Lane Community College℠

AT LANE YOU CAN!

learn a new career

earn a degree

achieve your goals

Think • Engage • Create • Communicate • Apply

Think Critically

Definition: Critical thinking is an evaluation process that involves questioning, gathering, and analyzing opinions and information relevant to the topic or problem under consideration. Critical thinking can be applied to all subject areas and modes of analysis (historical, mathematical, social, psychological, scientific, aesthetic, literary, etc.). Students who think critically:

- Identify and define key issues
- Determine information need, find and cite relevant information
- Demonstrate knowledge of the context and complexity of the issue
- Integrate other relevant points of view of the issue
- Evaluate supporting information and evidence
- Construct appropriate and defensible reasoning to draw conclusions

Engage Diverse Values with Civic and Ethical Awareness

Definition: Engaged students actively participate as citizens of local, global and digital communities. Engaging requires recognizing and evaluating one's own views and the views of others. Engaged students are alert to how views and values impact individuals, circumstances, environments and communities. Students who engage:

- Recognize and clarify personal values and perspectives
- Evaluate diverse values and perspectives of others
- Describe the impact of diverse values and perspectives on individuals, communities, and the world
- Demonstrate knowledge of democratic values and practices
- Collaborate with others to achieve shared goals

Create Ideas and Solutions

Definition: Creative thinking is the ability and capacity to create new ideas, images and solutions, and combine and recombine existing images and solutions. In this process, students use theory, embrace ambiguity, take risks, test for validity, generate new questions, and persist with the problem when faced with resistance, obstacles, errors, and the possibility of failure. Students who create:

- Experiment with possibilities that move beyond traditional ideas or solutions. Embrace ambiguity and risk mistakes
- Explore or resolve innovative and/or divergent ideas and directions, including contradictory ideas
- Utilize technology to adapt to and create new media
- Invent or hypothesize new variations on a theme, unique solutions or products; transform and revise solution or project to completion
- Persist when faced with difficulties, resistance, or errors; assess failures or mistakes and rework
- Reflect on successes, failures, and obstacles

Communicate Effectively

Definition: To communicate effectively, students must be able to interact with diverse individuals and groups, and in many contexts of communication, from face-to-face to digital. Elements of effective communication vary by speaker, audience, purpose, language, culture, topic, and context. Effective communicators value and practice honesty and respect for others, exerting the effort required to listen and interact productively. Students who communicate effectively:

- Select an effective and appropriate medium (such as face-to-face, written, broadcast, or digital) for conveying the message
- Create and express messages with clear language and nonverbal forms appropriate to the audience and cultural context
- Organize the message to adapt to cultural norms, audience, purpose, and medium
- Support assertions with contextually appropriate and accurate examples, graphics, and quantitative information
- Attend to messages, check for shared meaning, identify sources of misunderstanding, and signal comprehension or non-comprehension
- Demonstrate honesty, openness to alternative views, and respect for others' freedom to dissent

Apply Learning

Definition: Applied learning occurs when students use their knowledge and skills to solve problems, often in new contexts. When students also reflect on their experiences, they deepen their learning. By applying learning, students act on their knowledge. Students who apply learning:

- Connect theory and practice to develop skills, deepen understanding of fields of study and broaden perspectives
- Apply skills, abilities, theories or methodologies gained in one situation to new situations to solve problems or explore issues
- Use mathematics and quantitative reasoning to solve problems
- Integrate and reflect on experiences and learning from multiple and diverse contexts

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This catalog is published for informational purposes and every effort is made to ensure 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: Neil Isaacson and Bruce Nichols, Graphic Design; Dawn Whiting, Registrar; Tammy Salman, Coord. Assessment and Curriculum; Craig Taylor, Dir. Institutional Research; Melanie Brown, Curriculum Specialist; Laura Lawver and Kellie Porteous, Degree and Transcript Evaluators; Deidre Lyons, Advising; Matt Danskine, Business Analyst; Pat Griffin, Information Technology; and Angela Miller.

