication of metal products. Welding practice is provided in wire drive, SMAW and GTAW processes. Fabrication skills taught include blueprint reading, metal layout, part preparation and assembly and final finishing. Also studied are concepts in ferrous and non-ferrous metallurgy and their applications especially pertaining to welding of stainless steel and aluminum alloys. Products may be manufactured in the process of learning skills that may be sold.

**WLD 217 Fabrication/Welding 6** .....12 credits  
Prerequisite: Second year standing or instructor consent. This course instructs in the skills and technology associated with fabrication of metal products. Welding practice is provided in wire drive, SMAW, and GTAW processes. Fabrication skills taught include blueprint reading, metal layout, part preparation and assembly and final finishing. Also studied are concepts in wear analysis and selection and application of wear or corrosion resisting surface treatments. Products may be manufactured in the process of learning skills that may be sold.

**WLD 242 Gas Tungsten Arc Welding 1** .....3 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. This course teaches the technology of, and provides

practice in, gas tungsten arc welding (GTAW) of carbon and stainless steel sheet material. Students will be instructed in proper care, set-up and use of GTAW equipment. Testing of weld coupons is included in this course.

**WLD 256 Gas Tungsten Arc Welding 2** .....3 credits  
Prerequisite: WLD 242 or Instructor consent. This course provides continuing training in the technology and practice of the gas tungsten arc welding (GTAW) of carbon and stainless steel sheet. Testing of weld coupons is included in this course.

**WLD 257 Gas Tungsten Arc Welding 3** .....3 credits  
Prerequisite: WLD 242 and WLD 256. This course provides technical information about, and practice in, gas tungsten arc welding of aluminum alloy sheet materials. Instruction in material preparation, finishing and testing of coupons will also be provided.

**Family Studies - See Human Relations**  
**Film - See Literature, Media Studies**

**Flight**

Also see Aviation Maintenance

For information, contact Flight Technology, Airport Road, 541.463.4195.

**AS 111 The Air Force Today** .....1 credits  
Deals with the Air Force in the contemporary world through a study of the total force structure, strategic offensive and defensive forces, general purpose forces, and aerospace support forces.

**AS 112 The Air Force Today** .....1 credits  
Deals with the Air Force in the contemporary world through a study of the total force structure, strategic offensive and defensive forces, general purpose forces, and aerospace support forces.

**AS 113 The Air Force Today** .....1 credits  
Deals with the Air Force in the contemporary world through a study of the total force structure, strategic offensive and defensive forces, general purpose forces, and aerospace support forces.

**AS 120 Leadership Laboratory** .....1 credits  
Cadets learn officership, leadership, drill and ceremony, and customs and courtesies. Lec/lab. Graded P/N. OTHER PREREQS: Taken concurrently with AS 111, AS 112 and AS 113. Only offered to students enrolled in the AFROTC officer commissioning program.

**AS 211 The Development of Air Power** .....1 credits  
Study of air power from balloons and dirigibles through the jet age; a historical review of air power employment in military and non-military operations in support of national objectives; a study of changes in the nature of military conflict; and a look at the evolution of air power concepts and doctrine. OTHER PREREQS: If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.

**AS 212 The Development of Air Power** .....1 credits  
Study of air power from balloons and dirigibles through the jet age; a historical review of air power employment in military and non-military operations in support of national objectives; a study of changes in the nature of military conflict; and a look at the evolution of air power concepts and doctrine. OTHER PREREQS: If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.

**AS 213 The Development of Air Power** .....1 credits  
Study of air power from balloons and dirigibles through the jet age; a historical review of air power employment in military and non-military operations in support of national objectives; a study of changes in the nature of military conflict; and a look at the evolution of air power concepts and doctrine. OTHER PREREQS: If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.

**AS 220 Leadership Laboratory** .....1 credits  
Cadets are placed in element leadership positions in order to know and comprehend the Air Force concepts of command, discipline, tradition, and courtesies. Lec/lab. Graded P/N. OTHER PREREQS: AS 220 is taken concurrently with AS 211, AS 212, and AS 213. Only offered to students enrolled in the AFROTC officer commissioning program.

**BA 254 General Aviation Management** .....3 credits  
This course will present a detailed examination of general aviation's role in the national economy, regional economy and local economy. The course will cover the most effective uses and management of



general aviation resources. It will stress the role of the fixed base operator, and the importance of the interview in the hiring process.

**FT 101 Exploring Aviation Careers**.....1 credits

This course is designed to provide a hands-on opportunity for the participants in multiple major career specialties in the air transportation industry. This course includes 3 hours of dual flight instruction recorded as official logged flight time. Classroom instruction with labs including experience as a pilot, aviation maintenance technician, avionics technician, air traffic controller, airport management and briefings with the TSA. Students will work on projects and schedule job shadows.

**FT 102 General Aviation Careers** .....1 credits

A survey of general aviation career areas, both flying and non-flying, as presented by a variety of guest speakers from the aviation industry. Class attendance is mandatory for credit; this is not a graded course.

**FT 103 Aircraft Development**.....4 credits

Prerequisite: Testing: minimum reading score of 68. A survey course developing the evolution of the aviation industry. This course develops the interdependence of developing technology, materials sciences, political influences and economics. The student will exit this course understanding how these factors have driven the state of the industry today and projections for the future.

**FT 113 Aviation Science** .....4 credits

A foundational course developing applicable principles in the fields of physics, chemistry and mechanics. These principles are developed to an applications level to support an understanding of how major aircraft systems operate.

**FT 115 Aircraft Structures and Systems** .....3 credits

Designed to give a pilot a thorough understanding of airplane systems and structural design.

**FT 130 Primary Flight Briefing** .....3 credits

Prerequisite: Testing: minimum reading score of 68. This course will help students to master key areas of aeronautical knowledge necessary to progress efficiently toward the Private Pilot Certificate.

**FT 228 Multiengine Ground School** .....2 credits

Recommend possession of FAA private pilot license. A two part multi-engine course: Part 1 develops the understanding of multi-engine airplane systems and basics of multi-engine airplane flight operations including emergency procedures. Part 2 develops advanced multi-engine airplane systems and operation. Multi-engine airplane operational procedures training including both normal and emergency procedures skills development.

**FT 239 Professional Pilot Flight Lab**.....1-7 credits

Prerequisites: Admission to the Flight Technology program. The Professional Pilot Course is designed to prepare applicants for their careers as professional pilots in the air transportation industry. The Professional Pilot Course includes certification training for Private Pilot, Commercial/Instrument Pilot in single-engine and multi-engine airplanes. Professional Pilot students may be prepared to become qualified as flight instructors with ratings so they may provide instrument instruction and multi-engine airplane instruction. The Professional Pilot Course is a comprehensive course of study including preparation that will meet Airline Transport Pilot (ATP) proficiency. Emphasis throughout the Professional Pilot Course is placed on instrument piloting skills and the use of conventional and advanced navigation systems including GPS and digital/electronic display technology. This course is repeatable.

**FT 249 Flight 10** .....1-3 credits

This course will present the principles of attitude instrument flying using a simulator. The course will cover all instrument procedures used under instrument flight conditions.

**FT 250 Private Pilot Ground School** .....5 credits

This course introduces and develops each knowledge and skill areas essential for successful completion of the FAA written examination for a Private Pilot Airplane. Topics include FARs, airplane structures, aerodynamics, meteorology, navigation, accessing and using performance data and numerous other industry information resources.

**FT 251 Commercial Pilot Ground School**.....5 credits

Recommend private pilot license or equivalent. This course develops the knowledge and skills required for a candidate to successfully complete and pass the FAA written test required to be certificated as a commercial pilot.

**FT 252 Instrument Ground School**.....5 credits

Recommend completion of Commercial Pilot Ground School FT 251. This course prepares the student for successful completion of the FAA written examination required for an Instrument rating. The course develops an understanding of the IFR environment, systems and procedures.

**FT 254 Aerodynamics**.....3 credits

An analysis of the physics of flight; the characteristics of high-speed and low-speed flight and the effects of pressure, altitude, weight, center of gravity, and airfoil design on aircraft performance.

**FT 255 Fundamentals and Flight Instructor-Instrument Ground School** .....3 credits

Recommend current passing score on FAA commercial pilot and instrument pilot knowledge exam or possession of valid commercial or ATP pilot certificate. A survey of psychological principles relating to the human learning process, plus a concise review of federal regulations, radio navigation, and principles of meteorology appropriate to IFR flight operations in the United States.

**FT 256 Flight Instructor-Airplane Ground School**.....3 credits

Recommend participants be the holder of a FAA Commercial Pilot certificate with an Instrument rating, or an ATP certificate. This course develops details of airplane flight operations and maneuvers analysis; FAA regulations and recommended procedures for flight instruction. Detailed analysis of reference documents and resources for flight instructors. Upon completion of this course, participants will be prepared for the FAA Flight Instructor written examination.

**FT 280 Co-op Ed: Flight Tech** .....3-12 credits

This course provides the student with flight-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**GS 109 Meteorology** .....5 credits

This course is a survey of the field of meteorology with detailed emphasis on the elements specific to the aviation industry. Students exit this course understanding how to access, analyze and use weather data to make decisions essential for safe flight.

<b>Foreign Languages - See Language Studies</b>
<b>French - See Language Studies</b>
<b>General Science - See Chemistry, Earth and Environmental Science, Physics</b>

**Geography**

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

**GEOG 141 Natural Environment** .....4 credits

This course is designed to introduce and analyze natural processes and the impacts of human/cultural activities operating in our environment. Dynamic processes create and alter landforms, climatic patterns, and biotic regional differences on the earth's surface. Understanding the causes and results of global climate change as it impacts future geographies is a fundamental theme in this course. Analysis of natural processes with added human impacts will introduce the student to scientific methodologies, using graphs, models and mapping techniques. This course is strongly recommended as a prerequisite for ENV5 184, Global Climate Change. This course meets the AAOT science or social science requirement.

**GEOG 142 Introduction to Human Geography** .....4 credits

This course is an introduction to human geography patterns and concepts that help explain the spatial distribution for contemporary cultures. Concepts of region, movement of cultural ideas, and human interaction with their natural and built environment are stressed. Globalizations and changes in cultures resulting from environmental alterations will be presented. Changing cultural patterns will be explored and analyzed using maps, videos, and in-class exercises. This course fulfills the race, gender, and ethnicity requirement. May be offered through Distance Learning.

**GEOG 201 World Regional Geography** .....3 credits  
 An introduction to major culture regions of the world through the study of human patterns and the natural environments. Cultures, resources, and historical contexts illuminate the world's distinctive regional nature. An emphasis is placed on development within the context of globalization. GEOG141 or GEOG142 is recommended prior to this class.

**GEOG 280 Co-op Ed: Geography** .....2-12 credits  
 This course provides the student with geography-related work experience in community businesses and organizations. Students will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals while earning transferable college credit.

**GEOG 298 Independent Study:** .....1-3 credits  
 A variable credit course based on independent study contracted between an instructor and a student.

**GIS 245 Maps and Spatial Information** .....4 credits  
 Prerequisites: Math 60 or Consent of instructor. This course will provide an introduction to the cartographic principles needed to understand Geographic Information Science. The course will explore global reference and coordinate systems, maps and generalization, types of maps: reference, thematic, topographic, aerial photography, and GIS. During the course, students will be introduced to ArcMap. It is assumed that students have no prior knowledge about GIS. This course serves as a foundation course in the GIS sequence. The course assumes participants have taken CIS 101 Computer Fundamentals, or CS 120 Concepts of Computing, or have an equivalent understanding of basic computer literacy concepts, and have experience as a user of the Windows operating system and applications software. Access to a current computer outside of class (new within last 4 years) is strongly recommended.

**GIS 246 Introduction to GIS** .....4 credits  
 Prerequisites: Math 65 & GIS 245, or Consent of instructor  
 Information Analysis and Visualization is highly recommended but not required. This course is the second in a series of Geographic Information Science courses and will focus on the development of skills and techniques used to create, analyze, and display spatial data in a geographic information system. The following skills and techniques will be emphasized: data management, map digitizing, and map editing. The course assumes participants have taken CIS 101 Computer Fundamentals, or CS 120 Concepts of Computing, or have an equivalent understanding of basic computer literacy concepts, and have experience as a user of the Windows operating system and applications software. Access to a current computer outside of class (new within last 4 years) is strongly recommended.

**GIS 248 Applications in GIS** .....4 credits  
 Prerequisite: GIS 246 or consent of the instructor. This course will provide advanced experience in Geographic Information Science (GIS) concepts and applications. The course builds on the experience and knowledge gained in GIS 245 (Maps and Spatial Information), GIS 246 (Introduction to GIS) and CIS 247 (Information Analysis and Visualization). Students will gain practical experience by performing a number of GIS tasks such as: database management, cartographic design, document conversion, analysis and workforce training. Experience will be gained via real-world, applied, capstone projects.

**GIS 251 GIS for Water Technicians** .....2 credits  
 Prerequisite: GIS 245 This course will develop the student's abilities to collect, organize, display, and analyze temporal and spatial data with particular emphasis on water conservation. Students will improve their understanding of applied water conservation using problem based learning utilizing GIS and GPS technology. This course of workforce skills is a required component of the Water Conservation Technician Program (specifically) and would be beneficial to other students working in the water resource and geospatial industries.

**GIS 252 GIS Water Resources** .....2 credits  
 Prerequisite: GIS 245 This course introduces the major concepts of water resources and develops student's ability to incorporate Geographic Information Science (GIS) into problem solving. Students will learn how to utilize GIS as a tool for both data management and analysis based on real world examples in water resources. This course builds on the concepts developed in GIS 251 and GIS 245.

**GIS 280 Co-op Ed: Geographic Information System** .....3-12 credits  
 Cooperative Education (Co-op) is a field experience opportunity for students who have successfully completed GIS 245, GIS 246 and GIS 248. Students will gain practical workforce experience in the field of geospatial technology while exploring career opportunities. Contact Lynn Songer, GIS instructor and Co-op Coordinator: songerl@laecc.edu, 541.463.5493.

**GIS 298 Independent Study:** .....1-4 credits  
 A variable credit course based on independent study contracted between an instructor and a student.

**Geology - See Earth and Environmental Science**

**Graphic Design**

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, 541.463.5409.

**ART 115GD Basic Design: Fundamentals for Graphic Designers** .....4 credits  
 Beginning course in two-dimensional design covering fundamental visual elements, concepts and principles. Emphasis will be placed on how those fundamentals apply to graphic design and will include career information. Course work includes necessary competencies for the Graphic Design program.

**ART 119 Typography 1** .....3 credits  
 Prerequisite: ART 115 or ART 131. This course explores the use and design of letterforms and typographic design. Basic typographic history and classification of typefaces will be covered. Essential craftsmanship and technical skills will be stressed. Coursework includes necessary competencies for the Graphic Design program.

**ART 199AB Special Studies:** .....4 credits  
 See department for topics.

**ART 200 Graphic Design History** .....3 credits  
 A team-taught interdisciplinary approach to graphic design history and its relationship to traditional art. Students will examine the chronology and development of graphic design within a social context, through an exploration of styles, movements, and individual careers. Emphasis is on mid-19th century design to the present. Open to all students, required for graphic design majors.

**ART 216 Digital Design Tools** .....4 credits  
 An introduction to core layout, vector, bitmap, and document-sharing software used in graphic design. Coursework includes necessary competencies for the graphic design program.

**ART 218 Printing Technology** .....2 credits  
 Prerequisite: Acceptance into the second year of the graphic design program. Co-requisite: ART 227. This course introduces graphic design students to printing technology, including pre-press, press, finishing processes, proofing, papers and inks. Coursework includes necessary competencies for the graphic design program.

**ART 221 Graphic Design 1** .....4 credits  
 Prerequisite: ART 115, ART 116, ART 119. An introduction to design, layout, typography, and the design process from concept to mockup. Coursework includes necessary competencies for the Graphic Design program.

**ART 222 Graphic Design 2** .....4 credits  
 Prerequisite: ART 221. An exploration of typical print design problems with an emphasis on layout strategy, and concept. Coursework includes necessary competencies for the Graphic Design program.

**ART 223 Graphic Design 3** .....4 credits  
 Prerequisite: ART 222. Exploration of advanced graphic design problems as well as portfolio preparation. Students are exposed to a number of professional and business issues in the field of graphic design. Coursework includes necessary competencies for the Graphic Design program.

**ART 225 Digital Illustration** .....3 credits  
 Prerequisite: ART 216. This course is designed to give students experience in using vector software to create technical and creative

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

illustrations. Coursework includes necessary competencies for the Graphic Design program.

**ART 227 Graphic Design Production 1** .....3 credits  
Prerequisite: Art 216. Co-requisite: ART 218 and acceptance into the second year of the graphic design program. An introduction to digital prepress production with emphasis on page layout software and professional standards of production. Coursework includes necessary competencies for the graphic design program.

**ART 228 Graphic Design Production 2** .....4 credits  
Prerequisites: Art 227, Art 218, MUL 212, ART 225 An intermediate course in digital prepress production. Coursework includes necessary competencies for the graphic design program.

**ART 229 Graphic Design Production 3** .....4 credits  
Prerequisites: ART 228, Art 218, Mul 212, ART 225. An advanced course in digital production in which students produce projects in a studio setting under professional conditions and standards.

**ART 237 Illustration 1** .....3 credits  
Prerequisite: ART 131. This course provides an introduction to the field of illustration with emphasis on solving illustration problems and developing a personal style. Most of the assignments will concentrate on black and white illustration techniques.

**ART 280GD Co-op Ed: Graphic Design** .....3-12 credits  
This course provides the student on-the-job experience in professional graphic design sites in the community. The student will have the opportunity to integrate theory and practice gleaned from the classroom with the practical experience of the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree. The Graphic Design Program requires a minimum of six credits of cooperative education. Please contact graphic design cooperative education coordinator as soon as possible after registering.

**ART 289 Web Production** .....3 credits  
Prerequisite: CIS 125H and ART 216 or MUL 212. Intermediate web development course emphasizing production using web authoring software Adobe Dreamweaver. Topics include site building and management, GUI customization, typography, CSS and integration of multimedia.

**ART 290 Design Concepts for the Web** .....3 credits  
Prerequisite: ART 216 or MUL 212, and ART 289. An intermediate study of web site design with an emphasis on informational architecture including strategy, planning, usability, and design of integrated web sites.

**GD 110 Introduction to Graphic Design** .....1 credits  
This course presents information about the career of graphic design including job opportunities, the design process, required skills, education, and work conditions. Coursework includes necessary competencies for graduation from the Graphic Design program.

**Health and First Aid**

For information, contact Health and PE, Bldg. 5/Rm. 205, 541.463.5545.

**HE 125 Workplace Health and Safety** .....3 credits  
This class is designed to increase awareness and practical knowledge of occupational and environmental health and safety. Students will explore the connections between psychological health, personal behaviors, attitudes and the accidents and illnesses that occur in the workplace. Topics will include but not be limited to: injury and illness prevention, teambuilding, behavior based psychology, emotional intelligence, workplace morale and wellness, hazard types and identification, consequences and prevention of environmental exposures, OSHA safety regulations and the principles of behavior change.

**HE 152 Drugs, Society and Behavior** .....3 credits  
Overview of current information concerning the impact of drugs on both society and personal behavior. Students will learn how drugs affect the human body and will examine a variety of issues related to drug use and abuse. Topics include, but are not limited to: pharmacology, stimulants, depressants, opiates, inhalants, and psychedelics, as well as drug history and drug control issues.

**HE 199 Special Studies:** .....3 credits  
Wilderness First Aid will cover fundamental first aid care and emergency procedures in an outdoor environment. Techniques of handling the sick and injured in a more remote location will be

included. Students will study and practice skills related care for airway obstruction, rescue breathing, child and adult CPR, shock, poisoning, temperature related conditions, altitude sickness, sudden illness, bites, stings, musculoskeletal injuries, including strains, sprains, dislocations and fractures, bleeding and wound management, internal injuries and patient transportation skills.

**HE 209 Human Sexuality** .....3 credits  
The Human Sexuality course increases knowledge and awareness of current sexual health issues in order to assist students in making informed, responsible decisions. We will explore and discuss physiological, psychological and sociological forces that contribute to the development and expression of sexuality. Topics discussed include: sexual anatomy and health; sexual development; sexual and gender identity; sexually transmitted diseases; sexual arousal and behavior; communication skills for healthy relationships; fertility management; conception, pregnancy and childbirth; sexual dysfunctions; sexual coercion; and sustainability and consumer awareness related to sexual health. May be offered through Distance Learning.

**HE 222 Consumer Health** .....3 credits  
This course is designed to provide students with the ability to obtain, understand and process basic health information and services needed to make informed decisions as a health consumer. Topics will include, but not be limited to: Health Conditions & Diseases, Self-Care (i.e., dental care, skin care, womens & mens health issues, drugs, fitness, food choices, weight/fat control), Advertising & Quackery, Alternative Health Methods, Health Care Facilities & Health Insurance, Death & Dying, Health Care Economics, and Consumer Laws and Agencies.

**HE 240 Holistic Health** .....3 credits  
This course explores the expanding field of holistic health therapies. Students will examine how holistic health therapies approach important public health issues, such as stress, poor nutrition, inactivity, and environmental degradation, with the goal of learning how to achieve a higher level of wellness. Students will gain a basic understanding of how complementary and alternative medicine (CAM) contrasts with conventional Western (allopathic) medicine, and how they can be used concurrently. This course will also address the validity of holistic approaches to help students make informed health care choices. A wide range of therapies, including nutritional medicine, mind-body medicine, naturopathic medicine, and acupuncture, are reviewed.

**HE 250 Personal Health** .....3 credits  
The Personal Health course provides an overview of various health topics in order to encourage each individual-is responsibility for their own health. The influences of family, community and society on health behavior are discussed. Students will develop behavior change strategies; perform self-assessments and identify personal risk factors for disease. Topics discussed include: communicable and chronic diseases; psychological and intellectual health; spirituality; addictive behaviors; coping with stress; sexual health issues; consumer awareness; and sustainability related to personal health. This course may be offered through Distance Learning.

**HE 251 Wilderness First Aid** .....3 credits  
Wilderness First Aid includes fundamental first aid care and emergency procedures in an outdoor environment. The class includes techniques of assessing and handling the sick and injured in a remote location. Students study and practice skills related to assessment of an injured or ill vicim, cardiac and breathing emergencies for children and adults, bleeding emergencies, shock, musculoskeletal injuries including spinal injuries, poisoning, heat and cold related illness, altitude sickness and other environmentally caused illnesses or injuries, sudden illness, internal injuries, transportation methods and improvisation skills related to all of the above areas.

**HE 252 First Aid** .....3 credits  
This course focuses on emergency first aid response, assessment, care and prevention. Students will study and practice life-saving skills related to airway obstruction, rescue breathing, adult, child and infant CPR, shock, soft tissue and musculoskeletal injuries, sudden illnesses such as poisoning, bites/stings, seizures, heat and cold emergencies, diabetes and emergency childbirth. Other topics include but are not limited to; delayed help situations, moving and transport of victims, working with special needs populations, care and prevention of cardiovascular disease including stroke and other circulatory and respiratory conditions with an emphasis on creating healthy lifestyles. Meets American Red Cross, National Safety



Council, and OSHA standards for responding to emergencies and CPR and First Aid certification. Students will also receive exposure to automated external defibrillators.

**HE 255 Global Health and Sustainability** .....4 credits  
 This course will increase student's knowledge and awareness of global sustainability and the health consequences related to; poverty, social status and global economic systems. Students will explore the interconnected global issues of: consumerism, industrial globalization, maternal and child health, violence, hunger, emerging infectious disease, environmental toxins and pollution, organic and conventional agricultural practices, alternative media resources, social marketing, fair trade, biodiversity and ecosystems services, population, environmental racism and the impacts of economic, political, and social constructs on the health of our communities and planet.

**HE 261 Cardiopulmonary Resuscitation** .....1 credits  
 Principles and procedures to provide basic life support to victims of airway obstruction, respiratory and cardiac distress and or arrest. Meets National Safety Council and OSHA and American Red Cross standards for certification of adult, child and infant CPR. Students will receive Community CPR and AED certification, adult, child and Infant.

**HE 275 Lifetime Health and Fitness** .....3 credits  
 The Lifetime Health and Fitness course increases knowledge of current health and fitness issues and discusses their influence on achieving optimal health. The focus is on promoting physical activity and positive health behaviors throughout the lifespan. Topics discussed include: cardiorespiratory function; muscular strength and endurance; flexibility; nutrition; body composition and weight management; stress management; prevention and management of chronic diseases; and consumer awareness and sustainability related to health and fitness. May be offered through Distance Learning.

**HE 280 Co-op Ed: Health Occupations** .....3-12 credits  
 The purpose of this course is to provide students meaningful learning experiences related to the field of health occupations. This course allows the student the opportunity to earn college credit while working in the health care community under supervision. The field experience is planned to have a direct relationship to the student's classroom work so that each contributes to the student's education and future employability.

**PE 280H Co-op Ed: Community Health** .....1-12 credits  
 Prerequisite: Instructor approval. This course provides an opportunity for supervised work experiences in a community health work site. Students may gain knowledge, develop skills, and explore career options while earning credit toward a degree or certificate. Work sites may be paid or non-paid. Note: For students who are not currently enrolled in the Exercise and Movement Science Program, there is an enrollment minimum of 3 credits for this course.

**Health Occupations - See Dental Assisting, Dental Hygiene, Emergency Medical/Paramedic, Health Records, Physical Therapy Assistant, Nursing, Respiratory Care**

**Health Records**

For information, contact Health Professions, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Health Records program to take some these classes.

**EL 115H Effective Learning: Health Science Majors** .....3 credits  
 This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

**HIT 104 Clinical Terminology** .....3 credits  
 An opportunity to learn terminology used in a medical setting such as names of clinical instruments, surgical procedures, laboratory tests and pharmacology. Particularly for those interested in health careers, but open to anyone.

**HIT 120 Introduction to Health Records** .....1 credits  
 This course is designed to introduce the Health Records student to the career opportunities in health information management, work settings, basics of the patient record, and basics of the healthcare delivery system. Students will learn about the Health Insurance

Portability and Accountability Act (HIPAA). Important guidelines for building a resume and portfolio.

**HIT 154 Introduction to Medical Science** .....3 credits  
 Prerequisites: Successful completion of Human Body Systems 1 (HO150) and Human Body Systems 2 (HO152); or instructor consent. Provides an overview of human disease in terms of general vocabulary, overall frequency and significance of disease, and diagnostic approach including laboratory resources. Course covers basic pathologic processes; diseases of organs and organ systems; discussion of some multisystem diseases and disease processes.

**HIT 160 Medical Manager** .....3 credits  
 Prerequisites: Admission to the Medical Office Assistant or Health Records Technology Program. Introduces medical practice management software. Students learn to create/maintain patient files, make appointments, store treatment information, match CPT and diagnosis codes with treatment procedures and charges, create and follow insurance claims for collection of payments from Medicare, Medicaid, private insurance and other reimbursement organizations. Introduces medical practice management software.

**HIT 196 Medical Transcription 2** .....2 credits  
 Prerequisites: Medical Transcription 1 HO 195, consent of instructor. Come to the first class to be released to register. Continuation of Medical Transcription 1 HO 195 with higher standards for accuracy, neatness, terminology usage, spelling, etc.

**HIT 197 Medical Transcription Laboratory** .....1-3 credits  
 Prerequisites: Medical Transcription 2 HIT 196, consent of instructor. Come to the first class to be released to register. This course is designed to give the student actual medical transcription practice using authentic digital technology dictated by physicians in various specialties

**HIT 222 Reimbursement Methodologies** .....3 credits  
 Prerequisites: Medical Insurance Procedures HO 112, Medical Coding Procedures HO 114, or instructor consent. The study of coded data and health information in reimbursement and payment systems appropriate to all health care settings. Emphasis on ability to identify correct codes and appropriate documentation in order to obtain maximum reimbursement. Technologic advances in claims submission and coding will be included.

**HIT 280 Co-op Ed: Health Records** .....3-12 credits  
 Prerequisites: Admission to the Health Records Technology Program, SUCCESSFUL COMPLETION OF FALL AND WINTER TERM HELATH RECORDS TECHNOLOGY COURSES. Instructor consent required. The purpose of this course is to provide students meaningful learning experiences related to the field of health records. This course allows students the opportunity to earn college credit while working in the health care community under supervision. Students will set specific goals and evaluate their progress at the end of the term.

**HIT 298 Independent Study** .....1-3 credits  
 Requires Instructor Consent See the program coordinator for topics.

**HO 100 Medical Terminology 1** .....3 credits  
 Due to high demand, a student may register for this course only one time per academic year. A programmed course covering medical terminology, derivation, pronunciation and meaning. May be offered through Distance Learning.

**HO 101 Introduction to Health Occupations** .....2 credits  
 This course explores the health care system and a variety of health careers. It includes an overview of the health care delivery system, historical background, holistic health and cultural competencies. In addition, it explores educational requirements, employability skills and demands, ethical, legal and safety standards, salary ranges and future job prospects for a variety of health careers. The course concludes with a comparison of all of the careers introduced in terms of their future viability and appropriateness for each student. May be offered through Distance Learning.

**HO 102 Diversity Issues in Healthcare** .....3 credits  
 This course explores the influence of membership in ethnic,

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

religious, age, class and gender groupings on communication in health care settings on both the health care provider and the receiver of health care. Utilizing both theory and personal experience, students will identify personal attitudes and behaviors and gain experience in using effective methods of communicating with individuals from backgrounds represented in both patient and health care provider populations. May be offered through Distance Learning.

**HO 103 Health Literacy and Communication** .....3 credits  
 This course is designed to introduce the issue of health literacy and explore the links between health literacy, health outcomes and health care disparities. Students will gain a foundational understanding of health literacy by defining and identifying the factors that influence health literacy and exploring health communication expectations, examine varying levels of literacy, learn how to identify these levels and practically approach the differing needs of those at each level of literacy. This will also include learning how health literacy and communication impacts the health care system, populations at risk, cultural competence and communication, the responsibility to increase health literacy and identify resources and tools available to improve health related communication and improve health outcomes. Course may be offered through Distance Learning.

**HO 110 Administrative Medical Office Procedures**.....3 credits  
 Principles of filing and records management specifically for the medical facility. Legal and ethical concerns of confidentiality & privacy. Fundamentals of client reception, appointment scheduling, telephone techniques, and letter composition.

**HO 112 Medical Insurance Procedures** .....3 credits  
 Prerequisite: HO 110. Completion of MTH 025 is strongly recommended but not required. Medical reimbursement management for private health and accident insurance, Medicare, Medicaid, Workers' Compensation. Abstracting information from health records for billing and transfer forms. Introduction to the use of CPT-4 and ICD-9-CM coding. This course includes computation component. Introduction to the CMS 1500 FORMS.

**HO 114 Medical Coding Procedures**.....3 credits  
 Prerequisites: HO 100, Corequisites: HO 150, HO 112; or instructor consent. A course for anyone involved in health care delivery, particularly dealing with insurance and/or Medicare and government regulations. Basics of ICD-9-CM and CPT-4 including abstracting health records and assigning code numbers to diagnoses and procedures for indexing health data and processing reimbursement claims.

**HO 150 Human Body Systems 1** .....3 credits  
 Prerequisite or corequisite: HO 100. Designed to help the student identify selected fundamental concepts of the anatomy and physiology of the cell and skin, musculoskeletal, nervous, sensory, endocrine, and circulatory-lymphatic systems.

**HO 152 Human Body Systems 2** .....3 credits  
 Prerequisites: Human Body Systems 1 HO 150. Designed to help the student identify selected fundamental concepts of the anatomy and physiology of the respiratory, digestive, urinary, and reproductive systems. A basic introduction to microbiology is included.

**HO 190 Medical Formatting** .....3 credits  
 A course designed to increase keyboarding skills including proofreading, spelling, English grammar, punctuation, medical terminology, and ability to format medical reports and correspondence in proper manner utilizing all of the above. Prior completion of HO100 is required.

**HO 195 Medical Transcription 1** .....2 credits  
 Prerequisite: HO 100, keyboard 45 wpm, knowledge of MS Word, instructor consent. Come to the first class to be released to register. This course is designed to introduce the student to machine transcription of medical dictation with particular emphasis on accuracy and correct usage of medical terminology and English grammar. Correct spelling will also be emphasized.

**HO 220 Legal and Ethical Aspects of Healthcare** .....3 credits  
 Prerequisite: Admission to the Medical Office Assistant program, Health Record Technology program, or instructor consent. An overview of the United States legal system. A study of the principles of law and ethics as applied to the healthcare field with particular reference to all phases of medical records management and medical assisting.

**MA 110 Clinical Assistant 1** .....3 credits  
 Prerequisite: Admission to the Medical Office Assistant program, previous completion of or concurrent enrollment in all fall term Medical Office Assistant courses, or instructor consent. Introduction to clinical assisting in the ambulatory care setting. Includes learning aseptic technique, sterilization of instruments, exam room techniques, vital signs, taking a patient history, proper handling of patient medical record and documentation requirements.

**MA 130 Clinical Assistant 3**.....3 credits  
 Prerequisites: Successful completion of MA 120, MA 150, HO 110, HO 152, HO 112 and HO 220. Continuation of Clinical Assistant 2 MA 120. This course includes ordering and scheduling diagnostic testing per doctor's instructions, instructing patients with special needs, and dealing with office emergencies.

**MA 150 Laboratory Orientation**.....3 credits  
 Prerequisites: Admission to the Medical Office Assistant program, successful completion of MA 110, MTH 052 and HO 150 with a grade of C- or better plus consent of instructor. Study of various office laboratory procedures and, in most instances, how to do them; hematology, urinalysis, immunology and phlebotomy.

**History**

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

**HST 101 History of Western Civilization** .....4 credits  
 A survey of the historical development of the early Western world, peoples, and societies that have influenced it including the Greeks, the Jewish, the Romans, and Christians, the Germanic and Islamic influences in the wake of the fall of Rome, and the early Renaissance. This course will provide an overview of diverse peoples and nationalities, the creation of and changes in religious systems, ideas, social structures, and political institutions while considering connections to our modern world. May be taken out of sequence.

**HST 102 History of Western Civilization** .....4 credits  
 A survey of the historical development of the Western world over a period of several hundred years including the Italian Renaissance, expansion to and colonization of the western hemisphere, the Reformation era, the Enlightenment and Scientific Revolution, early Industrial Revolution, finishing with the French Revolution. This course will provide an overview of diverse peoples, nationalities, creation of, and changes in religious/value systems, scientific theories, social structures, economies, and political thought and institutions. Main themes of Western societies will be synthesized and considered in light of our modern world. May be taken out of sequence.

**HST 103 History of Western Civilization** .....4 credits  
 A survey of the historical development of the Western world from approximately 1800 to the late twentieth century, including industrialization and labor, social movements, mid 19th-century political revolutions, imperialism, ideologies and politics of the 19th and 20th-century, the world wars and decolonization, Cold War, and popular culture. This course will provide an overview of diverse peoples, nationalities, and cultures while putting them in the context of changing social, political, economic conditions and values. These concepts, events, and people will guide our understanding of the present world. May be taken out of sequence.

**HST 104 World History** .....4 credits  
 World History is the story of peoples on a global stage. This course will look at the origin and diffusion of civilizations in the ancient world including Asia, Africa, Middle East and Mediterranean, Europe and the Americas. Themes and topics will include world religions, early empires, communication, interaction and exchange. These survey courses will use the global approach, which focuses on the big picture and looks at the convergence of peoples across the earth's surface into an integrated world system begun in early times and intensified after the rise of capitalism in the early modern era. All of the courses will consider the connections of select topics and concepts to the shaping of our present world. May be taken out of sequence. Class is offered through Distance Learning with videos available online, library checkout, and through television broadcast.

**HST 105 World History** .....4 credits  
 A survey of the "global village" and the diverse peoples during the emergence of new world patterns beginning in approximately 1400

COURSE DESCRIPTIONS

to 1815 including topics of exploration and expansion, state building, religions and their impact on culture, war, politics, selected individuals, global trade and consequences. May be taken out of sequence. May be offered through Distance Learning.

**HST 106 World History** .....4 credits  
A survey of the modern patterns of world history from approximately 1800 to late 20th-century including topics of industrialization and nationalism, mass society, imperialism, Communism, war and revolution, the Cold War, nation-building in Latin America, Africa and the Middle East. Select individuals and events will be examined in historical context to guide understanding of present thought and conditions in our "global village". May be taken out of sequence. May be offered through Distance Learning.

**HST 195 History of the Vietnam War** .....4 credits  
This course examines the Twentieth-century conflict in South East Asia, and is designed to help students grasp the political, social, and economic realities of the Vietnam War, as it progressed in both South East Asia and the United States. This course includes rare documentary film footage and archival photographic material of soldiers and civilians, as well as those political figures that were central to the development and outcome of this struggle. History 195 is not a military history course, but a course designed to shed light on the reasons for Western involvement and the factors behind the failure of Western military and political policies. Offered through Distance Learning as an online class only.

**HST 199 Special Studies:** .....3 credits  
See department for topics.

**HST 201 History of the United States**.....4 credits  
Survey of United States history focusing on the creation and development of the country socially, economically, politically, and culturally. Native America, European colonization, colonial development, origins of slavery, Revolution, early Republic. May be taken out of sequence. May be offered through Distance Learning.

**HST 202 History of the United States** .....4 credits  
Survey of United States history focusing on the development of the country socially, economically, politically, and culturally. Jacksonian era, expansion, commercial and industrial revolution, slavery, Civil War, Reconstruction, Gilded Age, Populism. May be taken out of sequence. May be taken through Distance Learning

**HST 203 History of the United States** .....4 credits  
Survey of United States history focusing on the creation and development of the country socially, economically, politically, and culturally. Imperialism, Progressivism, modernity, the 1920s, Depression and New Deal, World Wars and Cold War, 1960s, 1970s and recent developments. May be taken out of sequence. May be offered through Distance Learning.

**HST 207 History of the American West**.....3 credits  
A survey course of the trans-Mississippian West covering social, political, intellectual, and environmental history. The course will include the study of this region of America and its peoples, from indigenous times into the 20th century. Some emphasis will be placed on contrasting the "mythical" West from historical facts, by involving the image of the West itself in movies, novels, music, and American folklore.

**HST 208 US History Since 1945** .....4 credits  
A survey of American history and culture since the Second World War. Some of the issues and people looked at are: the use of atomic weapons; the Marshall Plan; the Korean War; African-Americans' struggle for civil rights; Vietnam; post-War immigration; multiculturalism; the Cold War; the changing role of women in American society; and the politics and Presidents of the era.

**HST 209 American History: The Civil War** .....4 credits  
The Civil War course is based in part on the award-winning documentary film series of the same name. Its subject matter is the history of the U.S. Civil War and it is designed to help students grasp the political, social, and economic realities of the conflict as it progressed in both the North and South, the problems of the Northern and Southern governments during the war, the major military campaigns of the war, and the impact of the war upon the civilian population. The relationship of North and South to each other, as well as to the political and economic life of the nation were very different after this conflict than they had been before. May be offered through Distance Learning.

**HST 266 US Women's History**.....4 credits  
This course explores the distinctive experiences of women in the United States from its earliest period to current time. The course will follow a chronological framework with a focus on themes and topics such as Native American women, women and witchcraft, slavery, women's rights movement, women and work, women and war, the 'feminine mystique,' and personal politics. The coursework will also include implications of race, class, and ethnic differences among women over time.

**HST 280 Co-op Ed: History**.....2-12 credits  
This course provides the student with history-related work experience in community organizations. Students will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options, and network with professionals and employers while earning college credit.

**HST 298 Independent Study**.....1-4 credits  
See department for topics.

**Hospitality - See Culinary Arts and Hospitality Management**

**Human Relations**

For information, contact the Counseling Department, Bldg. 1/103, 541.463.5299.

**CG 101 Native Circles: It's Your Life** .....3 credits  
This class introduces students to Lane resources and the Native community of Lane County. Students use traditional Native methods to set and achieve goals and assess skills. They explore how to keep their identities yet benefit from educational or other institutions. They examine the impact of class differences and race on personal success. They form networks of support and community.

**CG 144 Introduction to Assertive Behavior**.....1-3 credits  
Class is designed to assist students in developing self-management skills. Training will focus on areas of work and school settings, social and family situations, close interpersonal relationships, and consumer situations. Assertiveness skills are taught in a two-stage process, first defining assertive behavior, including pinpointing and describing assertive and non-assertive behaviors; and second, learning how to behave assertively. Includes deciding when to be assertive and practicing these new behaviors.

**CG 145 Coping Skills for Stress and Depression** .....1-3 credits  
This course presents the theory and practice of managing stress and depression. Topics include recognizing, managing, and modifying causes of stress, altering individual perception of stressful events, and modifying the stress response. The symptoms, causes, and forms of depression will be described, including methods of treating depression. The topic of stress will be covered in more detail than depression. This course provides an educational approach to managing stress and depression.

**CG 203 Human Relations at Work**.....1-3 credits  
This course presents the interpersonal 'people skills' that are important in the modern workplace. Topics include communicating effectively, assertive behavior, teamwork, conflict resolution, and work ethics. Students will gain awareness of their individual work styles and how to work effectively with people with different styles in a diverse workplace. Specific techniques for coping with job stress, and managing anger in the workplace also will be emphasized. Class activities and assignments will stress practical application of skills. Course content is applicable in other settings such as family, social, and school.

**CG 204 Eliminating Self-Defeating Behavior** .....1-3 credits  
This class is intended for persons who have a recurring behavior, feeling, or thought which is negatively affecting their quality of life and which they wish to eliminate. For the purpose of this class, a self-defeating behavior can be an active behavior, such as smoking or negative self-talk, or a passive behavior like not making decisions or not doing other desired activities.

**CG 211 Dreikursian Principles of Child Guidance 1** .....1-3 credits  
Students examine the Adlerian/Dreikursian point of view for improving relationships with elementary-school-age and younger children who are experiencing social and emotional difficulties. Students view family counseling sessions in a counseling center setting, examine dynamics of relationships, and understand the application of principles and skills for improving relationships



between parents and children. Students use ideas offered in the course in the context of their own life situations.

**CG 212 Dreikursian Principles of Child Guidance 2** .....1-3 credits  
Students engage in specialized study from the Adlerian/Dreikursian point of view. Focus is on understanding in-depth ways of facilitating positive relationships of adults and children. Students view family counseling sessions in a counseling center setting and engage in weekly reading, discussions, and experiences.