To request this information in an alternate format, contact the Center for Accessible Resources at 541.463.5150 or *AccessibleResources@lanecc.edu*

Academic Calendar 2018-2019

Summer Term 2018 (session 201910)

Registration begins*	May 7-16 —7 a.m.
Open registration begins*	June 13 —7 a.m.
Summer term books available	June 18
Summer term classes begin	June 25
Independence Day, college closed	July 4
First four-week session	June 25-July 21
Second four-week session	July 24-August 18
Third four-week session	August 21-September 15
First six-week session	June 25-August 4
Second six-week session	August 7-September 15
Eight-week session	June 25-August 18
Twelve-week session	June 25-September 15
Labor Day, college closed	September 3

Fall Term 2018 (session 201920)

Registration begins*	May 21-30 —7 a.m.
Open registration begins*	September 4 —7 a.m.
Fall term books available	September 10
Inservice, college closed	September 20
Fall term classes begin	September 24
Last day to receive a tuition refund	September 30 —11:59 p.m.
Veterans' Day observed, college closed	November 12
Last day for schedule changes	November 16
Thanksgiving weekend, college closed	November 22-25
Finals week	December 3-8
Fall term ends	December 8
Winter break	December 9-January 6
Holiday Observance, college closed	December 24-26

Winter Term 2019 (session 201930)

Registration begins*	October 29 -November 6 —7 a.m.
Open registration begins*	December 4 —7 a.m.
Winter term books available	December 27
New Year's Day, college closed	January 1
Winter term classes begin	January 7
Last day to receive a tuition refund	January 13, —11:59 p.m.
Martin Luther King Day, college closed	January 21
Presidents' Day, college closed	February 18
Last day for schedule changes	March 1
Finals week	March 18-23
Winter term ends	March 23
Spring break	March 24-31

Spring Term 2019 (session 201940)

Registration begins*	February 11-20 —7 a.m.
Open registration begins*	March 12 —7 a.m.
Spring term books available	March 25
Spring term classes begin	April 1
Last day to receive a tuition refund	April 7 —11:59 p.m.
Spring Conference, college closed	May 3
Last day for schedule changes	May 24
Memorial Day, college closed	May 27
Finals week	June 10-15
Spring term ends	June 15
Graduation	June 15

*For detailed registration information, visit lanecc.edu/calendars/registration-calendar.

June 2018

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Welcome to Lane Community College

A quality college education is essential to build a successful career or navigate a complex world. Lane Community College is a wonderful place to start.

We're accessible, affordable, and committed to student success.

If you want a four-year degree, you'll save thousands of dollars in tuition costs by completing your first two years at Lane. If you want to enter the job market with a competitive edge, Lane will provide you with outstanding, hands-on training.

We offer two-year associate degrees, one-year and two-year certificates, and career pathways certificates. Our faculty are first rate and highly accomplished. They are dedicated to helping each student learn, and our small class sizes ensure that no one falls through the cracks.

Students at Lane enjoy an array of support services from financial aid to academic advising to student activities. We have stellar athletics programs and amazing student clubs from fencing to French. Student life at Lane is robust and rewarding.

We have a place for you at Lane Community College. Students are all ages with a variety of backgrounds, abilities, interests, and ancestries. Our mission of inclusivity and equity means that we strive to make every individual welcome and successful.

It's amazing what you'll be able to accomplish here.

Start your education at Lane, finish what you start, and you will be a success.

Sincerely,

Dr. Margaret Hamilton, President

Lane Community College

About Lane Community College

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

Lane serves a population of approximately 362,000 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 Florence, Cottage Grove, downtown Eugene, and the Eugene Airport.

Enrollment

During the 2016-17 academic year, 26,215 students enrolled in Lane Community College classes. For fall term 2017, the average age for females enrolled in credit classes was 24.6 years and the average age for males 24.7. The average age for females enrolled in noncredit classes was 45.6 years and the average age for males 39.2.

Accreditation, Certificates and Affiliations

Lane is accredited by the Northwest Commission on Colleges and Universities, 8060 165th 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.

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 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. The Commission may be contacted at 312.440.4653 or 211 East Chicago Avenue, Chicago, Illinois 60611
- 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; membership: Northwest Diesel Industry Council and the Oregon Trucking Association
- Energy Management, 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
- Exercise and Movement Science: The American College of Sports Medicine has endorsed the curriculum for Lane Community College's Associate of Applied Science program.
- Flight Technology approved by the Federal Aviation Administration. Flight Technology is a Certified Part 141 approved training course and is the only flight school in the state of Oregon with FAA approved self-examining authority for Private Pilot, Commercial Pilot and Instrument Rating.
- Geospatial Information Science and Technology Endorsement of The National Geotech Center, Del Mar Community College.
- Hotel/Restaurant/Tourism Management, 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 (CHG).
- Medical 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 Medical Assisting Education 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, the Oregon State Board of Nursing, 17938 SW Upper Boones Ferry Rd., Portland, OR 97163-0685, oregon.gov/OSBN
- Physical Therapist Assistant, accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association (CAPTE), 1111 N. Fairfax Street, Alexandria, VA 22134); phone: 703.706.3245; email: accreditation@apta.org; website: capteonline.org
- Paramedicine accredited by the Oregon Department of Education (ODE) or the Oregon State Board of Higher Education. The ODE uses the DHS/EMS administrative rules (OAR 333-265) and must meet the standards established by the ODE in OAR chapter 581, division 49. arcweb.sos.state.or.us/rules/OARS_500/OAR_581/581_049.html
- Practical Nursing, accredited by the Oregon State Board of Nursing (OSBN), 17938 SW Upper Boones Ferry Rd., Portland, OR 97163-0685, oregon.gov/OSBN

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 is an Achieving the Dream College.

Funding

Lane Community College is funded by local property taxes, state revenues, and tuition and fees. The 2017-18 General Fund budgeted resources were $87,823,200, of which 50.2 percent came from intergovernmental sources, 34 percent from tuition and mandatory fees, and 6.7 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.

myLane

Use myLane for registration, account payments, viewing schedules, class details, financial aid, and grades. Check each term's class schedule for information on registration dates, getting your "L" number and going online in myLane.

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 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 technical degree program. For detailed information about credit programs and courses, see Career Technical programs and Course Descriptions.

Noncredit Community Education Classes

Noncredit courses are not transferable to Lane's associate degrees and career technical degree programs or to other colleges. Information about these offerings begins on page 227.

Where to Start

Welcome to Lane!

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.

Catalog This catalog is produced annually in the spring and is available at no charge. It is also available through the mail for a small charge. To order a catalog, call the Titan Store at 541-463-5256. Copies of the catalog can be found in Building 1. The catalog can also be found on Lane's Website *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 academic advisor. Students also are encouraged to see a counselor or academic advisor early in their programs of study to obtain the most accurate information on their program requirements.

Class schedule The online class schedule is available on the web at *lanecc.edu* about one week before registration begins. Registration usually begins the fourth week of the preceding term except fall term, which occurs the preceding spring term. The most current registration calendar can be found on Lane's web site at *lanecc.edu/calendars/registration-calendar*.

The Continuing Education Class schedule which contains noncredit offerings is mailed to homes in the college district each term. Lane Community College at Florence also mails schedules specific to the Florence Center to Florence area residents.

Counseling and Career Center Building 1, First Floor, Room 103, lanecc.edu/ccc, 541.463.3600, coundept@lanecc.edu

The Counseling and Career Center provides personal/retention counseling, career counseling, career information resources, and credit classes to help students reach their academic, career, and personal goals. Hours are Mondays-Fridays, 8 a.m.-5 p.m. and summer hours when the college is open. For more information about the center's services, see Counseling and Career Center in the Academic and Student Services section. Counseling services are also available at the Florence Center, 541.463.4800.

Enrollment Services Building 1, First Floor (Lobby), *lanecc.edu/esfs/* 541.463.3100

Enrollment Services admits credit students and provides registration assistance to all students..

Financial Aid Building 1, First Floor (Lobby), *lanecc.edu/finaid/*, 541.463.3400

Financial aid responds to all questions and issues regarding financial aid.

***Lanecc.edu* Website** Lane's website is a useful tool for finding answers to general questions about attending Lane. Information about the college, such as the catalog, class schedule and myLane can be found at *lanecc.edu*

Student Accounts, Building 1, First Floor (lobby) lanecc.edu/collfin/student-accounts, 541-463-3011

Student Accounts answers questions related to billing, payment plans, sponsored accounts and refund requests.