**CG 213 Improving Parent Child Relations** .....3 credits  
Real life in-home interactions between parents and children and segments of interviews in which a counselor discusses with parents the application of principles and skills for improving relationships. Videotaped situations focus on establishing credibility as a parent, improving communication, setting reasonable and consistent limits, stimulating independence and responsibility, and improving order, structure, and routine. Approaches to typical problems are illustrated (e.g. fighting, crying, whining, conflict among siblings, bedtime). Reading and writing assignments supplement videotapes. May be offered through Distance Learning.

**CG 299 Conference On Families** .....1 credits  
See department for topics.

**CPSY 195 Introduction to Addictive Behavior** .....3 credits  
This class is intended to infuse substance abuse prevention technology into the general populace of employed professionals such as teachers, lawyers, nurses and other occupations, to enable non-counseling lay people to become proficient in the basics of self-care when dealing with addicts. Basic principles of self-care, when practiced, avoid most substance abuse problems. As self-care is culturally bound, providing a culturally competent and culturally proficient framework for what constitutes healthy behavior counters the generic mainstream approach, which actually promotes substance abuse by ignoring cultural protective factors. Because CPSY 195 has some similar course content to HS 102 Psychopharmacology, only one of these courses may be counted toward degree and certificate requirements at Lane. In addition, CPSY 195 may not be substituted for any course in Human Services certificate or degree programs. May be offered through Distance Learning.

**CPSY 200 Understanding Addictive Behavior** .....3 credits  
Broad overview of the field of addiction and the impact of addictions on individuals and society, introducing a variety of models and theories of addiction. The social and cultural environments within which substance abuse and addictions exist will be explored. Students will be introduced to scientifically supported models of prevention and treatment. May be offered through Distance Learning.

## Human Services

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

**CG 280HS Co-op Ed: Human Services** .....3-12 credits  
This course provides students with practical human service-related work experience in community organizations. The student will have the opportunity to integrate theory and practice skills learned in the classroom. Students can choose to work with a variety of client populations. In this course a student will explore career options and network with professionals and employers while earning credit toward their degree.

**HS 102 Psychopharmacology** .....4 credits  
Students will be introduced to the behavioral, psychological, physical and social effects of psychoactive substances on the individual user as well as the family and society. Students will learn basic pharmacology and about commonly abused drugs. Models of treatment for substance use and disorders will be explored including issues related to diverse cultures, lifestyles, gender and the needs of special populations. This class is accepted by ACCBO to meet certification requirements for alcohol & drug counselors.

**HS 107 Aging: A Social and Developmental Perspective** ....3 credits  
This course introduces students to the field of gerontology. As our population ages, we continue to have a need to have service providers who are informed, trained and educated around the issues facing seniors. Students will learn skills that will assist them in working with elders and their families. Students will be introduced to the various service settings as well as the needs of special populations. Spirituality and alternative forms of care will also be explored.

**HS 150 Personal Effectiveness for Human Service Workers** 3 credits  
This course is designed to help students create greater success in college, and in their professional lives, while simultaneously building a supportive learning environment for students in the Human Services Program. The course utilizes individual and small group exercises to improve skills in such areas as self-awareness, values clarification, communication skills, stress management, and burnout prevention as well as other field-oriented skills. Students will increase their abilities to work effectively with people from diverse individual, and cultural backgrounds. Students will develop skills to use on the job with clients in human service agencies.

**HS 155 Interviewing Theory and Techniques** .....3 credits  
Students will be introduced to the theoretical knowledge and interviewing skills required of human service workers in a variety of work settings. Students will learn the basic processes used for information gathering, problem solving, and information or advice giving. They will learn and practice skills associated with conducting an effective interview. Students will be sensitized to the issues common to interviewing people of differing cultural backgrounds. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors.

**HS 199 Special Studies** .....1-3 credits  
See department for topics.

**HS 201 Introduction to Human Services** .....3 credits  
Students will be introduced to a wide array of social and personal problems that are addressed by the field of human services. Students will explore the way economics and history shape current social welfare programs and policies. The philosophical foundation of the human service movement as well as career opportunities in the field will be examined. Trends and intervention strategies for a number of service systems will be introduced. The impact of culture and diversity on human services will be explored.

**HS 205 Youth Addiction** .....3 credits  
Knowledge, concepts, and skills of substance abusing and addicted adolescents and their families will be acquired. The student will develop a working knowledge of adolescent development and behavior as related to chemical dependency. Students will learn about various juvenile justice and substance abuse treatment approaches. Cultural, ethnic, and racial issues will be discussed.

**HS 206 Counseling the Criminal Addict** .....3 credits  
An overview of the complex relationship between drug abuse, dependency and criminality will be discussed. The criminal mind and how psychopharmacological, familial, socio-economic, gender, and cultural factors affect criminal development will be examined. The general functioning of the criminal justice and corrections systems will be studied.

**HS 209 Crisis Intervention and Prevention** .....3 credits  
This course will introduce human service and correctional personnel to crisis intervention and prevention that emphasizes crisis counseling and non-physical methods for preventing or controlling disruptive behavior before it escalates. Students will be taught effective non-violent intervention for a wide range of crisis situations. Content of this course will provide students with hands-on practical approaches to crisis management.

**HS 211 Family Interventions: Children** .....4 credits  
This is the first class in a three-course sequence on treatment interventions. This class focuses on issues involving mental health, chemical dependency and a variety of other problem behaviors of infancy and childhood. Topics will be examined from a developmental and family focused perspective. Methods of engaging children, and their families in the best practices of treatment will be explored. This course is designed to provide students with "hands on" experience. Throughout the course, students will be analyzing actual and simulated cases. Course content will be presented through reading actual course studies, viewing simulations, producing student presentations and active role-playing.

**HS 212 Family Interventions: Adolescents** .....4 credits  
This is the second class in a three-course sequence on treatment interventions. This class focuses on issues involving mental health, chemical dependency and a variety of other problem behaviors of adolescence. Topics will be examined from a developmental and family focused perspective. Methods of engaging adolescents, and their families in best practices of treatment will be explored. This course is designed to provide students with "hands on" experience. Throughout the course, students will be analyzing

actual and simulated cases. Course content will be presented through reading actual case studies, viewing simulations, producing student presentations, and active role-playing.

**HS 213 Family Interventions: Adults**.....4 credits  
This is the third course in a three-course sequence on treatment interventions. This class focuses on issues involving mental health, chemical dependency and a variety of other problem behaviors of adults. Topics will be examined from a developmental and family focused perspective. Methods of engaging adults, and their families in the best practices of treatment will be explored. This course is designed to provide students with “hands on” experience. Throughout the course, students will be analyzing actual and simulated cases. Course content will be presented through reading actual case studies, viewing simulations, producing student presentations and active role-playing.

**HS 220 Prevention 1: Preventing Substance Abuse & Other Social Problems**.....3 credits  
Prerequisite: College level reading and writing skills. Students will be introduced to prevention philosophy and program interventions aimed at addressing social problems and reinforcing healthy behavior and lifestyles. Risk factors, protective processes and resiliency factors will be explored. Students will have an opportunity to examine effective prevention programs that address the needs of different cultures and diverse populations.

**HS 224 Group Counseling Skills** .....3 credits  
Introduction to describing, selecting, and appropriately using strategies from accepted and culturally appropriate models for group counseling with clients with a variety of disorders including substance abuse. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors.

**HS 226 Ethics and Law** .....3 credits  
Introduction to the established professional codes of ethics that define the professional context within which the addiction counselor and human services provider works. Students will become knowledgeable about federal and state laws and regulations that apply in the field of substance abuse treatment and other human services. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors.

**HS 228 HIV/AIDS and other Infectious Diseases: Risk Assessment and Intervention** .....2 credits  
Introduces the epidemiology of HIV/AIDS, hepatitis, tuberculosis and sexually transmitted diseases that frequently infect people who use drugs or who are chemically dependent. Students will examine treatment options and prevention strategies. The legal and policy issues that impact infected individuals as well as the larger community will be explored. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors.

**HS 229 Grief and Loss Across Life Span**.....3 credits  
This course will introduce students to the issues and impact of learning to live with, and manage, losses. Students will explore the emotional, cultural, developmental, spiritual and behavioral factors that shape an individual's reaction to loss, including the reactions of helpers who are working with people experiencing personal loss and grief. Material will address losses of individuals, and their significant others, when confronted by chronic disability, illness, or other life-altering events associated with aging as well as death. Students will investigate specific therapeutic methods to respond compassionately and help individuals develop emotional resilience to loss. This class will combine lecture, small and large group discussions, journaling and art projects that focus on personal experience as one way to grasp the reality of griefwork.

**HS 231 Advanced Interviewing and Counseling** .....3 credits  
Prerequisite: HS 155. This class will provide an introduction to the theory and principles of motivational interviewing. Motivational interviewing is a client-centered approach to helping clients make behavioral changes and encouraging the client to explore and resolve their ambivalence about changing their behaviors. Students will learn the theoretical basis of this evidence based practice. Students will learn about stages of change and strategies for intervening effectively at each stage of the change process.

**HS 232 Cognitive-Behavioral Strategies** .....3 credits  
Prerequisite: HS 155. This course will introduce students to the theory and methods of cognitive-behavioral approaches to counseling. These approaches rest upon the premise that psychological distress and maladaptive behavior is the result of faulty thinking. Cognitive-behavioral approaches are based on a

psycho-educational model and focus on changing cognitions in order to change feelings and behavior.

**HS 235 The Aging Mind: Understanding and Adapting to Change**.....3 credits  
All older persons experience normal changes in cognitive functioning as they age. Some older persons, as well as younger persons, experience pathological changes in cognitive functioning often associated with growing older. This course will address the common myths and fears related to cognitive aging, will provide current information about the capability of the brain to continue to learn and remember, will identify coping skills for successfully adapting to both normal and pathological changes in cognition, and will build skills for developing successful helping relationships with older persons. Instructional practices will include guest speakers, media presentations, role plays, case studies, reading assignments, and lectures.

**HS 265 Casework Interviewing** .....3 credits  
Prerequisite: HS 155. Students will learn the theoretical knowledge and skills needed to work effectively as case managers with clients in human service organizations. Students will be introduced to solution-focused, and client directed interviewing skills that emphasize client strengths and goals.

**HS 266 Case Management**.....3 credits  
Prerequisite: HS 155 or HS265. Students will be introduced to the theory and practice of case management. Methods of delivering accessible, integrated, coordinated, and accountable case management services will be presented. Students will learn how to maintain professional records, including documenting assessments, treatment plans, chart notes and other relevant agency records. Cross-cultural issues to designing and delivering case management services will be explored.

**HS 267 Cultural Competence in Human Services**.....3 credits  
Diverse cultures and philosophies will be studied. How the human service practitioner can become culturally competent, will be the focus. Major ethnic and cultural groups will be studied as well as major cultural assumptions and patterns and their impact on identity and mental health.

**Humanities**

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

**HUM 100 Humanities Through the Arts**.....4 credits  
The Humanities through the Arts offers an exploratory approach to the humanities, focusing on the special role of the arts. Examining the relation of the humanities to values, objects and events important to people, is central to this course. A major goal of the course is to provide a means of studying values as revealed in the arts, all the while keeping in mind the important question “What Is Art?“. This course is intended to provide the necessary tools for students to think critically when exploring the arts and the other humanities. Both online and video mediums are used to enrich and enhance the topics covered. May be offered through Distance Learning.

**Internet - See Business and Computers: Introduction/Information Systems/Computer Science Internships/Work Experiences - See Cooperative Education**

**Journalism**

Also see Photography

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, 541.463.5409.

**J 134 Photojournalism** .....3 credits  
This course is designed to work within the field of content. Content within the work is not only the first step in good photojournalism, but also the first step in good art-making. Within this course, we will explore how you see an image, how you choose to share that image with those around you, and the message that your images carry. We will also be studying the history of photojournalism and the cross over from documentary photography to the world of art.

**J 216 Newswriting 1** .....3 credits  
Study and practice of newsgathering and writing of ‘straight’ objective news stories. Discussions center on concept of news and news value, ethics, interviewing and traditional journalism methods and standards as practiced by established American newspapers.

**J 234 Photojournalism 2** .....4 credits  
Prerequisite: J 134. This course is designed as a continuation of Photojournalism. We will be continuing the discussion of content and ethics that is addressed in Photojournalism. Students will learn how to create editorials, identify the differences between news and human interest, develop funding for stories that are not mainstream, and to self-promote in the competitive field of photojournalism. Students will also learn how to prepare their work through editorial processing and presentation.

**J 280 Co-op Ed: Journalism** .....3-12 credits  
Prerequisite: Instructor approval. J216 for reporters, ART 221, 222, 223 for graphic artists, and ART261 and J216 for photographers is highly recommended. This course provides the student with journalism-related work experience in reporting, page design and photography on print publications. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

### Landscaping - See Construction

### Language Studies

For information, contact Language, Literature and Communication, Center Bldg./Rm. 457, 541.463.5419.

**AIL 101 American Indian Languages** .....4 credits  
This course is the first course of a three-term sequence of study of the American Indian language, Chinuk Wawa, at the first-year college level. Students will achieve beginning listening, oral, cultural, and literacy competency. Determination of competency and instruction will conform to tribal, state, and college criteria. Language instruction will include activities, dialogue, and text analysis. Objectives: Students will (1) learn the sound system of Chinuk Wawa to be able to (2) converse in a variety of common everyday settings using vocabulary and structures presented in class. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language.

**AIL 102 American Indian Languages** .....4 credits  
Prerequisite: AIL101 or consent of instructor. This course is the second course of a three-term sequence of study of the American Indian language, Chinuk Wawa, at the first-year college level. Students will achieve beginning listening, oral, cultural, and literacy competency. Determination of competency and instruction will conform to tribal, state, and college criteria. Language instruction will include activities, dialogue, and text analysis. Objectives: Students will (1) continue to become proficient in the sound system of Chinuk Wawa to be able to (2) converse in a variety of common everyday setting using basic sentences and structures presented in class. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language.

**AIL 103 American Indian Languages** .....4 credits  
Prerequisite: AIL 102 or consent of instructor. This course is the third course of a three-term sequence of study of the American Indian language, Chinuk Wawa, at the first-year college level. Students will achieve beginning listening, oral, cultural, and literacy competency. Determination of competency and instruction will conform to tribal, state, and college criteria. Language instruction will include activities, dialogue, and text analysis. Objectives: Students will (1) become proficient in the sound system of Chinuk Wawa to be able to (2) converse in a variety of common everyday settings using sentences, questions, and structures presented in class. Emphasis is placed on daily speaking, more complex writing, reading and listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language.

**AIL 201 Chinuk Wawa** .....4 credits  
Prerequisite: AIL 103 or consent of the instructor. This course is the first course of a three-term sequence to ensure students achieve competency in Chinuk Wawa at the second year college level. Competency is defined by benchmarks set by the Tribes, by the state of Oregon and in accordance with Oregon's SB 690 of 2001, and by Lane's language standards. Objectives: Students will (1) learn the culture and history of the Grand Ronde people; (2) converse in a variety of common everyday settings; (3) learn to use more advanced verb structures: (4) learn to work (with a linguistic

emphasis) with texts. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language.

**AIL 202 Chinuk Wawa** .....4 credits  
Prerequisite: AIL 201 or consent of the instructor. This course is the second course of a three-term sequence to ensure students achieve competency in Chinuk Wawa at the second year college level. Competency is defined by benchmarks set by the Tribes, by the state of Oregon and in accordance with Oregon's SB 690 of 2001, and by Lane's language standards. Objectives: Students will (1) learn and discuss the culture and history of the Grand Ronde people; (2) converse in a variety of settings; (3) learn to use more advanced verb structures: (4) learn to work (with a linguistic emphasis) with texts. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and understanding the cultures of the people who spoke and still speak the language.

**AIL 203 Chinuk Wawa** .....4 credits  
Prerequisite: AIL 202 or consent of the instructor. This course is the third course of a three-term sequence to ensure students achieve competency in Chinuk Wawa at the second year college level. Competency is defined by benchmarks set by the Tribes, by the state of Oregon and in accordance with Oregon's SB 690 of 2001, and by Lane's language standards. Objectives: Students will (1) learn and discuss the culture and history of the Grand Ronde people; (2) converse in a variety settings; (3) learn to use more advanced grammatical structures: (4) work (a linguistic emphasis) on texts. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and understanding the cultures of the people who spoke and still speak the language.

**AIL 280 Co-op Ed: American Indian Language** .....3-12 credits  
Prerequisite: Instructor approval; AIL 100 or above preferred. The purpose of this class is to integrate classroom learning about American Indian languages with field experience, to gain exposure and understanding of issues related to culture and language, and to expand a student's understanding of the challenges and opportunities associated with learning American Indian languages. Students will work at an appropriate field site. Students will generate learning objectives for the experience, journal progress toward learning objectives and evaluate themselves at the end of the term. Site supervisor will orient, support, guide, provide instruction and evaluate the student's performance. Co-op coordinator will visit site to meet with supervisor, discuss student performance, and do a final evaluation at the end of the term.

**AIL 298 IS:** .....1-4 credits  
A variable credit course based on independent study contracted between the instructor, student and Division Dean.

**FL 280IW Co-op Ed: International Work Experience** .....1-12 credits  
Prerequisite: Instructor approval. This college transfer credit course is a supervised internship program for international work experience through Lane Community College in partnership with IE3 Global Internships. Living and working in another country provides uniquely valuable experiences. Students gain career and intercultural skills essential in a global society. Internships are available in over 40 countries. Details are on the web at <http://ie3global.ous.edu>.

**FR 099 French Conversation (Learning Laboratory: French)** 1 credits  
This course offers conversational practice in French vocabulary and structure that the students have already acquired or are currently learning. Students will become more aware of cultural differences as well as of current events in the francophone world. It is divided into one section for second-year students and one section for first-year students. The grade is based on an A, P or NP scale. No textbook is required. Preference to students currently enrolled in French classes.

**FR 101 First-Year French** .....5 credits  
The first term of a three-term sequence. Introduction to French, emphasizing oral communication (listening and speaking) in the context of French-speaking cultures, with some reading and writing practice. Students learn basic structures, vocabulary, and cultural information. Designed for students with no previous experience in French.

**FR 102 First-Year French** .....5 credits  
Prerequisite: FR 101 with a passing grade of C- or above, or equivalent. The second term of a three-term sequence. Continuation of the study of French, emphasizing oral communication (listening and speaking) in the context of French-



speaking cultures, with some reading and writing practice. Students continue to learn basic structures, vocabulary, and cultural information. Designed for students who have completed Fr 101 or equivalent.

**FR 103 First-Year French** .....5 credits  
Prerequisite: FR 102 with a passing grade of C- or above, or equivalent. The third term of a three-term sequence. Continuation of the study of French, emphasizing oral communication (listening and speaking) in the context of French-speaking cultures, with more reading and writing practice. Students complete their exposure to basic structures and vocabulary and are introduced to additional cultural information. By the end of FR 103, the student should be able to communicate simply, understand basic conversations, and read and write in a basic manner. Designed for students who have completed FR 102 or equivalent.

**FR 150 First-Year French** .....7 credits  
First term in a two-term "accelerated sequence." Introduction to French emphasizing oral communication (listening and speaking) in the context of French-speaking cultures, with some reading and writing practice. Students learn basic structure and vocabulary, and cultural information. Designed for students with no previous experience in French.

**FR 151 First-Year French** .....7 credits  
Prerequisite: FR 101 or FR 150 with a passing grade of C- or above, or equivalent. The second term in a two-term "accelerated sequence." Continuation of the study of French, emphasizing oral communication (listening and speaking) in the context of French-speaking cultures, with additional reading and writing practice. Students complete their exposure to basic structures and vocabulary, and cultural information. By the end of FR 151, the student should be able to communicate simply, understand basic conversations, and read and write in a basic manner. Designed for students who have completed FR 150 or equivalent.

**FR 199 Special Studies:** .....2 credits  
See department for topics.

**FR 201 Second-Year French** .....5 credits  
Prerequisite: FR 103 or FR 151 with a passing grade of C- or above, or equivalent. First course of three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication in French listening, comprehension, and speaking practice. These courses include periodic writing in journal form and in more structured compositions. Students will continue skill development in reading from both literary and nonliterary texts. French-speaking cultures serve as both an authentic context for the other four skills and a fifth skill in their own right. Students will review and add to their knowledge of grammatical structures, expressions, and vocabulary.

**FR 202 Second-Year French** .....5 credits  
Prerequisite: FR 201 with a passing grade of C- or above, or equivalent. Second course of three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication in French listening, comprehension, and speaking practice. These courses include periodic writing in journal form and in more structured compositions. Students will continue skill development in reading from both literary and nonliterary texts. French-speaking cultures serve as both an authentic context for the other four skills and a fifth skill in their own right. Students will review and add to their knowledge of grammatical structures, expressions, and vocabulary.

**FR 203 Second-Year French** .....5 credits  
Prerequisite: FR 202 with a passing grade of C- or above, or equivalent. Third course of three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication in French listening, comprehension, and speaking practice. These courses include periodic writing in journal form and in more structured compositions. Students will continue skill development in reading from both literary and nonliterary texts. French-speaking cultures serve as both an authentic context for the other four skills and a fifth skill in their own right. Students will review and add to their knowledge of grammatical structures, expressions, and vocabulary.

**FR 211 Conversational French** .....2 credits  
Prerequisite: FR 103, FR 151, or equivalent. May be taken concurrently with FR 103, FR 151 or any 200 level French Course. Conversational French classes are designed to allow students to improve their competence in oral communication skills. This is accomplished through introduction and expansion of vocabulary and expressions in a functional and cultural context. Students have the opportunity to share experiences and ideas and to learn communication skills useful in daily activities in French-speaking cultures. They also become aware of different levels of conversation, from informal to formal. This course is offered in the spring as an immersion weekend and may be offered in the summer under a different format.

**FR 212 Conversational French** .....2 credits  
Prerequisite: FR 103, FR 151, or equivalent. May be taken concurrently with FR 103, FR 151 or any 200 level French Course. Conversational French sequence are designed to allow students to improve their competence in oral communication skills. This is accomplished through introduction and expansion of vocabulary and expressions in a functional and cultural context. Students have the opportunity to share experiences and ideas, and to learn communication skills useful in daily activities in French-speaking cultures. Students also become aware of different levels of conversation, from informal to formal.

**FR 280 Co-op Ed: French** .....3-12 credits  
This course provides students who are fluent in French with opportunities to practice and polish their language skills in a work setting. Students primarily work as tutors in language labs with a limited number of off campus opportunities in local schools. Students will generate learning objectives for the experience, journal progress toward learning objectives and evaluate themselves at the end of the term. Site supervisor will orient, support, guide, provide instruction and evaluate the student's performance. Co-op coordinator will visit site to meet with supervisor, discuss student performance, and do a final evaluation at the end of the term. Meet with the French co-op coordinator the term before (if possible) to set up the internship.

**SPAN 101 Spanish, First-Year** .....5 credits  
Spanish 101 is the first course in a three course sequence designed to provide one full year of college level transfer courses at the beginning language level. Each course is conducted in Spanish and they must be taken in sequence. The sequence emphasizes the development of the skills of listening, speaking, reading, writing, and culture. In Spanish 101, students will learn to converse in a variety of common everyday settings using the vocabulary and structures presented in class. Emphasis is also placed on daily writing, reading, listening, and learning about Hispanic cultures.

**SPAN 102 Spanish, First-Year** .....5 credits  
Prerequisite: SPAN 101 with a passing grade of C- or above, or placement by instructor. Spanish 102 is the second course in a three course sequence designed to provide one full year of college level transfer courses at the beginning language level. Each course is conducted in Spanish and they must be taken in sequence. This sequence emphasizes the development of the skills of listening, speaking, reading, writing, and culture. In Spanish 102, students will learn to converse in a variety of common everyday settings using the vocabulary and structures presented in class. Emphasis is also placed on daily writing, reading, listening, and learning about Hispanic cultures.

**SPAN 103 Spanish, First-Year** .....5 credits  
Prerequisite: SPAN 102 with a passing grade of C- or above, or placement by instructor. Spanish 103 is the third course in a three course sequence designed to provide one full year of college level transfer courses at the beginning language level. Each course is conducted in Spanish and they must be taken in sequence. This sequence emphasizes the development of the skills of listening, speaking, reading, writing, and culture. In Spanish 103, students will learn to converse in a variety of common everyday settings using the vocabulary and structures presented in class. Emphasis is also placed on daily writing, reading, listening, and learning about Hispanic cultures. Tests are administered outside of class hours. This course is conducted in Spanish.

**SPAN 201 Spanish, Second-Year** .....5 credits  
Prerequisite: Credit level SPAN 103 minimum grade of P or Span 103 at previous college with minimum grade of P. SPAN 201 is the first course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college transfer courses at the

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

intermediate (second year) level. Each course is conducted in Spanish and they must be taken in sequence. SPAN 201-202-203 builds on Spanish language skills acquired through the beginning, first year sequence (SPAN 101-102-103) and expands upon them to develop student skills at an intermediate language level. These courses are five skill courses with emphasis on daily reading, writing, listening and speaking of Spanish, and on learning about Spanish-speaking cultures. Tests are administered outside of class hours. The text for this course includes an online workbook component.

**SPAN 202 Spanish, Second-Year** .....5 credits  
 Prerequisite: Credit level SPAN 201 minimum grade of P or Span 201 at previous college with a minimum grade of P. SPAN 202 is the second course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college transfer courses at the intermediate (second year) level. Each course is conducted in Spanish and they must be taken in sequence. SPAN 202 continues the development of and expands upon the five language skills practiced in SPAN 201 (see course description) through emphasis on daily reading, writing, listening, and speaking of Spanish, and on learning about Spanish-speaking cultures. Tests are administered outside of class hours. The text for this course includes an online workbook component.

**SPAN 203 Spanish, Second-Year** .....5 credits  
 Prerequisite: Credit level SPAN 202 minimum grade of P or Span 202 at previous college with a minimum grade of P. SPAN 203 is the third course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college transfer courses at the intermediate (second year) level. Each course is conducted in Spanish and they must be taken in sequence. SPAN 203 continues the development of and expands upon the five language skills practiced through emphasis on daily reading, writing, listening, and speaking of Spanish, and on learning about Spanish-speaking cultures. Tests are administered outside of class hours. The text for this course includes an online workbook component.

**SPAN 211B Conversational Spanish Intermediate** .....3 credits  
 Prerequisite: SPAN 103 or equivalent with min. grade of C- or first year language competence. May be taken concurrently with any 200 level Spanish course. Intermediate Spanish course in oral communication. The student has an opportunity for intensive practice in both speaking and listening skills to help improve oral/aural skills in spoken Spanish. Meaningful communication is accomplished through the expansion of vocabulary and expressions, and through interactive activities that permit the exchange of experiences and ideas in various areas of interest. The main themes developed in the course content are expanded through the incorporation of authentic readings and materials chosen from the internet and from literary and nonliterary texts. This course is conducted in Spanish.

**SPAN 212B Conversational Spanish Intermediate** .....3 credits  
 Prerequisite: SPAN 103 or equivalent with min. grade of C- or first year language competence. May be taken concurrently with any 200 level Spanish course. Intermediate Spanish course in oral communication. The student has an opportunity for intensive practice in both speaking and listening skills to help improve oral/aural skills in spoken Spanish. Meaningful communication is accomplished through the expansion of vocabulary and expressions, and through interactive activities that permit the exchange of experiences and ideas in various areas of interest. The main themes developed in the course content are expanded through the incorporation of authentic readings and materials chosen from the internet and from literary and nonliterary texts. This course is conducted in Spanish

**SPAN 280 Co-op Ed: Spanish** .....3-12 credits  
 This course provides students who are fluent in Spanish with opportunities to practice and polish their language skills in a work setting. Students may work as language lab tutors at LCC, or in a limited number of K-12 school settings, or in community organizations, usually as interpreters. Students will generate learning objectives for the experience, journal progress toward learning objectives and evaluate themselves at the end of the term. Site supervisor will orient, support, guide, provide instruction and evaluate the student's performance. Co-op coordinator will visit site to meet with supervisor, discuss student performance, and do a final evaluation at the end of the term. Meet with the Spanish co-op coordinator the term before (if possible) to set up the internship.

**SPAN 298 IS:** 1-3 credits See department.

**Legal Assistant**

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

**BA 280L Co-op Ed: Legal Assistant** .....3-12 credits  
 This course provides the student an opportunity to apply theory learned in the classroom to practical work experience in the legal field. In this course a student will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**LA 100 Legal Procedures** .....4 credits  
 This course is an introduction to the roles and duties of legal support personnel and administrative procedures specific to law offices. Students will explore legal office careers, learn legal terminology, and learn about the attorney/client relationship. Introductory preparation of legal pleadings, correspondence, and documents including contracts, wills and trusts. Extensive coverage of written and oral communications needed for law practice, law office procedures, ethics, legal terminology, the court system, the law library, and notary public duties. Instructor enforced prerequisites: Working knowledge of MS Word, accurate keyboarding speed of 45 wpm, placement test scores into WR 121 and MTH 065 or instructor permission. Note: LA 100 was formerly numbered LGL 201. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit. May be offered through Distance Learning.

**LA 101 Introduction to Paralegal Studies** .....3 credits  
 Prerequisite: LA 100, or instructor consent. An introduction to the role and duties of the paralegal including such topics as regulations of the legal profession, law office management, human relations skills, legal terminology, techniques of interviewing, and methods of discovery. Preparation for assisting in the legal environment by drafting legal pleadings and case briefing. Reviewing local, trial, and state court laws. May be offered through Distance Learning.

**LA 105 Civil Litigation** .....3 credits  
 Prerequisite: LA 101 and LA 128, (formerly LGL 202) or instructor consent. This course will focus on the various stages of the civil litigation process. This will include the initial client interview, the process leading to the filing of a civil lawsuit, its resolution by settlement or trial, and a brief review of the appellate process. The course emphasis will be on the actual preparation of the documents, with a major focus on the discovery phase of the civil litigation process. This course will demonstrate how each stage of civil litigation builds, relates, and is dependent upon the others. May be offered through Distance Learning. Note: LA 105 was formerly numbered LGL 203. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**LA 128 Legal Procedures 2** .....4 credits  
 Prerequisite: LA 100 (formerly LGL 201), LA102, and BT 108 (formerly BT 180), or instructor consent. Students will work on legal office projects designed to utilize a project-based approach to completing legal office activities that involve legal document preparation, layout, formatting, internet research, and transcription. Students will depict a law office setting for the projects where the student is to serve as a floating legal assistant for a number of diverse individuals practicing various types of law. May be offered through Distance Learning. Note: LA 128 was formerly numbered LGL 202. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

**LA 132 Ethics for the Legal Professional** .....3 credits  
 Prerequisite: LA 100, or instructor consent. Explore the differences between morality and rules of ethics. Introduce the rules of professional responsibility as they pertain to paralegals (and lawyers). Engage in discussions and opinions of ethical issues in real-world situations. Introduce and enhance legal vocabulary as is used in ethics. Introduce and study the Oregon Rules of Ethics and the practical application. May be offered through Distance Learning.

**Library/Information Research**

For information, contact the Library, Center Bldg./2nd Floor, 541.463.5770.

**LIB 127 Library and Information Research** .....3 credits  
 Students will develop critical thinking skills needed to locate, evaluate and cite information applicable to specific research needs. This is a non-lecture course ideally suited to self-motivated

students. The course develops research skills and confidence that contribute to success in other college courses and life experiences. May be offered through Distance Learning.

**LIB 127A Basic Research** .....1 credits  
 Students will develop critical thinking skills needed to locate, evaluate and cite information applicable to specific research needs. The course develops research skills and confidence that contribute to success in other college courses and life experiences. May be offered through Distance Learning. LIB 127a is a condensed version of LIB 127. Students cannot get credit for both LIB 127 and LIB 127a.

**Literature**

For information, contact Language, Literature and Communication, Center Bldg./Rm. 457, 541.463.5419.

**ENG 100 Children's Literature** .....4 credits  
 Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. Children's Literature is a wide-ranging introductory course, including a history of both British and American literature for children and a continuing discussion of the ways our culture and history have defined and created what children may or may not be and what they may or may not read, enjoy or understand. The class reads a variety of material including fairy tales, picture books, and young adult novels. Students will develop criteria for the selection and evaluation of literature for children at different developmental stages. Students will explore current debates in and around children's literature, scholarship, classroom use and publishing. This course features multi-cultural materials and touches on a variety of media, including film, cartoons, television, and print. Though many students who take the course are, or will be, working with children, the course also addresses children's literature from a literary perspective, discussing the texts from theoretical as well as a pedagogical framework. A major aim of the class is to introduce students to recent and emerging authors to broaden familiarity with current material available to young people.

**ENG 104 Introduction to Literature: Fiction** .....4 credits  
 Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. This course will present to the student a wide range of fiction from various time periods and cultures. Course work will involve students in critical analysis, basic literary terminology, and concepts which will enhance appreciation of fiction. The course may include the short story, the novel, and/or the novella. May be offered through Distance Learning.

**ENG 105 Introduction to Literature: Drama** .....4 credits  
 Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. This course will introduce the student to a wide variety of world plays which may include classical Greek drama, Shakespeare, and modern works of today. Students will engage in reading, writing, and discussion of the plays they read. May be offered through Distance Learning.

**ENG 106 Introduction to Literature: Poetry** .....4 credits  
 Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. This course will present to the student a wide range of poetry from various time periods and cultures. Course work will involve students in the consideration of poetic technique and expression. Theme, structure, and style will be emphasized, as well as the elements of poetry. At the discretion of the Instructor, students may also be required to participate in creative writing assignments to gain insight into the nature of poetry. May be offered through Distance Learning.

**ENG 107 Survey of World Literature** .....4 credits  
 Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. Survey of World Literature is a three-term sequence to acquaint students with representative works of important world writers, literary forms, and significant currents of thought. The class is intended primarily for students who aspire to a broad education and who want to expand their reading experience and interpretive skills. The material for fall term comes from the ancient and medieval eras.

**ENG 108 Survey of World Literature** .....4 credits  
 Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. Survey of World Literature is a three-term sequence to acquaint students with representative works of important world writers, literary forms, and significant currents of thought. The class is intended primarily for students who aspire to a broad education and who want to expand their reading experience and interpretive skills. The material for winter term comes from early modern era.

**ENG 109 Survey of World Literature** .....4 credits  
 Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. Survey of World Literature is a three-term sequence to acquaint students with representative works of important world writers, literary forms, and significant currents of thought. The class is intended primarily for students who aspire to a broad education and who want to expand their reading experience and interpretive skills. The material for spring term comes from the nineteenth century until the present day.

**ENG 121 Detective Fiction** .....4 credits  
 Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success. Detective fiction will provide students with a broad introduction to both early and recent British and American writers with some emphasis on novels and short stories translated into TV programs and film. The course will examine the origins of detective fiction and how the original models have been followed and altered in the roles of the amateur sleuth, the professional investigator (PI), the police, and local citizens as clients. The literature will include hard-boiled male and female detectives, as well as African American and Native American detectives and will be read from the viewpoint of different literary theories including, historical and social viewpoints and addressing issues of gender, race/ethnicity, class, sexuality, and nationality.

**ENG 151 Black American Literature** .....4 credits  
 This course will offer students an intense examination and exploration of black authors. Students will analyze and respond to a wide variety of issues, critical questions, and perspectives regarding how to interpret and define the journey of African Americans and where this path might eventually lead. Novels, short stories, poems, biographies, and critical essays will be studied.

**ENG 194 Literature of Comedy** .....4 credits  
 Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Literature of Comedy is a one-term course to acquaint students with representative works of literature defined by tradition as comedy, including essays, poems, plays, short fiction, film, and novels. The class is intended for students who aspire to pursuing a broad education and who want to expand their reading experience, interpretive skills, and their understanding of the literary genre of comedy as works which affirm community, explore love, and portray restoration in human life, even as they make us laugh.

**ENG 195 Introduction to Film Studies** .....4 credits  
 Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 195 is the first course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scene, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis. A variety of assignments and activities develop and test students "ways of seeing." ENG 195 focuses on the formal elements of the shot: cinematography, mise en scene, blocking, and movement.

**ENG 196 Introduction to Film Studies** .....4 credits  
 Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 196 is the second course of a year-long sequence focusing on the history, art, and



social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scene, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis. A variety of assignments and activities develop and test student's "ways of seeing." ENG 196 reviews the elements of film style relating to the individual film shot, but it emphasizes the formal means by which shots are built into the larger structures of scene, segment, and finished film: editing, sound, screenwriting, and narrative structure (e.g., editing style — sequence shots, continuity editing, montage and editing techniques — on the types and uses of film: Foley, dialogue, theme music, etc.). The course also looks at the larger social and historical contexts in which films emerge, considering the ways that films both reflect and affect a culture. Along these lines, we focus particularly on issues and ideologies relating to race, class, gender, sexuality and nation.

**ENG 197 Introduction to Film Studies**.....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 197 is the third course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scene, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis. A variety of assignments and activities develop and test students "ways of seeing." ENG 197 centers on films chosen around a theme, topic or director. Recent themes include "Film and the American Dream" or "American Independent Cinema." Providing an overview of film language, the course explores the style of the featured films and/or director and looks at their historical contexts and ideological effects relating to such contested areas of social experience as race, class, gender, sexuality, and nation.

**ENG 199 Special Studies**.....6 credits  
See department for topics.

**ENG 201 Shakespeare**.....4 credits  
Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. One scholar suggests that Shakespeare's works "remain the outward limit of human achievement"; they fascinate us because we "cannot catch up to them." Nevertheless, we will have fun running after them. This survey explores the works of Shakespeare, covering 3-5 plays and at least one sonnet each term. Instructors might divide the plays by theme, genre, or chronology. ENG 201 will include Romeo and Juliet.

**ENG 203 Shakespeare** .....4 credits  
Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. One scholar suggests that Shakespeare's works "remain the outward limit of human achievement"; they fascinate us because we "cannot catch up to them." Nevertheless, we will have fun running after them. This survey explores the works of Shakespeare, covering 3-5 plays and at least one sonnet each term. Instructors might divide the plays by theme, genre, or chronology. ENG 203 will include King Lear.

**ENG 204 Survey of British Literature**.....4 credits  
Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Survey of British Literature is a two-term sequence to acquaint students with representative works of important British writers, literary forms, and significant currents of thought. The material for the first term comes from the Anglo-Saxon era, the Middle English period, and the Renaissance, through Milton. Each course may introduce students to different methodological perspectives/lenses through which to read and interpret literary texts, and may include

developing an understanding of the social, political and cultural contexts in which texts are produced and interpreted. Primary emphasis is on reading and engaging with the literary materials.

**ENG 205 Survey of British Literature**.....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Survey of British Literature is a two-term sequence to acquaint students with representative works of important British writers, literary forms, and significant currents of thought. The second term includes British literature of the late 17th century through the modern period. Each course may introduce students to different methodological perspectives/lenses through which to read and interpret literary texts, and may include developing an understanding of the social, political and cultural contexts in which texts are produced and interpreted. Primary emphasis is on reading and engaging with the literary materials.

**ENG 213 Survey of Asian Literature** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course features a selection of classical literature and historical documents that will serve as a basis to examine important cultural values of India, China, and Japan, and to trace their development into contemporary life and literature.

**ENG 215 Latino/a Literature** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This is an introductory course to Latino/a literature that will examine some of the major issues that have influenced its development beginning with the contact between European and pre-Columbian cultures. Students will also read some of the major voices in Latin American literature in order to examine how their work anticipates many of the issues facing contemporary Latino/a writers in the United States.

**ENG 222 Literature and Gender** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will examine representations and/or investigations of gender in literature. While some literature chosen for the course may thematically focus readers on the gender roles assigned to people at different points in time in relation to a given culture, other literature will explore the ways in which gender is a socially constructed identity. Critical thinking will play a role as students consider concepts such as social norm, gender construction, subject position, self-other paradigms, and ideology. Feminist models of literary criticism may be considered.

**ENG 232 Native American Literature** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course provides an introduction to the oral traditional and formal written literature of Native American cultures through a wide variety of texts from different countries, tribes, regions, and individuals. Students will examine the worldview expressed in the literature, the major thematic currents of oral and written Native American literature, the characteristics of Native American forms and traditions, and the characteristics it shares.

**ENG 240 Nature Literature** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. People have always explained themselves and their world according to how they define and perceive their relationship with nature. The Nature Literature course will examine how literature reflects mythological, theological, philosophical, and scientific views toward nature. Readings will include fiction, poems, non-fiction, and personal essays that project a variety of attitudes toward nature. Students will keep regular journals in response to their readings and experiences, and will also do their own pieces of "nature writing."

**ENG 243 Native American Autobiography** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will introduce students to a new way of seeing the world they live in as they read

the lives of Native Americans written by themselves. Autobiographies studied will range from early historical works narrated and translated by anthropologists to modern works by Linda Hogan and N. Scott Momaday. These texts will be studied in their historical contexts, as well as their cultural contexts. Speakers and films will play an important role in this course. The goal of the class is to present a fuller picture of the voices and visions of Native Americans.

**ENG 244 Asian American Literature** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. The course will familiarize students with the literature written by American writers of Asian ancestry. The course may also engage students in materials written by American writers of Pacific Islander ancestry. Students will consider such literature in its aesthetic, historical, cultural, political, and social contexts. The class will also examine recurring themes regarding the development of attitudes, values, and identities as expressed within the body of literature.

**ENG 250 Introduction to Folklore and Mythology** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. The nature and formal principles of studying folklore and myth will be introduced and illustrated through a variety of texts, folk artifacts, and thematic ideas, including world-wide examples that extend beyond Western cultures. Students will examine folkloric elements in their own and each other's backgrounds, as well as textbook examples of folklore and folk life from regional, ethnic, age, gender, or work groups. Students will consider how myth informs their own and each other's backgrounds, as well as examine textbook examples of myth and mythic themes, motifs, and archetypes from regional, ethnic, age, gender, or work groups. The course will introduce students to formal approaches to a variety of folklore and myths, and explore the relationship between myth, culture, and society. Folklore and myth will also be considered from a cross-cultural perspective.

**ENG 253 Survey of American Literature** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Survey of American Literature is a two-term sequence to acquaint students with representative works of important American writers, literary forms, and significant currents of thought. Primary emphasis is on reading and engaging with the literary materials, with an introduction to practices of literary interpretations. Questions of genre, authorship, aesthetics, and literary movements may be examined in their relationships to social, political, and intellectual movements in the United States. The first term will draw on material from colonial settlement in the Americas through the Civil War period.

**ENG 254 Survey of American Literature** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Survey of American Literature is a two-term sequence to acquaint students with representative works of important American writers, literary forms, and significant currents of thought. Primary emphasis is on reading and engaging with the literary materials, with an introduction to practices of literary interpretations. Questions of genre, authorship, aesthetics, and literary movements may be examined in their relationships to social, political, and intellectual movements of the United States. The second term will include literature from the end of the 19th century to the present.

**ENG 257 The American Working Class in Fiction and Non-Fiction** 4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. Using the concept of the "American Dream" to examine work, class, and social mobility, the literature course is linked to WR 122 to create a learning community that helps students appreciate the power of class to shape our individual lives and our culture. A prevailing belief in America is that we are a "classless" society. However, this literature course includes fiction, non-fiction, autobiography, poetry, and documentaries that explore ways that the inequalities of class, ethnicity, race, and gender interrelate to sustain the power and interests of economic elites.

**ENG 259 African American Poetry, Plays and Film** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course creates several perspectives through which to explore the African American experience: Drama, Poetry, and Film Studies. This course is designed to allow students to utilize textual materials, dramatic presentations, films, and documentaries to chart, research, examine, and evaluate the interconnectedness of black plays, poetry, and film representations. Students will have at their disposal a variety of resources to aid them in understanding the themes, techniques, and critical theories underlying the foundations that black playwrights, poets, film historians, and filmmakers/actors have developed and refined over the years. This course will guide students to a clearer yet more comprehensive understanding of the collaborative aspect of these artistic expressions in the African American world and their continuing influence on the larger American experience in Arts and Letters.

**ENG 260 Introduction to Women Writers** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will introduce students to the richness and variety of literary works written by women. Issues that concern women writers, the impact of stories, and how class, race, and gender work to construct the stories we live by will be central to the course. Students will consider fiction written by women writers in a global context historically to the present day. The course will include an introduction to feminist literary theory and will introduce students to a variety of literary genres and styles, including the slave novel, sentimental, realistic, and postmodern fiction.

**ENG 261 Science Fiction** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course explores science fiction, fantasy and speculative futures through literary and popular fiction, film, and guest authors. Discussions of content, styles, techniques, and conventions of the genre will be central to the course.

**ENG 270 Bob Dylan: American Poet** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will focus primarily on the poetry and poetics of Bob Dylan's work. Textual analysis will lead to understanding of syntax, imagery, narrative tactics, and other poetic elements. Students will gain familiarity with the range of Dylan's poetic genres. As with any literature course, we will examine how meaning is produced through words and sound. Dylan's musical and literary sources, and his influence in our culture, will also be explored.

**ENG 271 Film Genre: Horror** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will examine the history of the horror film from the silent era to the present, focusing mainly on U.S. texts. The class will explore various theories of the horror genre, the history and social context of horror cycles, and the representation of class, gender, sexuality, nationality, and ethnicity as they relate to horror.

**ENG 272 Film Genre: Film Comedy** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will focus on film comedy, a loosely defined genre that spans the silent era to the present. Starting with silent films, the course will focus on film comedy across the decades, and may include the following sub genres: slapstick, screwball comedy, farce, romantic comedy, black comedy, parody/satire and/or gross-out comedy. Students will be introduced to various theories of the genre as well as historical, political, and social issues related to representative texts.

**ENG 273 Film Genre: Film Noir** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course will focus on film noir—a type of film featuring hard-boiled detectives, dangerous urban landscapes, and mysterious, perhaps treacherous, dames—that flourished in the U.S. between 1948-1958. The class will

concentrate on the question of definition: is noir a genre, a style, a mood, or a movement? Students will read various theories about noir and examine classical and contemporary films, measuring them against competing definitions of the genre. The course will also focus on the historical and social context of noir as well as issues of gender, race/ethnicity, class, sexuality and nationality as they relate to noir.

**ENG 298 Independent Study:** .....1-4 credits  
A variable credit course based on independent study contracted between an instructor and a student.

**FA 263 Film in the Fifties** .....4 credits  
Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course introduces students to the 1950s as a complex decade in American history through films from and about the era that epitomize the cultural tensions and darker historical currents that define it, demythologizing the fifties as a golden age of innocence and simplicity. Historical and critical readings supplement the screening of classic films and provide direction for class discussion, exams, and critical essays that help students develop critical skills and cineliteracy.

**FA 264 Women Make Movies** .....4 credits  
Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course focuses on women directors around the world and the contributions they have made to film (and video). Students will be introduced to the historical and economic context of film production as well as to a formalist film vocabulary. They will explore readings in feminist scholarship and analyze women-authored cinema-narrative, experimental and documentary-in the context of race, ethnicity, gender, sexuality, class and nationality. Films will span the silent period to the present.

**FA 265 African American Film Images** .....4 credits  
Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course gives students an introduction to African Americans' role in the history of Hollywood filmmaking, and the social, educational, and political climates that follow this cultural phenomenon of moviemaking. Several critical texts will reveal the historically complex and difficult relationship between black Americans and their desire to become an active, integral part of all aspects of the American film industry. Screenings of important films, class discussions, inside and outside of class group work, exams, and other relevant critical readings are essential aspects in guiding students' understanding of the peculiar problems offsetting African Americans' full, rigorous admittance into the Hollywood system.

**Machine Shop, Machine Tools - See Manufacturing**

**Management - See Business and Culinary Arts and Hospitality Management**

**Manufacturing**

For information, contact Advanced Technology, Bldg. 12/Rm. 201, 541.463.5380.

**ENGR 280M Co-op Ed: Manufacturing Technology** .....3-12 credits  
This course provides the student with manufacturing technology-related work experience in community businesses and industry. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**MFG 122 RV Manufacturing** .....1-6 credits  
This course is offered to teach specific recreational vehicle manufacturing skills in the following areas: workplace safety; electrical systems; hydraulics; fuel systems; water systems; cable plant; HVAC; assembly; installation; interior and exterior coach fabrication and maintenance; and, powerplant, suspension, brakes troubleshooting. This course may be repeated up to 36 credits.

**MFG 197 Manufacturing Technology** .....1-6 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. MFG 197 covers theory, setup and operation of conventional (manual) machine tools and related tooling. Course

includes materials, speeds and feeds, measuring tools, cutting tool geometry and selection. Develop competencies in troubleshooting setups, shop math and blue print reading. Completed machining projects become student tools. Manufacturing Technology MFG 197 is an open-entry/open-exit variable credit course. It is suggested that majors NOT schedule less than 6 credits of MFG 197 per term (instructor approval is required to schedule less than 6 credits). It is recommended that six terms be the target maximum for completion of MFG 197, 12 credits/ term 1-8 lecture, 3-12 lab hrs/wk. Upon satisfactory completion of 66 credits (528 lecture, 792 lab hrs) the student has completed MFG 197.

**MFG 201 CNC Mill** .....1-6 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Development of the skills required to program, operate, and produce parts on the computer numerical control (CNC) 3 axis mill. Topics include: history of NC/CNC, computer to machine interface including feedback and adaptive control, understanding the G-code language required to efficiently program the machine tool from a part drawing, modern cutting tools and part fixtures for CNC operations, set-up and operation of CNC milling machines including machining centers with automatic tool changers. This course will be presented by lectures, demonstrations, and hands-on experience.

**MFG 202 CNC Lathe** .....1-6 credits  
Prerequisite: Minimum reading score of 68 OR RD 080 OR Prior College. Development of the skills required to program, operate, and produce parts on the computer numerical control (CNC) lathe. Topics include: history of NC/CNC, computer to machine interface including feedback and adaptive control, understanding the G-code language required to efficiently program the machine tool from a part drawing, modern cutting tools and part fixtures for CNC operations, set-up and operation of CNC lathes including turning centers with automatic tool changers. This course will be presented by lectures, demonstrations, and hands-on experience.

**MFG 208 CNC Special Projects** .....1-9 credits  
Prerequisite: MFG 201 and MFG 202. Overview of advanced uses of computers in manufacturing including rapid prototyping systems, flexible manufacturing systems, and computer integrated manufacturing. Students will utilize the skills developed in MFG 201 and MFG 202 to create individualized projects demonstrating initial product design concepts, process planning, CNC code generation, and product production on the LCC CNC machines. This course will be presented by lectures, demonstrations, and hands-on experience.

**MFG 210 CAM 1** .....3 credits  
Prerequisite: MFG 201 and MFG 202, Or instructor consent. Introduction to Computer Aided Manufacturing CAM, and its application in modern industry. Development of the basic skills required to use Mastercam software for CNC Milling. Primary emphasis is on CAM for 3 axis CNC machining centers. Topics include: geometry creation, importing CAD drawings, assigning work planes, determining correct cutting tools and tool paths, solid model machining simulation, and creating CNC code. Introduction to multi-work plane 4 axis milling. Demonstration of the CAD/CAM/CNC process workflow using Mastercam software to create machine code for the LCC machining center. This course will be presented by means of lectures, demonstrations, and hands-on experience.

**MFG 211 CAM 2** .....3 credits  
Prerequisite: MFG 210 OR instructor consent. Utilization of the basic Mastercam software skills learned in MFG 210 applied to programming CNC lathes. Primary emphasis is on 2 axis turning centers. Introduction to CAM for multiple spindle, multiple axis turning centers. Orientation to CAM for milling complex 3D surfaces and mold cavities. Demonstration of the CAD/CAM/CNC process workflow using Mastercam software to create machine code for the LCC machining center. This course will be presented by means of lectures, demonstrations, and hands-on experience.

**RTEC 100 Basic Career Technical Skills** .....2-6 credits  
This course explores the basic skills for entering technical careers such as mechanics, manufacturing, aviation, electronics, etc. The course includes; safety, math, tools, basic electricity, basic hydraulics, employability skills, rigging, blue prints, and communication. Students may not receive credit for both RTECH 100 and APPR 101.



## Mathematics: Self-Paced Format

For information, visit the Math Resource Center in Building 16, Room 169, or call 541.463.5399.

Most Lane Community College mathematics courses are presented in an instructor led lecture class format. However, to accommodate students that need a more flexible approach to instruction the department offers several courses in a variable credit, self-paced format. These courses are administered through the Mathematics Resource Center. Students enrolling in these courses must attend an Orientation Session where policies and procedures are outlined, study guides and schedules are distributed, and questions are answered. Group Orientation sessions occur during the first week of each term and begin on the hour at 9 a.m., 11 a.m. or 1 p.m. in Building 16, Room 169. Following the orientation, you can be cleared to enroll if you have met the course prerequisites.

The MRC also provides free tutoring support for all Lane math students in Building 16, Rooms 163 and 177.

The following courses require instructor permission to enroll. To obtain instructor permission, you must come to the Math Resource Center, Building 16, Room 169. Please call the Math Division Office at 541.463.5392 for times.

Courses available for variable credit in a self-paced format offered through the Math Resource Center are:

MTH 20 Basic Math Review.....	1-3 credits
MTH 60 Beginning Algebra .....	1-4 credits
MTH 65 Elementary Algebra .....	1-4 credits
MTH 95 Intermediate Algebra.....	1-5 credits

Additional self-paced courses offered in the Math Resource Center are:

MTH 022 Number Reasoning.....	1 credit
MTH 053 Metric Measurement.....	1 credit
MTH 058 Word Problems in Algebra.....	1 credit
MTH 071 Informal Geometry 1 .....	2 credits
MTH 072 Informal Geometry 2 .....	2 credits

### MTH 020 Math Renewal.....1-3 credits

Prerequisite: MTH 010A, MTH 010T or equivalent courses with a grade of "C-" or better, or pass a placement test through Testing Services. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course begins with a review of whole number, fraction, and decimal arithmetic that includes rounding, estimation, order of operations, averages, and the solving of one-step equations. This review is followed by an introduction to ratios, proportions, percent, measurement, and basic geometry in a problem-solving context, with the earlier review skills integrated throughout. Some applications for technical careers will be incorporated for students in professional technical programs. Required: Scientific Calculator with Advanced Direct Algebraic Logic (D.A.L.), which allows entry of an expression in the exact order it appears on paper. [Purchase after instructor recommendation]. Students wishing to take MTH 020 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

### MTH 022 Number Reasoning .....1 credits

Prerequisite: Three credits of MTH 020 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. This is a self-paced course under the supervision of an instructor. This course will test students ability to perform basic math operations by hand and to evaluate whether an answer is of reasonable size. Upon entering this course, students are expected to be able to calculate by hand basic math problems involving decimals, fractions, percents, ratios and proportions. In addition to reviewing these basic math skills, this course will provide practice in comparing, estimating and reflecting on the reasonableness of answers.

### MTH 053 Metric Measurement.....1 credits

Prerequisite: MTH 020 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. A self-paced course under the supervision of an instructor. The course provides hands-on experience in metric measurement and encourages metric common sense: the ability to estimate and think in metric units, metric prefixes, metric symbols, conversion of units, temperature, length, mass, and volume.

### MTH 058 Word Problems in Algebra.....1 credits

Prerequisite: MTH 060 and above or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. A self-paced course under the supervision of an instructor. This course requires some beginning algebra skills. It covers methods for solving standard word problems using basic algebra skills.

### MTH 060 Beginning Algebra.....1-4 credits

Prerequisite: MTH 020 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course is for the student who has not taken algebra recently, or who desires a slow-paced introduction to the subject. This is the first term of a two-term sequence in introductory algebra. Topics include a selective review of arithmetic, tables and graphs, signed numbers, problem solving, linear equations, ratio and proportion, and unit analysis. MTH 060 prepares students for Elementary Algebra, MTH 065. MTH 060 and MTH 065 provide a two-term sequence preparatory to Intermediate Algebra, MTH 095. A scientific calculator is required. Students wishing to take Mth 060 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

### MTH 065 Elementary Algebra.....1-4 credits

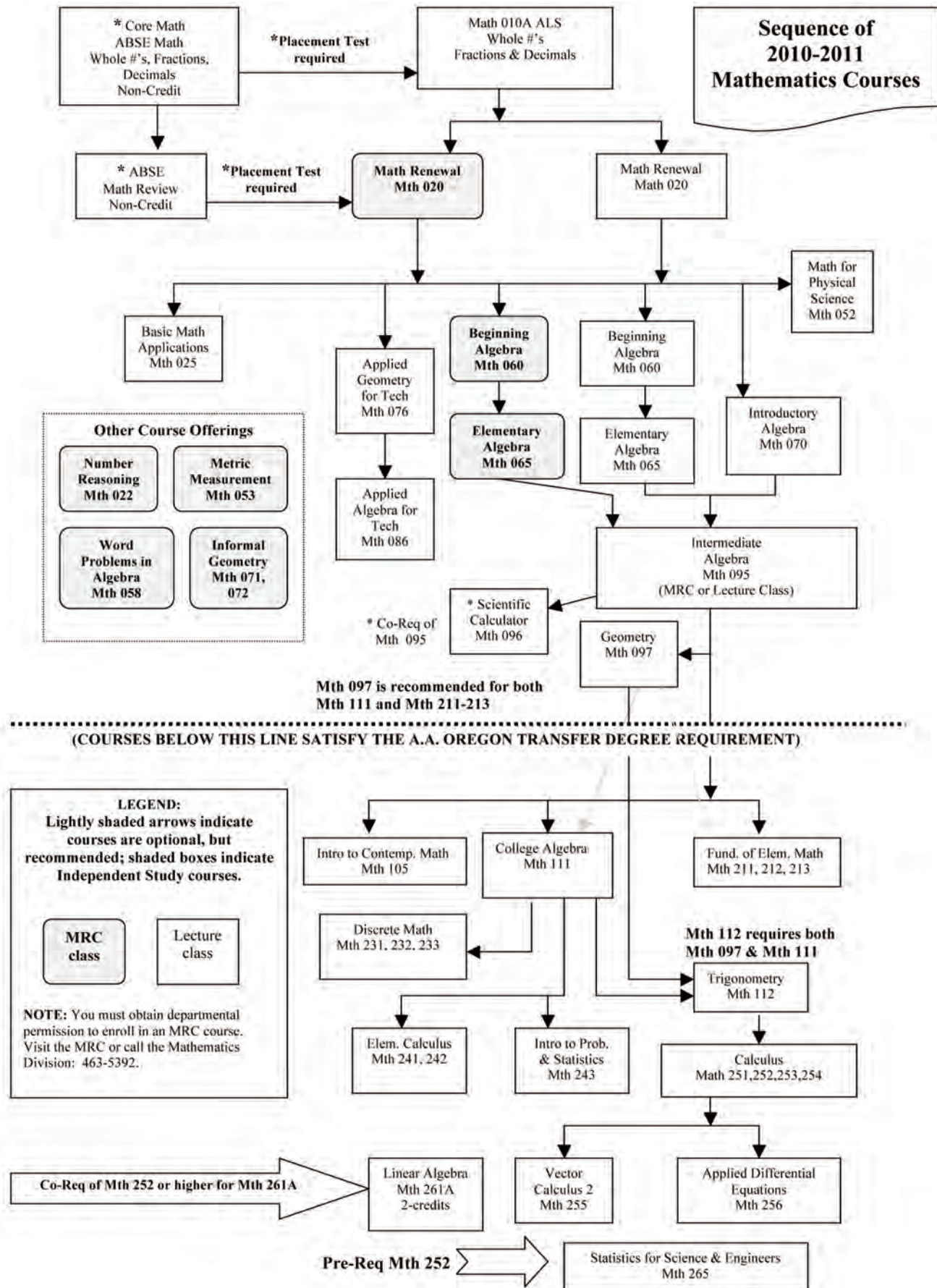
Prerequisite: MTH 060 or equivalent courses with a grade of "C-" or better, or pass a placement test through the testing office. Prerequisite grades must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This is the second term of a two-term sequence in introductory algebra. Students having successfully completed MTH 060 should continue with this course in preparation for taking Intermediate Algebra (MTH 095). Topics include systems of linear equations, polynomials, factoring, quadratic equations, rational expressions, exponents, and radicals. A scientific calculator is required. Students wishing to take MTH 065 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

### MTH 071 Informal Geometry 1.....2 credits

Prerequisite: Four credits of MTH 060 or five credits of MTH 070 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Instructor permission required. A self-paced course under the supervision of an instructor. This informal course in geometry requires elementary algebra skills. Topics include angles, parallel and perpendicular lines, polygons, polyhedra, transformations, triangles, congruence, quadrilaterals, and the coordinate plane. Basic vocabulary and elementary relationships are stressed. Suitable for students with little background in geometry and who want new concepts introduced one at a time. MTH 071 and MTH 072 do not satisfy the geometry prerequisites for Trigonometry MTH 112 or Calculus 1 MTH 251.

### MTH 072 Informal Geometry 2.....2 credits

Prerequisite: MTH 071 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. Instructor permission required. A self-paced course under the supervision of an instructor. This course includes concepts and computation of perimeter, area, surface area, and volume; applications of similar figures; the Pythagorean Theorem, and elementary trigonometric ratios; attributes and measurement of circles, prisms, pyramids, cones, and cylinders; and transformations related to coordinate geometry. MTH 071 and MTH 072 do not satisfy the geometry prerequisites for Trigonometry MTH 112 or Calculus 1 MTH 251.



COURSE DESCRIPTIONS



**Mathematics: Traditional Instructor-Led Format**

For information, contact Mathematics, Bldg. 16/Rm. 166, 541.463.5392.

Most Lane Community College mathematics courses are presented in an instructor-led lecture class format. However, to accommodate students that need a more flexible approach to instruction, the department offers several courses in a variable credit, self-paced format. These courses are administered through the Mathematics Resource Center.

**MTH 010A Whole Numbers, Fractions, and Decimals** .....3 credits  
 Prerequisite: Placement by the LCC math test or consent of the instructor. Students will review whole number skills and learn to compute with fractions and decimals. Universal math concepts will be integrated into the curriculum to increase students' abilities and to extend their understanding of basic math principles in preparation for higher level math courses. Effective math study strategies and math anxiety issues will be discussed to increase students' confidence in their abilities to succeed in math classes and to use math in daily life. MTH 010A is intended for students who need to strengthen their basic math skills before moving on to MTH 020.

**MTH 010T Whole Numbers, Fractions, and Decimals: WIT** .3 credits  
 Prerequisite: Placement by the LCC math test or consent of the instructor. Students will review whole number skills and learn to compute with fractions and decimals. Universal math concepts will be integrated into the curriculum to increase students' abilities and to extend their understanding of basic math principles in preparation for higher level math courses. Effective math study strategies and math anxiety issues will be discussed to increase students' confidence in their abilities to succeed in math classes and to use math in daily life. MTH 010T is intended for students who need to strengthen their basic math skills before moving on to MTH 020.

**MTH 020 Math Renewal**.....1-3 credits  
 Prerequisite: MTH 010A, MTH 010T or equivalent courses with a grade of "C-" or better, or pass a placement test through Testing Services. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course begins with a review of whole number, fraction, and decimal arithmetic that includes rounding, estimation, order of operations, averages, and the solving of one-step equations. This review is followed by an introduction to ratios, proportions, percent, measurement, and basic geometry in a problem-solving context, with the earlier review skills integrated throughout. Some applications for technical careers will be incorporated for students in professional technical programs. Required: Scientific Calculator with Advanced Direct Algebraic Logic (D.A.L.), which allows entry of an expression in the exact order it appears on paper. [Purchase after instructor recommendation]. Students wishing to take MTH 020 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

**MTH 025 Basic Mathematics Applications** .....3 credits  
 Prerequisite: Three credits of MTH 020 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or higher, you may not use this course for your degree/certificate requirements. Basic skills in fractions, decimals, percents and ratios will be assumed. MTH 025 is a course in the application of basic mathematics to everyday situations. Topics include applications involving budget and retirement, simple and compound interest, mortgage and charge options, household and garden, health formulas, food preparation, measurement systems, markup and discounts. The course will focus on group work, skill maintenance, investigations and projects. Scientific calculator required.

**MTH 052 Math for Introductory Physical Science**.....4 credits  
 Prerequisite: MTH 020 or equivalent content with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course

than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This is a pre-algebra level course in professional-technical mathematics used in chemistry, dosage computation, and other science-related courses. Topics include unit conversions, metrics, scientific notation, significant figures, rates, proportions, percent applications, graphs, algebra of units, and logarithms for pH. May be offered through Distance Learning.

**MTH 060 Beginning Algebra** .....1-4 credits  
 Prerequisite: MTH 020 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course is for the student who has not taken algebra recently, or who desires a slow-paced introduction to the subject. This is the first term of a two-term sequence in introductory algebra. Topics include a selective review of arithmetic, tables and graphs, signed numbers, problem solving, linear equations, ratio and proportion, and unit analysis. MTH 060 prepares students for Elementary Algebra, MTH 065. MTH 060 and MTH 065 provide a two-term sequence preparatory to Intermediate Algebra, MTH 095. A scientific calculator is required. Students wishing to take Mth 060 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

**MTH 065 Elementary Algebra**.....1-4 credits  
 Prerequisite: MTH 060 or equivalent courses with a grade of "C-" or better, or pass a placement test through the testing office. Prerequisite grades must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This is the second term of a two-term sequence in introductory algebra. Students having successfully completed MTH 060 should continue with this course in preparation for taking Intermediate Algebra (MTH 095). Topics include systems of linear equations, polynomials, factoring, quadratic equations, rational expressions, exponents, and radicals. A scientific calculator is required. Students wishing to take MTH 065 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

**MTH 070 Introductory Algebra** .....5 credits  
 Prerequisite: Recent experience in algebra, such as an eleventh grade high school algebra course completed within the last three years; and placement into MTH 070 through the placement testing office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. MTH 070 is a fast paced review of algebra for students with recent algebra experience. For students without recent algebra experience, MTH 060 and MTH 065 provide a more relaxed and thorough introduction to the subject. (Students who are unsure whether to take MTH 070 or MTH 060 should seek the advice of a Counselor or Advisor.) MTH 070 prepares students for Intermediate Algebra, MTH 095. Topics include a selective review of arithmetic, tables and graphs, signed numbers, problem solving, linear equations, ratio and proportion, unit analysis, systems of linear equations, polynomials, factoring, quadratic equations, rational expressions, exponents, and radicals. A scientific calculator is required.

**MTH 076 Applied Geometry for Technicians** .....4 credits  
 Prerequisite: MTH 020 with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. MTH 076 Applied Geometry includes the following: angle measure, properties of systems with parallel, perpendicular and oblique lines; perimeter and area of polygons and circles; surface area and

**Course Fees**  
 Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.



volume of solid figures such as prisms and pyramids; similarity, ratio, and proportion; right triangle trigonometry; linear, square, and cubic units; and dimensional analysis in metric and US customary measures. Algebra will be introduced as needed to work with proportions and formulas. The course will emphasize applications encountered in technical-professional programs and clear communication of mathematical results.

**MTH 086 Applied Algebra for Technicians** .....4 credits

Prerequisite: MTH 076 with a grade of "C-" or better, or instructor permission. Prerequisite grades or test scores must have been completed within the past four terms. MTH 086 Applied Algebra is a first course in algebraic skills needed for technical mathematics, including the following: signed numbers, positive and negative exponents, scientific notation, the Cartesian coordinate system, linear equations and their graphs, linear systems and their graphs, quadratic equations and their graphs, forming expressions and equations from real situations. Oblique triangle trigonometry is an optional topic. Fraction skills will be reviewed as needed. Geometric topics from MTH 076 will be integrated throughout. The course will emphasize clear communication of mathematical results.

**MTH 095 Intermediate Algebra**.....1-5 credits

Prerequisite: MTH 065 or MTH 070 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. If you have taken a higher level math course than this and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. Topics include equations, function notation, polynomials, coordinate graphing, rational equations, radical equations, exponents, quadratic functions, exponential and logarithmic functions, inequalities and problem solving methods. Scientific calculator required. A graphing calculator (TI-83) is suggested for students taking math courses above MTH 095. This course provides a foundation for MTH 097, MTH 105, MTH 111, or MTH 211 or MTH 213. Students wishing to take Mth 095 in a variable credit, self-paced format must obtain instructor permission prior to registering. This permission can be obtained in the Math Resource Center on the first day of classes or just prior to the beginning of the term.

**MTH 096 Using the Scientific Graphing Calculator**.....1 credits

Prerequisite: Co-requisite of MTH 095 or higher. This course is an introduction to the graphing calculator. Topics discussed include: evaluating expressions, graphing functions, solving equations using multiple formats, programming (time permitting), and effective use of tools, offered by the graphing calculator, to solve mathematical problems.

**MTH 097 Geometry**.....4 credits

Prerequisite: MTH 095 or 4 credits of MTH 090 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office or one-and-one-half years of high school algebra. Prerequisite grades or test scores must have been completed within the past four terms. A course in informal geometry covering the study of lines, planes, polygons, circles, solids, area, perimeter, volume, surface area, Pythagorean Theorem, congruence, and similar figures. Applications and exploration of geometry topics rather than proofs will be stressed. This course is the geometry prerequisite for MTH 112, and 251. MTH 097 is strongly recommended for MTH 111 and MTH 211. Scientific calculator required.

**MTH 105 Introduction to Contemporary Mathematics** .....4 credits

Prerequisite: MTH 095 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Survey of Applications of Mathematics for non-science majors including probability, statistics, finance and exponential modeling. (Also available through Distance Learning). Note: MTH 105 will not meet any Science/Math/Computer Science degree requirements if taken after MTH 243; however, MTH 105 can be used as an elective if taken after MTH 243.

**MTH 106 Introduction to Contemporary Math 2**.....4 credits

Prerequisite: MTH 105 with a grade of "C-" or better completed within the past four terms. College Now offering only. The second of a two term sequence involving problem solving with a variety of applications of mathematics. These applications include elementary probability and at least two of the following topics: history and uses of geometry, matrices and linear systems, Markov chains,

game theory, graph theory involving routing and networks, mathematics of voting and apportionment, or other topics approved by the Mathematics Division

**MTH 111 College Algebra**.....5 credits

Prerequisite: MTH 095 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. MTH 097 is strongly recommended. College Algebra is the study of basic functions and their applications. This includes polynomial, rational, exponential, and logarithmic functions and their inverses. Other topics include an introduction to sequences and non-linear systems of equations. In accordance with national recommendations, this course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of technology. A graphing calculator is required. However, students will be held accountable for many skills without a calculator. See current calculator recommendation chart.

**MTH 112 Trigonometry**.....4 credits

Prerequisite: MTH 097 and MTH 111 or equivalent courses with a grade of "C-" or better or pass placement tests through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Trigonometry has wide applications in the world around us. It is a vital tool in construction, physics, and engineering. Trigonometry is preparatory for Calculus 1 (Differential Calculus, MTH 251). The major topics covered include radian measure, circular functions and their graphs, right triangle ratios and related trigonometric functions, identities, solving trigonometric equations, law of sines, law of cosines, and applications. Other topics include polar coordinates, parametric equations, vectors, and conic sections. A graphing calculator is required. See current calculator recommendation chart.

**MTH 199 Special Studies:** .....1 credits

See department for topics.

**MTH 211 Fundamentals of Elementary Mathematics 1**.....4 credits

Prerequisite: MTH 095 or equivalent courses completed with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. MTH 097 is strongly recommended before MTH 211. Surveys mathematical topics for those interested in the presentation of mathematics at the K-9 levels. Various manipulative and heuristic problem solving strategies are used to emphasize problem solving, patterns, sequences, set theory, logic, numerations systems, number bases, arithmetic operations, and number theory.

**MTH 212 Fundamentals of Elementary Mathematics 2**.....4 credits

Prerequisite: MTH 211 with a grade of "C-" or better. Prerequisite grades must have been completed within the past four terms. Surveys mathematical topics for those interested in the presentation of mathematics at the K-9 levels. Various manipulative and heuristic problem solving approaches are used to explore rational numbers (fractions, decimals, and percents), integers, the set of irrational numbers, the set of real numbers, and simple probability and statistics.

**MTH 213 Fundamentals of Elementary Mathematics 3**.....4 credits

Prerequisite: MTH 211 or MTH 212 with a grade of "C-" or better. Prerequisite grades must have been completed within the past four terms. MTH 097 is strongly recommended before MTH 213. Surveys mathematical topics for those interested in the presentation of mathematics at the K-9 levels. Various manipulative and heuristic problem solving approaches are used to explore algebra and functions, informal geometry, transformational geometry, and measurement systems.

**MTH 231 Discrete Mathematics 1** .....4 credits

Prerequisite: MTH 111 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. First course in three-term sequence fulfilling the Discrete Mathematics requirement for enrolling in upper division Computer Science courses at the University of Oregon and Oregon State University. Topics include formal logic, methods of proof, sequences and mathematical induction. The order of the topics may vary with instructor and text.

**MTH 232 Discrete Mathematics 2** .....4 credits

Prerequisite: MTH 231 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms.

Second course in three-term sequence fulfilling the Discrete Mathematics requirement for enrolling in upper division Computer Science courses at the University of Oregon and Oregon State University. Topics include set theory, combinatorics, elementary counting techniques, functions, Boolean algebra and probability. The order of the topics may vary with instructor and text.

**MTH 233 Discrete Mathematics 3** .....4 credits  
Prerequisite: MTH 232 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. Third course in three-term sequence fulfilling the Discrete Mathematics requirement for enrolling in upper division Computer Science courses at the University of Oregon and Oregon State University. Topics include recursion, relations, modular arithmetic, group theory, graphs and trees. The order of the topics may vary with instructor and text.

**MTH 241 Elementary Calculus 1** .....4 credits  
Prerequisite: MTH 111 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Differential calculus (without Trigonometry) for business and social sciences. Some review of algebraic techniques. Major emphasis is on limits; continuity; derivatives with applications; exponential and logarithmic functions, their derivatives and applications; and introductory mathematics of finance.

**MTH 242 Elementary Calculus 2** .....4 credits  
Prerequisite: MTH 241 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. Integral calculus (without Trigonometry) for business and social sciences. Integration and applications for single variable functions, techniques of integration, partial differentiation methods for multivariate functions and their relative extrema, and matrix algebra.

**MTH 243 Introduction to Probability and Statistics** .....4 credits  
Prerequisite: MTH 111 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Discrete and continuous probability, data description and analysis, measures of central tendency and variability, binomial and other distributions, sampling distributions; basic concepts of statistical inference, including confidence intervals, hypothesis testing, correlation, and regression. Note: Students planning to take MTH 105 and MTH 243 must take MTH 105 first in order to apply the Mth 105 credits towards any Science/Math/Computer Science degree requirements. Students who complete MTH 105 after MTH 243 will have the MTH 105 credits counted as elective credits.

**MTH 251 Calculus 1 (Differential Calculus)** .....5 credits  
Prerequisite: MTH 112 (Trigonometry) or equivalent course(s) with a grade of "C-" or better, or pass a placement test through the Testing Office. Prerequisite course(s) or placement testing must have been completed within the past four terms. MTH 251 is a first-term calculus course that includes a review of college algebra and trigonometry followed by development of the derivative from the perspective of rates of change, slopes of tangent lines, and numerical and graphical limits of difference quotients. The limit of the difference quotient is used as a basis for formulating analytical methods that include the power, product, and quotient rules. The chain rule and the technique of implicit differentiation are developed. Procedures for differentiating polynomial, exponential, logarithmic, and trigonometric functions are formulated. Analytical, graphical, and numerical methods are used to support one another in developing the course material. Opportunities are provided for students to work in groups, verbalize concepts with one another, and explore concepts and applications using technology. The use of a programmable graphing calculator is required.

**MTH 252 Calculus 2 (Integral Calculus)** .....5 credits  
Prerequisite: MTH 251 (Calculus 1) or equivalent course(s) with a grade of "C-" or better. Prerequisite course(s) must have been completed within the past four terms. MTH 252 is a second-term calculus course covering definite and indefinite integrals. Specific topics include conceptual development of the definite integral, properties of the definite integral, the first and second Fundamental Theorems of Calculus, constructing anti-derivatives, techniques of indefinite integration, approximating definite integrals, and applications. Analytical, graphical, and numerical methods are used to support one another in developing the course material.

Opportunities are provided for students to work in groups, verbalize concepts with one another, and explore concepts and applications using technology. The use of a programmable graphing calculator is required.

**MTH 253 Calculus 3 (Infinite Series and Sequences)** .....4 credits  
Prerequisite: MTH 252 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. This is the third term of a six-term sequence. Indeterminate forms and improper integrals. Sequences and series. Investigation of the convergence of series. Taylor series and power series. Miscellaneous topics include parametric and polar equations and conics. The use of programmable graphic calculator is required.

**MTH 254 Vector Calculus 1 (Introduction to Vectors and Multidimensions)** .....4 credits  
Prerequisite: MTH 253 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. This is the fourth term of a six-term sequence. Major emphasis is on three-dimensional vectors and differential calculus of several variables. The use of a programmable graphing calculator is required.

**MTH 255 Vector Calculus 2 (Introduction to Vector Analysis)** 4 credits  
Prerequisite: MTH 254 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. This is the fifth term of a six-term sequence. Major emphasis is on multiple integration, vector fields, and applications. The use of a programmable graphing calculator is required.

**MTH 256 Applied Differential Equations** .....4 credits  
Prerequisite: MTH 254 with a grade of "C-" or better. Prerequisite grade must have been completed within the past four terms. This is the last of a six-term sequence. The course covers methods of solving ordinary differential equations and includes elementary methods, convergent power series and numerical methods, with applications to physical engineering science. The use of programmable graphing calculator required.

**MTH 261 Introduction to Linear Algebra** .....2 credits  
Corequisite: MTH 252. If the co-requisite has already been completed, then one of the following must have been completed with a "C-" or better within the past four terms: MTH 252, MTH 253, MTH 254, MTH 255 or MTH 256. Introduction to Linear Algebra, MTH 261 may be taken concurrently with any math course after Calculus 1, MTH 251. The course covers systems of linear equations, vectors in a geometric setting, real vector spaces, matrices, operations on matrices, inversion of matrices, determinants, linear transformations, dot product and cross product, and eigenvalues and eigenvectors.

**MTH 265 Statistics for Scientists and Engineers** .....4 credits  
Prerequisite: MTH252 with a grade of "C" or better. A calculus-based introduction to probability and statistics with applications to science and engineering disciplines. Topics include: data description and analysis, discrete and continuous probability theory, common probability distributions, sampling distributions, estimation, hypothesis testing, control charts, regression analysis, and experimental design. Prerequisite: MTH 252

**MTH 280 Co-op Ed: Mathematics** .....1-12 credits  
The LCC mathematics student tutor will devote a prearranged number of hours each week to classroom observation and possible assistance to the instructor, as well as direct student contact outside the classroom in a one-to-one or group situation. The student tutor will write learning goals at the beginning of the term, keep a daily log of progress on goals, etc., and write a summary paper. The tutor will meet periodically with the mathematics supervisor to discuss any problems, to get feedback, and for evaluation of the student tutor's progress. The mathematics supervisor will train, direct, supervise, and evaluate the student tutor's performance.

**Mechanics - See Automotive, Aviation, Diesel**

### Media Studies

Also see Video Production

For information about classes with course numbers that begin with:

ENG - Contact Language, Literature and Communication, Center Bldg./Rm. 457, 541.463.5419.

FA - Contact Art and Applied Design, Bldg. 11/Rm. 101, 541.463.5409.

**ENG 195 Introduction to Film Studies**.....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 195 is the first course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scene, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis. A variety of assignments and activities develop and test students "ways of seeing." ENG 195 focuses on the formal elements of the shot: cinematography, mise en scene, blocking, and movement.

**ENG 196 Introduction to Film Studies**.....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 196 is the second course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scene, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis. A variety of assignments and activities develop and test student's "ways of seeing." ENG 196 reviews the elements of film style relating to the individual film shot, but it emphasizes the formal means by which shots are built into the larger structures of scene, segment, and finished film: editing, sound, screenwriting, and narrative structure (e.g., editing style — sequence shots, continuity editing, montage and editing techniques — on the types and uses of film: foley, dialogue, theme music, etc.). The course also looks at the larger social and historical contexts in which films emerge, considering the ways that films both reflect and affect a culture. Along these lines, we focus particularly on issues and ideologies relating to race, class, gender, sexuality and nation.

**ENG 197 Introduction to Film Studies**.....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. ENG 197 is the third course of a year-long sequence focusing on the history, art, and social contexts of film as an art form. A primary objective of the course is to enhance students' enjoyment and appreciation of film by developing their cinematic literacy. Students are introduced to the basic elements of film language, including cinematography, mise-en-scene, editing, and sound. While American films are emphasized, the sequence also focuses at times on international cinema, looking at all films in the context of time, culture, and ideological effects. Weekly campus screenings are required, and clips of films are used in class for close analysis. A variety of assignments and activities develop and test students "ways of seeing." ENG 197 centers on films chosen around a theme, topic or director. Recent themes include "Film and the American Dream" or "American Independent Cinema." Providing an overview of film language, the course explores the style of the featured films and/or director and looks at their historical contexts and ideological effects relating to such contested areas of social experience as race, class, gender, sexuality, and nation.

**FA 250 Concepts of Visual Literacy** .....3 credits

Introduces students to elementary concepts of visual literacy, including theories of representation and design. Includes the role of composition, color, time, motion, lighting, and sound in the design of moving images for film, television, and computer imaging. Students will learn to incorporate these design elements into visual projects and learn how to critically evaluate visually mediated messages.

**FA 255 Understanding Movies: American Cinema**.....3 credits

An introductory film studies course designed to bring Hollywood film making into clear focus as an art form, as an economic force, and as a system of representation and communication. The course explores how Hollywood films work technically, artistically and

culturally. Students will probe the deeper meaning of American movies - the hidden messages of genres, the social and psychological effects of Hollywood film style, and the mutual influence of society and popular culture-through encounters with the work of such directors as John Ford, Howard Hawks, and Martin Scorsese. May be offered through Distance Learning.

**FA 263 Film in the Fifties**.....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course introduces students to the 1950s as a complex decade in American history through films from and about the era that epitomize the cultural tensions and darker historical currents that define it, demythologizing the fifties as a golden age of innocence and simplicity. Historical and critical readings supplement the screening of classic films and provide direction for class discussion, exams, and critical essays that help students develop critical skills and cineliteracy.

**FA 264 Women Make Movies**.....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course focuses on women directors around the world and the contributions they have made to film (and video). Students will be introduced to the historical and economic context of film production as well as to a formalist film vocabulary. They will explore readings in feminist scholarship and analyze women-authored cinema-narrative, experimental and documentary-in the context of race, ethnicity, gender, sexuality, class and nationality. Films will span the silent period to the present.

**FA 265 African American Film Images** .....4 credits

Prerequisite: College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) are strongly recommended for success in this course. This course gives students an introduction to African Americans' role in the history of Hollywood filmmaking, and the social, educational, and political climates that follow this cultural phenomenon of moviemaking. Several critical texts will reveal the historically complex and difficult relationship between black Americans and their desire to become an active, integral part of all aspects of the American film industry. Screenings of important films, class discussions, inside and outside of class group work, exams, and other relevant critical readings are essential aspects in guiding students' understanding of the peculiar problems offsetting African Americans' full, rigorous admittance into the Hollywood system.

## Medical Office Assisting

**Also see Health Records**

For information, contact Health Professions, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the program to take most of these classes

**HO 101 Introduction to Health Occupations** .....2 credits

This course explores the health care system and a variety of health careers. It includes an overview of the health care delivery system, historical background, holistic health and cultural competencies. In addition, it explores educational requirements, employability skills and demands, ethical, legal and safety standards, salary ranges and future job prospects for a variety of health careers. The course concludes with a comparison of all of the careers introduced in terms of their future viability and appropriateness for each student. May be offered through Distance Learning.

**HO 102 Diversity Issues in Healthcare** .....3 credits

This course explores the influence of membership in ethnic, religious, age, class and gender groupings on communication in health care settings on both the health care provider and the receiver of health care. Utilizing both theory and personal experience, students will identify personal attitudes and behaviors and gain experience in using effective methods of communicating with individuals from backgrounds represented in both patient and health care provider populations. May be offered through Distance Learning.