Titan Peer Associates Building 1, First Floor (Lobby)

Student peers are available to assist students to access online Enrollment Services and Financial Aid services.

Other Good Starting Places:

College centers and maps, pages 8-9
Center for Accessible Resources, page 19
English as a Second Language, page 228-229
Gender Quity Center, 20, 26
International Student Program, page 24
Multicultural Center, page 20
Native American Program, page 20
TRiO Learning Center, pages 28
Veterans' Services, pages 29-31

Como Empezar en Lane

Quien puede asistir a Lane

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

Que les Ofrece Lane

Lane Community College ofrece cursos de tronco comun, capacitacion profesional y vocacional, desarrollo de habilidades preuniversitarias, programas cooperativos con preparatorias locales, orientacion profesional y personal, servicios para empresas, educacion continua y actividades culturales.

Programas y Clases de Valor Curricular

Algunos de los cursos que el college ofrece son de credito curricular. Los cursos de credito curricular estan disenados para transferirlos a otros colegios y universidades o para que formen parte de un programa tecnico/profesional. Para informacion sabre clases de credito curricular vea la sección de Career Technical Programs y Course Descriptions.

Clases de Educación Comunitaria

Los cursos sin credito no pueden transferirse a otros colegios o universidades ni pueden formar parte de un programa de nivel tecnico o profesional. La informacion sabre estos cursos empieza en la pagina 227.

Por donde Comenzar

Lane ofrece una variedad de opciones educativas las cuales estan disenadas para cumplir con las necesidades academicas de las personas durante las diferentes etapas de su vida y educacion. A continuacion presentamos unos buenos puntos de partida.

Catálogo Este catalogo se produce anualmente durante la primavera y lo puede adquirir gratis en los centros del colegio. Tambien se puede ordenar, a bajo costo,por correo. Para ordenar un catalogo, llame a la Libreria de Lane al (541) 463-5256. El catalogo se encuentra en el portal de Lane en el Internet, lanecc.edu.

El catalogo de Lane se publica para fines informativos y se hacen todos los esfuerzos para asegurar su exactitud a la hora de imprimirlo. Sin embargo, lo presentado en este catalogo no debe ser considerado como un contrato irrevocable entre el estudiante y el colegio. Lane Community College reserva el derecho de cambiar, en cualquier momento,cualquier parte de lo presentado o de los requisitos. Se aconseja a los estudiantes revisar la lista de clases y asesorarse detalladamente con un consejero o asesor. Tambien se recomienda a los estudiantes obtener una evaluacion formal de sus expedientes academicos, al iniciar sus programas de estudios, para asi obtener la informacion mas precisa sabre los requisitos que necesitan para sus programas.

Lista de Clases El horario de online clases esta a su disposicion en lanecc.edu, aproximadamente una semana antes de que se inicie el registro. La inscripción usualmente comienza la cuarta semana del trimestre anterior, excepto el trimestre de otono, el cual se lleva a cabo durante el trimestre de primavera anterior.

La revista impresa con el horario de clases trimestrales tambien se nvía por correo a los hogares dentro del distrito escolar aproximadamente una semana antes de que se inicie cada trimestre. El centro en Florence tambien envian por correo horarios de clases especfficos a eso centro.

Centro de Consejería y Carreras Edificio 1, Salón 103, 541.463.3600

El Centro de Consejería y Carreras proporciona consejería acerca de asuntos personales, problemas de retención escolar y asesoramiento vocacional. También ofrece recursos e información sobre carreras y clases con crédito universitario para ayudar a los estudiantes a alcanzar sus metas académicas, personales y profesionales. El horario es de lunes a viernes, 8 a.m. - 5 p.m. incluso durante el verano cuando está abierto el colegio. Para más información sobre los servicios, consulte la Sección de Servicios Académicas y Estudiantiles: El Centro de Consejería y Carreras.

Financial Aid Edificio 1, Primer piso, *lanecc.edu/finaid*, 541.463.3100

Ayuda financiera responde a todas las preguntas y problemas de ayuda financiera.

Internet Para obtener informacion sabre el colegio en el Internet, vaya al lanecc.edu.