**HO 103 Health Literacy and Communication** .....3 credits

This course is designed to introduce the issue of health literacy and explore the links between health literacy, health outcomes and health care disparities. Students will gain a foundational understanding of health literacy by defining and identifying the factors that influence health literacy and exploring health



communication expectations, examine varying levels of literacy, learn how to identify these levels and practically approach the differing needs of those at each level of literacy. This will also include learning how health literacy and communication impacts the health care system, populations at risk, cultural competence and communication, the responsibility to increase health literacy and identify resources and tools available to improve health related communication and improve health outcomes. Course may be offered through Distance Learning.

**MA 120 Clinical Assistant 2**.....3 credits  
Prerequisite: Successful completion of MA 110 and all fall term Medical Office Assistant courses. Continuation of Clinical Assistant 1 MA 110. Includes identification, care and use of clinical instruments. Preparation for assisting physician with office procedures and surgeries. Introduction to basic pharmacology and drug identification. Identification of injection sites, introduction to preparation of injectables; instruction in mixing and administering ID, SQ, and IM injections; application of bandages and dressings. ECG instruction.

**MA 280 Co-op Ed: Medical Office Assistant** .....3-12 credits  
Prerequisite: MA120, MA 150, HO 110, HO 112, HO 152, HO 190 and HO 220 with grade of C- or better, or consent of instructor. The purpose of this course is to provide internships in local medical offices and hospitals in both clinical and administrative office settings. During the required unpaid field placement spring or summer term students earn college credit and gain actual work experience. Further instruction in the identification and proper use of other medical equipment and valuable on-the-job training are additional benefits gained in this course. Students attend a weekly seminar that includes instruction for writing effective resumes, interviewing techniques and other job-search skills.

**Microbiology - See Anatomy/Physiology/Microbiology**

**Multimedia Design**

Also see Video Production

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, 541.463.5409.

**ART 151A Media Graphics** .....3 credits  
This course will give students a solid foundation in the essential skills needed to use Flash software. At the end of the course you will understand how components of a Flash movie fit together, have used all the key tools, and have integrated all of your learning in a series of detailed creative exercises. Flash is used to create all kinds of content such as website front-ends, interactive games, animated cartoons, movie trailers, and PDA interfaces.

**ART 288 Introduction to Web Design**.....2 credits  
Prerequisite or Co-requisite: CS 195. An introduction to design and communication principles as they apply to web design. Students will also investigate the unique challenges involved in web site design. This course may be offered through Distance Learning or as a hybrid course.

**ART 298 Independent Study**.....1-3 credits  
An independent study experience designed to allow the student with prior qualifying college course experience in his/her field of interest to initiate individual projects, with instructor approval. Enables the student to explore further some specific interest, method, project, or technique. Upon completion of the course, the student should demonstrate an increased capability in the chosen field, method or technique. May be available in the following areas: Art History, Design, Drawing, Ceramics, Graphic Design, Painting, Fibers, Printmaking, and Sculpture. Repeatable.

**FA 221 Computer Animation**.....3 credits  
Historical beginnings of animation from flipbooks to film. Students will explore the uses of animation from business presentations to entertainment. This project-oriented, hands-on course will give students the opportunity to script, design, and produce animation projects on the computer. The course will emphasize 2-D animation techniques and tools and introduce 3-D modeling and animation techniques and tools.

**FA 222 Computer Animation 2** .....3 credits  
Prerequisite: FA 221. This course is a comprehensive exploration of three-dimensional computer animation arts: 3-D space and form, model creation, texturing, lighting, scene composition, animation and rendering strategies.

**FA 231 Multimedia Authoring** .....3 credits  
Prerequisite: MUL 210. Authoring techniques as they pertain to multimedia production. Students will have the opportunity to develop authoring skills using Macromedia Director and the Lingo authoring language. This course is not about programming; it is about applying multimedia design to an authoring language framework to solve implementation problems, and to enhance non-linear content presentation. Activities will focus primarily on completed multimedia projects and their effectiveness. Students are encouraged to develop tools and programs that serve real needs or fit well into a portfolio.

**FA 254 Fundamentals of Lighting** .....3 credits  
This course will give the student a comprehensive mix of lighting techniques, tools and theory that can be applied to media production including video, photography, and production design. Students will learn the fundamental properties of light as well as practical advice, tips and tricks for improving production values from the studio or location to the screen. Students will gain an understanding of image manipulation and demonstrations, practical hands-on exercises and assignments.

**FA 261 Writing and Interactive Design**.....3 credits  
Prerequisite: WR 121. An introduction to basic principles involved in scripting for interactive media. Focusing on writing techniques which foster interactivity, the course will explore the role of authoring tools in the design of multimedia projects, define the stages involved in the development of multimedia projects, and address the skills necessary to write a proposal, develop a flow chart and storyboard a short multimedia project involving text, graphics, illustrations, animation, video, sound, links and search mechanisms. May be offered through Distance Learning.

**MDP 246 Multimedia Production 1** .....4 credits  
Prerequisite: FA 250, FA 231, VP 151, AUD 120, ART 151A, MUL 210, and CIS 140B. A practicum course that gives students the opportunity to apply technical knowledge and skills learned in the first year to actual basic production situations with an emphasis in multimedia productions. Class members may be able to volunteer for production positions based on their own career interests and experience.

**MDP 247 Multimedia Production 2** .....4 credits  
Prerequisite: MDP 246, FA 261, VP 152, MUL 212, and CG 203. A practicum course that gives students the opportunity to apply technical knowledge and skills learned in the first year to actual intermediate production situations with an emphasis in multimedia productions. Class members may be able to volunteer for production positions based on their own career interests and experience. A component of the course will permit the introduction of current topics such as media issues, professional production techniques, changing media technology, and job market information.

**MDP 248 Multimedia Production 3** .....4 credits  
Prerequisite: MDP 247. A practicum course that gives students the opportunity to apply technical knowledge and skills learned in the first year to actual intermediate production situations with an emphasis in multimedia productions. Class members may be able to volunteer for production positions based on their own career interests and experience. A component of the course will permit the introduction of current topics such as media issues, professional production techniques, changing media technology, and job market information.

**MDP 280 Co-op Ed: Multimedia**.....3-12 credits  
Prerequisite: Instructor approval. This course provides the student with multimedia-related work experience in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**MUL 210 Multimedia Design** .....3 credits  
Prerequisite: ART 261, CIS 140B, and AUD 120. Students learn to design and produce computer multimedia programs by utilizing digital production techniques in imaging, sound, and animation.

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

Emphasis is given to design implementation and human factors, user analysis, interface and interaction considerations, project management, and meeting client needs.

**MUL 212 Digital Imaging** .....3 credits

Prerequisite: ART 261. Basic computer literacy required. Introduction to the use of Adobe Photoshop for digital compositing, typography, image repair, and construction of photographic images and digital artworks. This course covers basic concepts, processes, and aesthetic interpretation of making digital imagery.

**MUL 216 Multimedia for the Web** .....3 credits

Prerequisites: CIS125H, ART 289. This course allows students to explore the basics of working in the World-Wide Web environment with emphasis on integrating video, web graphics, animation, and other types of dynamic multimedia into Web site design. Students will investigate various site design models used in personal and commercial web sites and will design web pages and web sites utilizing a variety of multimedia techniques and tools. Students who complete the one-year certificate are prepared for entry-level positions in many areas of web related businesses as page and site designers, multimedia and graphic designers, information designers and web animators.

**MUL 218 Business Practices for Media Arts** .....2 credits

This course will provide students a strong understanding of common business practices in the graphic, multi-media and web design fields. In this class, students will be exposed to the skills necessary to successfully manage an art department, or to run a freelance business. Additionally, the class will provide students a working knowledge of project management from initial client contact through the completion of the project. Upon successful completion of the class students will have a clear understanding of how to establish and maintain timelines, budgets and workflow. Throughout the curriculum, the student will be exposed to the role of ethics in the design profession.

**MUL 298 Independent Study: Multimedia**.....1-3 credits

A variable credit course based on independent study contracted between an instructor and a student.

## Music

For information, contact Music, Dance and Theatre Arts, Bldg. 6/Rm. 205A, 541.463.5209.

**MUS 101 Music Fundamentals**.....3 credits

This course provides the student an opportunity to develop a working knowledge of the elements of music. Students learn the basic skills needed to read, write, analyze, and compose simple music. Students may find it helpful to take Group Piano MUS 131 at the same time. This course prepares one for Music Theory MUS 111.

**MUS 107 Audio Engineering 1** .....3 credits

Prerequisite: MUS 101 and MUS 119. Audio Engineering is available for students who are seeking the tools to work and function as a recording engineer in a recording environment i.e., recording studio or live concert recording. Students will meet with the instructor in the recording studio where the following topics, among others, will be addressed and demonstrated: sound and hearing, studio acoustics, microphones choices and positioning, mixing board, recording technology, tracking, audio editing, signal processing, monitoring, mixing, mastering, work flow, and professionalism.

**MUS 108 Music in World Cultures**.....4 credits

This one-term basic survey explores selected musical cultures of the major continental regions of the globe, including Native Americans, Africa, Eastern Europe, India, Asia, and Latin America. Focus is placed in both (1) the nature of the music for a given people on its own terms and (2) the ways in which this music is located within its own cultural context. Approaching this music is accomplished by recorded music listening and analysis. Venues include in-class and outside-classroom experiences of music and, to a limited degree, in-class music making. Previously numbered MUS 209 and cannot be repeated for Degree Requirements.

**MUS 109 Audio Engineering 2** .....4 credits

Prerequisite: MUS 107. This course is available for students who are seeking the tools to work and function as recording engineers in a recording environment (recording studio or live concert recording). Students will meet with the instructor in the recording studio where the following topics, among others, will be addressed and demonstrated, and hands-on assignments, using the recording

studio equipment, will begin taking place: operation of outboard mic pre amps and signal processors, signal flow and setting up various signal paths within the control room, microphone placement and basic multitrack recording of various instruments, using the mixing console, tracking to different mediums, etc.

**MUS 110 Audio Engineering 3** .....4 credits

Prerequisite: MUS109. Audio Engineering 3 is the third course in the Audio Engineering sequence, which is designed to train students seeking the tools to work and function as recording engineers in a recording environment. Students will meet with the instructor in the Recording Studio. The following topics, among others, will be addressed and demonstrated as students work on a large-scale recording project: Studio Etiquette, Studio Preparation, Selecting a Recording Format, Rehearsal Sessions, Console Logistics, Initial Tracking, Overdubbing, Compression Techniques, EQ Techniques, Signal Processing, Console Automation, Mixing, and Mastering.

**MUS 111 Music Theory 1 (First Term)** .....4 credits

Theory placement test required. MUS 111, 112, 113 must be taken in sequence. Thorough review of the fundamentals of music followed by their application to melody, harmony, and rhythm through analysis and composition. Emphasis of MUS 111 is on fluency of key signatures, scales, rhythm, intervals, triads and 7th chords, individually and in context, as well as 1st species modal and tonal counterpoint. This course is designed to be taken in conjunction with MUS114 and MUS127 concurrently.

**MUS 112 Music Theory 1 (Second Term)** .....4 credits

Prerequisite: MUS 111. Must be taken in sequence. Emphasis of MUS112 is on tonal species counter point and tonal music in 4 part context. Includes tonal functional harmony involving tonic and dominant harmonies, non-harmonic tones, scoring, figured bass and introduction of cadences. This course is designed to be taken in conjunction with MUS115 and MUS128 concurrently.

**MUS 113 Music Theory 1 (Third Term)** .....4 credits

Prerequisite: MUS 112. Must be taken in sequence. Emphasis of MUS113 is in concepts of prolongation and contextual analysis. Includes all diatonic chords, cadences, embellishing chords, melodic analysis, sequences, and secondary dominants. This course is designed to be taken in conjunction with MUS116 and MUS129 concurrently.

**MUS 114 Sight-reading and Ear Training (First Term)** .....2 credits

Prerequisite: Theory placement test required. In this three term sequence of courses, one develops the skills necessary to read melodies at sight and to notate melodies one hears. It includes study of rhythm and meter, tonality and modality (solfeggio) scales, triads and seventh chords, cadences, and conducting patterns. This course is designed to be taken in conjunction with MUS111 and MUS127 concurrently.

**MUS 115 Sight-reading and Ear Training (Second Term)** .....2 credits

Prerequisite: MUS 114. Second in three term sequence of courses developing the skills necessary to read melodies at sight and to notate melodies one hears. It includes study of rhythm and meter, tonality and modality (solfeggio) scales, triads and seventh chords, cadences, and conducting patterns. This course is designed to be taken in conjunction with MUS112 and MUS128 concurrently.

**MUS 116 Sight-reading and Ear Training (Third Term)** .....2 credits

Prerequisite: MUS 115. Third in three-term sequence of courses developing the skills necessary to read melodies at sight and to notate melodies one hears. It includes study of rhythm and meter, tonality and modality (solfeggio) scales, triads and seventh chords, cadences, and conducting patterns. This course is designed to be taken in conjunction with MUS113 and MUS129 concurrently.

**MUS 118 Music Technology MIDI/Audio 1** .....4 credits

This course provides the student with an opportunity, through group instruction and hands-on experience, to study current applications of music technology in a comprehensive MIDI/audio studio. Students will learn to use various music production tools, using MIDI sequencing, patch editing, digital audio recording, MIDI networking, digital effects devices and plug-ins, and both digital and analog mixing systems. Each student is assigned to one of the 20 MIDI/audio studios, where they will complete creative lab assignments. Students will work in the studios a minimum of 3 hours outside of class.

**MUS 119 Music Technology MIDI/Audio 2** .....4 credits  
Prerequisite: MUS 118. This course provides the student with an opportunity, through group instruction and hands-on experience, to study advanced techniques in the field of music technology in a comprehensive MIDI/audio studio. Students will learn advanced applications of synthesizers, professional sound recording/editing software, MIDI networking, MIDI sequencing, digital effects and both analog, digital mixing, and mastering. In addition, students will gain experience in syncing sound and music to digital movies. Students will also have the opportunity to work with many audio formats such as AIFF, SDII, WAV, MP3, and surround sound as they work on their sound event projects. Students will work in the studio a minimum of 3 hours outside of class.

**MUS 127 Keyboard Skills 1 (First Term)** .....2 credits  
Prerequisites: Theory placement test required. This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors: performance of rhythmic patterns, scales & arpeggios, intervals, chord progressions (including cadences) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS111 and MUS114 concurrently.

**MUS 128 Keyboard Skills 1 (Second Term)** .....2 credits  
Prerequisites: MUS127 This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors: performance of rhythmic patterns, scales & arpeggios, intervals, chord progressions (including cadences) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS112 and MUS115 concurrently.

**MUS 129 Keyboard Skills 1 (Third Term)** .....2 credits  
Prerequisites: MUS128 Co-requisites: MUS113 & MUS116 This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors: performance of rhythmic patterns, scales & arpeggios, intervals, chord progressions (including cadences) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS113 and MUS116 concurrently.

**MUS 131 Group Piano** .....2 credits  
This course is for students who are not music majors who are interested in learning to play piano or continuing their keyboard studies. The course provides group instruction covering principles of piano playing. May be repeated up to 6 credits. May be applied to transfer associate's degrees. See advisor for details.

**MUS 134 Group Voice** .....2 credits  
This class is designed to help students develop their voices for singing. They will be instructed individually and as a group in vocal techniques that will improve the quality of their voices. They will learn about diction, phrasing, dynamics, expression, posture, breath-control, and vocal resonance as well as well as the basic anatomy of singing. They will also learn how to cope with the fear of singing in front of others. No musical background is needed to take this class. May be repeated up to 6 credits. May be applied to transfer associate's degrees.

**MUS 135 Group Voice 2** .....2 credits  
Prerequisite: MUS 134 Group Voice 2 is designed to help students develop their voices further for singing. Students will be instructed individually and as a group in vocal techniques that will improve the quality of their voices. They will continue to refine basic techniques of diction, phrasing, dynamics, expression, posture, breath control and vocal resonance. We will address issues related to performance anxiety. Focus will be on solo singing and individual development of technique. Repeatable for up to six credits.

**MUS 137 Group Guitar** .....2 credits  
The student must have access to an acoustical guitar. Group Guitar provides a basic orientation to guitar techniques that encompass accompaniment and solo skills. Students will learn to read standard musical notation. A variety of strumming and finger-picking are taught to accompany singing.

**MUS 161 Jazz Improvisation: Instrumental** .....2 credits  
Students will study elements of jazz harmony, jazz standards and classic recordings of jazz artists to build background and a platform for development of skills in jazz improvisation. Students should

have considerable skill on their instrument and knowledge of major key signatures and major scales. MUS 101 - Music Fundamentals or instructor approval required.

**MUS 185 Instrumental Performance** .....1 credits  
Instrumental performance is designed for instrumental students at MUP 100 or above who are taking individual lessons and are declared pre-music or music majors. This class focuses on the art of performance and how to deal with performance anxiety. May be repeated up to 6 credits. May be applied to transfer associate's degrees.

**MUS 186 Vocal Performance** .....1 credits  
Vocal Performance is designed for vocal students at MUP100 or above who are taking individual lessons and are declared pre-music or music majors. This class focuses on performance of classical literature and how to deal with performance anxiety. May be repeated up to 6 credits. May be applied to transfer associate's degrees.

**MUS 201 Introduction to Music and Its Literature** .....3 credits  
This course meets three hours per week for three terms to survey, listen to, and study classical music from antiquity to the present. Music of representative composers from each of the musical periods will be studied to follow the effect of musical experimentation and outside influences on the growth of musical style. MUS 201, 202, 203 do not need to be taken in sequence.

**MUS 202 Introduction to Music and Its Literature** .....3 credits  
Second course in sequence. See sequence information under course description for MUS 201.

**MUS 203 Introduction to Music and Its Literature** .....3 credits  
Third course in sequence. See sequence information under course description for MUS 201.

**MUS 205 Introduction to Jazz History** .....3 credits  
This course provides the student with listening skills and a historical overview of jazz from its origins to the present. Emphasis is on in-class listening and discussion of the music. No musical background is needed to take this class. Satisfies arts and letters and ethnic/gender/cultural diversity requirements.

**MUS 211 Music Theory 2: (First Term)** .....3 credits  
Prerequisite: MUS 113. This 3-term sequence is a continuation of Music Theory I (MUS111, 112, 113) with further studies of compositional techniques in tonal harmony. Emphasis of MUS 211 is on chromaticism and analysis. Includes altered chords (N6 and augmented sixths chords), modal mixtures and diatonic modulation. This course is designed to be taken in conjunction with MUS224 and MUS214 concurrently.

**MUS 212 Music Theory 2 (Second Term)** .....3 credits  
Prerequisite MUS 211. Continuation of MUS 211, with chromatic elaboration and enharmonic modulation using fully diminished seventh chords, augmented 6ths and Mm 7ths. Emphasis of MUS 212 is on form and analysis including binary, ternary, rondo, variations, art song, and sonata form. This course is designed to be taken in conjunction with MUS225 and MUS215 concurrently.

**MUS 213 Music Theory 2 (Third Term)** .....3 credits  
Prerequisite: MUS 212 Emphasis for MUS 213 is on musical language of the 20th century, including modes, atonality, serialism, set theory, new forms and new organizations of rhythm and meter. This course is designed to be taken in conjunction with MUS226 and MUS216 concurrently.

**MUS 214 Keyboard Skills 2 (First Term)** .....1 credits  
Prerequisites: MUS129 This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors. Keyboard skills II focuses on chromatic harmony. Skills include the performance of scales & arpeggios, chord progressions with modulations (including altered chords) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS211 and MUS 224 concurrently.

**MUS 215 Keyboard Skills 2(Second Term)** .....1 credits  
Prerequisites: MUS214 or proficiency test. This course is part of a 6-

### Course Fees

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.



term sequence. It is designed to develop piano skills essential for all music majors. Keyboard skills II focuses on chromatic harmony. Skills include the performance of scales & arpeggios, chord progressions with modulations (including altered chords) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS212 and MUS225 concurrently.

**MUS 216 Keyboard Skills 2(Third Term)** .....1 credits  
 Prerequisites: MUS215 This course is part of a 6-term sequence. It is designed to develop piano skills essential for all music majors. Keyboard skills II focuses on chromatic harmony. Skills include the performance of scales & arpeggios, chord progressions with modulations (including altered chords) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. This course is designed to be taken in conjunction with MUS213 and MUS226 concurrently.

**MUS 224 Sight-reading and Ear Training (First Term)** .....2 credits  
 Prerequisite: MUS 116. Continues development of student's perception, knowledge, and skills needed to notate melodies, 2 and 4 part harmonies. This course is designed to be taken in conjunction with MUS211 and MUS214 concurrently.

**MUS 225 Sight-reading and Ear Training (Second Term)**.....2 credits  
 Prerequisite: MUS 224. Continues development of student's perception, knowledge, and skills needed to read and write music. This course is designed to be taken in conjunction with MUS212 and MUS215 concurrently.

**MUS 226 Sight-reading and Ear Training (Third Term)**.....2 credits  
 Prerequisite: MUS 225. Continues development of student's perception, knowledge, and skills needed to read and write music. This course is designed to be taken in conjunction with MUS213 and MUS216 concurrently.

**MUS 261 Music History** .....4 credits  
 Prerequisite: MUS 111, MUS112. History is a survey of the music, lives, and times of composers and other musicians that influenced the course of Western Music. Fall term covers basic stylistic concepts, Greek and Roman legacies, Medieval and Renaissance time periods (900 AD-1600AD).

**MUS 262 Music History** .....4 credits  
 Prerequisite: MUS 111, MUS 112. Music History is a survey of the music, lives, and times of composers and other musicians that influenced the course of Western music. Winter term covers the Baroque, Pre-Classic and Classic eras, including early Beethoven c.1600-1825

**MUS 263 Music History** .....4 credits  
 Prerequisites: MUS 111, MUS 112. Music History is a survey of the music, lives, and times of composers and other musicians that influenced the course of Western Music. Spring term covers the Romantic ear (including middle to late Beethoven) through twentieth-century to the present ( c.1800-present).

**MUS 264 History of Rock Music 1** .....4 credits  
 This course is designed to provide the student with an opportunity to explore the musical, social and cultural aspects of Rock music from its pre-Rock influences and its development through c.1963, while learning about important artists in this style.

**MUS 265 History of Rock Music 2** .....4 credits  
 This course is designed to provide the student with an opportunity to explore the musical, social and cultural aspects of Rock music from its pre-Rock influences and its development through c.1963, while learning about important artists in this style.

**MUS 266 History of Rock Music 3** .....4 credits  
 This course is designed to provide an opportunity to explore the musical, social and cultural aspects of rock music from c.1975 through 1995, while learning about important artists in this style.

**MUS 270 Jazz Theory** .....3 credits  
 This one-term course in jazz theory will introduce the student to concepts of jazz harmony, melody, rhythm, form, timbre and instrumental performance practice. The focus will be on analyses of jazz compositions and improvisation techniques, as well as traditional concepts of music theory. Students must be able to read music.

**MUS 280 Co-op Ed: Music** .....3-12 credits  
 This course provides the student with music-related work

experience in community businesses and industry. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning college credit.

**MUS 290 Gospel Choir** .....2 credits  
 Gospel choir provides a performance opportunity for the student who does not read music. The ensemble will primarily explore traditional African-American sacred music from the early spirituals to today's contemporary gospel sound. Emphasis will be placed on both group and personal expression which historically characterized the wellsprings of this music, which is native to the United States. No audition required; open to all Lane students . Repeatable for up to 12 credits.

**MUS 291 Chamber Choir** .....2 credits  
 This is a select vocal ensemble that rehearses and performs choral chamber music from the medieval period to the present. Audition during first week of class. Students need to be able to read music. May be repeated up to 12 credits. May be transferred.

**MUS 292 Vocal Jazz Ensemble** .....2 credits  
 Audition required during first week of class, fall term and as needed thereafter. Read, rehearse, and perform music of the vocal jazz idiom including swing, blues, Latin, and ballad styles. Student must have the ability to learn music on his/her own, be at rehearsal prepared and on time, and have an enthusiasm for the music. Vocal jazz also requires a full-year commitment. May be repeated up to 12 credits. May be transferred.

**MUS 293 Jazz Combos** .....2 credits  
 Music reading or concurrent enrollment in MUS 101 is recommended. This course is for instrumentalists wishing to study jazz styles in a small group (combo) setting. Students form several small ensembles combos of up to seven players to study jazz standards from the Real Book and other jazz "fake books". Emphasis is placed on performance styles as well as fundamentals/elements of jazz theory as they relate to harmonic form and improvisation and listening. Heavy emphasis on rhythm section playing. No audition required. May be repeated up to 12 credits. May be transferred.

**MUS 294 Jazz Ensemble** .....2 credits  
 Jazz Ensemble is a class for students who wish to study jazz music in a performance environment. The class is limited to six saxophones, five trumpets, five trombones, piano, bass, guitar, and trap set. Audition required. The Lane Jazz Ensemble performs formal concerts on and off campus throughout the year (Fall, Winter, Spring). May be repeated up to 12 credits. May be transferred.

**MUS 295 Symphonic Band** .....2 credits  
 Symphonic Band provides an opportunity for woodwind, brass, and percussion students to study, rehearse, and perform all types of concert band literature. An audition is recommended for new members (though not required). Returning members do not need to audition. High school or college ensemble experience is recommended. The Lane Symphonic band performs at least one formal concert at the end of fall, winter and spring term. May be repeated up to 12 credits. May be transferred.

**MUS 296 Chamber Orchestra** .....2 credits  
 This course blends the talents of experienced community instrumentalists with student musicians creating an excellent orchestra experience for all. Chamber orchestra plays three programs each year. Audition only. Rehearsals are Wednesday evenings, 7-9:50 p.m. May be repeated up to 12 credits. May be transferred.

**MUS 297 Concert Choir** .....2 credits  
 This class is open to anyone interested in singing in a large ensemble. No prior experience is required. Students develop their vocal skills and learn music of various periods and styles in preparation for at least one public performance each term. May be repeated up to 12 credits. May be transferred.

**MUS 298 Independent Study** .....1-6 credits  
 A variable credit course based on independent study contracted between an instructor and a student. Repeatable.

## Music Lessons

For information, contact Music, Dance and Theatre Arts, Bldg. 6/Rm. 205A, 541.463.5209.

**MUP 100 Individual Lessons**.....1-2 credits  
Individual instruction in technical and stylistic aspects of solo performance for pre- and non-majors. Students receive 10 45-min lessons each term in their major instrument. Instruction is offered in the following: voice, piano, flute, oboe, clarinet, saxophone, bassoon, violin, trumpet, French horn, trombone, baritone horn, tuba, string bass, cello, viola, electric bass guitar, jazz guitar, classical guitar, harp, and percussion. No more than six hours credit may be earned in MUP 100 singularly or combined.

**MUP 171 Individual Lessons: Piano (First-year level)** .....2 credits  
Prerequisite: Jury required to enter this level. Individual instruction in technical and stylistic aspects of solo performance. Each term students enroll for one 45-minute lesson each week. Regular practice outside of lessons is expected. Consult with instructor regarding expectations. A term jury is required.

**MUP 174 Individual Lessons: Voice (First-year level)** .....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 175 Individual Lessons: Violin (First-year level)** .....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 178 Individual Lessons: Bass (First-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 181 Individual Lessons: Flute (First-year level)** .....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 183 Individual Lessons: Clarinet (First-year level)** .....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 184 Individual Lessons: Saxophone (First-year level)** .2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 186 Individual Lessons: Trumpet (First-year level)** .....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 187 Individual Lessons: French Horn (First-year level)** 2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 188 Individual Lessons: Trombone (First-year level)** ....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 189 Individual Lessons: Baritone Horn (First-year level)** .....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 190 Individual Lessons: Tuba (First-year level)** .....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 191 Individual Lessons: Percussion (First-year level)** ..2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 192 Individual Lessons: Electric Bass (First-year level)** 2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 194 Individual Lessons: Guitar (First-year level)** .....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 171.

**MUP 271 Individual Lessons: Piano (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. Individual instruction in technical and stylistic aspects of solo performance. Each term students enroll for one 45-minute lesson each week. Regular practice outside of lessons is expected. Consult with instructor regarding expectations.

**MUP 274 Individual Lessons: Voice (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

**MUP 275 Individual Lessons: Violin (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

**MUP 281 Individual Lessons: Flute (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

**MUP 283 Individual Lessons: Clarinet (Second-year level)** ..2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

**MUP 284 Individual Lessons: Saxophone (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

**MUP 286 Individual Lessons: Trumpet (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

**MUP 287 Individual Lessons: French Horn (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

**MUP 288 Individual Lessons: Trombone (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

**MUP 289 Individual Lessons: Baritone Horn (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

**MUP 291 Individual Lessons: Percussion (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

**MUP 292 Individual Lessons: Electric Bass (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

**MUP 294 Individual Lessons: Guitar (Second-year level)**.....2 credits  
Prerequisite: Jury required to enter this level. See course description for MUP 271.

## Nursing

For information, contact Health Professions, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Nursing program to take these classes.

**EL 115H Effective Learning: Health Science Majors** .....3 credits  
This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

**HO 090 Nursing Assistant** .....8 credits  
This course is designed to prepare the student in a course of study of basic level nursing care and skills. The course curriculum is established by the Oregon State Board of Nursing. Individuals satisfactorily completing all requirements of this course are eligible to sit for the Oregon State Board of Nursing competency examinations. The course includes both didactic and clinical instruction and evaluation. A criminal background check is required for each student and fingerprinting may be required. Enrollment restricted to pre-nursing and pre-respiratory care students.

**NRS 110A Foundations of Nursing-Health Promotion** .....4 credits  
This course introduces the learner to framework of the OCNE curriculum. The emphasis on health promotion across the life span includes learning about self-health as well as client health practices. To support self and client health practices, students learn to access research evidence about healthy lifestyle patterns and risk factors for disease/illness, apply growth and development theory, interview clients in a culturally-sensitive manner, work as members of a multidisciplinary team giving and receiving feedback about performance, and use reflective thinking about their practice as nursing students. The family experiencing a normal pregnancy is a

major exemplar. Includes classroom and clinical learning experiences

**NRS 110B Foundations of Nursing-Health Promotion**

**Clinical Lab** .....5 credits  
Clinical Lab required for NRS110A.

**NRS 111A Foundations of Nursing in Chronic Illness 1** .....2 credits

This course introduces assessment and common interventions (including technical procedures) for clients with chronic illnesses common across the life span in major ethnic groups within Oregon. The client and family' "lived experience" of the illness, coupled with clinical practice guidelines and extant research evidence is used to guide clinical judgments in care to the chronically ill. Roles of multidisciplinary team in care of the chronically ill, and legal aspects of delegations are explored. Through case scenarios, cultural, ethical, health policy, and health care delivery system issues are explored in the context of the chronic illness care. Case exemplars include children with asthma, adolescent with a mood disorder, adult-onset diabetes, and older adults with dementia. (Concurrent with Pathophysiology 1 and Pharmacology 2). (Can follow Foundations of Nursing in Acute Care I).

**NRS 111B Foundations of Nursing in Chronic Illness 1-**

**Clinical Lab** .....4 credits  
Clinical Lab required for NRS111A.

**NRS 112A Foundations of Nursing in Acute Care 1** .....2 credits

This course introduces the learner to assessment and common interventions (including relevant technical procedures) for care of patients during an acute episode of disease/illness. Disease/illness trajectories and their translation into clinical practice guidelines and/or standard procedures are considered in relation to their impact on providing culturally sensitive, client-centered care. (Concurrent with Pathophysiology I/II and Pharmacology I/II) (Can follow Foundations of Nursing in Chronic Illness I).

**NRS 112B Foundations of Nursing in Acute Care 1**

**Clinical Lab** .....4 credits  
Clinical Lab required for NUR112A.

**NRS 199 Special Studies:** .....1-3 credits  
See department for topics.

**NRS 221A Foundations of Nursing in Chronic Illness 2 and End of Life** .....4 credits

Prerequisite: NRS 111A and NRS 111B, or WR 227. This course builds on Foundations of Nursing in Chronic Illness 1. The evidence base related to family care giving and symptom management is a major focus and basis for nursing interventions with patients and families. Ethical issues related to advocacy, self-determination, and autonomy are explored. Complex skills associated with symptom management, negotiating in interdisciplinary teams, and the impact of cultural beliefs are included in the context of client and family-centered care. Exemplars include patients with chronic mental illness and well as other chronic conditions and disabilities affecting functional status and family relationships. Prerequisites: WR 123 Composition: Research or WR 227 Technical Writing. (Can follow Nursing in Acute Care 2 and End-of-Life).

**NRS 221B Foundations of Nursing in Chronic Illness 2 and End-of-Life Clinical Lab** .....5 credits

Clinical Lab required for NRS221A.

**NRS 222A Foundations of Nursing in Acute Care 2 & End-of-Life4**  
credits

This course builds on Nursing in Acute Care I focusing on more complex and/or unstable patient care situations some of which require astute assessment skills, rapid decision making, and some of which may result in death. The evidence base supporting appropriate focused assessments, and effective, efficient nursing interventions is explored Life span factors, cultural variables, and legal aspects of care frame the ethical decision-making employed in patient choices for treatment or palliative care within the acute care setting. Case scenarios incorporate prioritizing care needs, delegation and supervision, family & patient teaching for discharge planning. Exemplars include acute psychiatric disorders as well as acute conditions affecting multiple body systems. Prerequisites: WR 123 Composition: Research or WR 227 Technical Writing.

**NRS 222B Foundations of Nursing in Acute Care 2 & End-of-Life**

**Clinical Lab** .....5 credits  
Clinical Lab required for NRS222A.

**NRS 224A Integrative Practicum 1** .....2 credits

This course is designed to formalize the clinical judgments, knowledge and skills necessary in safe, registered nurse practice. The preceptorship model provides a context that allows the student to experience the nursing work world in a selected setting, balancing the demands of job and life long learner. Faculty/preceptor/student analysis and reflection throughout the experience provide the student with evaluative criteria against which they can judge their own performance and develop a practice framework. Includes seminar, self-directed study and clinical experience. Required for AAS and eligibility for RN Licensure

**NRS 224B Integrative Practicum 1 Lab** .....7 credits  
Clinical Lab required for NRS224A.

**NRS 230 Clinical Pharmacology 1** .....3 credits

This course introduces the theoretical background that enables students to provide safe and effective care related to drugs and natural products to persons throughout the lifespan. Students will learn to make selected clinical decisions regarding using current, reliable sources of information, monitoring and evaluating the effectiveness of drug therapy, teaching persons from diverse populations regarding safe and effective use of drugs and natural products, intervening to increase therapeutic benefits and reduce potential negative effects, and communicating appropriately with other health professionals regarding drug therapy. Drugs are studied by therapeutic or pharmacological class using an organized framework

**NRS 231 Clinical Pharmacology 2** .....3 credits

This sequel to Clinical Pharmacology I continues to provide the theoretical background that enables students to provide safe and effective care related to drugs and natural products to persons throughout the lifespan. Students will learn to make selected clinical decisions regarding using current, reliable sources of information, monitoring and evaluating the effectiveness of drug therapy, teaching persons from diverse populations regarding safe and effective use of drugs and natural products, intervening to increase therapeutic benefits and reduce potential negative effects, and communicating appropriately with other health professionals regarding drug therapy. The course addresses additional classes of drugs and related natural products not contained in Clinical Pharmacology

**NRS 232 Pathophysiological Processes 1** .....3 credits

Prerequisite: BI 112 and BI 233, or BI 112 and BI 102G, or BI 101F and BI 233, or BI 211 and BI 233, or BI 101K and BI 233, or BI 101K and BI 102G. This course introduces pathophysiological processes that contribute to many different disease states across the lifespan and human responses to those processes. Students will learn to make selective clinical decisions regarding using current, reliable sources of pathophysiology information, selecting and interpreting focused assessments based on knowledge of pathophysiological processes, teaching persons from diverse populations regarding pathophysiological processes, and communicating with other health professionals regarding pathophysiological processes. Prerequisites: Anatomy and Physiology sequence; Microbiology

**NRS 233 Pathophysiological Process 2** .....3 credits

This sequel to Pathophysiological Processes I continues to explore pathophysiological processes that contribute to disease states across the lifespan and human responses to those processes. Students will learn to make selected clinical decisions regarding using current, reliable sources of pathophysiology information, selecting and interpreting focused assessments based on knowledge of pathophysiological processes, teaching persons from diverse populations regarding pathophysiological processes, and communicating with other health professionals regarding pathophysiological processes. The course addresses additional pathophysiological processes not contained in Pathophysiological Processes 1.

**NRS 280 Co-op Ed: Nursing** .....2-12 credits

Cooperative education is a voluntary experience beyond the formal requirements of the Associate Degree Nursing Program. Nursing students in Cooperative Education are eligible to earn college credit for job related activities in professional medical settings. Cooperative Education sites may be in specialty areas that are not part of the normal nursing curriculum or in an area where a student wants to gain hands-on experience. While at Cooperative Education sites, students develop skills, integrate theory and practice, expand career knowledge, and make contacts for potential future employment in nursing. In spring term of first year and



each following term, students with a minimum GPA of 2.8 in nursing courses are eligible for Cooperative Education and work under the direct supervision of a Registered Nurse.

**NRS 298 Independent Study: Nursing** .....1-3 credits  
A variable credit course based on independent study contracted between an instructor and a student.

**Nutrition**

For information, contact Health Professions, Bldg. 4/Rm. 222, 541.463.5617.

**FN 105 Nutrition for Foodservice Professionals** .....3 credits  
As nutrient functions, food sources and guidelines are discussed throughout the term, issues concerning those nutrients and the sustainability of our food system will also be explored. Some of the other topics include digestion, food allergies, vegetarianism, eating disorders, and religious eating traditions. This may be offered through Distance Learning and during Winter term, it is offered for culinary majors only.

**FN 190 Sports Nutrition** .....2 credits  
This course focuses on how active individuals can develop an eating and hydration plan to support athletic performance and to stay well-nourished. This course presents the role of a variety of nutrients in maintaining a body that is healthy and that supports athletic performance. Skills are developed for improving personal eating habits and for evaluating nutrition information in the mass media. May be offered through Distance Learning.

**FN 199 Special Studies:** .....2 credits  
See department for topics.

**FN 206 Co-op Ed: Dietary Manager Seminar**.....2 credits  
Prerequisites or Corequisites: CA 175, CA 184 and HRTM 265. This course provides the culinary arts student with additional food service management information targeted at working in a nutrition services-related settings including long-term and acute-care healthcare facilities, corrections facilities and schools. The content is designed to help students present themselves to employers in a competent and professional manner, and to move initially into their cooperative education internships, and then into their professional careers.

**FN 225 Nutrition** .....4 credits  
A study of how the body takes in and uses the nutrients from food. Food sources, functions, and requirements of the following are discussed: carbohydrates, proteins, fats, vitamins, minerals and water. In addition, digestion, absorption and metabolism of all nutrients are covered. Skills are developed for improving personal eating habits and for evaluating nutrition information in the mass media. In addition to sections offered on the 30th Ave. LCC campus, it may also be offered through Distance Learning and it may be offered in Florence.

**FN 230 Family Food and Nutrition** .....3 credits  
This course's focus is how to prepare and offer to families a variety of nutrient dense foods in an environment that helps family members develop a positive approach to eating. Each food group's role in a nutritionally adequate diet is discussed. Presented are ideas for menu planning and food selection as well as a variety of quick, nutritious and tasty recipes. May be offered through Distance Learning.

**FN 255 Medical Nutrition Therapy**.....3 credits  
Prerequisite: FN 225 or FN 105. This introductory 3-credit course covers the fundamental principles of medical nutrition therapy throughout the life cycle, including at-risk populations from different cultural and socioeconomic backgrounds. A variety of case studies of clients with diseases including heart disease, diabetes, cancer, and many others will provide opportunities to discuss the purposes and procedures for culturally competent nutrition screening, documentation, education, and verbal communication in a variety of medical settings. The roles of professionals on the health care team involved with food and nutrition, from dietitians and dietary managers to nurses, doctors, chefs and others will be discussed. Community resources will be provided throughout the term. This course may be offered through Distance Learning.

**FN 298 Independent Study** .....1-3 credits  
A variable credit course based on independent study contracted between an instructor and a student.

**Occupational Skills**

For information, contact Cooperative Education, Bldg. 19/Rm. 231, 541.463.5203.

**GWE 180 Co-op Ed: General Work Exper.**.....1-12 credits  
This course provides the student with on-the-job learning experiences in community businesses and organizations. The student will have the opportunity to integrate basic knowledge gained in the classroom with practical experience in a work setting. In this course a student may develop employability skills, explore career options and network with professionals and employers while earning credit that may be applied toward a certificate or degree.

**GWE 280 Co-op Ed: General Work Experience** .....3-12 credits  
Prerequisite: Instructor approval. This course provides the student on-the-job learning experiences in community businesses and organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with the practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

**OST 280 Co-op Ed: Occupational Skills**.....1-12 credits  
Prerequisite: Instructor approval. This course offers a student college credit for on-the-job work experience related to his or her educational and career goals. Through Cooperative Education a student can integrate theory and practice, develop skills, expand career knowledge and make contact for future employment. Twenty to 26 credits of co-op are required for the Occupational Skills certificate.

**OST 280CE Co-op Ed: Occupational Skills**.....3-12 credits  
This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers. Students engage in on-the-job learning experiences related to their course of study in community business, industry and/or governmental sites.

**PST 101 Professional Skills Training** .....1-6 credits  
Prerequisite: Instructor approval required. Co-requisite: Only available to students who have sustained an injury, or other circumstances, and have been referred by a Workers Compensation, State Vocational Rehabilitation, or a Veterans Administration counselor. This lab course follows a set curriculum in introductory workforce skills under the guidance of a cooperating employer in the students' chosen field. Related classroom instruction is also offered in support of the lab experience. Students will acquire the skills needed to be employable. Can be taken more than one term.

<b>Office Assistant - See Administrative Support</b>
<b>Paramedic - See Emergency Medical/Paramedic</b>
<b>Parent Education - See Early Childhood Education</b>

**Philosophy and Religion**

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

**PHL 199 Special Studies:**.....4 credits  
See department for topics.

**PHL 201 Ethics** .....4 credits  
Ethics is the study of morality, including an analysis of the concepts of good and evil, right and wrong, justice and injustice, duty, responsibility, character, and successful living. Possible topics include whether morality is relative to culture or to the individual, the relationship between morality and religion, theories about what make particular actions right or wrong, moral skepticism, and eastern perspectives on right action. May be offered through Distance Learning.

**PHL 202 Theories of Knowledge**.....4 credits  
Theories of knowledge (epistemology) address such issues as the nature of knowledge, how it differs from mere opinion, and whether knowledge comes primarily through the senses, reason, intuition or revelation. Additional topics may include: modern

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

theories about what justifies belief, the role of subjectivity in knowing, and whether there may be different kinds of knowledge or limits to what we can know. May be offered through Distance Learning.

**PHL 203 Theories of Reality**.....4 credits  
Theories of reality (metaphysics) is an attempt to discover and describe the underlying nature of existence. Possible topics include the nature of the self, the relationship between matter and consciousness, free will, the existence of God, death, and the meaning of life. These topics may be approached from the perspective of both Eastern and Western philosophy. May be offered through Distance Learning.

**PHL 205 Contemporary Moral Issues** .....4 credits  
This course focuses on ethical issues, which affect our daily lives in personal, social, and political spheres. Issues covered will vary by instructor, but may include our duties to animals and the environment; consumerism and materialism; issues in bioethics such as abortion, euthanasia, human cloning and genetic engineering; the proper size and scope of government; crime, including 'victimless' crimes such as drugs, pornography and prostitution; poverty, both in the U.S. and abroad; war; free speech and other personal liberties; and various forms of discrimination and prejudice. May be offered through Distance Learning.

**PHL 221 Critical Thinking**.....4 credits  
This course is aimed at developing practical reasoning skills. Students will learn to analyze and evaluate arguments, detect fallacies, distinguish science from pseudo-science, recognize media bias, and better understand methods of deception employed by advertisers, political organizations and others. A central goal of this course is to develop an attitude of fair-mindedness and intellectual honesty while learning to avoid the pitfalls of defensiveness and rationalization.

**PHL 298 Independent Study:**.....1-4 credits

**REL 199 Special Studies:**.....4 credits  
See department for topics.

**REL 201 Religions of India (Hinduism, Buddhism)**.....4 credits  
This course introduces students to some of the major religious traditions of India, such as Hinduism, Buddhism, Sikhism and Jainism. The central beliefs and practices of these traditions may be approached historically, culturally, and/or through their essential wisdom teachings and how these apply to daily life. Emphasis will vary by instructor.

**REL 202 Religions of China and Japan (Taoism, Confucianism, Buddhism, and Shinto)**.....4 credits  
This course introduces students to some of the major religious traditions of China, Japan and other East Asian cultures, such as Buddhism, Confucianism, Taoism and Shinto. The central beliefs and practices of these traditions may be approached historically, culturally and/or through their essential wisdom teachings and how these apply to daily life. Emphasis will vary by instructor.

**REL 203 Religions of the Middle East (Judaism, Christianity, and Islam)** .....4 credits  
This course introduces students to three major religious traditions which emerged from and developed in the Middle East: Judaism, Christianity, and Islam. The central beliefs and practices of these traditions may be approached historically, culturally, and/or through their essential wisdom teachings and how these apply to daily life. Emphasis will vary by instructor. May be offered through Distance Learning.

**REL 211 Introduction to the Bible** .....4 credits  
This course reviews the history, content and organization of the Jewish and Christian scriptures that make up the canon of the Bible. Historical and critical analysis will be used to explore the authorship, worldviews, and values found in key texts of the Bible.

**REL 230 Christian Beginnings**.....4 credits  
This course traces Christianity from its days as a persecuted Jewish sect to its establishment as the official religion of the Roman Empire. Topics will include the quest for the historical Jesus, Christianity's Jewish roots, influences from Greco-Roman religion and philosophy, how the New Testament was compiled, and how official Christian doctrine was decided. A central focus of this course will be to discover to what extent the historical Jesus and early Christianity may differ from later institutional and modern expressions of Christian faith.

**REL 243 Nature, Religion and Ecology** .....4 credits  
This course explores how different religious traditions and the cultures influenced by them view nature and the place of humankind within the natural environment. Native, Asian, and Western traditions are examined, as are contemporary eco-spiritual thinkers and movements. Class discussion for the students to apply the material in current social and personal contexts will be an integral part of the course.

**REL 298 Independent Study:** .....1-4 credits  
See department for topics.

**Photography**

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, 541.463.5409.

**ART 199FP Special Studies: Fine Art Printing** .....3 credits  
See department for topics.

**ART 210 The Photographic Vision**.....3 credits  
Introductory course in photography that approaches the medium as an art form and unique means of human communication, as well as technical skill. Student is introduced to basic mechanical principles of the camera, shown how photography has influenced human perception and communication throughout history, and provided with techniques for responding to the content and structure of photographs. Does not fulfill Photography 1 requirement, prerequisite or elective credit for the Multimedia Design and Production program. May be offered through Distance Learning.

**ART 261 Photography 1**.....3 credits  
Introduction to history and fundamentals of photography. Emphasis on camera handling, manual exposure control, composition, and basic color theory. Demonstration given on the theory of black-and-white film processing and printing.

**ART 262 Photography 2**.....3 credits  
Prerequisite: ART 261. Hands-on experience in black-and-white film processing, printing and image control in the darkroom. Medium format cameras and advanced shooting, composition, and camera handling techniques are introduced through a variety of shooting assignments.

**FA 256 Lighting for Photography** .....3 credits  
The course objective is to provide students with an introduction to the basics in lighting for photography. Students will learn how to work within a studio environment as well as on location. All students will work with professional lighting equipment and learn the basics in setting up, metering and shooting both portraits and basic commercial products. During this course, students will also learn the basics in camera and lens variations, film stock, digital output and editing.

**J 134 Photojournalism** .....3 credits  
This course is designed to work within the field of content. Content within the work is not only the first step in good photojournalism, but also the first step in good art-making. Within this course, we will explore how you see an image, how you choose to share that image with those around you, and the message that your images carry. We will also be studying the history of photojournalism and the cross over from documentary photography to the world of art.

**J 234 Photojournalism 2**.....4 credits  
Prerequisite: J 134. This course is designed as a continuation of Photojournalism. We will be continuing the discussion of content and ethics that is addressed in Photojournalism. Students will learn how to create editorials, identify the differences between news and human interest, develop funding for stories that are not mainstream, and to self-promote in the competitive field of photojournalism. Students will also learn how to prepare their work through editorial processing and presentation.

**MUL 214 Digital Photography** .....3 credits  
Prerequisite: ART 261 Overview of digital camera types and technologies, camera controls, managing file resolution, formats, and back-up strategies. Migration of traditional photographic skills to a digital workflow, using a survey of photo editing software, practical sharing technologies (email, web and print), and anticipated trends in the industry. Software emphasis will introduce iPhoto, Photoshop and Aperture.

**Physical Education**

Also see **Dance and Exercise and Movement Science**

For information, contact Health and PE, Bldg. 5/Rm. 205, 541.463.5545.

**PE 181C Combination Aerobics** .....1 credits  
 Combination Aerobics is a rhythmic aerobics class designed to increase cardiovascular fitness and muscular endurance through a variety of exercise formats. Following the principles of progression and overload, this course will allow students an opportunity to sample formats such as step aerobics, dance aerobics, circuit training, interval training and kickboxing aerobics. Light resistance exercises with the use of hand weights and elastic bands are incorporated to maximize cross training benefits.

**PE 181D Dance Aerobics** .....1 credits  
 Simple choreographed dance patterns are incorporated into this rhythmic aerobics class to improve cardiovascular fitness. Movements presented in this course should safely accommodate the needs of the beginning exerciser as well as the conditioned athlete by allowing optional intensity levels to be employed.

**PE 181K Kickboxing Aerobics** .....1 credits  
 Martial arts-inspired movements are combined with classic sports drills to create a challenging and fun rhythmic workout. This course will allow students the opportunity to progressively enhance their fitness levels by offering various impact and intensity options.

**PE 181S Step Aerobics** .....1 credits  
 This class enables students to enhance their cardio-respiratory and muscular endurance through the execution of choreographed step patterns. Options for intensity are provided to meet the needs of students of various fitness levels.

**PE 181SB Body Sculpt** .....1 credits  
 Body Sculpt is a group fitness class designed to increase muscular endurance by incorporating resistance exercises for all the major muscle groups. Participants utilize hand weights and resistance bands as well as their own body weight to develop muscle firmness and definition. Fitness gains may include improved muscular endurance, increased muscular strength and altered body composition. Individuals of all fitness levels can experience the benefits of this class by employing suitable resistance and intensity options.

**PE 181SS Step and Sculpt** .....1 credits  
 Step & Sculpt is a group fitness class designed to increase cardiorespiratory and muscular endurance. Participants alternate between step aerobics combinations and resistance exercises to experience the benefits of both approaches. Hand weights and resistance bands will be utilized to develop muscle firmness and definition. Simple step routines and aerobics drills will allow participants the opportunity to maintain their target heart rates in order to achieve overall fitness gains.

**PE 181Y Yogilates** .....1 credits  
 Yogilates incorporates the principles and methods of Pilates and Yoga to promote flexibility, balance, and core strength. Participants progress individually as exercises are taught at various levels. Improvements in agility, coordination, confidence, body awareness and body appreciation help enhance overall health.

**PE 182A Scuba Diving** .....1 credits  
 Covers necessary skills, physical conditioning and knowledge for the exciting sport of scuba diving. Diving skills such as hand signals, buoyancy control, equipment usage and diver safety will also be stressed. This course results in a PADI Open Water certification. Students are required to supply their own SCUBA mask, and this will be covered during the first class session.

**PE 182B Scuba Diving Advanced** .....1 credits  
 Further develops scuba diving skills and introduces new material to the certified diver. Develops night diving, navigation, deep diving, search and recovery and underwater environments or specialty training in one area. Students must be SCUBA certified before taking course. This course results in a PADI Advanced certification or specialty rating. Students are required to supply their own SCUBA mask, and this will be covered during the first class session.

**PE 182C Rescue Diver** .....1 credits  
 A course designed to improve diver understanding of emergency situations in diving. The course covers self-rescue, diver stress, first aid equipment, diver tows, dealing with both a panicked and a passive victim, in-water artificial respiration, equipment removal,

and non-swimming assists, among other subjects. The course includes classroom as well as pool exercises and open water evaluations. Students must have beginning and advanced scuba or equivalent, and be CPR certified. This course results in a PADI Rescue Diver certification or specialty rating. Students are required to supply their own SCUBA mask, and this will be covered during the first class session.

**PE 182D Divemaster 1** .....1 credits  
 The Divemaster 1 course prepares the divemaster candidate with advanced diving knowledge in management and control, supervising students, physics, physiology, and equipment. Beginning internship experience is also stressed. The successful candidate will demonstrate advanced watermanship and stamina. Upon completion of the Divemaster 1 curriculum, the candidate is eligible to participate in the Divemaster 2 program.

**PE 182E Divemaster 2** .....1 credits  
 The Divemaster 2 course implements knowledge and skills in a scuba practicum. The divemaster candidate will provide assistance to new students enrolled in lower level scuba classes at Lane. Divemaster 2 candidates will also learn underwater map making and surveying skills, first aid, the role of the divemaster in non-training capacities such as conducting orientation dives. Upon completion the candidate will have attained a PADI Divemaster rating and be eligible for instructor level training.

**PE 183A Conditioning** .....1 credits  
 This exercise class is designed for students of all fitness levels. Instructor-led activities utilize state-of-the-art equipment in the LCC Fitness Education Center, such as Free Motion, Cybex and Paramount weight machines. Many types of cardio machines and functional training equipment are also used in a variety of class formats. Addressing basic fitness principles, this progressive, cross-training approach will improve participants' fitness levels by increasing muscular strength and endurance, enhancing cardiovascular endurance, improving flexibility, and increasing core strength.

**PE 183B Exercise and Weight Control** .....1 credits  
 This activity class is designed for individuals who would like to alter their body composition and control their weight. A variety of class formats are incorporated as a cross-training approach to address basic fitness principles and exercise recommendations. Utilizing state-of-the-art exercise equipment in the LCC Fitness Education Center, students participate in instructor-led activities to gain benefits related to regular exercise. These include increased muscular strength and endurance, enhanced cardiovascular endurance, improved flexibility, increased core strength, and altered body composition. Fitness assessments are offered and current nutritional information is presented as elements of this class.

**PE 183C Exercise Walking** .....1 credits  
 Exercise walking develops and maintains cardiovascular fitness, muscular endurance and joint flexibility. The emphasis will be on developing a progressive walking program starting with a basic understanding of one's current fitness level. A variety of topics will be discussed including: proper technique, pace, training methods, injury prevention, nutrition and hydration. Trails, track, roads, hills and off campus areas will be used.

**PE 183CG Group Cycling** .....1 credits  
 This course is designed to improve cardiorespiratory fitness and muscular endurance, while enhancing cycling skills and mechanics. Workout sessions are performed on specialized stationary cycles and are led by an instructor. Students cycle to music using a variety of body positions and drills. Options for intensity are provided to meet the needs of students of various fitness levels.

**PE 183E Fitness Circuits** .....1 credits  
 An instructor lead circuit training class for all ages and fitness levels. Students participate in exercise circuits to improve cardiovascular fitness, muscular endurance and flexibility. Body weight resistance exercises, weight machines, cardiovascular machines and other modalities will all be used. Nutrition and weight control and stress management ideas and concepts will be introduced.

**PE 183F Fitness Education: Introduction** .....1 credits  
 Students are guided in creating a well-rounded, self-paced fitness program. All student complete a mandatory orientation including health screening, exercise program information and equipment instruction. Following orientation, students attend exercise sessions



during FEC usage hours to fulfill course requirements and meet personal fitness goals. The FEC offers instructional assistance in personalized exercise programming, wellness seminars, an incentive program, and opportunities for fitness development and stress management. Students can choose to take part in an optional fitness assessment to determine individual strengths and areas for improvement in cardiovascular fitness, overall body strength, muscular endurance, flexibility and body composition. Students can receive a printout of fitness assessment results and recommendations. All students are encouraged in a supportive and noncompetitive environment. For Fitness Education Center usage hours or additional information, contact the FEC at 541.463.3987.

**PE 183FO Fitness Education: Orientation** .....0 credits  
Students registered for Fitness Education: Introduction must register for this one time, mandatory orientation. This orientation covers course policies, general fitness information and an orientation to all of the equipment in the Fitness Education Center.

**PE 183G Fitness Education: Returning** .....1 credits  
For students who have successfully completed PE 183F Fitness Education: Introduction. Students continue their well-rounded, self-paced fitness program. The FEC offers continued instructional assistance in personalized exercise programming, wellness seminars, an incentive program, fitness assessments and opportunities for fitness development and stress management. Students attend exercise sessions during FEC usage hours to fulfill course requirements and meet personal fitness goals. For Fitness Education Center usage hours or additional information, contact the FEC at 541.463.3987.

**PE 183J Jogging** .....1 credits  
Emphasis on a progressive jogging program starting with a basic understanding of one's current fitness level. Individualized programs will be developed accordingly. A variety of topics will be discussed including: work-out ideas, nutrition and weight control will be addressed. Trails, track, roads, hills and off campus areas will be used.

**PE 183R Stability Ball Fitness** .....1 credits  
Students will perform conditioning exercises with a focus on core stability and improvement of muscular strength, endurance, flexibility, balance, and coordination. Light weights, resistance bands and weighted balls will be used to compliment the fitness workout. Nutrition and weight control and stress management ideas and concepts will be introduced.

**PE 183S Strength Training** .....1 credits  
Emphasis on progressive resistance training using a variety of exercise modalities including barbells, dumbbells, resistance bands, body weight, and weight machines. Students can develop strength, muscular size, toning, and improve general physical condition. Basic training programs and routines for all levels will be discussed. Special and individualized programs available.

**PE 183U Strength Training for Women** .....1 credits  
A fun and active class designed for women of all ages, experience and conditioning levels. Use of barbells, dumbbells, weight machines, stability balls, bands, medicine balls, body weight resistance exercises and more, to tone and strengthen all major muscle groups and improve your general physical condition. Emphasis is on safe and correct techniques, while learning terminology and basic anatomy. Basic and specialized individual programs for beginners through advanced levels, tailored to your goals and experience.

**PE 183W Therapeutic Exercise and Rehabilitation** .....1 credits  
This course will use cardiovascular, strength, endurance, and flexibility programming with the awareness of orthopedic injuries, chronic pain, cardiovascular and pulmonary diseases, and metabolic disorders. This course does not address neuromuscular, cognitive, or emotional disorders. The purpose of this course is focused on designing exercise programs meeting the needs of the injured individual. This course is structured to help you improve overall health and wellness so you can progress into other fitness courses. Nutrition and weight control and stress management ideas and concepts will be introduced.

**PE 184A Archery Beginning** .....1 credits  
Fundamentals covered include safety, care and use of equipment, basic rules, etiquette, terminology and skill techniques. Learn to successfully shoot at different size targets at various distances. Individual competition in regulation and novelty shoots. All equipment provided, however with permission of instructor you

may be able to use your own equipment if it is suitable for our range. Class is designed for beginners, but experienced students welcome.

**PE 184AI Archery Intermediate** .....1 credits  
Designed for experienced archers to improve and refine basic skills and develop more consistency in form, aiming, techniques and scoring at a variety of distances and targets. Individual competition in regulation and novelty shoots. All equipment provided, however with permission of instructor you may be able to use your own equipment if it is suitable for our range.

**PE 184B Badminton Beginning** .....1 credits  
Learn and develop badminton skills through daily play and skill work on basic fundamentals. Footwork, grip, forehand and backhand shot execution, shot selection, scoring, terminology, etiquette and rules will be covered. Skills and basic strategy will be applied in both singles and doubles play. Equipment provided, but may bring own racquet.

**PE 184C Badminton Intermediate** .....1 credits  
Designed for experienced players to refine basic skills and develop advanced shots and strategy in singles and doubles play. Equipment provided, but may bring own racquet.

**PE 184D Bowling** .....1 credits  
Development and improvement of skills for a social and popular recreational activity. Fundamentals of spot bowling techniques used for both straight and hook deliveries. Rules, scoring and etiquette will be covered. Designed for beginning bowlers.

**PE 184F Fencing** .....1 credits  
Instruction in skills basic to foil fencing, including offensive and defensive skills, rules, etiquette, judging, and bout experience.

**PE 184G Golf Beginning** .....1 credits  
Beginning golf is an introduction to golf including short game, full swing and routines on the course. Rules and etiquette will also be introduced. Upon completion, the student will have enough working knowledge to start playing the game. Some rounds of golf are provided.

**PE 184H Golf Intermediate** .....1 credits  
Intermediate golf is a continuation of beginning golf with an emphasis on swing mechanics, trouble shots, strategy and more extensive application of rules.

**PE 184I Ice Skating Beginning** .....1 credits  
Introduction to ice skating. Safety, equipment, forward and backward swizzles, one and two foot glides, stroking, forward and backward crossovers, stops and beginning turns. Written and skill testing required.

**PE 184J Ice Skating Intermediate** .....1 credits  
An intermediate level ice skating class that builds on the beginning skills of forward and backward stroking and crossovers and provides instruction in forward and backward turns, edges, beginning jumps and spins. A hockey track is available for skaters interested in learning basic hockey skills and game rules. Written and skill testing required.

**PE 184K Karate Beginning** .....1 credits  
Basic skills of karate including blocks, punches, strikes, and kicks. Discussions include technique and power, history of karate, and the students' legal rights and responsibilities in Oregon for self-defense. The beginning class includes sparring strategies.

**PE 184P Personal Defense** .....1 credits  
Fundamental personal defense skills, precautionary measures to improve one's safety, countering attacks whereby various weapons are employed, developing a skill level that promotes self-assurance to reduce panic. The students' legal rights and responsibilities in Oregon for self-defense will be presented.

**PE 184T Tennis Beginning** .....1 credits  
Learn and develop basic tennis skills including forehand, backhand, serve, return of serve and volley through drills, ball machine practice and game play. Learn and apply basic doubles strategy, rules, etiquette and terminology. Designed for the new or novice player.

**PE 184U Tennis Intermediate** .....1 credits  
Tennis Intermediate is a continuation of Beg. Tennis designed to refine basic skills and develop advanced strokes and strategy in singles and doubles play. Designed for experience players.

- PE 185M Meditation**.....1 credits  
A survey of diverse meditation techniques to enable students to find the appropriate methods for them. Includes discussion and practice of breath awareness, relaxation, sensory meditation, instant calming technique, affirmation/mantra, walking and other movement awareness and guided imagery. Practice of correct sitting postures, gentle stretching, and breathing techniques which aid in meditation will be included.
- PE 185T Tai Chi Chuan**.....1 credits  
Chinese meditative exercise. Thousands of years old, Tai Chi is the best way to promote health and develop an effective martial art. This class teaches Yang-style and Chen style Tai Chi.
- PE 185U Tai Chi Chuan Intermediate**.....1 credits  
Prerequisite: PE 185T with a C- or better. Intermediate concepts of Yang Style Tai Chi Chuan. Use of body strength, flexibility and mental control skills. Coordination of eyes, movement, breathing, & internal energy. Relaxation, improved health & concentration, increased energy, flexibility and clarity of mind.
- PE 185Y Yoga Beginning**.....1 credits  
Basic knowledge of asanas (stretching postures), pranayama (breathing techniques), relaxation and yogic philosophy. Course is designed to enhance flexibility, strength, respiratory function, postural alignment, and stress reduction. Sitting, lying, inverted, and standing postures will be included.
- PE 185YG Gentle Yoga**.....1 credits  
Practice of gentle yoga postures, stretches, breathing and relaxation techniques. Designed for students who need modification of traditional yoga practice due to limited mobility; less flexibility or strength; or other special needs. Course is designed to enhance flexibility, respiratory function, postural alignment, strength and stress management.
- PE 185Z Yoga Intermediate**.....1 credits  
More difficult variations of beginning postures, and more advanced postures and breathing techniques will be added to improve flexibility, endurance, correct postural alignment, and stress management. Designed for students who have a basic knowledge of asanas (stretching postures), pranayama (breathing techniques), and relaxation. Prior knowledge and practice of yoga is required.
- PE 186D Downhill Skiing and Snowboarding**.....1 credits  
Instruction and practice in fundamental skills of downhill skiing and snowboarding. Instruction provided for beginner through advanced skill level. Classes held at an Oregon ski area. Transportation is provided, rentals not included.
- PE 186H Handguns and Personal Safety**.....1 credits  
A fast-moving course with a fundamental training approach to the physical skills necessary to become a safe and accurate handgun user. Legal and ethical issues pertaining to handgun use and ownership are included.
- PE 186W Whitewater River Rafting**.....2 credits  
This is an entry-level course for the beginner or novice rafter. The course is designed to provide a foundation of basic river skills, with a focus on safety awareness and preparedness. Through a series of lectures, and two (2) weekend field outings on local rivers, students will learn about topics including rafting equipment use, reading rapids, paddle, captaining skills, boat maneuvering, river safety and rescue, low impact river use and a variety of other topics. With the aid of an instructor, students will guide paddle-rafts on appropriate river sections during the outings. Safety awareness and preparedness is the foundation for this course.
- PE 188B Basketball Beginning**.....1 credits  
Emphasis on the basic fundamentals of the game and individual skills. Daily play and skill work to include footwork, dribbling, passing, shooting, 1 on 1 skills, and team play. Students will experience 3 on 3, 4 on 4 and 5 on 5 game play. 1.000 Credit Hours
- PE 188C Basketball Intermediate**.....1 credits  
Review and practice of fundamentals and individual skills in daily progressive drill work. Team play may include 3 on 3, 4 on 4 and 5 on 5 game play. Offensive and defensive strategies and techniques will be discussed throughout the term.
- PE 188F Flag Football**.....1 credits  
Fundamental skills, rules, and strategy taught through team play. Skill practice and repetition will include passing receiving, and running plays. 1 and 2 point conversions will be covered. Modified NFL Air It Out rules will be used.
- PE 188P Soccer**.....1 credits  
Instruction and practice in the fundamental soccer techniques, position play, offensive and defensive tactics, team formation and rules of the game. Team play may include 11 on 11 or mini-game play.
- PE 188Q Soccer-Indoor**.....1 credits  
Instruction and practice in the fundamental indoor soccer techniques including position play, offensive and defensive tactics, team formation and rules of the game. Rules will be modified for gym usage.
- PE 188S Softball**.....1 credits  
This co-ed class is for students starting the game as well as those wanting to improve their skills for summer recreational play. Fundamentals such as catching, throwing, fielding, hitting and base running will be practiced. Outfield play, infield play and game strategy will be covered. Skill development and game play will be a part of every lesson. This course incorporates slow pitch rules and procedures.
- PE 188U Ultimate Frisbee**.....1 credits  
Basic skills of Ultimate Frisbee. This game combines the passing and scoring of football, the cutting and guarding of basketball, and the non-stop movement of soccer. Through organized play, all students will be actively involved in the game. Discussion of rules, strategy, and terminology will be included as well. This is a fun course designed to enhance cardiovascular capacity.
- PE 188V Volleyball Beginning**.....1 credits  
This class emphasizes fundamental development in basic skills, rules, terminology and team play.
- PE 188W Volleyball Intermediate**.....1 credits  
This class will include a review of skills and techniques fundamental to the game. Additional strategies and techniques will be discussed.
- PE 191A Cross Country Conditioning 1**.....1 credits  
A conditioning class designed for students interested in participating in competitive cross-country running. Emphasis on conditioning and endurance. Recent Cross Country experience highly recommended.
- PE 191B Cross Country Skills 1**.....1 credits  
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive cross country experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices. Recent Cross Country experience highly recommended.
- PE 191C Cross Country Conditioning 2**.....1 credits  
A highly advanced conditioning class that is designed for students interested in competitive cross-country running at the elite level. Strong emphasis on conditioning and endurance. This class is more advanced than PE191A.
- PE 191D Cross Country Skills 2**.....1 credits  
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive cross country experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices.
- PE 192I Soccer Conditioning 1**.....1 credits  
A conditioning class designed for students with an interest in participating in competitive soccer. Emphasis on conditioning, exercise principles and the development of fundamentals.
- PE 192J Soccer Conditioning 2**.....1 credits  
A highly advanced conditioning class that is designed for students interested in competitive soccer at the elite level. Strong emphasis on conditioning and endurance. This class is more advanced than PE192I.
- PE 192K Soccer Skills 1**.....1 credits  
This course will provide intermediate instruction and practice in the fundamentals of soccer. Individual skill technique in kicking, passing, trapping, ball control, heading and tackling will be stressed. Team concepts of position play, offensive and defensive tactics, game strategy, formation and rules of the game will be emphasized.
- PE 192M Soccer Skills 2**.....1 credits  
This course will provide advanced instruction and practice in the fundamentals of soccer. Expand on individual skill techniques learned in Skills 1. Expand and incorporate new team concepts of position play, offensive and defensive tactics, game strategy, formations and rules of the game.

- PE 193A Basketball Conditioning 1** .....1 credits  
A conditioning class designed for students interested in participating in competitive basketball. Emphasis on conditioning and development of fundamentals.
- PE 193B Basketball Skills-Mens Rules 1** .....1 credits  
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive basketball experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices.
- PE 193C Basketball Conditioning 2** .....1 credits  
A conditioning class designed for students interested in participating in competitive basketball. Emphasis on conditioning and development of fundamentals.
- PE 193D Basketball Skills-Mens Rules 2** .....1 credits  
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive basketball experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices.
- PE 195A Basketball Women's Conditioning 1** .....1 credits  
A conditioning class designed for students interested in participating in competitive basketball. Emphasis on conditioning and development of fundamentals.
- PE 195B Basketball Skills-Women's Rules 1** .....1 credits  
Theory, analysis, skills and techniques for skilled performers and individuals who are preparing for a competitive basketball experience. Course covers terminology, rules, strategy, conduct, sportsmanship and healthy lifestyle choices. Women's ball and Women's NCAA rules will be used.
- PE 195C Basketball-Women's Conditioning 2** .....1 credits  
A conditioning class designed for students interested in participating in competitive basketball at an elite level. Strong emphasis on conditioning, endurance and fundamentals.
- PE 195D Basketball Skills-Womens Rules 2** .....1 credits  
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive basketball experience. Course covers terminology, rules, advanced strategies, conduct, sportsmanship and healthy lifestyle choices. Women's ball and Women's NCAA rules will be used.
- PE 196A Track & Field Conditioning 1** .....1 credits  
A conditioning class designed for students interested in participating in competitive track and field. Emphasis on conditioning, development of fundamentals and skills. Current track and field experience highly recommended.
- PE 196B Track and Field Skills-Rules 1** .....1 credits  
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive track and field experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices. Current track and field experience highly recommended.
- PE 196C Track & Field Skills-Men's Rules 1** .....1 credits  
Theory, analysis, advanced skills and techniques for skilled performers and individuals who are preparing for a competitive track and field experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices. Current track and field experience highly recommended.
- PE 196D Track & Field Conditioning 2** .....1 credits  
A conditioning class designed for students interested in participating in competitive track and field. Emphasis on conditioning, development of fundamentals and skills.
- PE 196E Track and Field Skills-Rules 2** .....1 credits  
An advanced course that covers theory, analysis, skills and techniques for individuals who are preparing for a competitive track and field experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices. Course is more technical and advanced than PE196B.
- PE 196F Track & Field Skills-Mens Rules 2** .....1 credits  
An advanced course that covers theory, analysis, skills and techniques for individuals who are preparing for a competitive track

and field experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices. Course is more technical and advanced than PE196C.

**PE 197A Baseball Conditioning 1** .....1 credits  
A conditioning class designed for students interested in participating in competitive baseball. Emphasis on conditioning and development of fundamentals.

**PE 197B Baseball Skills 1** .....1 credits  
Theory, analysis, skills and techniques for skilled performers and individuals who are preparing for a competitive baseball experience. Course covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices.

**PE 197C Baseball Conditioning 2** .....1 credits  
An advanced conditioning class designed for students interested in participating in competitive baseball at an elite level. Emphasis on conditioning and development of fundamentals. Course is more advanced than PE197A.

**PE 197D Baseball Skills 2** .....1 credits  
An advanced course that covers theory, analysis, skills and techniques for individuals who are preparing for a competitive baseball experience at an elite level. There is a strong emphasis on skill development. Course is more advanced than PE197B.

**PE 214 Physiology of Exercise & Healthy Aging** .....3 credits  
This course will apply the science of exercise physiology to the aging process. It will identify the positive effects of physical activity and regular exercise on risk of disease, longevity and quality of life. Topics will include but not be limited to: aging theories; structural and functional changes in aging; and exercise programming for elderly populations.

**PE 298 Independent Study** .....1 credits  
A variable credit course based on independent study contracted between the instructor, student and Division Dean.

**Physical Science - See Chemistry, Earth and Environmental Science, Physics**

**Physical Therapist**

For information, contact Health Professions, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the program to take most of these classes

**PTA 100 Introduction to Physical Therapy** .....3 credits  
Prerequisite: Admission into the PTA program. This course provides a framework for the PTA student in the program and in future career directions. It includes the study of the history and practice of physical therapy, roles of personnel who provide physical therapy, communication, professionalism, and reimbursement issues. Information and technology integration into academic and clinical practice are also introduced. May be offered through Distance Learning

**PTA 101 Introduction to Clinical Practice 1** .....5 credits  
Prerequisite: Admission into the PTA program. This course introduces physical therapy practice patterns for soft tissue injuries, soft tissue pathology, and physical therapy interventions for acute and chronic pain. Included are theoretical principles, documentation, safety, and communication considerations for practical applications of the following physical therapy interventions: superficial and deep heat, cold, aquatics and hydrotherapy, electrical modalities, compression/taping, TENS and therapeutic massage. Safety, documentation/billing, data collection and patient communication are integrated into lecture. Principles of positioning, transfer training, and wheelchair management are also introduced. May be offered through Distance Learning

**PTA 101L Introduction to Clinical Practice 1 Lab** .....2 credits  
Prerequisite: Admission into PTA program Corequisite: PTA 101  
This co-requisite lab to PTA 101 allows for practice of physical therapy interventions for localized acute and chronic pain and soft tissue injuries. Topics and skills include application of superficial and deep heating agents, electrical modalities, compression/taping, bracing, exercise, and assisted mobility training. Principles of safe and effective communication, data collection, protection of patient privacy and body mechanics are integrated into laboratory practice. May be offered through distance learning or in a format including some online instruction.

**PTA 103 Introduction to Clinical Practice 2** .....5 credits  
Prerequisites: PTA 100, 101, 101L. Corequisite: PTA 103L This

**Course Fees**

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.



course covers the application of physical therapy interventions for medical conditions contained in localized body systems, such as single organ dysfunction (cardiac, lung, muscles of respiration, liver, kidney, gastrointestinal, genitourinary, reproductive, and skin). Anatomy, physiology, etiology, and theory are integrated with considerations for communication with patients, PTs, and the health care team. May be offered through Distance Learning.

**PTA 103L Introduction to Clinical Practice 2 Lab**.....2 credits  
Prerequisite: PTA 100, 101, 101L. Corequisite: PTA 103 This co-requisite lab to PTA 103 allows for practice of physical therapy interventions for medical conditions contained localized body systems. Topics and skills include exercise and conditioning/reconditioning, energy conservation, breathing exercises, and gross mobility activity progression. Principles of safe and effective communication, body mechanics, tests and measures, data collection, abuse and neglect reporting are integrated into laboratory practice. May be offered through distance learning or in a format including some online instruction.

**PTA 104 PT Interventions-Orthopedic Dysfunctions**.....5 credits  
Prerequisite: PTA 103, 103L, 132, 132L Corequisite: PTA 104L This course covers the principles for physical therapy intervention and treatment progression affecting the skeletal system: fracture (adult and pediatric), pre- and post-surgical conditions for the spine and extremities, joint replacement, arthritis, osteoporosis, and other conditions involving bone tissue. Mechanisms of injury, treatment interventions, data collection, documentation, communication, and treatment progressions are discussed. May be offered through Distance Learning.

**PTA 104L PT Interventions-Orthopedic Dysfunctions Lab** ...2 credits  
Prerequisite: PTA 103, 103L, 132, 132L. Corequisite: PTA 104 This co-requisite lab for PTA 104 allows for practical application of physical therapy interventions related to orthopedic conditions. Orthotics/prosthetics, traction, balance, therapeutic exercise, body mechanics, patient safety education/home management, and gait training are also covered. May be offered through distance learning or in a format including some online instruction.

**PTA 132 Applied Kinesiology 1** .....2 credits  
Prerequisites: PTA 101, 101L, HO 152 or BI 233. Corequisite: PTA 132L This course addresses kinesiology and therapeutic exercises for injury prevention and management for the pelvis, lower extremity and gait. Terminology, biomechanical principles of movement, joint structure and function, muscle anatomy, action, and innervations will be integrated into physical therapy interventions and therapeutic exercise for the lower quarter. Documentation, safety, and billing considerations are also discussed. May be offered through Distance Learning.

**PTA 132L Applied Kinesiology 1 Lab**.....2 credits  
Prerequisite: PTA 101, 101L, HO 152 or BI 233. Corequisite: PTA 132 This co-requisite lab to PTA 132 allows for practice of physical therapy interventions and data collection based on principles of kinesiology for the lower quarter. Skills include application and documentation of palpation, goniometry, therapeutic exercise, manual muscle testing, gait deviations, and stretching. May be offered through distance learning or in a format including some online instruction.

**PTA 133 Applied Kinesiology 2**.....2 credits  
Prerequisite: PTA 132, PTA 132L. This course addresses kinesiology principles for the upper extremity, neck, trunk, and muscles of respiration. Terminology, biomechanical principles of movement, joint structure and function, muscle anatomy, action, and innervations will be integrated into physical therapy interventions and data collection for therapeutic exercises and posture. May be offered through Distance Learning.

**PTA 133L Applied Kinesiology 2 Lab**.....2 credits  
Prerequisite: PTA 132 and PTA 132L Corequisite: PTA 133 This co-requisite lab to PTA 133 allows for practice of physical therapy interventions and data collection based on principles of kinesiology for the upper quarter. Skills include application and documentation of palpation, goniometry, therapeutic exercise, manual muscle testing, and posture analysis and posture education. May be offered through distance learning or in a format including some online instruction.

### Course Fees

Many courses have additional fees. Refer to the web class schedule credit listings and registration information for updated fees and amounts.

**PTA 200 Professionalism, Ethics, and Exam Preparation**.....4 credits  
Prerequisite: PTA 100, HO 102, PTA 205, PTA 205L. Corequisite: PTA 203 This course continues instruction in ethics and applied ethics for the physical therapist assistant using case studies. Students will apply knowledge from previous course work and cooperative education into ethical practice issues that may be encountered in physical therapy settings. Skills for transition into the physical therapy workforce are applied to developing a professional resume. Students are introduced the format of the licensure exam and engage in preparatory exercises for the exam. May be offered through Distance Learning.

**PTA 203 Contemporary Topics in Physical Therapy** .....2 credits  
Prerequisite: PTA 100, PTA 205, PTA 205, HO102. Corequisite: PTA 200 This course explores contemporary issues affecting clinical and professional physical therapy practice and impacts on the PTA culminating in class presentation of service learning projects to the PTA Advisory Committee. May be offered through Distance Learning.

**PTA 204 PT Interventions - Neurological Dysfunctions**.....5 credits  
Prerequisite: PTA 133, PTA 133L, PTA 104, PTA104L. Corequisite: PTA 204L. This course covers the principles for physical therapy interventions and treatment progression in conditions affecting the neurological and neuromuscular systems: spinal cord injury, stroke, brain injury and hemorrhage, central and peripheral nerve disorders, vestibular and developmental disorders. Treatment considerations for special populations (pediatric, psychiatric) are also introduced. May be offered through Distance Learning.

**PTA 204L PT Interventions - Neurological Dysfunctions Lab**2 credits  
Prerequisite: PTA 104, PTA 104L, PTA 133 and PTA 133L  
Corequisite: PTA 204 This co-requisite lab for PTA 204 allows for practical application of physical therapy interventions related to neurological conditions, including bed mobility, gait and locomotion training, balance training, adaptive equipment, and activity modification. Issues regarding patient communication, safety, integration of the health care team, and tests and measures for this patient population are covered. May be offered through distance learning or in a format including some online instruction.

**PTA 205 PT Interventions - Complex Medical Dysfunction** .4 credits  
Prerequisite: PTA 204, 204L. Corequisite: PTA 205L. This course covers the etiology, theory and application of physical therapy interventions for complex medical conditions involving multiple body systems such as CAD, COPD, diabetes, lymphedema, AIDS, infections, metabolic disorders, genetic disorders, wounds and burns. Patient communication, documentation, OSHA and infection control for this population is included. Topics include biofeedback, breathing strategies, postural pulmonary drainage, manual chest percussion techniques and energy conservation. Also covered are compression garments, debridement and dressings for burn and wound management. May be offered through Distance Learning.

**PTA 205L PT Interventions - Complex Medical** .....2 credits  
Prerequisite: PTA 204, 204L Corequisite: PTA 205 This co-requisite lab for PTA 205 allows for practical application of physical therapy interventions related to complex medical conditions, including biofeedback, external compression, chest percussion, pulmonary drainage, positioning for pressure relief, advanced infection control, prosthetic training and wound care. Issues regarding patient communication, safety, integration of the health care team, and tests and measures for this patient population are covered. May be offered through distance learning or in a format including some online instruction.

**PTA 280A Co-op Ed: First Clinical Affiliation**.....6 credits  
Prerequisite: Admission in PTA Program This course provides the fourth quarter Physical Therapist Assistant Student (SPTA) a supervised application of previously learned techniques and skills in the rehabilitation of patients in a college-selected clinical facility. The focus is on safe, legal, ethical and effective use of physical therapy interventions. This course also fosters the development of communication skills, interpersonal relationships and professionalism for the health care field. It requires a high level of critical thinking related to implementing, modifying and progressing physical therapy rehabilitation programs. Supervision of the student at the beginning to intermediate level is provided by the PT/PTA staff of the affiliating co-operative institution and is coordinated by the college faculty. This course is the first of three clinical/co-operative educational experiences in the PTA program.

**PTA 280B Co-op Ed: Second Clinical Affiliation**.....6 credits  
Prerequisite: Admission in PTA Program This course provides the second year student Physical Therapist Assistant (SPTA) a second, supervised application of previously learned techniques and skills in the rehabilitation of patients in a college-selected clinical facility. The focus is on progressing from an intermediate to advanced student level of competency in the application in the safe, legal, ethical and effective use of physical therapy interventions. This course requires a professional level of communication and interpersonal relationship skills necessary for the healthcare field. It requires an intermediate to advanced level of critical thinking related to implementing, modifying and progressing physical therapy rehabilitation programs. Supervision of the student at intermediate to advanced level is provided by the staff of the affiliating institution and is coordinated by the college faculty. This course is the second of three cooperative education courses in the PTA program.

**PTA 280C Co-op Ed: Third Clinical Affiliation** .....6 credits  
Prerequisite: Admission in PTA Program This course provides the second year student Physical Therapist Assistant (SPTA) a third and final, supervised application of previously learned techniques and skills in the rehabilitation of patients in a college-selected clinical facility. The focus is on safe, legal, ethical and effective application of physical therapy interventions as an entry-level PTA. This course requires a professional level of communication and interpersonal relationship skills necessary for the healthcare field. It requires an advanced level of critical thinking related to implementing, modifying and progressing physical therapy rehabilitation programs. Students are placed in an inpatient, sub-acute/SNF, or outpatient/ambulatory setting. Supervision of the student at advanced student to entry level PTA is provided by the staff of the affiliating institution and is coordinated by the college faculty. This course is the third of three cooperative education courses in the PTA program.

## Physics

For information, contact Science, Bldg. 16/Rm. 156, 541.463.5446.

**ASTR 107 Survey of Astronomy** .....3-4 credits  
Prerequisite: MTH 052 or above with grade of 'C' or better or pass placement test. This course provides a one-term, comprehensive introduction to the science of astronomy. The course introduces the science of the origin, characteristics and evolution of solar systems, stars, galaxies and the universe. Both classroom and telecourse formats for this class are regularly available. Lab credit is a fixed part of the 4-credit classroom format, and optional in the 3-4 credit telecourse.