Titan Peer Associates Edificio 1, Primer piso

Companeros de estudio estan disponibles para ayudar a los estudiantes de Inscripcion en linea y acceso a servicios financieros para estudiantes ayuda financiera y servicios.

Otros Buenos Puntos de Partida

Centros del college, páginas 8-9
Centro de Recursos de acceso, página 19
Inglés como Segundo Idioma, página 228-229
Programa para Estudiantes Internacionales, página 24
Centro Multicultural, página 20
Programa Nativo Americano, página 20
Centro de Aprendizaje TRiO, páginas 28
Oficina de Veteranos, páginas 29-31
Centro Gender Equity, página 30

College Phone Numbers

Main college phone: 541.463.3000

- Academic Advising 541.463.3800
- Administrators
  - President 541.463.5200
  - Vice President, College Services 541.463.5310
  - Vice President, Academic and Student Affairs 541.463.5302
  - Executive Dean Academic Affairs, School of Professional and Technical Careers 541.463.5315
  - Executive Dean Academic Affairs, School of Arts and Sciences 541.463.5306
  - Executive Dean Student Affairs 541.463.5725
- Admissions 541.463.5678
- Adult Basic and Secondary Education (ABSE) 541.463.5214
  - Downtown Campus 541.463.6180
  - ABSE Volunteer Tutor Program 541.463.6184
- Affirmative Action 541.463.5801
- Associated Students of Lane Community College (ASLCC) 541.463.5365
- Athletics 541.463.5599
- Bookstore 541.463.5256
- Center for Accessible Resources 541.463.5150
- Child and Family Center 541.463.5517
- Child and Family Education 541.463.5519
- Continuing Education 541.463.6100
- Cooperative Education 541.463.5203
- Cottage Grove Center* 541.942-4202
- Counseling and Career Center 541.463.3200
- Credit Instructional Departments
  - Academic Learning Skills 541.463.5439
  - Advanced Technology 541.463.5380
  - Arts Division 541.463.5409
  - Aviation Academy 541.463.4195
  - Business Department 541.463.5221
  - Child and Family Education 541.463.3522
  - Computer Information Technology 541.463.5221
  - Cooperative Education 541.463.5203
  - Culinary Arts and Hotel/Restaurant/Tourism 541.463.3503
  - 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
  - Women's Program 541.463.5353
- Denali (Student Publication) 541.463.5897
- Dental Hygiene Clinic 541.463.5206
- Dislocated Worker Program 541.463.5223
- Downtown Campus 541.463.6250
- 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 Services 541.463.3100
- Family Connections of Lane and Douglas Counties 541.463.3954/1.800.222.3290
- Financial Aid 541.463.3400
- First Year Experience 541.463.5771
- Fitness Education Center* 541.463.3987
- Florence Center 541.997.8444/541.463.4800
- Foundation 541.463.5135
- GED, Classes 541.463.5214
- GED, Testing 541.463.5324
- Health Clinic 541.463.5665
- High School Connections 541.463.5521
- Institute for Sustainable Practices 541.463.5594
- International Students Counselor 541.463.3200
- KLCC (Radio Station) 541.463.6000
- LaneOnline 541.463.5893
- 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 541.463.5686
- Small Business Development Center 541.463.6200
- Student Engagement 541.463.5276
- Student Life and Leadership Development 541.463.5336
- Student Accounts
  - Perkins Loan Payments 541.463.3011
  - Tuition and Other Payments 541.463.3011
- Student Legal Services 541.463.5365
- Student Records 541.463.3100
- Student Resource Center 541.463.5342
- Substance Abuse Prevention 541.463.5178
- TTY (Personnel) 541.463.3999
- Titan Store 541.463.5256
- Torch (Student Newspaper) 541.463.5881
- Tours (Main Campus) 541.463.5678
- Transitions to Success 541.463.5837
- TRIO Learning Center 541.463.3131
- Veterans' Benefits 541.463.5663
- Veterans' Services 541.463.5684
- 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 new downtown campus in 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.

Lane's Aviation Academy offers two programs at its facilities at Eugene's Mahlon Sweet Airport: the Flight Technology Program offers ground/flight courses, and the Aviation Maintenance Technician Program offers advanced training at the Return-to-Service facility.