**ASTR 121 Astronomy of the Solar System** .....4 credits  
Prerequisite: MTH 052 or higher. Primary subject matter for this course is an in-depth understanding of the following: Naked-eye Astronomy (the Earth's motion and seasons, celestial coordinates, the Moon's motion and phases); The Solar System (an introduction to comparative planetology); Earth and its Moon (our home planet and moon which provides data and points of reference); Mercury (the inner-most planet, and the inner-most terrestrial planet, physical characteristics, comparisons to our Moon); Venus (physical characteristics, comparisons to Earth); Mars (physical characteristics, also the question of life on Mars); Jupiter (the inner-most gas planet, characteristics, the giant planet, its moons); Saturn (the next gas planet, characteristics, its rings, comparisons to Jupiter and its moons); Uranus, Neptune, Pluto, and Beyond (characteristics of planets beyond Saturn in a framework set by the discussion of the other planets nearer the Sun) Solar System Debris (comets and asteroids); and Formation of Planetary Systems (modeling the origin of our solar system).

**ASTR 122 Stellar Astronomy** .....4 credits  
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. This course provides an introduction to astronomy as science and to fundamental physics concepts underlying our current understanding of stars. Focus on our sun and its place in our galaxy begins a comprehensive exploration of the nature of stars, from their birth to multiple paths to maturity and death, including super novae and stellar black holes.

**ASTR 123 Cosmology and the Large-Scale Structure of the Universe**.....4 credits  
Prerequisite: MTH 052 or higher. Primary subject matter for this course is an in-depth understanding of the following: The Milky

Way Galaxy (our home galaxy which provides data and points of reference); Normal Galaxies (the usual entities making up the large-scale structure of the universe); Active Galaxies and Quasars (unusual dynamic entities and observations at the edge of the observable universe); Cosmology (questions, theories and models of the past and future of the universe, the Big Bang, the geometry of space-time, the cosmic background radiation, dark matter, dark energy); The Early Universe (origins of atoms, nuclei, and formation of structure); and Life in the Universe (frameworks, questions, searches)

**GS 104 Physical Science** .....4 credits  
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. In the GS 104, GS 105, GS 106 course sequence for non-science majors, emphasis is placed on basic principles that tie the physical sciences together. GS104 topics are selected from the standard first year of physics, such as mechanics, heat, temperature and entropy, electricity and magnetism, waves, and some introduction to modern physics. This science class includes lab experiences in a variety of settings, with an emphasis on directly observable connection to specific phenomena, as well as classroom demonstrations. Any of the GS 104, 105,106 courses can be taken independently of the others.

**PH 101 Fundamentals of Physics**.....4 credits  
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. The 'Fundamentals of Physics' courses provide an introduction to a broad range of fundamental physics concepts and is recommended for anyone seeking a good basic level of physics literacy. The sequence is designed for non-science majors, but also serves prospective science majors who want to gain a better conceptual grounding before taking General Physics. The sequence also meets physics elective requirements for professional-technical students, as well as providing physics transfer credit for professional-technical students who may transfer to a university; for example, drafting students who may go on to study architecture. Emphasis is on everyday phenomena and conceptual understanding more than calculations. Each course can be taken independently, though the sequential order is recommended when possible. PH 101 is not a prerequisite for PH 102 or PH 103. The classes are readily accepted for transfer credit. The class environment includes labs, demonstrations, discussion and hands-on activities. PH 101 focuses on the nature of science, data analysis, motion, momentum, energy, gravity, the atomic nature of matter, and the properties of solids, liquids, gases, and plasmas.

**PH 102 Fundamentals of Physics**.....4 credits  
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. PH 102 provides an introduction to heat and thermodynamics, waves and sound, and electricity and magnetism. It can be taken independently of PH 101 and PH 103. See information about the Fundamentals of Physics sequence in the PH 101 course description.

**PH 103 Fundamentals of Physics**.....4 credits  
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. PH 103 is concerned with light and color and many aspects of modern physics, including atomic physics, quantum mechanics, nuclear physics, special and general relativity, and astrophysics. It can be taken independently of PH 101 and PH 102. See information about the Fundamentals of Physics sequence in the PH 101 course description.

**PH 201 General Physics** .....5 credits  
Prerequisite: MTH 112 with grade of 'C-' or better or pass placement test. This three-term sequence introduces a wide range of fundamental physics concepts and analysis that is required for most health, mathematics and all science majors. PH 201, 2, 3, provides an algebra-based introduction, which is sufficient for majors not requiring calculus. These three courses all focus on conceptual understanding, graphical representation, and problem solving. The mathematical background in college-level algebra and trigonometry is needed and used throughout the sequence. The courses are designed to be taken in sequence. PH 201 provides an introduction to the concepts of force, acceleration, work, energy and momentum of objects with mass in various kinds of motion.

**PH 202 General Physics** .....5 credits  
Prerequisite: PH 201 with grade of 'C-' or better. The second term of this algebra-based General Physics sequence, PH 202, provides an introduction to rotational motion, sound, wave phenomena and optics. See information about this General Physics sequence in the PH 201 course description.

**PH 203 General Physics** .....5 credits  
 Prerequisite: PH 202 with grade of 'C-' or better. In the third term of this algebra-based General Physics sequence, PH 203 provides an introduction to the topics of electricity, magnetism, and selected topics from modern physics. See information about this General Physics sequence under the PH 201 course

**PH 211 General Physics with Calculus** .....5 credits  
 Corequisite: MTH 251. This calculus-based, three-term sequence provides an introduction to fundamental physics concepts and analysis that are required for engineering and physics majors, and also readily meets any General Physics requirements for other health, mathematics and science majors. These physics courses require a concurrent study of calculus, if calculus hasn't been studied previously. In particular, PH 211 requires MTH 251 concurrently, PH 212 requires MTH 252 concurrently, and PH 213 requires MTH 253 concurrently, if this mathematics was not studied previously. Concurrent study of calculus can be expected to be supported by the experience of these physics courses. These three courses all focus on conceptual understanding, graphical representation, and problem solving. In addition, there is an emphasis on generating and evaluating mathematical models of physical systems. These courses are designed to be taken in sequential order. This first course of the sequence, PH 211, introduces mechanics, including accelerated motion, forces, energy, and momentum of objects with mass in motion.

**PH 212 General Physics with Calculus** .....5 credits  
 Prerequisite: PH 211 and MTH 251 with grades of 'C-' or better;  
 Corequisite: MTH 252. PH 212 introduces rotational motion, fluid pressure and Bernoulli's equation, oscillatory motion, and fundamentals of waves and optics. See information about this three term sequence in the PH 211 course description.

**PH 213 General Physics with Calculus** .....5 credits  
 Prerequisite: PH 212 and MTH 252 with grade of 'C-' or better;  
 Corequisite: MTH 253. PH 213 is the last term of the calculus-based General Physics sequence and focuses primarily on electricity and magnetism. See information about this three term sequence under PH 211.

**PH 298 Independent Study** .....1-3 credits  
 A variable credit course based on independent study contracted between an instructor and a student.

**Political Science**

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

**PS 104 Problems in US Politics /Film 1** .....3 credits  
 This course is designed to incorporate commercial and documentary films and videos, speaker panels, a packet of readings and class discussion of political/public policy issues. Students will be expected to develop and apply critical analytical skills in addressing a wide range of political topics. Offered every other year.

**PS 105 Problems in US Politics/ Film 2** .....3 credits  
 While technically a continuation of PS 104, this is offered as a stand alone course which does not require taking PS 104 previously. Films, videos, readings, discussion, and speaker panels will be utilized to develop and apply critical analytical skills to address a variety of political and public policy issues. Offered every other year.

**PS 201 U.S. Government and Politics** .....3 credits  
 An introduction to American Government and politics that includes consideration of the debates surrounding the formation of the Constitution, the theory and practice of American Federalism, American political economy, media and politics, the formation and impact of public opinion, and various forms of political participation including voting, political parties, campaigns, interest groups, and social movements.

**PS 202 U.S. Government and Politics** .....3 credits  
 A continuation of American Government and Politics that focuses on the institutions of American Government (the US Congress, the Presidency, the Federal Bureaucracy, and the Federal Court System), the history, formation, and implementation of civil rights and liberties in United States, and the formation and implementation of U.S. economic and foreign policy.

**PS 203 State and Local Government and Politics** .....3 credits  
 This class completes the three-course sequence in U.S. Government and Politics. The course examines the place of state

and local government and politics in the larger federal system. Topics will include federalism, electoral politics, institutions and actors in city, county, and state politics and government, taxation and economic development. This course will include both a comparative analysis of various states and communities as well as examples from Lane County and Oregon.

**PS 204 Introduction to Comparative Politics** .....3 credits  
 This course is a general introduction to the methods of comparing political systems, followed by contemporary case studies applying these methods to several countries in different stages of economic, social and political development.

**PS 205 International Relations** .....3 credits  
 This introductory course examines the system of relationships between states, including international organizations and non-governmental organizations. Global issues such as international trade, the environment, human rights, and organized violence are emphasized.

**PS 208 Introduction to Political Theory** .....4 credits  
 The course is designed to introduce students to modern political theory, with an emphasis on social contract theory. The course focuses on questions about why government is formed, the basis of individual obligations and rights in relation to the state, the meaning of democracy, and when actions by government give rise to the right and obligation to resist and rebel. To examine these questions, the course uses different frameworks for thinking about political rights and duties including the individualistic approach, the communitarian approach, and the pluralistic perspective. Readings are assigned from modern and contemporary works in political theory.

**PS 211 Peace and Conflict Studies: Global** .....4 credits  
 This course focuses on issues of peace and conflict at the global level. Based upon principles of social and economic justice, the course is designed to integrate theory with practice. Topics include the relationship of war and militarism to peace, violence embedded in the structures of the global economic system, conflicts resulting from environmental exploitation, feminist peace paradigms, and peace at the individual level as the foundation for global peace.

**PS 212 Peace and Conflict Studies: National** .....4 credits  
 This course focuses on issues of peace and conflict at the national level. Based upon principles of social and economic justice, the course is designed to integrate theory with practice. Theoretical ways of conceptualizing peace and conflict are used to examine important aspects of United States politics. Topics vary in order to focus on important contemporary issues. Examples include the impact of militarization on social programs, the concentration of media, economic inequality in the United States, the prison industrial complex, and a variety of social and environmental justice issues.

**PS 213 Peace and Conflict Studies: Local** .....4 credits  
 This course focuses on issues of peace and conflict at the local level. Based upon principles of social and economic justice, the course is designed to integrate theory with practice. The focus is on social justice issues at the local level. Topics vary in order to focus on important contemporary local issues. Local politicians and activists are invited to speak about their work and activism. Guests cover a wide variety of issues and perspective typically ranging from the mayor and the police chief, to activists involved in various social justice issues including anti-war activism, to anarchists.

**PS 225 Political Ideology** .....4 credits  
 Political Ideologies are comprehensive systems of political beliefs. More than particular opinions or suggestions for political programs, they contain interpretations of human nature, individual rights, and social life. They are oriented towards political action, containing particular programs for the structure of the state and authority, economic systems, and methods for solving political problems. This course focuses on the major ideologies of the modern era. These include liberalism, conservatism, fascism, Marxism, democratic socialism, anarchism, neo-liberalism, civil rights, feminism, and environmentalism. It examines the basic tenets of each ideology; the historical circumstances giving rise to their development and implementation, and their relevance to current political and social discourse.

**PS 275 Legal Processes Through Civil Rights and Liberties** 4 credits  
 This course introduces students to basic concepts of the legal system by focusing on the civil rights and liberties of American citizens. Among the legal principles covered are how the court



system is organized, the differences between civil and criminal law, and how court cases are appealed. Fundamental civil rights and liberties covered include the issues of free speech, unreasonable search and seizure, the right to counsel, the impact of the Patriot Act on these rights, the right to privacy including a woman's right to control her own body, freedom of religion, the separation of church and state, and the equal protection of the laws dealing with discrimination in America.

**PS 280 Co-op Ed: Political Science** .....2-12 credits  
Internships in this discipline allow students to learn about and work on political campaigns, assist federal/state/local legislators and work with grass roots organizations. Working with governmental and political professionals gives students the opportunity to explore potential career options, enhance academic and career resumes, develop workplace skills and earn academic credit. No political or governmental experience is required but a commitment to the placement for at least the term is expected.

**PS 280LW Co-op Ed: Pre Law** .....2-12 credits  
This course is designed for students who anticipate pursuing a legal career, particularly those seeking to become an attorney. While internships vary from term to term, depending upon availability of offices, students have an opportunity to learn and work with lawyers, legal assistants and other legal professionals in areas of legal administration, research, working with clients and working with the courts. Students will be able to develop workplace skills, explore career options, enhance resumes and earn academic credit. Previous legal experience or coursework is not required, but once placed, students are expected to fulfill their commitment to the end of the term.

**PS 297 Environmental Politics** .....4 credits  
This course focuses on current environmental problems, alternative frameworks for understanding these problems, and appropriate political responses. Among the problems covered are overpopulation, economic globalization, ozone depletion, the greenhouse effect, bio-colonization, and the depletion of renewable and non-renewable resources. Alternative frameworks considered include the philosophical visions of Deep Ecology and Gaia. These frameworks are used to investigate possible ways to create sustainable economic, political and social systems. Finally, the course focuses on grass roots politics, including groups and social movements actively seeking to promote environmental and social justice.

**Psychology**

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

**PSY 110 Exploring Psychology** .....3 credits  
A basic introduction to psychology that encourages an appreciation and understanding of the scientific approach to the study of human behavior. The approach integrates several perspectives on human thought and behavior. Learning through video, textbook, and workbook course materials. Also available through Distance Learning Fall, Winter, Spring terms.

**PSY 201 General Psychology** .....3 credits  
Scientific principles related to psychology and psychological research including an introduction to statistical methodology, the human organism considering both developmental and structural aspects, neurobiology and neurochemistry, and anatomy of the brain, the senses and perceptual processes and how they are influenced by the internal and external environment, and states of consciousness. Basic principles and theories of behavior. Sophomore standing recommended. Also recommend that the PSY 201-202-203 courses be taken in sequence. May be offered through Distance Learning.

**PSY 202 General Psychology** .....3 credits  
The study of behavior as it is influenced by learning, remembering, forgetting, higher brain functions, motivation and emotions. Previous PSY 201 recommended. May be offered through Distance Learning.

**PSY 203 General Psychology** .....3 credits  
Individual differences and methods of measurement, personality dynamics, stress, abnormal, social, and applied psychology. Previous PSY 201 & PSY 202 recommended. May be offered through Distance Learning.

**PSY 205 Applied Psychology** .....3 credits  
Prerequisite: PSY 201 or PSY 203. Emphasizes psychological

principles that can be readily applied to everyday life and work. Application of these principles will be illustrated by activities and practices that are easily transported to school, home, and job

**PSY 212 Theoretical Principles of Learning** .....3 credits  
Recommend at least one introductory psychology course before taking this course. Lectures, demonstrations, and review of experimental research in the areas of animal and human learning. Variables that influence learning will also be considered including stimulus-response connections, discrimination, chaining, verbal association, concept formation, and problem solving. Memory, transfer of learning, forgetting, insight and observational learning will also be covered.

**PSY 213 Introduction to Physiological Psychology** .....3 credits  
Prerequisite: PSY 201. An introduction to the physiological processes underlying behavior. The human organism is explored as a specific nervous system interacting with its environments. Topics may include basal nervous system functions, sensory processing, movement, sleep, reproductive behavior, emotion and stress, hunger, learning and memory, human communication, neurological disorder and mental disorder.

**PSY 214 Introduction to Personality** .....3 credits  
Recommend at least one introductory psychology course before taking this course. This course aims to familiarize students with the major theoretical viewpoints about personality within mainstream psychology. Methods of researching issues in personality, theories about how personality develops in individuals and how it is organized, procedures for personality assessment, and processes by which personality may be changed are discussed. Students relate theoretical concepts to personal awareness exercises.

**PSY 215 Lifespan Developmental Psychology** .....3 credits  
Prerequisite: PSY 201. An introduction to psychological aspects of human development from conception through old age. Topics covered include brain, perceptual, cognitive, memory, socio-emotional, and personality development. Theoretical and methodological issues pertaining to the study of development will also be covered.

**PSY 216 Social Psychology** .....3 credits  
Prerequisite: PSY 201 or PSY 203. The boundary field where sociology and psychology overlap. The influence of psychological process on groups, and the influence of culture, society, and groups on individuals. Topics: group dynamics, leadership, socialization, attitude change, and others. Emphasis is put on learning to use social psychological findings to explain real-life events.

**PSY 217 Experimental Psychology** .....4 credits  
Prerequisite: PSY 201. This course presents the basic principles of the modern scientific approach to the study of human behavior. It includes the study of the terminology, methods and values that support psychological research. The primary focus is on the understanding of common research designs and what conclusions can reasonably be drawn from the results of experiments using those designs. Students will have an opportunity to conduct experiments of their own design.

**PSY 218 Multicultural Psychology** .....4 credits  
Prerequisite: PSY 202 and PSY 203. This course is designed to assist students in understanding the diversity of individual experiences. It is based on developing awareness, knowledge, and skills as they relate to the areas of worldview, identity, and acculturation with regard to the exploration of psychological issues. These topics will include cognition, sensation, perception, intelligence, emotion, motivation, development, disorders, and social psychology. In addition, we will explore the methodologies of cross-cultural research in psychology. We will explore and identify cultural assumptions about people different from ourselves via modeling, observations, readings, and experiential exercises.

**PSY 231 Human Sexual Behavior** .....3 credits  
Prerequisite: PSY 201. Explores human sexuality by examining the behavioral, psychological, and biological components that compose our sexuality. Topics include cross-cultural comparisons, learned and developmental origins, biological systems, variations in sexual behavior, and sexual difficulties. This course emphasizes the behavioral rather than the health issues in human sexuality.

**PSY 235 Human Development 1** .....3 credits  
Prerequisite: PSY 201. An introduction to human development from conception through adolescence. Areas covered include physical

(especially brain), cognitive, social-emotional and personality development as well as theoretical and methodological issues. May be offered through Distance Learning.

**PSY 236 Human Development 2** .....3 credits  
 Prerequisite: PSY 201 or PSY 235. Examines human development from early adulthood through old age and death. Areas covered include physical (especially brain), cognitive, social, and personality development as well as theoretical and methodological issues. May be offered through Distance Learning.

**PSY 239 Introduction to Abnormal Psychology**.....3 credits  
 Recommend at least one introductory psychology course before taking this course. Introduction to Abnormal Psychology bridges the gap between mental health-related concepts touched upon in the General Psychology course and the more in-depth analysis of issues relating to emotional disturbance covered in the typical upper division class in Abnormal Psychology. Major topics to be covered will include the historical and current status of behavior disorders, introductory statistics regarding the incidence and classification of persons who are emotionally disturbed and a framework for understanding such phenomena. May be offered through Distance Learning.

**PSY 280 Co-op Ed: Psychology**.....3-12 credits  
 This course provides the student with psychology-related work experience in community organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options, and network with professional while earning college credit.

**PSY 298 Independent Study** .....1-3 credits  
 A variable credit course based on independent study contracted between an instructor and a student.

**Radio - See Audio**

**Reading - See Study Skills and College Prep**

**Real Estate**

For information about noncredit, state approved Real Estate classes, call 541.463.5252.

**RE 280 Co-op Ed: Real Estate** .....3-12 credits  
 Prerequisite: Instructor approval required. This course offers students relevant work experience related to the real estate industry. Students will have the opportunity to integrate theory and practice, develop skills and expand career knowledge.

**Religion - See Philosophy and Religion**

**Respiratory Care**

For information, contact Health Professions, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Respiratory Care program to take these classes.

**EL 115H Effective Learning: Health Science Majors** .....3 credits  
 This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

**RT 110 Introduction to Mechanical Ventilation** .....3 credits  
 Prerequisite: RT 254 and RT 251, or consent of instructor. This course introduces concepts of artificial ventilatory support of the critically ill or ventilator dependent patient. This course develops awareness and understanding of ventilator settings and monitoring parameters. Discussion includes long-term mechanical ventilatory support and medical devices used.

**RT 112 Respiratory Care Science**.....2 credits  
 Prerequisite: Acceptance into Respiratory Care Program or consent of instructor. This course provides the student with instruction in specific applications of pertinent principles of mathematics, physics and chemistry relating to the practice of respiratory care. This course assumes that the student has previous educational experience in mathematics and chemistry as required by admission to the respiratory care program.

**RT 114 Fundamentals of Respiratory Care** .....2 credits  
 Prerequisite: Acceptance into the Respiratory Care Program. This course provides instruction in basic patient care skills with a focus

on safety and legal/ethical issues relevant to the respiratory care practitioner. Topics include legal and ethical issues facing respiratory care practitioners, patient positioning and safety, proper body mechanics, infection control, medical documentation and communication, and medication administration. Student will demonstrate skills in laboratory setting.

**RT 116 Basic Respiratory Assessment** .....2 credits  
 Prerequisites: RT 114 (minimum passing grade of C), or consent of instructor This course is designed to develop clinical assessment skills. Topics include presentations of clinical signs and symptoms associated with common cardiopulmonary disorders.

**RT 126 Respiratory Care Case Review - Part 1** .....2 credits  
 Prerequisite: RT 127 (minimum passing grade of C), or consent of instructor This course provides instruction in the etiology, pathogenesis, and pathophysiology of common respiratory diseases and their clinical, laboratory, radiological and physical manifestations. Simulated or real patient cases are utilized for practice in assessment of data and the application of principles and procedures in management of these diseases. This course is the first of a four-part sequence addressing disease states that require progressively more advanced scenarios. Topics include scenarios that reflect concepts presented in the co-requisite respiratory care courses.

**RT 127 Respiratory Care Diseases and Medications** .....4 credits  
 Prerequisite: RT 112 and RT 114 (minimum passing grade of C), or consent of instructor This course studies the normal anatomic and physiologic components of respiration, including the nature and causes of cardiopulmonary disorders. Physiologic functions presented include mechanics of ventilation, oxygen and carbon dioxide transport, neuro-regulation of respiration, acid-base balance, and defense mechanisms of the lung. Topics include discussion of common cardiopulmonary disorders requiring medication administration by respiratory therapists, and the indications, contraindications, mechanisms of action and standard dosages of those medications

**RT 136 Respiratory Care Case Review Part 2** .....4 credits  
 Prerequisite: RT 126 (minimum passing grade of C) or consent of instructor This course provides instruction in the etiology, pathogenesis, and pathophysiology of common respiratory diseases and their clinical, laboratory, radiological and physical manifestations. Simulated or real patient cases are utilized for practice in assessment of data and the application of principles and procedures in management of these diseases. This course is the second of a four-part sequence addressing disease states that require progressively more advanced scenarios. Topics include scenarios that reflect concepts presented in the co-requisite or prerequisite respiratory care courses.

**RT 141 Principles of Respiratory Care Lab** .....1 credits  
 Co-Requisite: RT 144 Practice time is provided for pulmonary assessment techniques, medical gas delivery, humidity and aerosol therapy, medication delivery, breathing procedures, chest physiotherapy, hyperinflation therapy, and emergency resuscitation techniques.

**RT 144 Principles of Respiratory Care**.....3 credits  
 Prerequisite: RT 112 and RT 114 (minimum passing grade of C) or consent of instructor. Patient assessment and therapeutic modalities encountered in the clinical setting is emphasized. Indications, contraindications, and hazards of gas therapy, humidity therapy, aerosol therapy, chest physiotherapy and basic medications delivery are presented. Significance is given to positive pressure breathing, hyperinflation therapy, and emergency resuscitation techniques. Presentations include physical principles related to the behavior of gases and various gas laws pertinent to respiratory care practice.

**RT 146 Introduction to Clinical Respiratory Care** .....3 credits  
 Prerequisite: Acceptance into Respiratory Care Program or consent of instructor. An introductory course designed to orient the student to the respiratory care profession and associated clinical practice facilities. Topics include job requirements, professional credentials and legal/ethical guidelines for the practice of respiratory care. Provides time for hospital-specific training for HIPAA, infection control, blood-borne pathogen, harassment, and general hospital policy and procedure orientation. Assignments include job-shadow rotations through affiliate respiratory care departments.

**RT 148 Advanced Placement Clinical Practice** .....1-8 credits  
 Prerequisite: Acceptance into Respiratory Care Program and

consent of instructor. This course is designed to assess the clinical skills of candidates for advanced placement in the Respiratory Care program. Students will be observed performing all aspects of clinical respiratory care to determine appropriate placement in the clinical practice courses of the program.

**RT 216 Respiratory Care Case Review - Part 3** .....2 credits

Prerequisite: RT 136 (minimum passing grade of C), or consent of instructor This course provides instruction in the etiology, pathogenesis, and pathophysiology of common respiratory diseases and their clinical, laboratory, radiological and physical manifestations. Simulated or real patient cases are utilized for practice in assessment of data and the application of principles and procedures in management of these diseases. This course is the third of a four-part sequence addressing disease states that require progressively more advanced scenarios. Topics include scenarios that reflect concepts presented in the co-requisite respiratory care courses.

**RT 236 Clinical Practice 1** .....8 credits

Prerequisite: RT 146, or consent of instructor This course is the first in a sequence of four courses addressing the development of skills in respiratory care patient assessment and application of therapeutic modalities in the treatment of respiratory disorders. Emphasis is on clinical performance of basic therapy, infection control techniques, and development of professional attitudes and behaviors in the clinical setting.

**RT 241 Principles of Mechanical Ventilation Lab** .....1 credits

Co-requisite: RT 244 or consent of instructor. Emphasis is placed on analysis and understanding of functional mechanical ventilator characteristics, the assembly of patient circuits, ventilator monitoring, and weaning procedures. Also included is analysis of arterial blood gas parameters, respiratory patient assessment and airway management.

**RT 244 Principles of Mechanical Ventilation** .....3 credits

Prerequisite: RT 110 (minimum passing grade C). Acceptance into Respiratory Care Program or consent of instructor. Emphasis of this course is on the function of mechanical ventilation equipment. Students are provided information regarding current indications, contraindications and hazards of continuous mechanical ventilation. Advanced ventilator monitoring techniques and analysis of ventilator waveforms as well as problem-solving algorithms are presented

**RT 248 Clinical Practice 2** .....6 credits

Prerequisite: RT 236 or consent of instructor This course is a continuation of Clinical Practice 1, RT 236 with special emphasis on development of skills used in determining efficacy of therapeutic modalities in patient care situations. Familiarization with diagnostics and monitoring techniques, polysomnography, and skills used in management of respiratory care patients will be included. Assignments include sleep study, and pulmonary function study rotations. Continued emphasis is placed on development of professional attitudes and behaviors in clinical settings.

**RT 251 Pulmonary Diagnostics and Monitoring Lab** .....1 credits

Co-requisite: RT 254 Emphasis is placed on bedside patient assessment, laboratory investigation, pulmonary function testing techniques and interpretation of results, radiologic assessment and arterial blood gas interpretation. Topics include bronchoscopy assisting and assessment of sleep disorders.

**RT 254 Pulmonary Diagnostics and Monitoring** .....3 credits

Prerequisites: RT 127 and RT 144 (minimum passing grade of C), or consent of instructor Emphasis is placed on diagnostics and monitoring principles used in the clinical evaluation and pulmonary management of patients. Cardiopulmonary assessment and related diagnostic procedures are presented for acute and chronic cardiopulmonary disease.

**RT 256 Respiratory Care Case Review - Part 4** .....2 credits

Prerequisite: RT 216 (minimum passing grade of C), or consent of instructor This course provides instruction in the etiology, pathogenesis, and pathophysiology of common respiratory diseases and their clinical, laboratory, radiological and physical manifestations. Simulated or real patient cases are utilized for practice in assessment of data and the application of principles and procedures in management of these diseases. This course is the last of a four-part sequence addressing disease states that require progressively more advanced scenarios. Topics include scenarios that reflect concepts presented in the co-requisite respiratory care courses.

**RT 258 Clinical Practice 3** .....8 credits

Prerequisite: RT 248 or consent of instructor This course is a continuation of Clinical Practice 2, RT 248 with special emphasis on an introduction and development of skills used in performance of therapeutic modalities employed in intensive care situations. Familiarization with therapeutic and monitoring techniques and skills used in management of critical care patients is provided. Special areas of emphasis will include exposure to adult intensive care and the initiation and maintenance of mechanical ventilators. Continued emphasis is placed on development of professional attitudes and behaviors in clinical settings.

**RT 262 Neonatal/Pediatric Respiratory Care** .....3 credits

Prerequisite: RT 244 (minimum grade of C), or consent of instructor Respiratory care of the neonate and pediatric patient is presented with special emphasis on physiology, pulmonary complications, and related intensive care procedures. Transportation and assessment of the sick newborn and child is emphasized. Topics prepare the student for more advanced training in Neonatal Resuscitation Protocol.

**RT 266 Emergency and Critical Care - Part 1** .....3 credits

Prerequisite: RT 244 (minimum grade of C), or consent of instructor This course presents information on monitoring techniques used in the management of intensive care unit patients. The course includes in depth discussion of electrocardiography, emergency airway management, and medications used in the management of critical care patients

**RT 268 Clinical Practice 4** .....8 credits

Prerequisites: RT 258 or consent of instructor This course is the last in a sequence of four courses addressing the development of skills in respiratory care patient assessment, application of therapeutic modalities in the treatment of respiratory disorders and development of professional attitudes and behaviors in the clinical setting. Emphasis is on respiratory care in the critical care setting. Assignments include neonatal and pediatric respiratory care.

**RT 270 Clinical Competency Assessment** .....1 credits

Prerequisite: RT 268 or consent of instructor This course is designed to provide format for final evaluation of student competence in performance of skills taught in previous lab and clinical courses. Instructor will evaluate student performance of skills using performance evaluations that identify passing criteria for each skill.

**RT 274 Credentialing Topics** .....2 credits

Prerequisite: RT 266 (minimum passing grade of C), or consent of instructor. This course provides students the opportunity to demonstrate their ability to integrate recall, application and analysis levels of knowledge related to the performance of respiratory care procedures through completion of National Board for Respiratory Care style Self Assessment Examinations. Both Entry Level and Advanced Practitioner Level Examinations are used to prepare the student for credentialing examinations that are required after completion of the program. Faculty provides instruction in using examination matrices in preparation for the examinations and in understanding the grading systems used in scoring the examinations.

**RT 276 Emergency and Critical Care - Part 2** .....2 credits

Prerequisite: RT 266 (minimum passing grade of C) or consent of instructor This course builds on content presented in the prerequisite Emergency and Critical Care Part 1. Topics prepare the student for more advanced training in Advanced Cardiac Life Support and Pediatric Advanced Life Support.

**RT 280 Co-op Ed: Respiratory Therapy** .....1-12 credits

Prerequisite: Acceptance into the Respiratory Care Program and consent of instructor. The purpose of this course is to provide students meaningful learning experiences related to the Respiratory Therapy profession. This course provides students an opportunity to earn college credit while working in the health care community under supervision. The field experience is planned to have a direct relationship to students' classroom work so that each contributes to the students' education and future employment in respiratory care. Co-op may be taken as an optional elective, and is a required course in the final term of the program as a critical care focused practicum clinical capstone course .

**RT 298 Independent Study** .....1-3 credits

Prerequisite: Admission into the Respiratory Care Program and consent of instructor. A variable credit course based on independent study contracted between an instructor and a student.



<b>Robotics - See Electronics</b>
<b>Sales and Marketing - See Business</b>
<b>Science - See Anatomy/Physiology/Microbiology, Biology, Chemistry, Earth and Environmental Science, Energy Management, Engineering, Physics</b>
<b>Semiconductor Manufacturing - See Electronics</b>
<b>Social Science - See Anthropology, Criminal Justice, Economics, Geography, Ethnic Studies, History, Human Services, Humanities, Philosophy and Religion, Political Science, Psychology, Sociology, Women's Studies</b>

**Sociology**

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

**SOC 108A Selected Topics in Women's Studies, Women's Bodies, Women's Selves .....3 credits**

Throughout history, cultural views and practices regarding women's bodies have fundamentally affected women's experiences, position, and relative power in society. This class focuses on the embodied experiences of women, in what ways these experiences are socially constructed, and women's accommodation and resistance to those cultural constraints. Major areas of focus will include women's health, reproduction, sexuality, gendered violence, and body image, and will include cross-cultural information.

**SOC 204 Introduction to Sociology .....3 credits**

Development and application of the sociological imagination, concepts, and perspectives concerning human groups, includes attention to socialization, culture, organization, stratification and societies. Examines fundamental concepts and research methodology. May be offered through Distance Learning.

**SOC 205 Social Stratification and Social Systems .....3 credits**

Explores patterns of social inequality, or stratification, using sociological research and theory. Focuses on race, class, and gender inequality. May be offered through Distance Learning.

**SOC 206 Institutions and Social Change .....3 credits**

Sociological study of dynamic organizational nature of society through analysis of social change and major social institutions such as family, education, religion, economy, and political systems. May be offered through Distance Learning.

**SOC 207 Women and Work .....3 credits**

Women perform nearly two-thirds of the world's work, receive one-tenth of the world's income, and own less than one-hundredth of the world's property. This class is an introduction to and analysis of the issues necessary to understand women's work experience and economic position, past and present. Focus areas will include the multicultural economic and labor history of women in the US, the family and women's work, welfare/workfare issues, and women's position in the global economy.

**SOC 208 Sport and Society .....3 credits**

This course explores the relations between sport and society. While we use sociology to help make sense of sport, we also use sport to develop the ability to think sociologically about society. Subjects include sport and: values, socialization, deviance, social problems, social inequalities including class, race, and gender, social institutions including the economy, politics, mass media, and religion, and social change.

**SOC 210 Marriage, Family, and Intimate Relations .....3 credits**

Love, sexuality, intimate partnerships, marriage, parenting, and family disruptions are analyzed in a social context. A sociological approach offers insights into our personal experiences and informs our perspectives on social policies that affect families and intimate relationships.

**SOC 211 Social Deviance .....3 credits**

The study of behavior that departs from a group or society's norms. Topics include delinquency and crime; sexual, religious and lifestyle deviance; deviant sub-cultures; society's reaction to deviance; explanations of causes of deviance and the tracing of its effects on individuals and society.

**SOC 213 Race and Ethnicity .....3 credits**

This course explores a comparative history of racial dynamics with particular emphases on the way in which race, ethnicity, and class, inform these histories. A comparative sociological approach will be used in order to explore the process of racial information.

Throughout the course we will recuperate the histories of racialized groups and expose sites of oppression, struggle, and resistance.

**SOC 215 Social Class .....3 credits**

Examines the centrality of social class in contemporary society. Topics include: conceptions of class, class structure, class consciousness, class inequality and social mobility, worker alienation and exploitation, ideology, the relations between class and culture, the role of money and power elites in politics, the role of transnational corporations in the world, and class-based social movements and revolutions.

**SOC 216 Global Social Movements .....3 credits**

The twenty-first century has been marked with unprecedented social movement activity. Seattle, Chiapas Genoa, South Africa, Argentina, and New Deli, have become symbolic sites where social actors are forging global alliances to redefine, redirect, and resist the effects of globalization. This course examines the dynamic social, political, economic, and cultural, aspects of globalization though contemporary social movements that have developed in response to globalization. A comparative sociological approach will be used in order to explore globalization, international trade, labor, human and collective rights, and trans-national resistance movements.

**SOC 218 Sociology of Gender .....3 credits**

Sociological research and theory is used to examine how gender is socially constructed through social institutions, social interaction, and the formation of a gendered identity. Considers how gender interacts with other categories of difference (such as race and social class) to shape major social institutions and personal experiences. Explores how gender arrangements can be transformed.

**SOC 225 Social Problems .....3 credits**

An examination of selected social problems-basic facts, effects on individual and society, and explanations. Problems will be selected from the following three areas, but not all topics will be covered each term. 1. Systemic problems: racial and sexual discrimination, inequality and poverty, militarization and war, ecological problems, overpopulation, urban and rural problems, life cycle problems. 2. Problems of specific institutions: government, economy, family, education, religion, and social services. 3. Personal pathologies: mental illness, suicide, alcoholism, and drug addiction.

**SOC 280 Co-op Ed: Sociology .....3-12 credits**

This course provides the student with sociology-related work experience in community organizations. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options, and network with professional while earning college credit.

**Spanish - See Language Studies**

**Speech Communication**

For information, contact Language, Literature and Communication, Center Bldg./Rm. 457, 541.463.5419.

**SP 100 Basic Communication .....4 credits**

Basic Communication is a survey course designed to provide students with an overview of communication as a field of study. Its aim is to help develop oral communication competencies needed to function effectively in a variety of communication contexts. The course addresses a variety of theoretical topics in communication studies and attempts to build skills in interpersonal, small group, and public speaking. May be offered through Distance Learning.

**SP 105 Listening and Critical Thinking .....4 credits**

Analysis of listening behavior so as to develop an understanding and appreciation of listening as a vital element in the communication process. Designed to help students improve a variety of listening skills - such as attention, critical thinking, and memory - through exercises with diverse speakers and subjects. Students are urged to take Listening and Critical Thinking (SP 105) before Interpersonal Communication (SP 218). Also useful for English Language Learners preparing for the TOEFL exam.

**SP 111 Fundamentals of Public Speaking .....4 credits**

This course is designed to help students learn strategies for expressing ideas with confidence and clarity. The aim is to teach students to speak in public by preparing presentations for use in various places to diverse audiences on a variety of occasions. In addition, students will learn to become critical listeners by analyzing others' presentations.

**SP 112 Persuasive Speech**.....4 credits  
 Speech 112 is designed to provide students with an understanding of the persuasive communication process so that they are able to prepare effective audience-adapted persuasive presentations and to critically evaluate persuasive messages they encounter. Students will demonstrate their proficiency through expository and persuasive speeches, written analyses, and argumentation practice.

**SP 115 Introduction to Intercultural Communication**.....4 credits  
 This course is designed for people whose work, lifestyle, travel, or interests will involve them in intercultural interactions. A variety of topics will illustrate how differing values, beliefs, attitudes, and social systems affect verbal and nonverbal human communication behaviors. The students will develop awareness, understanding, and sensitivity to cultural diversity of different nations and cultures within our own society. May be offered through Distance Learning.

**SP 130 Business and Professional Speech**.....4 credits  
 This course is designed for students who need to develop or enhance their presentation and briefing skills in business or professional settings. Special attention is given to the use of presentation aids commonly used in small group settings and the business world. The emphasis will be on clarity, delivery, and organization. Students are required to prepare and deliver a variety of in-class presentations. May be offered through Distance Learning.

**SP 218 Interpersonal Communication**.....4 credits  
 This course is designed to assist students in using effective practices of intra- and interpersonal communication in a variety of face-to-face settings. The goal is to better understand oneself, others, and the role of communication in achieving and maintaining satisfying relationships. Knowledge and skill building are used to foster improvement, with special attention self-concept, listening, emotions, intimacy, verbal and non-verbal communication. Students learn to manage stress and conflict and to use assertive/supportive rather than aggressive/defensive messages as tools for improving relationships and for conducting more productive incidental relationships. Students are urged to take Listening and Critical Thinking (SP 105) before taking Interpersonal Communication. May be offered through Distance Learning.

**SP 219 Small Group Discussion**.....4 credits  
 The purpose of the course is to provide a setting in which students may increase their knowledge about the function and role of small group communication in the home and workplace. Students will have the opportunity to participate in a variety of small groups with single tasks. They will participate in an on-going problem-solving small group.

**SP 220 Communication, Gender and Culture**.....4 credits  
 This course is intended for people who are interested in increasing their understanding and awareness of differences in male and female communication styles. We will explore how communication, gender, and culture interact to influence perceptions and expectations of gender roles. May be offered through Distance Learning.

**SP 221 Forensics**.....1-2 credits  
 SP 221, SP 222, SP 223 Forensics (Variable credit) These courses offer training in several novice-level to intermediate speaking events in preparation for participation in intercollegiate speech (forensics) competition. The aim of this activity is to enable students to perfect their speaking skills in the two primary forms of individual speaking events - platform speeches and oral interpretation - as well as in debate. These courses allow for flexibility so that individual students will work in their areas of interest and at their levels of skill development.

**SP 222 Forensics**.....1-2 credits  
 See SP 221

**SP 223 Forensics**.....1-2 credits  
 See SP 221.

**SP 262 Voice and Articulation**.....4 credits  
 This course offers study and practice in the principles of voice production and the articulation of American English speech sounds, with attention to elementary speech physiology and phonetics. Intended to meet the needs of teachers, performers, radio and television speakers, public speakers, and English Language Learners, as well as others who want to improve the sound of their speech.

**SP 280 Co-op Ed: Speech**.....3-12 credits  
 This course provides relevant field experience related to the field of speech that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers. Students will generate learning objectives for the experience, journal progress toward learning objectives and evaluate themselves at the end of the term. Site supervisor will orient, support, guide, provide instruction and evaluate the student's performance. Co-op coordinator will visit site to meet with supervisor, discuss student performance, and do a final evaluation at the end of the term. Meet with the speech co-op coordinator the term before (if possible) to set up the internship.

**Spelling - See Study Skills**  
**Studio Art Classes - See Art, Studio**

**Study Skills and College Prep**

**Also see Mathematics and Writing**  
 For information about classes with course numbers that begin with:

EL, RD and SKD - Contact Academic Learning Skills, Center Bldg./Rm. 218, 541.463.5439.

CG - Contact the Counseling Department, Bldg. 1/Rm. 103, 541.463.5299.

**CG 100 College Success**.....1-3 credits  
 This course presents a systematic approach to solving the problems that interfere with student success and satisfaction. Using an experiential format, students will apply proven techniques and strategies to academic and personal situations they experience during the term. The resulting acquisition of new self-management skills will enhance school performance. May be offered through Distance Learning.

**CG 100A College Success**.....1 credits  
 This course is the first block of the three credit CG100 College success course. Students will study the following topics: Welcome to College, The First Step, Ideas are Tools, Finding the Time, Looking Ahead, You've Got a Great Memory and Muscle Reading.

**CG 100B College Success**.....1 credits  
 Prerequisite: CG 100A. This course is the second block of the three credit CG100 College Success course. Students will study the following topics: Reading Challenges, Taking Notes, Challenges Worth Noting, Preparing for the Test, This is Not a Test, Thinking Creatively and Thinking Critically.

**CG 100C College Success**.....1 credits  
 Prerequisite: CG 100A and CG 100B. This course is the third block of the three credit CG100 College Success course. Students will study the following topics: Math and Science: A 3-D Solution; Research: Solving a Mystery; Writing well - The First Draft; and Writing Well - The Final Presentation.