The college also offers classes via television and the Internet.

Bus Pass and Bus Transportation

Credit students, ABSE and ESL students at the main campus, Downtown Campus (DCA), and Aviation Academy are assessed a $27 per term* transportation fee which covers the cost of several transportation initiatives that benefit our students, including a Lane Transit District bus pass. Other students are assessed a $5 per term* transportation fee. For bus routes and bus pass information, log on to the LTD website at ltd.org or call LTD Customer Services at 541.687.5555 or 711 (TTY—Oregon Relay).

- Bring your myLane student schedule and photo ID to the Titan Store to get your pass.
- LCC Bus Passes are nontransferable and nonrefundable.
- Lost, stolen or misplaced LCC Bus Passes are replaceable for a non-refundable $10 fee. Bring your photo ID and $10 to the Titan Store to obtain a replacement pass.
- For information on how to obtain an LCC Bus Pass and sticker, go to *lanecc.edu/facilities/transportation/lcc-bus-pass*.

* subject to change

Parking

Main Campus

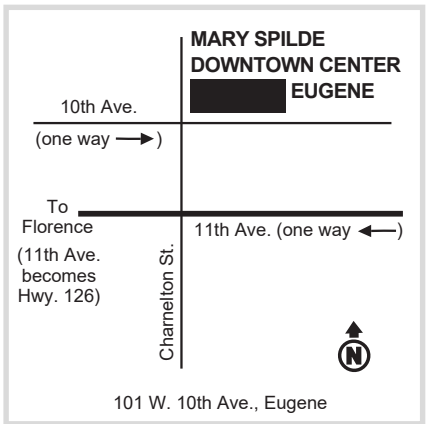
Parking is permitted in all parking lots on the main campus. Parking is prohibited on main access roads at Gonyea Road and Eldon Schafer Drive. If parking is temporarily permitted in an area where parking is not normally permitted, the area will be clearly marked.

More information about motor vehicle regulations applicable-to Lane is available on Lane's website at *lanecc.edu/copps/documents/vehicle-regulations* or call 541.463.5558.

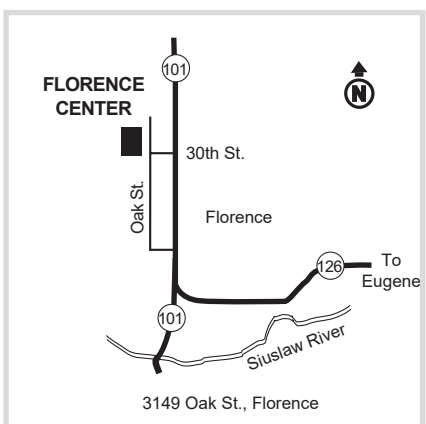
Downtown Campus

- The closest parking option is The Broadway garage, with entries on either side of Broadway along the west side of Charnelton. Parking here is free on weekends and after 6 p.m. with hourly parking available by machine (which accepts credit cards).
- Lane's Downtown Campus (DCA) students may have their parking validated at the Titan Store and Market when parking at the Overpark and Parcade lots.
- Parking is free on Saturday and Sunday in the Overpark and Parcade, for the first hour of parking Monday through Friday, and before 7 a.m. and after 6 p.m. Monday-Friday.
- For more information, call 541.463.6250, and for the latest information on all things related to our new Downtown Campus and the parking and transportation options available, see: lanecc.edu/facilities/transportation

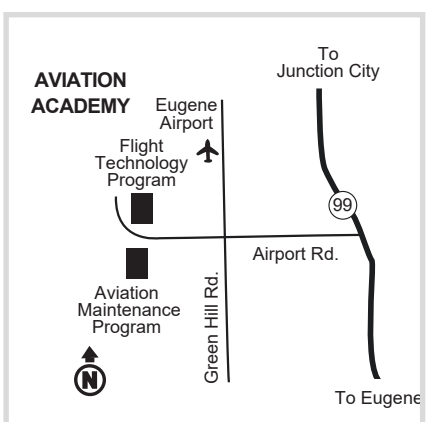
Maps to Lane Community College

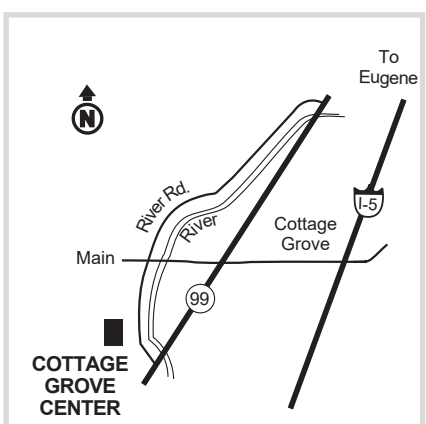


101 W. 10th Ave., Eugene



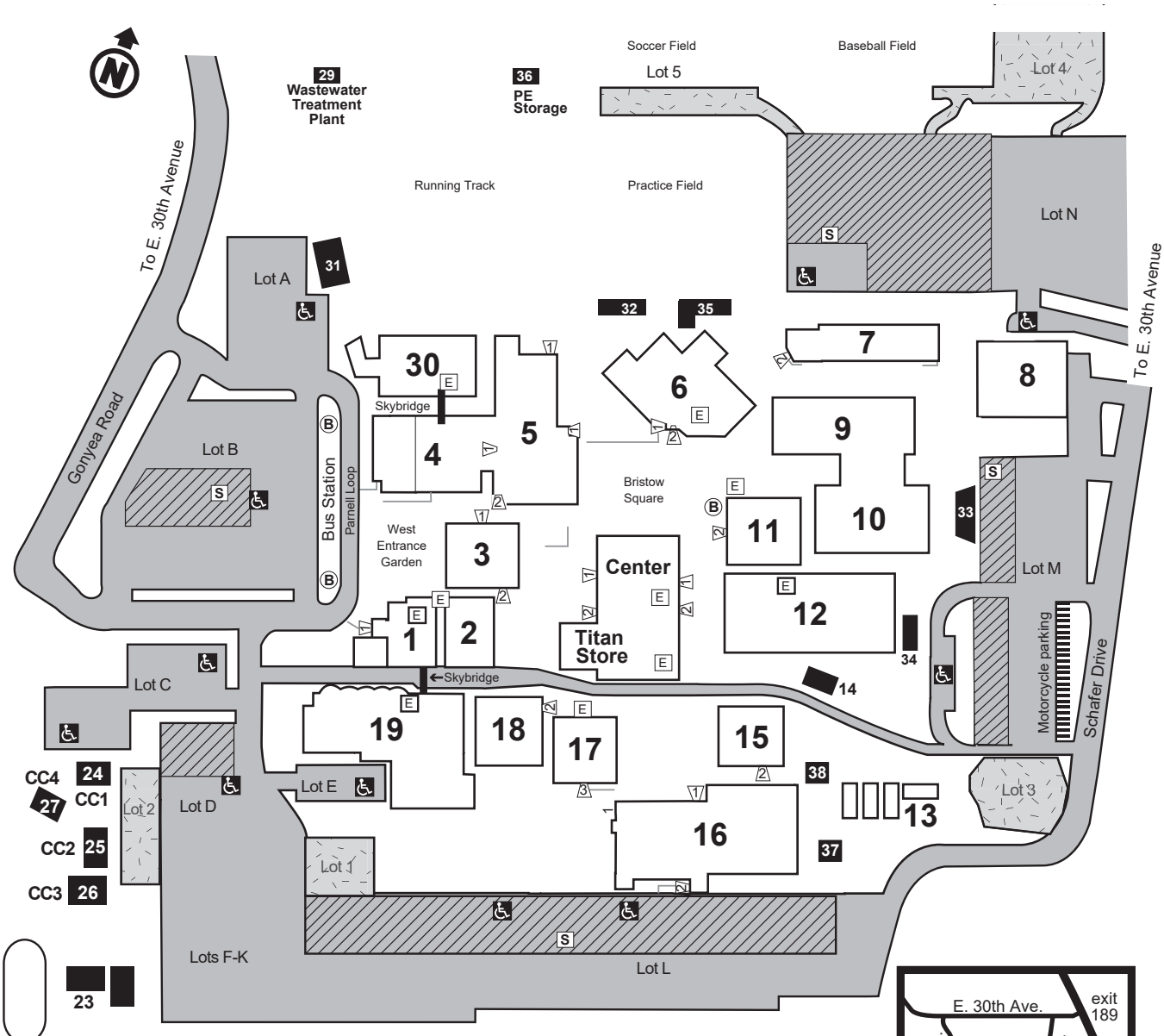
3149 Oak St., Florence





Lane Community College Main Campus

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



Building	Department
Center	Titan Store/Library/ Cafeteria/Social Science/ Language, Lit. & Comm.
1	**Student Services**
2	IT
3	Administration
4	Health Professions
5	Physical Education
6	Performing Arts
7	Campus Services/Facilities/ Printing & Graphics

Building	Department
8	Welding
9	Auto/Diesel
10	RTEC/Art
11	Art/ESL/GED
12	Manufacturing/Auto Coll./ Construction
13	Annexes
13	**Public Safety**
15	Electronics/Drafting
16	Science/Math

Building	Department
17	Forum
18	Drafting/Graphic Design
18	**Health Clinic**
19	Business/CIT/Workforce/ Co-op Ed/CML
24	Family Connections/Child Development
25	Infant/Toddler Center
26	Preschool
30	Health and Wellness
31	Longhouse

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 Schafer Drive).

Credit Student Admissions and Registration

Who May Enroll in Lane Credit Classes

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 must have a high school diploma, a GED certificate, or completed home schooling at the secondary level prior to the term the student wishes to receive aid. For more information about financial aid, contact Financial Aid at 541.463.3400.

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, or
- 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 online admissions application process at lanecc.edu/esfs/under- 18-students. To finalize the admission process, students under the age of 18 without a high school diploma must complete and submit to Enrollment Services the "Student/Parent-Guardian Consent Signature" form included in the online admission process. Students under the age of 18 attending Lane will not be considered as regularly admitted students until they reach the age of 18 or they have demonstrated that a high school diploma or GED 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. Students are consid- ered in-district* if they

- have maintained a permanent residence 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 residence 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, either within or outside the state of Oregon. It is vital that you review the residency requirements at all institutions to understand their in-state residency requirements.

How to Enroll

From lanecc.edu, go to the Apply and Enroll tab at the top left, select Apply Now.

Admissions