**CG 199 Special Studies:**.....1-3 credits  
 See department for topics.

**CG 215 Transition to the University**.....3 credits  
 Transition to the University is designed for the student who plans to transfer to a four-year university within the next few terms. It is a three-credit transfer course which will prepare students to make a successful academic and personal transition from the community college to the university. Students in the course will receive instruction in academic and personal survival skills necessary for success at the university level.

**EL 113A Connections: Special Study Skills**.....1 credits  
 This course is a content-specific study skills course designed for students reading at a college level who wish to strengthen their study skills and strategies in a specific content area for success in the content course. The course is linked with content areas through a content-area course in which students are co-enrolled. The two courses (EL113A and the content-area course) are either linked with extensive instructor collaboration or team-taught.

**EL 115 Effective Learning**.....3 credits  
 This course is designed for students who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Coursework requires college-level reading skills.

COURSE DESCRIPTIONS

**EL 115E Effective Learning: ESL**.....3 credits  
This course is designed for English language learners who wish to strengthen their study and language skills. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and communicate effectively. For a description of this ALS class in Spanish, see [lanec.edu/als/classesenspanol.htm](http://lanec.edu/als/classesenspanol.htm).

**EL 115H Effective Learning: Health Science Majors**.....3 credits  
This course is designed for health occupation majors who wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library. Course work requires college-level reading skills.

**RD 080 Preparatory College Reading**.....6 credits  
Preparatory College Reading Prerequisite: Minimum level as determined on the college reading test. This is the entry level reading class offered by the Academic Learning Skills Department. Students will learn active reading strategies such as finding main idea and supporting details to improve textbook comprehension. Students will develop techniques for enlarging vocabulary and creating study tools. Brief reading selections from actual first year textbooks are part of this course. This course is offered as a part of the Guided Studies Program.

**RD 089 Academic Reading for ELL Students**.....3 credits  
Department consent required. Corequisite: WR089. This course is for English language learners. Students will learn active reading strategies such as finding the main idea and supporting details. Students will develop techniques for expanding their vocabulary and creating study tools. Readings will include both advanced ESL texts as well as short authentic readings.

**RD 090 College Reading Skills**.....3 credits  
This is the second in the sequence of reading classes offered by the Academic Learning Skills Department. Students will learn to integrate active reading strategies such as finding main idea and supporting details, note taking, and mapping to comprehend longer college level reading selections. Students will learn how to draw thematic connections between a variety of readings.

**RD 093 College Reading for ELL Students**.....3 credits  
Prerequisite: Placement by reading/writing test. This is a course for English language learners. Students will learn reading strategies that will improve comprehension in reading such as reading for main idea, supporting detail, patterns of organization, and inference. Students will learn basic literary terminology and how to draw thematic connections between a variety of authentic texts including a novel, short stories, newspaper and journal articles, and poetry. In addition, students will learn to conduct basic library research and cite sources correctly. The course is designed so that students will increase their English language proficiency and improve their reading skills.

#### Television - See Video Production

#### Sustainability

For information, contact Cooperative Education, Bldg. 19/Rm. 231, 541.463.5203.

**COOP 206S Sustainability Seminar**.....1 credits  
The Cooperative Education Sustainability Coordinator Seminar will provide ways for students to increase their understanding of industry expectations, as well as develop job search tools and skills. The content is designed to help students present themselves to employers in a competent and professional manner, and to move initially into their cooperative education internships; then into their professional careers. This is a required course for the Sustainability Coordinator degree.

**COOP 280S Co-op Ed: Sustainability**.....3-12 credits  
This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers. This course is a required course in the Sustainability Coordinator degree.

## Theatre Arts

For information, contact Music, Dance and Theatre Arts, Bldg. 6/Rm. 205A, 541.463.5209.

**TA 140 Acting Shakespeare**.....4 credits  
Students become "Shakespeare-friendly" through lectures and classroom activities. Introductory trainings include acting, vocal/physical skills, swordplay, and Elizabethan song. Coached work on how to bring 400-year-old words alive. (Optional participation in public Term's End Shakespeare Showcase.)

**TA 141 Acting 1**.....3 credits  
Introduces the student to basic acting skills. Class exercises focus on increased self-awareness, observation skills, relaxation techniques, overcoming stage fright, and introduction to character analysis and scene study. No prior experience necessary. This course prepares students for continuing on in the Beginning Acting class sequence.

**TA 142 Acting 2**.....3 credits  
Prerequisite: TA 141. Continuation of the Beginning Acting sequence. Students are introduced to monologue audition techniques, in-depth character analysis, and more advanced scene work.

**TA 143 Acting 3**.....3 credits  
Prerequisite: TA 142. Continuation of the Beginning Acting sequence. Students continue in-depth character analysis, and apply it to more advanced scene work. This course prepares students for continuing on in the Intermediate Acting class sequence.

**TA 144 Improvisational Theatre 1**.....3 credits  
Students learn theater games, scene development, and role-playing. Participants put their creative energy into action, release their inhibitions, expand their imaginations, and sharpen their wits. This class is essential training for actors, and useful for others, too.

**TA 145 Improvisational Theatre 2**.....3 credits  
Previous experience required. Students study and practice historical styles, and apply the principles of improvisation to character development and scene analysis as well as to everyday life.

**TA 150 Technical Production**.....3 credits  
This course provides training and experience for students who want to learn the necessary functions and operations behind-the-scenes. Besides gaining technical expertise, students become familiar with stagecraft, scenic design, lighting, sound, stage management and crew work. This course is recommended for performers, stagehands and future arts producers in Music, Dance and Theatre, who need to know the basics of stagecraft and backstage communications.

**TA 153 Theatre Rehearsal and Performance**.....1-3 credits  
Consent of the instructor. Designed to provide practical application of classroom theory. The course may be repeated for a maximum of nine credits. Should be taken by participants in a theatrical production of this department scheduled for public performance.

**TA 164 Writing for the Theatre 1**.....3 credits  
This first sequence focuses on the essentials of playwriting. Students experience a series of exercises; and listen to, record, and write pieces for live theatre. This class may be taken for a total of not more than three terms.

**TA 199 Special Studies:**.....3 credits  
See department for topics.

**TA 241 Intermediate Acting**.....3 credits  
Prerequisite: TA 143. This course begins a three-term concentration on the problems of characterization. In preparation for various audition situations, students perform from theatre literature, commercial copy, film scripts, and television shows. This course is highly recommended for those students transferring to schools requiring entrance auditions and for anyone wishing to enter the business now. The three-course sequence may be repeated for a maximum of nine credits.

**TA 242 Intermediate Acting**.....3 credits  
Prerequisite: TA 241. This course continues the concentration on the problems of characterization, with an emphasis on 'method' acting. Students learn to bring themselves to the role in an intimate way. A preparation for the third term in this series. The three-course sequence may be repeated for a maximum of nine credits.



**TA 243 Intermediate Acting** .....3 credits  
Prerequisite: TA 242. This course continues the concentration on the problems of characterization, with an emphasis on acting for the camera. The three-course sequence may be repeated for a maximum of nine credits.

**TA 250 Technical Production 2** .....3 credits  
Prerequisite: TA 150. The course provides advanced training and experience for students who want to learn the necessary functions and operations behind-the-scenes. Besides gaining technical expertise, students become familiar with stagecraft, design, lighting, sound, and crew work. This course is recommended for performers, stagehands and future arts producers in Music, Dance and Theatre, who need to know more advanced skills in stagecraft and backstage communication.

**TA 253 Theatre Rehearsal and Performance** .....1-3 credits  
Designed to provide practical application of classroom theory and skills. Should be taken by participants in a theatrical production of the Music, Dance, and Theatre Arts Department that is scheduled for public performance. The course may be repeated for a maximum of nine credits.

**TA 264 Writing for the Theatre 2** .....3 credits  
Prerequisite: TA 164. A continuation of Writing for the Theatre 1, this sequence focuses on the rewriting process of script development, as students continue to work on projects. They learn to reshape events, they participate in readings, and analyze and critique each other's work. This course can be taken up to three terms.

**TA 280 Co-op Ed: Performing Arts** .....3-12 credits  
Course provides the student with a theatre-related work experience in community businesses and industry. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning college credit.

**TA 298 Independent Study:** .....1-3 credits  
A variable credit course based on independent study contracted between an instructor and a student.

**Tutoring**

For information, contact Tutoring Services, Center Bldg./Rm. 210, 541.463.5783.

**ED 125 Tutor Training 1** .....1 credits  
Prerequisite: Employment as a tutor. This class is the first of three levels of certified tutor training. The content includes learning styles, communication, tutoring techniques, and problem solving. Students learn how to facilitate learning. The teaching format is interactive with tutors supplying their own answers and teaching each other. Upon completion, tutors will gain regular level I certification from the College Reading and Learning Association (CRLA).

**ED 126 Tutor Certification - Advanced** .....1 credits  
Prerequisite: Continued employment as a tutor and completion of ED125. This class is designed for current LCC tutors with some experience. The content will deepen in the areas of learning styles, communication, and cultural competence as it relates to tutoring and life. The teaching format is interactive with tutors teaching and learning collaboratively. Upon completion, tutors will gain advanced level II certification from the College Reading and Learning Association (CRLA).

**ED 127 Tutor Certification-Master Level** .....1 credits  
Prerequisite: Continued employment as a tutor and completion of ED 125 and ED 126. This is the third and final level of the College Reading and Learning Association's (CRLA) certified tutor training. Tutors will gain skills in mentoring, teaching, leadership, and critical thinking. The teaching format allows tutors to individualize learning based on goals and needs through a project outside of class. Upon completion, tutors will gain a master level certification from the CRLA.

**Video Production**

**Also see Multimedia Design**

For information, contact Art and Applied Design, Bldg. 11/Rm. 101, 541.463.5409.

**VP 151 Video Production 1/Camera** .....3 credits  
Prerequisite: ART 261, AUD 120 and FA 250. This course introduces elementary concepts of video production including digital video camera operation and digital non-linear editing and the necessity of pre-production planning to insure a smooth production process. Students are taught basic camera techniques, pre-production and production practices through hands-on learning to develop basic field video production skills combined with individual creativity and the importance of teamwork and deadlines. Projects will be produced in the context of learning the theory and practice of pictorial continuity as it applies to multimedia productions.

**VP 152 Video Production 2/Editing** .....3 credits  
Prerequisite: VP 151. This course teaches advanced concepts and skills in digital video production and non-linear editing. The theory and practice of digital non-linear editing is emphasized. Students receive hands-on opportunity to learn advanced camera techniques, pre-production and production practices, combined with individual creativity and the importance of teamwork and deadlines. Projects will be produced in the context of learning the theory and practice of video production and computerized video editing combined with the applications of multimedia programs.

**Vocabulary - See Writing**

**Water Conservation**

For information, contact Science, Bldg. 16/Rm. 253, 541.463.3997.

**SUST 101 Introduction to Sustainability** .....3 credits  
This class examines, 'What is sustainability?' We discuss, measure & learn how to implement action. Topical overviews include economic, ecologic & environmental literacy; history; power & privilege; meeting one's basic needs of food, water & shelter; energy & transportation; products, purchasing, waste & recycling; transportation & development; governance. This class will feature multiple guest speakers.

**WATR 101 Introduction to Water Resources** .....3 credits  
This course provides a sociological perspective of topics including history and perception; water use; basic hydrology, water stressors at multiple scales; stormwater, wastewater and drinking water; water quality appropriate to use; water supply and demand management as well as emerging issues.

**WATR 105 Water Conservation: Residential** .....4 credits  
This class will teach strategies to increase water conservation & efficiency at the residential level using proven water conservation strategies. The course will cover program development, water use, waste, auditing, efficiency measures & incentives as well as fixtures & appliances. Students will participate in hands-on activities.

**WATR 107 Water Conservation: Outdoor** .....4 credits  
This course will focus on conservation at the residential outdoor level including water use & waste; efficiency measures; and landscape issues such as planning & design, irrigation systems, soils, mulch & maintenance. Theoretical work will be enhanced by hands-on outdoor learning.

**WATR 202 Fostering Sustainable Practices** .....3 credits  
In this class students will study and practice communication, appreciative inquiry, and collaboration skills that enable them to create durable and effective community programs to foster sustainable practices. Students will learn techniques to uncover and overcome barriers that stifle sustainable behaviors with a focus on practitioners approaches. Students will practice initiatives at the community level with direct contact with people. Using community-based social marketing and other social change strategies, students will learn how green industry practitioners encourage water efficiency, energy efficiency, recycling and other sustainable practices.

**WATR 206 Co-op Ed: Water Conservation Seminar** .....1 credits  
The Water Conservation Cooperative Education Seminar will provide ways for students to increase their understanding of industry expectations, as well as develop job search tools and skills. The content is designed to help students present themselves to employers in a competent and professional manner, and to move initially into their cooperative education internships; then into their professional careers.

**WATR 208 Water Conservation: Agricultural** .....4 credits  
 This course will provide an overview of water efficiency in irrigated agriculture. Topics include water use, water waste, water efficiency, conservation, auditing, measurement, soil moisture monitoring and irrigation. Laser leveling and other emerging technologies will be discussed. The class will include field work with irrigation controllers, field trips to local farms and nurseries and hands-on experience with irrigation auditing tools.

**WATR 210 Water Conservation: Industrial / Commercial** .....4 credits  
 This class will focus on retrofitting existing buildings and facilities to increase wise water use. Emphasis of the class will be water use, waste, efficiency and auditing for Commercial, Industrial and Institutional (CII) sites. Topics will include metering, sanitation, process water use, commercial kitchen, laundry and swimming pool water use, and heating and cooling systems. Students will be introduced to the concept of Industrial Ecology.

**WATR 215 Integrated Water Management** .....4 credits  
 Prerequisite: SUST 101 and WATR 101 This class will examine a wide range of water uses and water issues in multiple settings and at various scales. Emphasis will be on the interaction between various resource uses and the effect of conservation measures. Students will analyze global, regional and local case studies.

**WATR 220 Water Conservation: Program Development** .....4 credits  
 This capstone class will explore the design, implementation, maintenance and evaluation of water efficiency plans and programs. Emphasis will be on creating formal water conservation plans. Students will study how to make the business case for efficiency and how wise water use supports sustainability.

**WATR 221 Water Mechanical Systems** .....4 credits  
 Prerequisite: WATR 210 This course provides an overview of mechanical systems that use or re-circulate water in residential, commercial and industrial settings. Topics include: efficient use of water and energy, appropriate technology theories and practices, rules and regulations, systems analysis techniques and emerging technology. Types of equipment covered include: bathroom fixtures, clothes washers, water heaters, cooling towers, solar water heaters, fire systems, waste heat recovery systems, sterilizers, x-ray and photo processors, vehicle washing equipment, manufacturing cleaning equipment, and radiant floor heating.

**WATR 261 Regional Water Policy** .....3 credits  
 Explores policy, regulation, rights and law pertaining to the Pacific Northwest bioregion. Additional topics will include: national and international code trends, case studies illustrating conflict management techniques and the role of economic incentives in encouraging efficient resource use.

**WATR 280 Co-op Ed: Water Conservation Technician** .....3-12 credits  
 This course provides the student with water conservation related field experience. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals while earning credit toward a degree.

**Web - See Business and Computers:  
 Introduction/Information Systems/Computer Science  
 Welding - See Fabrication and Welding**

**Women in Transition**

For information, contact the Women's Program, Bldg.1/Rm. 202, 541.463.5353.

**BT 030 Computer ABCs for Women in Transition** .....3 credits  
 Prerequisite: CG 220 (may be taken the same term). Recommend ability to type. A course for students who are in the Women in Transition program, providing a supportive environment to learn basic computer operations. Through hands-on, in-class computer exercises and assignments, students will gain increased confidence in operating computers and prepare for future computer courses. Focus is on student success and integration with other programs in the learning community.

**CG 100T College Success: WIT** .....1-3 credits  
 This course is designed to help present and past Women In Transition students explore the positive forms that strength can take in women's lives. Topics will include: Identifying healthy definitions of strength in various arenas of life (mental, emotional, physical); Exploring where and what to direct your strength toward; Defining and creating a personal strength plan that embodies key

aspects of both internal and external forms of strength in your life. Using an experiential format, students will apply techniques and strategies to solving problems that interfere with student success and satisfaction. May be offered through Distance Learning.

**CG 140T Career and Life Planning: WIT** .....3 credits  
 Co-Requisite: CG 220. This course is designed to help students enrolled in the Women in Transition program plan their careers and their lives. Topics will include: Self - awareness (exploring and identifying values, interests, skills and personality styles): Career Exploration (available careers, careers that fit personal wants and needs, steps to pursuing career goals): and Decision Making (how to make decisions, weigh options, and set goals). Note: CG 140T is a Career and Life Planning class with an emphasis on issues for women in transition, there are also general Career and Life Planning courses offered by Counseling with overlap in content. Students may receive credit for either CG140 or CG140T.

**CG 207 Life Transitions 2** .....3 credits  
 Prerequisite: CG 220. This course is the next sequence in the Women in Transition program. It is designed to assist students in enhancing their ability to navigate life changes in powerful and positive ways, building on the skills and knowledge gained in the first Life Transitions course. Topics include: responding successfully to changing personal and professional demands; strengthening resiliency and self-esteem; establishing and maintaining healthy relationships; and setting, enacting and attaining personal, academic and career goals. Class activities will stress practical and personal application of course information. Successful completion of the first Life Transitions course is required.

**CG 220 Life Transitions: Women in Transition** .....4 credits  
 Co-requisite: CG 140T. This course is designed to help students enrolled in the Women in Transition program navigate their current life transitions and explore positive new life directions. Topics include: life transitions; (understanding change, endings, losses and new beginnings): relationships; (patterns, identifying productive and damaging interactions, learning new skills): and personal growth; (self-esteem, coping with powerful emotions, healthy power, assertiveness).

**EL 115T Effective Learning: Women in Transition** .....3 credits  
 Prerequisite: CG220, can be taken in a previous term or concurrently. This course is designed for students who are in the Women in Transition program and wish to strengthen their study skills and strategies. Students will learn how to take notes from lectures and textbooks, study for tests, improve memory, read and study from textbooks, manage time effectively, and use the library.

**MTH 010T Whole Numbers, Fractions, and Decimals: WIT** .....3 credits  
 Prerequisite: Placement by the LCC math test or consent of the instructor. Students will review whole number skills and learn to compute with fractions and decimals. Universal math concepts will be integrated into the curriculum to increase students' abilities and to extend their understanding of basic math principles in preparation for higher level math courses. Effective math study strategies and math anxiety issues will be discussed to increase students' confidence in their abilities to succeed in math classes and to use math in daily life. MTH 010T is intended for students who need to strengthen their basic math skills before moving on to MTH 020.

**PE 183U Strength Training for Women** .....1 credits  
 A fun and active class designed for women of all ages, experience and conditioning levels. Use of barbells, dumbbells, weight machines, stability balls, bands, medicine balls, body weight resistance exercises and more, to tone and strengthen all major muscle groups and improve your general physical condition. Emphasis is on safe and correct techniques, while learning terminology and basic anatomy. Basic and specialized individual programs for beginners through advanced levels, tailored to your goals and experience.

**Women's Studies**

For information, contact Social Science, Center Bldg./Rm. 403, 541.463.5427.

**SOC 108A Selected Topics in Women's Studies, Women's Bodies, Women's Selves** .....3 credits  
 Throughout history, cultural views and practices regarding women's bodies have fundamentally affected women's experiences, position, and relative power in society. This class focuses on the embodied experiences of women, in what ways these experiences

are socially constructed, and women's accommodation and resistance to those cultural constraints. Major areas of focus will include women's health, reproduction, sexuality, gendered violence, and body image, and will include cross-cultural information.

**SOC 207 Women and Work** .....3 credits  
 Women perform nearly two-thirds of the world's work, receive one-tenth of the world's income, and own less than one-hundredth of the world's property. This class is an introduction to and analysis of the issues necessary to understand women's work experience and economic position, past and present. Focus areas will include the multicultural economic and labor history of women in the US, the family and women's work, welfare/workfare issues, and women's position in the global economy.

**WS 101 Introduction to Women's Studies**.....4 credits  
 Introductory course to the interdisciplinary field of Women's Studies, to feminism, and to the issues raised by a focus on the lives of women. Special attention will be given to the areas of work, family, sexuality, body image, gender socialization, violence against women, social and economic relations, and theories about women's oppression, authority, and power. Class discussion is central in relating readings and lectures to students' everyday lives. Participation in a weekly discussion group is required.

**WS 298 Independent Study**.....1-3 credits  
 A variable credit course based on independent study contracted between an instructor and a student.

**Writing**

For information about classes with course numbers that begin with:WR115-245 - Contact Language, Literature and Communication, Center Bldg./Rm. 457, 541.463.5419.SKD and WR080-095 - Contact Academic Learning Skills, Center Bldg./Rm. 218, 541.463.5439.

**ENG 116 College Vocabulary** .....3 credits  
 Students will acquire vocabulary that will increase their speaking, listening, reading, and writing vocabularies. Students will study the history of the English language, affixes and roots, pronunciation, dictionary and thesaurus use, as well as strategies for vocabulary acquisition and enrichment. Instruction will move at a faster pace, introduce more material, and deal with vocabulary at a higher level than Preparatory Vocabulary.

**SKD 085 Preparatory Vocabulary**.....3 credits  
 Students will acquire vocabulary skills that will increase their speaking, listening, reading, and writing vocabularies. Students will study word parts, pronunciation, dictionary skills, and techniques for vocabulary acquisition and enrichment.

**WR 080 English Grammar and Sentence Writing** .....6 credits  
 Prerequisite: Placement by the LCC reading/writing test or instructor consent, or a grade of C- or better in RD080. Students will learn about parts of speech, subject/verb agreement, pronoun/antecedent agreement, and basic sentence patterns. Also, students will study sentence types, standard punctuation, and rules of capitalization. Students will develop their ability to write standard English sentences that will demonstrate their mastery of these concepts.

**WR 089 Academic Writing for ELL Students**.....4 credits  
 Prerequisite: Placement by the LCC reading/writing test or department consent required. Corequisite: RD 089 This is a course for English language learners. Students will develop sentence, paragraph, and essay writing skills. They will also work on summary writing and personal reaction writing. Students will develop a clearly focused essay with adequate support using sentences without major grammatical error (verb tense, subject-verb agreement, etc.) Course activities may be enhanced through an extended workshop setting, an online module, or a service-learning component. Students will submit papers using word processing software.

**WR 090 Paragraph Writing** .....3 credits  
 Prerequisite: A passing grade in WR080 or WR085B or WR089, or placement by the LCC reading/writing test, or recommendation of instructor. WR090 is the second in a three-course sequence that prepares students for transfer-level composition courses. Students will learn a writing process for writing and revising basic expository paragraphs. In addition, students will practice paragraph structures, development of ideas in a paragraph, and sentence improvement. Students will submit papers using word processing software.

**WR 093 College Writing for ELL Students**.....4 credits  
 Prerequisite: A passing grade in WR 089 or WR 090, or placement by the LCC reading/writing test, or recommendation of the instructor. English language learners will develop more competence in writing. Students will learn skills in paragraph and essay writing with an emphasis on development and organization techniques. Students will also learn advanced grammatical concepts and produce essays that reflect that knowledge. Students will demonstrate control and understanding of the writing process: generate and organize ideas, write drafts, revise and edit multi-paragraph essays. Students will also use critical reading skills to analyze essays and improve their own writing. Students will submit papers using word processing software.

**WR 095 College Writing Fundamentals** .....4 credits  
 Prerequisite: A passing grade in WR089 or WR090 or WR093, or placement by the LCC reading/writing test, or recommendation of instructor. This course serves as an introduction to WR115; therefore, skills essential to success in WR115 will be taught in WR095. Students will demonstrate control and understanding of the writing process: generate and organize ideas, write drafts, revise and edit paragraphs and multi-paragraph essays. Students will also use critical reading skills to analyze essays and improve their own writing. Students will produce writing that reflects knowledge of advanced grammar skills. Students will submit papers using word processing software. Course activities may be enhanced through an extended workshop setting, an online module, or a service learning component.

**WR 105 Writing for Scholarships** .....2 credits  
 Prerequisite: WR 115 or placement test. This course is part of the "Show Me the Money" Learning Community. Students must co-register with CG 105, "Scholarships: Money for College." The course provides a systematic approach to writing essays required for scholarship applications. It will include frequent writing exercises with extensive revision of drafts to help students learn essay writing strategies, styles, and methods to express themselves clearly, effectively, personally, and genuinely. Assignments will be based on essay topics from the Oregon Student Assistance Commission application. NOTE: This two-credit writing course will not count toward a WR 115/115W, 121, 122, 123 or 227 writing course.

**WR 115 Introduction to College Writing** .....4 credits  
 Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C- or better) in WR 095 or equivalent. WR 115 emphasizes the writing process of pre-drafting, composing, revising, and editing to help students express ideas clearly in logical and meaningful essays. WR 115 also helps students develop analytical skills so that they can become better critical thinkers, readers, and writers. Assignments and class discussions affirm the relevance of writing skills to students academic, occupational, public, and/or personal lives. Because this course serves as an introduction to college writing, skills essential for success in WR 121 will be introduced in WR 115. The course also fulfills some Lane programs' writing requirements.

**WR 115W Introduction to College Writing: Workplace Emphasis** .....3 credits  
 Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C- or better) in WR 095 or equivalent. This course provides students with a forum for exploring, evaluating, and creating various forms and styles of spoken and written English. Writing 115W emphasizes frequent writing, revision, and editing to help students learn to express ideas clearly in logically organized essays, letters, and reports. Because the course serves as an introduction to college writing, it addresses the analytical and thinking skills essential for success in Writing 121, and fulfills some Lane program's writing requirements.

**WR 121 Composition: Introduction to Academic Writing** ...4 credits  
 Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C- or better) in WR 115. This fundamental course for all writing students introduces students to the conventions of academic writing. It emphasizes defining and developing a significant topic and using principles of clear thinking to support an assertive or argumentative thesis. Students will gain an understanding of their subject matter, audience, purpose, and point-of-view, and demonstrate that understanding through the organization and development of their essays. Students will learn how to analyze and evaluate other writers' work to sharpen their critical abilities as readers and writers. The course also introduces



students to skills in source analysis, documentation, and beginning research methods. May be offered through Distance Learning.

**WR 122 English Composition: Argument, Style and Research** .....4 credits  
 Prerequisite: A passing grade (C- or better) in WR 121. or a passing score on the English Department's Waiver exam. While continuing the concerns of WR 121-English Composition: Introduction to Academic Writing WR 122-Argument, Style, and Research focuses on persuasion and argument supported by external research, including the processes of finding and evaluating sources, citing, documenting, and integrating source material into the student's own text. Both subjects—argument and research—are presented in the context of critical reading and the writing. May be offered through Distance Learning.

**WR 123 Composition: Research** .....4 credits  
 Prerequisite: A passing grade (C- or better) in WR 122 or a passing score on the English Department's Waiver exam. While continuing the goals of WR 122, this course emphasizes skills needed to complete a quarter-long research project. Students will write a research essay that supports an analytical and/or assertive thesis. WR 123 also emphasizes the critical reading and writing skills involved in defining and researching a genuine problem of inquiry, as distinct from encyclopedic reporting. May be offered through Distance Learning.

**WR 227 Technical Writing** .....4 credits  
 Prerequisite: A passing grade (C- or better) in WR 121 or a passing score on the English Department's waiver exam. Recommended: A passing grade (C- of better) in WR 122. This transfer course emphasizes forms of writing demanded in the workplace rather than academic essays. While addressing issues like evaluation of materials and audiences, sources of information, organization and design, and visual aids, the writings include letters, informal reports, descriptions, instructions, and proposals. May be offered through Distance Learning.

**WR 240 Creative Nonfiction** .....4 credits  
 Prerequisite: A passing grade of (C- or better) in WR121 or a passing score on the English department's waiver exam or waived based on instructor's evaluation of student writing. This course is designed to introduce students to the genre of Creative Nonfiction, in which they will learn the conventions and techniques of the genre through guided creative writing projects. Students will learn how to implement narrative, backstory, pacing, and characterization by reading the work of other students and published authors, whose work will serve as models for the students. The readings will include the various modes of the genre, such as autobiography/memoir, personal essay, nature and/or science writing, and literary journalism. Students will produce, workshop, and present their own works of creative nonfiction in class.

**WR 241 Introduction to Imaginative Writing: Fiction** .....4 credits  
 Prerequisite: A passing grade (C- or better) in WR 121, or a passing score on the English Department's waiver exam, or waived based on instructor's evaluation of student writing. Writing 241 is an introduction to the principles and practice of writing, editing, and publishing short fiction. Elements covered include character, conflict, plot, point of view, setting, theme, dialog, and tone. Stories by well-known authors are read and discussed as models. Students generally write two to three stories in addition to completing other exercises, peer responses, and a journal. Workshop discussions are often used along with instructor feedback to guide revision and editing of student work.

**WR 242 Introduction to Imaginative Writing: Poetry** .....4 credits  
 Prerequisite: A passing grade (C- or better) in WR 121, or a passing score on the English Department's waiver exam, or waived based on instructor's evaluation of student writing. Writing 243 deals with writing poetry. The goals of the course are to help students: 1) learn the elements of poetry; 2) develop an interest in reading poems by well-known poets; 3) develop an interest and ability in writing poems; 4) read and write poems effectively; 5) discover and develop talents; 6) receive constructive criticism of their writing; 7) learn to be confident in their critical evaluations of their peers; and 8) gain a better understanding of themselves and others.

**WR 255 Poet in the City** .....4 credits  
 Prerequisite: A passing grade (C- or better) in WR 121, or a passing score on the English Department's waiver exam, or waived based on instructor's evaluation of student writing. WR 245 is a poetry-writing course that encourages participatory learning through

writing poetry in both the classroom and alternative settings throughout the community. This course uses a holistic approach to learning, recognizing the student as a member of a college classroom and an outside community. As students study the form and style of poetry, they will experience poetry emotionally and intellectually. After students write, read, and team-teach poetry in community outreach settings, students will return to the traditional classroom to reflect on that engagement through guided writing assignments.

**WR 280 Co-op Ed: English/Writing** .....3-12 credits  
 This course provides relevant field experience that integrates theory and practice while providing opportunities to develop skills, explore career options and network with professionals and employers. Students will generate learning objectives for the experience, journal progress toward learning objectives, and evaluate themselves at the end of the term. Site supervisor will orient, support, guide, provide instruction, and evaluate the student's performance. Co-op coordinator will visit site to meet with supervisor, discuss student performance, and do a final evaluation at the end of the term. Students must meet with the English/Writing co-op coordinator the term before (if possible) to set up the internship.

**WR 298 Independent Study: Writing** .....1-3 credits  
 A variable credit course based on independent study contracted between an instructor and a student.

**Zoology - See Biology**

## Continuing Education

Many of the college's academic and student services are available to all students. Examples include Career and Employment Services, Counseling, Disability Resources, and the Multicultural Center. For complete information about these resources see pages 24 through 37.

**Registration, Costs and Payment Methods** To learn about registration, costs and payment methods for these training opportunities, consult the current class schedule or call the program of interest. For information about credit and refund policies, see page 23 of this catalog.

### Continuing Education

Continuing Education (CE) offers hundreds of noncredit courses each term in career and technical (vocational) training, employment training, computers, consumer/money, art, music, foreign language, home/house/garden, health and health occupations, human development, recreation, outdoor programs, and general interest areas.

CE also offers short-term training and upgrading for a wide range of professional fields. In some cases, students can earn continuing education units, industry certification, or meet state and/or national professional examination preparation requirements. Current noncredit technical trainings available through CE are described in this catalog, *Aspire Magazine* and the quarterly web class schedule.

Enrollment in most courses is open to any interested person over 16 years of age. A few courses have prerequisites. A list of course offerings and registration information is included in *Aspire Magazine*, mailed each quarter to area residents. *Aspire Magazine* also is available on the main campus, at the Downtown Center, at all outreach centers, and at [lanecc.edu](http://lanecc.edu) prior to the beginning of each term.

Tuition and fees for noncredit classes are published in *Aspire Magazine* and on the web class schedule.

Instructors have expertise in the subjects they teach. People interested in teaching a CE course may contact a coordinator at the CE office at the Downtown Center or call 541.463.5252.

### Continuing Education Training Programs

**Computer Training** From mastery of individual software programs to specialist certifications, the college offers a broad range of computer learning opportunities. Offerings include skill building in Windows operating systems, presentation, word-processing, and desktop design software, including AutoCAD, web programming, and database creation and application. Many computer trainings are available online.

**Massage Therapist Program** This program is designed to prepare students to sit for the Oregon State Board of Massage Therapists Certification Exams and has been approved by the Oregon Board of Massage Therapists. The program also provides hours toward continuing education for LMTs. Students must successfully complete required courses of anatomy and physiology, kinesiology and pathology, applied massage,

communication and ethics, professional practices, hydrotherapy, labs and clinical. Contact hours and program content are subject to change. For current information, visit [lanecc.edu/ce](http://lanecc.edu/ce).

**Nursing Assistant** This training provides 150 hours of instruction in basic nursing procedures. It includes theory and clinical hours. Upon successful completion, students may sit for the Oregon State Board of Nursing (OSBN) certification exam. A current CPR card is required before applying for the certification exam. The program is OSBN approved. For more information, visit [lanecc.edu/ce](http://lanecc.edu/ce).

**Phlebotomy** Upon completion of two courses, Phlebotomy I and Phlebotomy II, and a 120-hour Cooperative Education clinical placement, students are eligible to sit for the ASCP national Phlebotomy Technician Certification exam. This program is offered two times per year. The first session begins fall term, and the second session begins spring term. For more information, visit [lanecc.edu/ce](http://lanecc.edu/ce).

**Real Estate Broker or Property Manager License** The coursework satisfies the State of Oregon requirements for becoming a licensed real estate broker. The courses are highly beneficial to persons seeking to become licensed in real estate and to better understand real estate as an investment vehicle to financial independence. For more information, visit [lanecc.edu/ce](http://lanecc.edu/ce).

**Fashion Design** This course of study consists of 190 hours of instruction which includes core classes and elective classes. This course trains individuals for entry level positions in fashion design. For more information, visit [lanecc.edu/ce](http://lanecc.edu/ce).

**Jewelry Making and Marketing** This course of study consists of 150 hours of core classes and 50 hours of elective classes spread over four terms. Upon completion of this course of study, students will have a comprehensive knowledge of the jewelry industry. For more information, visit [lanecc.edu/ce](http://lanecc.edu/ce).

**Workshops, seminars, institutes, professional development** Topics include supervisory leadership, project management, workplace communication, business writing, quality improvement, customer service, workplace safety, conflict resolution, team building and many others available by request. These learning opportunities are designed to be easily accessible to working people. They are offered throughout the term, mornings, afternoons, evenings, and weekends in half-day or full-day formats as individual sessions or as ongoing series. For more information, call 541.463.5252.

### ExpressLane/myLane

Use ExpressLane/myLane to apply for admission, registration, account payments, viewing schedules, class details, and grades. Check each term's class schedule for information on registration dates, getting your "L" number and going on-line in ExpressLane/myLane.

## English as a Second Language

English as a Second Language (ESL) Department provides English language instruction for English language learners who need to improve their English skills for work, community, academic, or personal goals. Courses are designed to help students with everyday communication as well as with transitions to work or to other training and academic programs, including credit and noncredit programs in community colleges or universities.

This noncredit program enrolls students from more than 40 different nations, and students from Asian, Latino, European, and Middle Eastern cultures. All classes are culturally mixed, and all instruction is conducted exclusively in English.

**Registration** Call 541.463.5253 for day classes at Main Campus or 541.463.4935 for evening classes at the Downtown Center, or visit the office in Building 11, Room 201 at 4000 East 30th Avenue, or 1059 Willamette Street, Room 210.

New and returning students must make an appointment to take an English placement test. Placement tests are available at scheduled times both day and evening. There is no minimum skill level for entry to classes.

**ESL Classes** Instruction includes seven levels of classes in integrated skills (listening, speaking, reading and writing) and supplemental classes, such as TOEFL Preparation and multilevel classes at outreach sites.

**Volunteer ESL Tutors** Enrolled students can be matched with volunteer tutors. Community members may contact Amy Gaudia, 541.463.5919 to learn more about becoming a volunteer tutor.

**International ESL Students (IESL)** International students whose TOEFL score is lower than 475 PBT or 53 iBt may be issued an I-20 to obtain a student visa to attend ESL classes. International students are integrated into ESL classes and pay an International Student fee comparable to international student tuition in the credit program. Deadlines to submit applications vary each year but are usually a month prior to the start of each term.

Questions concerning international student admissions should be directed to Jane Marshall, International admission advisor, Lane Community College, 4000 East 30th Avenue, Eugene, OR 97405; telephone: 541.463.3404.

International students on student visas must enroll for a minimum of 18 hours of class per week. Other students in the U.S. on non-immigrant visas may enroll in ESL classes for a fee on a space-available basis.

### Inglés como Segundo Idioma

El programa de Inglés como segundo idioma provee instrucción a personas cuya primera lengua es otra que inglés y que necesitan

mejorar su inglés para lograr sus metas personales, académicas, laborales y comunitarias. Las clases han sido creadas con el propósito de facilitar la comunicación diaria, además de ayudar a los estudiantes a crecer laboralmente o a entrar en otros estudios y programas académicos, incluyendo programas con o sin valor curricular del Community College (colegio comunitario) y de universidades.

Este programa sin valor curricular admite estudiantes de más de 40 diferentes naciones, incluyendo Asiáticos, Hispánicos, Europeos y del Medio Oriente. Todas las clases son culturalmente combinadas y toda la instrucción es exclusivamente en inglés.

**Inscripción** Llame al 541.463.5253 para clases matutinas en el Main Campus o al 541.463.4935 para clases vespertinas en el Downtown Center. También puede visitar una de nuestras oficinas: Salón 201 del Edificio 11, ubicada en la dirección 4000 E. 30th Ave y en 1059 Willamette Street, Salón 210.

Los estudiantes que quieren iniciar clases por primera vez, o los que están regresando a clases después de un tiempo de ausencia, deben hacer una cita para tomar un examen de inglés para colocarse en un nivel. Las citas para los exámenes de colocación están disponibles en horas predeterminadas por la mañana y la tarde. No hay ningún requisito mínimo de conocimiento de inglés para entrar al programa.

**Clases de ESL** El Programa de Inglés como Segundo Idioma (ESL) proporciona instrucción sólo en inglés y consta de siete diferentes niveles incluyendo clases de lectura y escritura, comprensión auditiva y conversación, y algunas clases suplementales como preparación para el examen de TOEFL; además, se ofrecen clases multinivel en otras localidades.

**Tutores Voluntarios** Los estudiantes inscritos tiene la oportunidad que se les asigne un tutor voluntario. Los miembros de la comunidad pueden contactar a Amy Gaudia al 541.463.5919 para saber más acerca del entrenamiento de tutores voluntarios.

**Programa Internacional ESL (IESL)** A los estudiantes internacionales que no han alcanzado una calificación de 475 PBT o 53 iBt en el examen de TOEFL se les puede dar una forma I-20 para obtener una visa de estudiante y asistir a clases de ESL. Estos estudiantes internacionales son integrados a las clases del Programa Principal ESL y pagan una cuota de estudiante internacional comparable a la Inscripción de los estudiantes internacionales participando en el programa con valor curricular. Las fechas limitadas para entregar las solicitudes varían cada año, pero generalmente son un mes antes de empezar cada trimestre.

Si tiene preguntas con respecto a estudiantes internacionales, debe comunicarse con Jane Marshall, asesora de admisiones para estudiantes internacionales, Lane Community College, 4000 East 30th Avenue, Eugene, OR 97405; teléfono: 541.463.3404.

Los estudiantes internacionales con visas estudiantiles deben inscribirse para un mínimo de 18 horas por semana. Otros estudiantes en EEUU con visa no-inmigrante se pueden inscribir en clases de ESL por una cuota en base al espacio disponible.



### El Centro de Mujeres

El Centro de Mujeres de Lane Community College brinda el programa para mujeres "Transiciones". Si tiene interés llame 541.463.3253.



## Adult Basic and Secondary Education

Lack of basic skills is often a barrier to getting or keeping a job. The ability to read, write and compute at the 9th grade level is now the minimum required for entry-level employment. Higher paying jobs and employment in the 21st century will require higher level basic skills plus new skills such as computer literacy, problem solving, teamwork, and learning to learn.

**Admission Requirements** All students must be 18 years of age or older, or have a release-referral from the local public school district if 16 or 17 years of age, or have Lane Community College homeschool release and verification of current homeschool registration from ESD. (This applies to in-school and out-of-school youth. The decision to release a student is made by local school district officials in accordance with Oregon Revised Statutes and local school district policy).

**Admission Procedures** Class locations, orientation and registration information are available in the quarterly class schedule or on the department website at [lanec.edu/abse](http://lanec.edu/abse). For more information, call 541.463.5214.

Many of the college's academic and student services are available to all students. Examples include Career and Employment Services, Counseling, Disability Resources, and the Multicultural Center. For complete information about these resources see pages 24 through 37.

**Registration, Costs and Payment Methods** To learn about registration, costs and payment methods for Adult Basic and Secondary Education, consult the current class schedule or call 541.463.5214.

### Adult Skill Development

Adult Skill Development offers a variety of pre-college level alternatives for adults who need to brush up on basic reading, writing, or math skills for work, college entrance or passing the GED exam.

Class times are flexible and offered during the day and evening in many locations in Lane County. All new students must attend an orientation session.

### General Education Development (GED)

Lane Community College offers classes to prepare teens and adults to take the GED exam. Preparation is offered in all five test areas: social studies, science, reading, writing, and math. The structure of classes differs from location to location and offers a combination of small group instruction, individual attention and practice testing.

The official GED tests can be taken in Testing Services on main campus.

### Core College Connection

Lane's Adult Basic and Secondary Education (ABSE) department provides tuition-free core college classes that will help you:

- Prepare for or improve score on Lane Community College placement tests or the Ability to Benefit test.
- Develop reading comprehension skills and strategies
- Renew or increase math skills
- Develop writing and grammar skills

### Adult Basic Skills Development

Moving Toward Employment (MTE): Specialized Math, Reading and Technology

The MTE program is designed for individuals with mild to moderate intellectual disabilities. Structured courses provide a slower pace, extra support, and activities for multiple learning styles. Reading and Math for Work courses are offered every term at the Downtown Center. Technology is integrated into classes. Current Events, Language and Computers is an ongoing course using computers and current events to improve academic skills and to connect students with important events, locally and round the world.

**Registration** Students or referring agency should call 541.463.5945, Monday through Friday, 8 a.m. to 5 p.m. for more information on the admission process.

## Community Services

### Center for Meeting and Learning

This 35,000 square-foot conference and event venue on Lane's main campus features a 6,900 square-foot main event space, high-tech auditorium, breakout rooms, demonstration kitchen, computer training lab, and a spacious lobby with alcoves. The Center offers full service, in-house catering focusing on local and seasonal selections and provides Culinary Arts and Hospitality Management students the opportunity to work side-by-side with the Center's professional staff in a learning lab environment. Profits from the Center help fund a Hospitality Management faculty position at Lane. Booking an event at the Center helps support education. The Center accommodates campus,

community, and regional events of all types. Call 541.463.3500 to book an event or visit [lanec.edu/cml](http://lanec.edu/cml).

### Community Center for Family Counseling

Counseling and Continuing Education at Lane sponsor the Community Center for Family Counseling, informally known as Saturday Circus. Call 541.463.5234.

Both credit (CG 211) and noncredit learners (at no charge) can attend parent education/child guidance sessions at the Saturday Circus, 9 a.m. - noon, Saturdays (Thursdays or Fridays in the summer) at Lane's Downtown Center. Participants can

view family counseling sessions that illustrate principles and skills for improving relationships with children and participate in exercises and discussion. An advanced class (CG 212 for credit and noncredit learners at no charge) helps participants refine implementation of principles and skills. Childcare for children age three (and out of diapers) through elementary school age is available upon arrangement. Outgrowths of the Saturday Circus are noted below.

- Each term the Improving Parent-Child Relationships telecourse (CG 213) combines real-life, in-home interactions between parents and children with segments of interviews in which a counselor discusses with parents the application for principles and skills for improving relationships. Telesessions are cablecast as well as available at the main campus Library and outreach centers.
- An understanding anger class (CG 214) provides a goal-directed approach for improving self-management and effectiveness in responding to others who express anger.
- In collaboration with the Oregon Society of Individual Psychology, the Saturday Circus offers an Annual Conference on Families. Learners can participate through Continuing Education or as credit students (CG 299).

**English As A Second Language** See page 262.

### **KLCC-FM Radio** *klcc.org*

KLCC 89.7 FM — a listener-supported public radio station licensed to Lane Community College — provides NPR news, local and regional news, and a wide world of intelligent music to over 88,000 people in the Eugene/Springfield area and western and central Oregon. Musical genres include jazz, folk, blues, and world beat. KLCC consistently ranks among the top five public stations in the country for market impact.

Broadcasting 24 hours a day with 81,000-watts of power, KLCC is operated by a professional staff and volunteers from the community. It is funded by the Corporation for Public Broadcasting, Lane Community College, the business community, and the listening audience. KLCC is a charter member of National Public Radio.

### **Family Connections**

Family Connections is a community-based child care resource. For more information, see page 26.

### **Library**

The Library provides resources for students, faculty, staff, and community residents. For more information, see page 30.

### **Music, Dance and Theatre Arts**

The department presents concerts and performances available to the community. For information, see page 30.

### **Specialized Support Services**

Specialized Support Services (S<sup>3</sup>) provides employment training and education to adult students with intensive support needs. S<sup>3</sup> operates as a cooperative venture between the college, Lane County Office of Developmental Disabilities, Full Access Brokerage, Mentors Oregon Brokerage, and the State of Oregon's Division of Human Services. S<sup>3</sup> offers individual and small group instruction that addresses social skill development, on-the-job training, work crew skills in socially integrated settings,

competitive employment placement, as well as community inclusion activities to adults with developmental disabilities.

As a means of providing vocational training and actual work experience for its students, S<sup>3</sup> contracts to provide services to various public and private organizations. Services include confidential shredding, collating and assembling publications, paper recycling, bulk mailings, packaging, small parts assembly, and employee placement with on-the-job training and follow-along support in the employers' workplace. Additional services include janitorial, laundry work, and kitchen crews. S<sup>3</sup> has a central office on main campus and other jobsites in the community. For information, call 541.463.3959.

### **Successful Aging Institute**

The Successful Aging Institute (SAI) provides lifelong learning opportunities for adults of all ages, with special emphasis on classes for mature adults and those who nurture their success. Explore new careers, including those related to work with older adults; cultivate skills for the third age of life; and enjoy stimulating interactive courses in a variety of disciplines. SAI offers courses that promote health, wellness, intellectual growth, and information about the issues relevant to successful aging. Tailored training for professional caregivers and senior-related businesses is also available. Contact SAI with ideas of classes you would like to take and/or teach. At Lane, your quest for learning never ends. For information, call 541.463.4634 or visit [lanecc.edu/sai](http://lanecc.edu/sai).

### **The Senior Companion Program**

The Senior Companion Program is sponsored nationally by the federal Corporation for National & Community Service and locally by Lane Community College. Senior Companions help frail seniors and adults living with disabilities overcome loneliness and retain their independence through 1:1 friendly visits, and assistance with simple chores and transportation. Working in collaboration with 30+ agencies throughout Lane County, Companions provide more than 60,000 hours of service to 400+ clients annually. Companions must be age 55+, have a limited income, and serve clients 15-40 hours/week. They receive a tax-free hourly stipend of \$2.65 per hour and comprehensive ongoing training. Those interested in becoming Companions are invited to apply, pass a criminal background check, and participate in a week-long pre-service training. For more information, call 541.463.4630 or visit [lanecc.edu/scp](http://lanecc.edu/scp). (The Senior Companion Program does not link Companions with clients directly. Please contact Senior & Disabled Services at 541.682.4038 if you would like to receive the services of a Senior Companion.)

### **ExpressLane/myLane**

Use ExpressLane/myLane to apply for admission, registration, account payments, viewing schedules, class details, and grades. Check each term's class schedule for information on registration dates, getting your "L" number and going on-line in ExpressLane/myLane.

## Business and Workforce Development

### Business Development Center and Customized Employee Training

The Business Development Center and Customized Employee Training (Lane BDC) is located at the LCC Wildish Building, 1445 Willamette St., Ste. 1, Eugene. Business hours are 8:30 a.m.- Noon and 1-5 p.m., Monday-Friday. Call 541.463.5255 or visit LaneBDC.com website.

The Business Development Center is a resource for business, from inception through growth and transition phases. Participants learn from our experienced faculty, peers and local experts. The Lane BDC has classes, resources, and advisors available to help you find answers to your business questions all in one location. During the year offerings include: business management programs for small businesses, agricultural enterprises, innovators and inventors, green businesses, leadership and communication, micro-enterprise, and non-profits; starting a business classes, Microsoft® software training; Construction Contractor's Board licensing prep; and a variety of business classes and workshops.

Employee Training also offers customized learning experiences for area businesses and organizations, from start-ups to established enterprises. We develop and offer employee training packages that meet specific employee-learning needs.

#### At the Lane BDC, Participants Can:

- Develop new, practical business skills and strategies or improve existing ones in a combination of one-to-one and/or classroom instruction, and lab hours for owners and employees. What is learned in class today can be used in your business tomorrow.
- Network with other owners to learn real-life experiences and proven business practices in one of the center's comprehensive business management programs.
- Develop strategies to improve business with the help of a business advisor.
- Find assistance in business operation, marketing, business plan development, loan packaging; and in preparing financials.
- Develop employees through customized trainings.
- Find helpful information on our website, LaneBDC.com, reference resources, handouts, and books in our Resource Library.

Lane BDC, founded in 1982, is a member of the Oregon Small Business Development Center Network and is actively involved in the economic development efforts of Lane County and the State of Oregon.

#### Developing Successful Business Strategies with Lane BDC Advisors

Business advisors are available, by appointment only, to help business owners develop strategies for improving an established business or starting a new venture. Professional, confidential advising is underwritten by the SBA, the State of Oregon Business Development Department, and Lane Community College and is a no-cost service to the participant. For those thinking about starting a new venture, we suggest that you register for the First Steps in Business workshop and/or the Going Into Business: Next Steps class along with requesting advising.

The Lane BDC offers aid with idea development, inventions, innovations, and process improvement. No-cost advising for technology- or innovation-firms is available to assist with business development, strategic planning, and product development processes.

To request an advising session, go to LaneBDC.com and click on the blue registration tab and click the Register For Business Advising link to register and our staff will contact you to set up an appointment or call 541.463.5255.

#### New Small Business Ventures and Early-Staged Businesses

Starting a business takes creativity, drive, energy, money, and lots of hard work, but can have huge rewards. Find out what basic components make up a successful business, discuss your idea with the group, and rate your entrepreneurial skills in the 3 hour First Steps in Business class.

**The Going Into Business class** gives all the tools needed to create a sound business foundation. GIB helps determine what the business structure and financial setup should be, the type of record keeping needed, taxes, business planning, marketing, and more. Peer group discussions are invaluable to skill development. After the class, no-cost advising is available.

#### Small Business Management Program (SBM): Foundations

consists of three modules to focus on the critical basics. The program runs fall, winter, and spring terms with interactive learning sessions, twice a month, in the evenings and one-on-one personalized coaching sessions once a month. Owners will benefit from classroom sessions by learning from seasoned entrepreneurs and the goal of each module is that the business owner will leave with a plan they can execute. The one-on-one coaching is designed to fast-track implementation of key concepts and provides the small business owner with access to a professional business consultant. For more information on the SBM program, contact Gary Smith at 541.463.4614 or smithge@lanec.edu.

**SBM Marketing Foundation Module** delivers real results for your business. The focus is on all aspects of marketing with the goal of having each business leave the module with a marketing plan they can execute. Class topics include: value proposition, features and benefits, marketing basics, building a plan, image and branding, selling skills and strategies, and internet marketing.

**SBM Financial Foundation Module** delivers proven results for your business. The focus is on financial statements, accounting, and financing with the goal of having each business leave the module with a minimum of a cash-flow budget they can administer. Class topics include: accounting concepts, introduction to financial statements, understanding break-even and margins, cash flow management, budgeting, taxes, and working with accountants.



**SBM Operations Foundation Module** is about having a plan and executing that plan. At the core of every successful business is a well-run operation that understands employee issues, goal setting, customer service strategies, and more. Core operational concepts are the focus and the goal with each business finishing the module with a plan for managing workflow both in the short-term and in their future growth model. Class topics include: setting and achieving goals, time management, customer service strategies, legal and insurance issues, employee basics, recruitment and management, and recognition systems.

### **Idea Creators, Inventors, Innovators, New Technology and Process Improvements Assistance**

**Innovation Business Management Program (IBM)** helps innovators and inventors take their creative ideas, turn them into business goals, and then achieve those goals. Whether they want to check the viability of an idea, build a manufacturing business, or license an intellectual property to another company; this 9-month program offers the tools to get there. The classroom curriculum includes all three modules of our highly successful “Small Business Management Program, (SBM): Foundations”. Owners will participate in 15 SBM class sessions covering all aspects of marketing, financial management, and business operations. In addition to the classroom training, participants receive 10 hours of personalized advising sessions with an experienced product development and project management expert. The advising sessions are customized to the needs of the participant, and can include topics such as: product development roadmaps, researching the market, process improvement tools, project management methods, and intellectual property protection. Contact Frank Plaisted, instructor/advisor, at 541.463.4623 or [plaistedf@lanecc.edu](mailto:plaistedf@lanecc.edu) for more information or the front desk at 541.463.5255 to set up an advising appointment

### **Growing Existing Businesses**

Lane BDC currently offers business owners on-site business advising and an interactive class environment, which allows for networking with other business owners/managers. Customized employee training is available to businesses for the purpose of keeping their employees up to date with compliance and technical advances.

**Agricultural Business Management Program (ABM)** is designed for local farmers and agricultural professionals who want to build and improve the business side of their enterprise and increase their horticulture capacity. The ABM program contains business management and horticultural classroom training, practical applications, and on-site evaluations of soils, insect, disease and weed issues, crop production, pesticides, and more. Classes are designed to provide you with current, practical information and a methodology to apply it. The program, a partnership between OSU/Lane County Extension Office and the BDC, also includes one-on-one advising sessions to work on your unique challenges. For a program syllabus or more information contact Casey Foltz, instructor/advisor, at 541.463.4623 or [foltzc@lanecc.edu](mailto:foltzc@lanecc.edu).

**Climate Masters® at Work** helps businesses take action to save money by reducing their business’s carbon footprint in a class that will more than pay for itself in savings. The owner or manager will receive 20 hours of low-cost training in exchange for 25 hours of internal cost-savings work in their business or as a mentor. The training will provide: practical strategies for lowering expenses and reducing emissions through efficiency in facilities, packaging, materials selection, transportation, and more; financing leads for money saving resources, keys to developing a greenhouse gas emissions inventory and action plan, support with implementation, intern assistance from trained LCC Energy Management students and climate change basics. Follow up sessions, including an implementation-focused class each month and one-on-one personalized advising. Contact Sonja Mae, instructor/advisor, at 541.463.4605 or [maes@lanecc.edu](mailto:maes@lanecc.edu) or visit [lanebcc.com/training/programs/climate.html](http://lanebcc.com/training/programs/climate.html) for more information.

**Business Communications and Leadership Program** is designed to help develop advanced leadership and communication skills. This is an open enrollment program allowing entry at any time in the year. Program is based on the proven Toastmaster business communications curriculum with the addition of a leadership track, coaching and mentoring. Contact Jim Lindly, BDC Director, at 541.463.4621 for information and costs.

**eDev** is a nonprofit organization offering micro-business development services to individuals and communities. eDev offers many resources for microenterprises. Please visit [edev.org](http://edev.org) or contact Juli Brode, program coordinator, at 541.463.4627 for information on classes, schedules and services.

**Non-Profit Business Management** helps the leaders of existing non-profit organizations thrive in today’s environment and builds sustainable organizations by better focusing their efforts and bring optimal benefit to their stakeholders. Experts will lead discussions and answer questions on topics including funding, strategic planning, building capacity, how to evaluate your impact, effective boards and committees, responsible financial management, technology and more. Peers will share best practices and help one another as well. One-on-one personalized advising with the instructor focuses on their unique goals and issues. Contact Chris Nystrom, instructor/advisor, at 541.463.4607 or [nystromc@lanecc.edu](mailto:nystromc@lanecc.edu) for more information.

**Small Business Management Program Year II: Systems** is focused on growing the business through understanding, creating and implementing systems within a business. Owners will use their businesses as the textbook. SBM Year II is designed for businesses with at least one full-time staff, (owner/operator ok). Class topics include: strategic planning, plan/do/check/act, introduction to the e-myth, systems thinking, performance reviews and evaluations, CRM systems and solutions, process creation and documentation, financial statement strategies, marketing systems, leadership and ethics and class customized topics. Acceptance in the program is based on instructor approval. For more information, contact Gary Smith at 541.463.4614 or [smithge@lanecc.edu](mailto:smithge@lanecc.edu).

**Small Business Management Program Year III:** Advanced Concepts continues the unique combination of classroom sessions and one-on-one personal, coaching. Businesses work on mastering the earlier concepts while fine-tuning their operation with new material. SBM: Advanced Concepts is designed for businesses that have completed the SBM System series. Class topics include: workplace profiles and facilitation skills, sales management, board of directors, sustainability, job costing, budgeting processes, risk management, exit strategies and a large number of customized topics based on class member interest. Qualified third-year business owners will receive a certificate of recognition. For more information, contact Gary Smith at 541.463.4614 or smithge@lanecc.edu.

**Small Business Management Alumni Program** is a continuing education and support program open only to graduates of the three-year SBM program. Alumni members can drop into any current class in the SBM program, get additional one-on-one personalized business coaching, plus attend the annual "Alumni Only Business Roundtable." This is the best way for SBM graduates to keep their skills fresh, their contacts growing and their business on the right path. For more information and registration, please contact Gary Smith, instructor/advisor, at 541.463.4614 or smithge@lanecc.edu.

### Customized Learning Experiences for Local Employers

Employee Training is a premier provider of high-quality and cost-effective customized employee training and development solutions for business, industry and organizational needs. Serving start-up companies to established organizations, a coordinator will meet with you to assess your training needs, oversee course development, logistics, registration and course evaluation. Using a targeted process, company-specific courses can be adapted to your training requirements, in any format, at an affordable cost and for a specific time. Trainings can include upgrading employee computer skills to the latest software, manufacturing processes, leadership training, compliance training, lean business practices or performance management. Using evaluation tools, we will make sure the employees and managers achieve their training objectives. To make an appointment to discuss your specific training needs call: Molly Scurto, 541.463.4612 or scurtom@lanecc.edu or Gary Schweitzer, 541.463.4624 or schweitzerg@lanecc.edu. Targeted training can increase employee performance and in turn, a well-trained workforce can increase the measure of your business success.

### SkillSoft e-Learning

Develop training programs to meet your company's growing needs through e-learning from SkillSoft. By delivering training online, employers can reach their employees wherever they are and at a lower cost than classroom training. With online courses from SkillSoft, everything is included for formal training and instant problem solving. SkillSoft covers the full range of training needs with the largest library of online courses in the world. For information, contact 541.463.4615.

## Workforce Development

The Workforce Development Department is a grant funded department that focuses on job readiness, skill enhancement, and training for reemployment. It is located on Lane's main campus in Building 19 and can be reached at 541.463.5223 or [lanecc.edu/wdd/](http://lanecc.edu/wdd/) The following services, programs, classes and workshops are free and open to the public as well as Lane students.

**The Workforce Network** The Workforce Network is the delivery of workforce development services to adults and dislocated workers in Lane County through a One-Stop career center system. The goal is twofold: 1) to assist with individual job search activities, and 2) to help build a skilled and educated workforce that can meet the needs of the contemporary workplace. The Workforce Network utilizes a consortium approach and is an alliance with the following Lane County agencies:

- Oregon Employment Department
- Department of Human Services
- Lane Workforce Partnership

The Workforce Network provides state-of-the-art resources for the community through the following no-cost services:

- Skills, abilities and interests assessments
- Career exploration
- Skill upgrading
- Resume and cover letter development
- Online job search and application
- Job search workshops and seminars
- Information on the local labor market and job openings
- Information on community resources
- Information on scholarships
- Internet access to employment and training resources
- Internet access to tutorials in basic skills
- Basic classes in math and computer skills for the workplace

A monthly calendar schedule of current job search workshops and basic skills classes is available at the department website at [lanecc.edu/wdd/](http://lanecc.edu/wdd/)

### The Career Readiness Certificate (CRC)

The CRC is a nationally recognized certification that measures skills needed for the workplace, with certificates awarded at Bronze, Silver or Gold levels. Earning the CRC demonstrates that you have the skills needed by employers nationwide. CRC orientations, classes, access to courseware, and testing are available at no charge through the Workforce Development Department. Call 541.463.3217 for more information.

### Brighter Futures Grant

Lane was one of eight community colleges nationwide selected in August 2009 for the Brighter Futures Grant, a project of the League for Innovation and the Walmart Foundation. This two-year demonstration project allows for expanded career development and advising, enhanced job search assistance, and follow-up services for dislocated workers who participate. Call 541.463.5861 for more information.

## Governance and Staff

### Lane Community College Board of Education

Seven elected, nonpaid citizens comprise the Board of Education. Elections are held in May of odd-numbered years and openings are staggered. Vacancies due to unexpired terms are filled by board appointment. Board members are elected to four-year terms.

The Board of Education has primary authority for establishing policies governing the operation of the college and for adopting the college's annual budget. The board's charge is to oversee the development of programs and services that board members believe will best serve the needs of the people of the Lane Community College district.

The board holds public meetings the second Wednesday evening of each month, normally in the Boardroom, Building 3, main campus. Additional meetings are held as needed.



**Sharon Stiles**, retired EEO officer, Florence, elected May 2009, term expires June 30, 2013  
**Zone 1**—Western part of college district



**Tony McCown**, college access coordinator, Eugene, elected May 2007, term expires June 30, 2011  
**Zone 2**—Northern part of college district



**Gary LeClair**, physician, Springfield, elected May 2009, term expires June 30, 2013  
**Zone 3**—Marcola and Springfield part of college district



**Susie Johnston**, conference planner, Pleasant Hill, elected May 2005, re-elected May 2009, term expires June 30, 2013  
**Zone 4**—Eastern part of college district



**Pat Albright**, retired teacher, Eugene, appointed April 2007, elected May 2007, term expires June 30, 2011  
**Zone 5**—Central Eugene part of college district



**Roger C. Hall**, radiologist, Eugene, elected March 1991, re-elected March 1995, re-elected March 1999, re-elected May 2003, re-elected May 2007, term expires June 30, 2011  
**At-Large**—Position 6



**Robert Ackerman**, attorney, Eugene, elected July 1965, re-elected March 1969, elected July 1999, elected May 2007, term expires June 30, 2011  
**At-Large**—Position 7

### Administration

The college is administered by the president, under authority delegated by the Lane Community College Board of Education, with assistance from vice presidents, executive deans, division deans, and directors.

- **Mary Spilde**, President; at Lane since 1995. Ph.D. Oregon State University; M.Ed. Oregon State University; B.S., L.L.B. University of Edinburgh
- **Sonya Christian**, Vice President for Academic and Student Affairs; at Lane since 2003. Ph.D. University of California; M.S. University of Southern California; B.S. University of Kerala, India
- **Greg Morgan**, Chief Financial Officer; at Lane since 2006. M.S. University of Southern California; B.S. Brigham Young University
- **Dennis Carr**, Chief Human Resource Officer; at Lane since 2003. M.S.I.R. University of Oregon; B.S. Hiram College

### Emeriti

The late **Dr. Eldon G. Schafer** was named president emeritus by the Board of Education in 1985. Dr. Schafer served as Lane president from 1970-85.

**Dr. Dale Parnell** was named president emeritus by the Board of Education in 2004. Dr. Parnell was Lane's founding president and served from 1965-68. He became a national leader in the community college movement.



### Oregon State Board of Education

As one of Oregon's 17 publicly supported community college districts, Lane operates under the general direction of the Oregon State Board of Education.

- Jerry Berger, Salem
- Leslie Shepherd, Hammond
- Brenda Frank, Klamath Falls
- Artemio Paz, Jr., Springfield
- Nikki Squire, Bend
- Duncan Wyse, Portland
- Vacant

State Department of Education administration includes:

- **Susan Castillo**, State Superintendent of Public Instruction
- **Cam Preus**, Commissioner, Department of Community Colleges and Workforce Development

### Lane Community College Budget Committee

The Budget Committee analyzes the administration's annual budget proposal. The 2009-2010 Budget Committee includes the Board of Education and the following members:

- **Ron Green**, term expires 2012, Executive Vice President, Florence
- **Jennifer Ocker**, term expires 2012, Medical Informaticist, Springfield
- **Marsten Morgan**, term expires 2012, Architect, Cottage Grove
- **Carmen X. Urbina**, term expires 2010, school district family and community coordinator, Eugene
- **Chris Matson**, term expires 2010, Marketing and Political Consultant, Eugene
- **Dennis Shine**, term expires 2011, retired college instructor, Springfield
- **Rayna Luvert**, term expires 2011, Senior Outreach Coordinator, Eugene

### Advisory Committees

More than 600 volunteers are appointed by the Lane Community College Board of Education to 45 advisory committees. These committees offer advice and assistance to instructional programs, enabling the college to tie its programs closely to current practices in the world of work and to employment opportunities.

All of the college's career and technical programs, as well as most noncredit programs, have advisory committees. The college also has advisory committees for programs and services such as KLCC, English as a Second Language, and Small Business Management.

The Career and Technical Education Coordinating Committee provides oversight for all advisory committees.

Members of the advisory committees may change during the year. Current lists are managed by the Office of Academic and Student Affairs.

### Lane Community College Foundation

The Lane Community College Foundation raises and invests funds for scholarships, programs and capital needs.

**Program support** The state provides only a portion of the funding necessary to support instructional programs. Gifts from individuals and businesses strengthen Lane's ability to provide education and career training to nearly 35,000 students each year.

**Scholarships** Scholarships open the door to higher education for many people who otherwise could not afford college. Gifts for scholarships are an investment in the future.

**Tax-deductible gifts to support Lane's programs and students should be made payable to:** Lane Community College Foundation, 4000 East 30th Avenue, Eugene, OR 97405. Call 541.463.5226 for more information on how you can help. **If you are interested in applying for a scholarship**, please pick up a brochure in the Counseling office or check on-line.

### Staff

For fall term 2009, Lane employed 1,106 full- and part-time faculty and staff. A list of contracted and part-time instructional staff follows.\



## Full-Time Instructional Staff

### Acad Learning Skills/ESL/Tutoring

**Lindsley, Catharine D.;** department chair; B.A. Lewis & Clark Col.; Ed.M. Oregon State Univ

**Coleman, Liz E.;**B.A. Univ Of Oregon

**Gayle-Reddoor, Susan C.;**B.A. Univ Calif Riverside; M.A. Univ Calif Riverside

**Johnston, Stephen D.;**B.A. Univ Mass Boston; M.A. Univ Of Oregon

**McKenzie, Judith C.;**B.A. Evergreen State Col.; M.A. Goddard Col.

**McQuiddy, Stephen J.;**B.A. Univ Of Oregon; M.F.A. Univ Of Oregon

**Mitchell, Adrienne C.;**B.A. Univ Of Oregon; M.A. Univ Of Oregon; M.Ed. Univ Of Oregon

**Pray, Elaine V.;**A.A. Canada Col.; B.A. San Francisco State Univ; M.A. San Diego State Univ

**Simoni, Cristina L.;**B.A. Mills Col.; M.A. Univ Of Oregon

### Adult Basic & Secondary Education

**DeWolf, Dawn B.;** department chair; B.S. Montana State Univ Billings; M.Ed. Oregon State Univ

**Ahlstedt, Alice M.;**B.S. Univ Of Oregon; M.S. Univ Of Oregon

**Foust, Mary E.;**B.S. Univ Of Oregon; M.A. Oregon State Univ

**Gaudia, Amy.;**B.S. Buffalo State Clg (Suny); B.S. Univ Of Oregon; M.A. Pacific Univ

**Hemsoth, Gail L.;**B.A. Heidelberg Col.; M.S. Univ Of Oregon

**Jackson, Patricia J.;**B.A. Washington State Univ; M.Ed. Oregon State Univ

**Kent, Leonora T.;**B.A. San Francisco State Univ; M.Ed. Univ Of Oregon; Teaching Engl Speak Othr Lang; Elem Education Teaching Cert

**Lamoreaux, Alice A.;**B.A. Univ Of Oregon; M.S. Univ Of Oregon

**O'Brien, James S.;**B.S. Univ Of Oregon

**Pardew Grutta, Christine E.;**B.A. McDaniel Col.; M.A. Univ of Maine, Orono

**Simon, Michael F.;**B.A. Westrn Illinois Univ; M.A. Westrn Illinois Univ

**Young, James K.;**B.A. Rice Univ

### Advanced Technology

**Croker, Paul C.** Interim department dean; U.S.A.F. Cert. Mechanical Accessories Equip.; Environmental Systems Repair Cert.; L.P. Gas Cert.; A.S.E. Master Cert. Technician; Master Cert. RV Technician

**Bergen, Dean E.** A.S.E. Master Cert.; I.C.A.R. Instr. Cert.; Glasurit and Diamont Refinement/Collision Rep. Shop Management and Establishment; John Bean Steering and Suspension Cert; Chart Frame Equip Cert; Journeyman and Shop Manager

**Bird, Keith D.;**A.S. Lane Community Col.; FAA Inspection Authorization; FAA Airframe and Powerplant

**Bridges, Jon H.;**B.A. St Marys Col. Ca; FAA Private Pilot Single Land; USAF Flight Engineer C5/C130

**Clark, Alan B.;**A.S. Lane Community Col.; CAT/Cummins/Detroit Eaton Svc; Journeyman; ASE Cert Master, Truck

**Croker, Paul C.;**

**Hill, Allen D.;**Dipl. Lincoln Tech Inst-Pennsauken; C.E.R.T.1. Santa Monica Col.; A.A. Santa Monica Col.; Journeyman Machinist

**Huntington, Mark M.;**C.E.R.T.1. Pinellas Tech Ed Ctr-Clearwater; M.S. Eastern Washington Univ

**Keen, Leonard R.** Member of Assoc. of General Contractors of Oregon; State of Oregon Carpenter Apprenticeship Program; Journeyman

**Kimball, Daniel G.** I.C.A.R. Inst. Cert.; 3M Systems Auto Refinement/Collision Rep.; John Bean Steering and Alignment Cert.; SHARK Laser Cert.; Binks Spray Finishing Cert.; Journeyman;

**Laskey, Al** A.S. Lane Comm Col; Welding Technology; CPIM American Production and Inventory Control Society; CWI American Welding Society; CWE American Welding Society; SMAW, GTAW, GMAW, FCAW Certified; Journeyman, Operations Manager, Business Owner

**Mathers Kelly** Universal Technical Institute Automotive graduate; ABK nomination; ASE master certified; All Data certified; EPA 609 license; Ford customer service certificate; Identifix certified

**McGlynn, Brian J.;**B.A. Loyola Marymount Univ-Los Angl; M.P.A. Univ Southern California; FAA Mechincal Examiner; FAA Airframe and Powerplant; FAA Inspection Authorization; FAA Private Pilot Single Land

**Riordon, Egan A.;**A.A. Lane Community Col.; ASE Cert Master

**Robertson, Margaret E.;**B.L.A. Univ Of Oregon; M.L.A. Univ Of Oregon

**Webb, Steven A.;**C.E.R.T.1. Lane Community Col.; A.A.S. Lane Community Col.; CAT/Cummins/Detroit Eaton Svc; ASE Cert Master Med/Hvy Duty T

**Weiss, Doug O.;**A.A. Palomar Col.; A.S. Schoolcraft Col.; CET Intl Society of Elect Tech

### Art Department

**Williams, Rick R.;** department chair; B.S.J. Univ Of Texas - Austin; M.A. Univ Of Texas - Austin

**Bird, Jeffery S.;**B.S. Col. St Rose; M.F.A. Univ Mass Amherst; M.A. Suny Coll Oswego

**Finnerty, Kathryn.;**B.V.A. Nova Scotia Col. Of Art and Design; M.F.A. Louisiana State Univ.

**Grosowsky, Adam.;**B.A. Evergreen State Col.; M.F.A. Univ Iowa; M.A. Univ Iowa

**Hughes, Teresa B.;**B.S. Univ Of Oregon

**Imonen, Lee C.;**B.A. Willamette Univ; M.F.A. Univ Of Oregon

**Keene-Wilson, Meredith A.;**A.A. Orange Coast Col.; A.A.S. Lane Community Col.

**Lowdemilk, Susan K.;**B.F.A. Colorado State Univ Ft Collins; M.F.A. Univ Of Oregon

**Motouji, Satoko.;**B.A. Univ Of Oregon; B.A. Ritsumeikan Univ; M.F.A. Univ Mass Amherst

**Salzman, Andreas.;**A.A. Univ. of Wisconsin Marathon Campus; B.S. Univ. of Wisconsin Stevens Point, M.F.A. Univ. of Minnesota Twin Cities

**Simms, Merrick L.;**B.A. Calif St Univ Hayward; B.F.A. Univ Of Oregon; M.F.A. Univ Of Oregon

**Vander Schaaf, Elizabeth.;**B.A. Univ Of Oregon; M.A. Univ Of Oregon

### Athletics

**MonDragon, Sean E.;**B.S. Calif St Univ Hayward; M.S. Calif St Univ Hayward

**O'Connor, Patrick G.;**B.S. Univ Of Oregon; M.S. Oregon State Univ

**Sheley, Greg N.;**B.A. Calif St Univ - Chico; M.A. Calif St Univ - Chico

### Aviation Academy

**Boulton, Steve;** department chair

**Gustafson, Bruce L.;**B.A. Univ Of Oregon; FAA Transp Pilot Mulit Land; FAA Ground Instructor Advanced; FAA Instructor Single Engine; FAA Ground Instructor Instrum; FAA Transp Pilot Single Land; FAA MEI (Multiengine Instruct); FAA Flight Instructor, CFI

**Povenmire, Kingsley;**B.A. San Diego State Univ; M.S. Univ Illinois Urbana; FAA Ground Instructor AI; FAA Comm Pilot Glider; FAA Flight Instructor AIMG; FAA Transport Pilot ASMEL

### Business

**Culver, Christopher D.;**B.S. Univ Of Oregon; M.B.A. Univ Of Oregon; Certified Public Accountant

**Grant-Churchwell, C C.;**B.S. San Jose State Univ; M.S. San Jose State Univ

**Kimble, Sharon R.;**B.S. Westrn Carolina Univ; M.Ed. Westrn Carolina Univ

**Maitland, Laura A.;**B.S. James Madison Univ; M.Ed. Western Oregon Univ

**O'Rourke, Kaaren.;**B.S. Portland State Univ; M.B.A. Portland State Univ; M.S. E-Commerce National Univ

**Paschall, Annie C.;**B.A. Duke Univ; M.S. Univ Missouri Columbia; Certified Public Accountant

### Business Development Center & Employee Training

**Lindly, James L.;** department chair; B.S. Univ Of Oregon; M.B.A. Univ Of Oregon; Charterd Prpty Casualty Undwtr; Cisco Certified Design Assoc

**Smith, Gary E.;** B.S. Franklin Univ.; M.B.A. Franklin Univ.; Cruise Line Industry Association Cert.; Six Sigma Green Belt Cert.; Professional Bookkeeper Cert.

### Child and Family Education

**Bishop, Jean M.;**B.A. Eastern Washington Univ; M.A. Univ Of Oregon

**Hickey, Beverly J.;**B.S. Univ Calif Davis; M.A. Stanford Univ; Elem Education Teaching Cert; Bilingual Spanish/English

**Stermer, Julianne L.;**B.A. Portland State Univ; M.A. Washington State Univ

## Computer Information Technology

- Bailey, James L.;**B.S. Oregon State Univ; M.S. Brigham Young Univ Utah; Ph.D. Oregon Health Sci Univ
- Bricher, Gary P.;**B.S. Univ Of Oregon; B.S. Univ Of Oregon; M.S. Univ Of Oregon; Cisco Certified Network Assoc
- Good, Marilou .;**B.S. Univ Minnesota Minneapolis; M.S. Univ Of Oregon
- Little, Ronald K.;**B.S. Montana State Univ Bozeman; M.S. Portland State Univ
- Loft, Linda L.;**B.A. Univ Of Oregon; M.S. Univ Of Oregon
- Ross, Gerald J.;**B.A. Suny Buffalo; M.A. Univ Of Oregon; Teacher Corps Graduate

## Cooperative Education

- Brokaw, Thomas R.;**A.A.S. Lane Community Col.; Oregon EMT Paramedic; NAEMT Prehospital Trauma LS In; Advanced Life Support Instruct; CPR Certified
- Candee, Stephen M.;**B.S. Univ Of Oregon; M.S. Univ Of Oregon
- Clemons, Marvin L.;**B.S. Univ Wisc Waukesha; M.S. Univ Of Oregon; Sec Principal/Superintendent
- DelNero, John E.;**B.A. Calif St Univ Hayward; M.A. Univ Of Oregon; M.S. Univ Of Oregon
- Driscoll, Norma A.S.** Lane Community Col.; B.S. Linfield Col.; R.R.T.; R.C.P.
- Fike, Charles E.;**B.A. Northwest Christian Univ
- Gaul, Shannon I.;**B.A. Adrian Col.; M.S. Univ Toledo; Licensed Massage Therapist
- Hughes, Teresa B.;**B.S. Univ Of Oregon
- Kelsch, Jamie L.;**A.A.S. Lane Community Col.; A.G.S. Lane Community Col.; B.S. Linfield Col.
- McCully, Joe .;**B.S. Univ of Denver; M.S. Florida International Univ; Cert Hospitality Educator, AHM
- Oldham, Garry A.;**B.S. Univ Of Oregon; M.S. Univ Of Oregon
- Pinkas, Tamara L.;**B.A. Univ Calif Santa Cruz; M.S. Univ Of Oregon
- Pittman, Martha E.;**A.A.S. Regents Clg-Univ State Of Ny; C.M.A.; Registered Nurse
- Scott, Lawrence R.;**B.S.C. Univ Of Victoria - Canada; B.S.C. Univ Of Victoria - Canada; M.A. Antioch Univ-Yellow Springs
- Thompson, Susan J.;**A.A. Los Angeles City Col.; B.A. Calif St Univ Los Angeles; M.A. Calif St Univ Los Angeles
- Watrous, Merrill K.;**B.A. Scripps Col.; B.A. Occidental Col.; M.Ed. Santa Clara Univ
- Weiss, Doug O.;**A.A. Palomar Col.; A.S. Schoolcraft Col.; CET Intl Society of Elect Tech

## Counseling

- Soriano, Leslie C.;**M.S. Calif St Univ Hayward
- De Leon, Jerry F.;** department chair; B.A. Univ Colorado Boulder; M.A. Adams State Col.
- Parthemer, Mary S.;** department chair; A.A.S. Whatcomm Community Coll; B.A. Western Washington Univ; M.S.W. Arizona State Univ; Licensed Clinical Social Worker
- Hampton, Anthony .;**A.A. Chabot Col.; B.A. Univ Texas Pan American; M.Ed. Univ Texas Pan American

- Alvarado, Jessica S.;**A.A.S. Lane Community Col.; A.A.S. Portland Community Col.; B.S. Univ Of Oregon; M.S. Univ Of Oregon
- Blood, Timothy L.;**B.S. Albion Col.; M.S. Univ Of Oregon
- Ganser, Debra J.;**B.S. Univ Of Oregon; M.S. Univ Of Oregon; National Certified Counselor
- Harris, Mark C.;**B.A. Sonoma State Univ; M.A. Sonoma State Univ
- Landy, Beth S.;**B.S. Cal Poly - San Luis Obispo; M.S. Univ Of Oregon; Career Dev Facilitator Inst; National Certified Counselor
- Litty, Carolyn L.;**B.S. Univ Calif San Francisco; M.S.N. Univ Calif San Francisco; M.S. Univ Of Oregon; Ph.D. Univ Of Oregon; Cert Licensed Prof Counselor; Psychiatric/Ment Health N Prac; National Certified Counselor; Marriage and Family Therapist; Mental Health Nurse
- Salter, Christina L.;**B.A. New Clg - Univ South Florida; M.S. Univ Of Oregon; National Certified Counselor; Cert Licensed Prof Counselor
- Siegfried, Jill .;**B.A. Wittenberg Univ; M.S. Oregon State Univ
- Smyth, Douglas A.;**B.A. Depaul Univ; M.Div. Mc Cormick Theol Sem-Chicago; Ph.D. Univ Of Oregon; Licensed Psychologist
- Solomon, Marva D.;**B.A. CUNY Queens Col.; M.S.W. CUNY Hunter Col.

## Culinary Arts & Hospitality

- Aherin, Lisa PhD.** Univ. of Idaho; MA. Col. of Santa Fe
- Crosthwaite, Chris** Diploma, Southern Alberta Institute of Technology; Comm Col Instructional Cert, Lethbridge Col/Univ of Lethbridge; Certified Chef de Cuisine, Canadian Culinary Institute; Cert. Executive Chef; Cert. Culinary Educator, ACI
- McCully, Joe .;**B.S. Univ of Denver; M.S. Florida International Univ; Cert Hospitality Educator, AHM
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## Health & PE

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### Cottage Grove Center

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### Counseling

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### Culinary Arts & Hospitality

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### English as a Second Language

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- Music Dance and Theatre Arts**
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# Strategic Directions

(Continued from inside front cover)

## A Liberal Education Approach for Student Learning

- Equip students to become global citizens with the broad knowledge and transferable skills characterizing a liberal education approach
- Expand application of the liberal education approach throughout the college's programs and services

## Optimal Student Preparation, Progression and Completion

- Promote students' progression to goal completion by knowing our students and creating needed systems, processes and learning environments
- Support academically underprepared students' progression to college-level coursework by providing them with foundational skills classes and support

## Online Learning and Educational Resources

- Build capacity in faculty and staff to create high-quality, sustainable and innovative online learning and educational resources
- Provide the required tools, infrastructure and professional development to use emerging technologies for expanding online learning and educational resources
- Explore the effectiveness of online learning and educational resources

## A Sustainable Learning and Working Environment

- Build understanding of sustainable ecological, social and economic systems and practices among the college communities
- Apply principles of sustainable economics, resource use, and social institutions to Lane's learning and working environments

## A Diverse and Inclusive Learning and Working Environment

- Create a diverse and inclusive learning college
- Develop institutional capacity to respond effectively and respectfully to students, staff, and community members of all cultures, languages, classes, races, genders, ethnic backgrounds, religious beliefs, sexual orientations, and abilities

## A Safe Learning and Working Environment

- Maintain safe learning and working environment
- Improve practices and resources that secure property
- Promote activities, practices and processes that encourage civil discourse and protect college communities from discrimination, harassment, threats, and harm

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Lane Community College is committed to providing a working and learning environment that is free from discrimination, harassment and retaliation. Lane is committed to equal opportunity in education and employment, affirmative action, diversity, and compliance with the Americans with Disabilities Act. The college prohibits discrimination in admissions, employment and access to college programs, activities and services on the basis of race, color, national origin, sex, marital status, familial relationship, sexual orientation, pregnancy, age, disability, religion, expunged juvenile record, or veterans' status. This commitment is made by the college in accordance with federal, state, and local laws and regulations. Inquiries may be directed to the Executive Director for Human Resources, Lane Community College, 4000 East 30th Avenue, Eugene, Oregon 97405-0640, 541.463.5585. Inquiries regarding Title IX may be directed to the Women's Program Director, Building 1, Room 202, 541.463.5264. Inquiries regarding Section 504 may be directed to Nancy Hart, Disability Resources Director, Building 1, Room 218, 541.463.3010 or Dennis Carr, Human Resources Director and Section 504 Coordinator, Building 3, Room 114, 541.463.5585.



Assistant Engineering  
Pre-Chiropractic  
Women's Studies  
**Art**  
Flight Technology  
Dental Hygiene  
Ethnic Studies  
Energy Management  
Respiratory Care  
Accounting  
Human Services  
Environmental Science  
Biology  
Drafting  
**Theatre**  
Nursing  
Physical Therapist  
Graphic Design  
Automotive Technology  
Computer Simulation and  
Game Development  
Culinary Arts



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