We accept all students age 18 or older and students under the age of 18 with a high school diploma or GED. Admissions are "rolling" throughout the year, but close one week before each term starts. If you are a new credit student, you must complete all of the "Steps to Enroll" prior to the beginning of a term, or wait until the next term. To apply, complete the admissions process online at lanecc.edu/apply.

International Programs Admissions

Building 11, Room 235, 541.463.3434

Lane welcomes students who want to come to the USA to study on student visas to both the International English Program (ESL) and college-level programs.

Students applying to Lane need to complete the international application online (processing fee required) and submit the following documents electronically: copy of passport, transcripts from most recent school attended and proof of financial support. Other or original documents may be required in some cases. Go to *lanecc.edu* to apply.

At Lane, a TOEFL score is not required for admission. All students will be tested for English proficiency upon arrival and class placement will be based on the results. Students will be placed in ESL courses or college-level credit classes based on the outcome of the placement test. Students who complete all classes in level F of the ESL program with a C or higher are eligible to take credit classes.

College major and International ESL students are admitted for fall, winter, and spring terms. For additional information on summer term please see *lanecc.edu/international.* International students must be at least 17 years of age to be admitted.

Students who are transferring to Lane from another college, university or language school need to have at least a 2.0 GPA and be eligible to transfer their I-20 to be admitted to our regular program. Students with less than a 2.0 GPA, or those who have been academically disqualified from their current school, will be enrolled in the International "Success Program." Success Program students will have additional requirements to ensure they get the support they need to succeed. Students who have earned more than 180 quarter credits need to identify a specific degree plan and specific number of credits needed to graduate before they can be admitted. All students must be in status with immigration. Students with a terminated I-20 are not eligible to transfer to Lane.

For more information about Lane's International ESL Program, see English As A Second Language.

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
- Dental Hygiene
- Emergency Medical Technology/Paramedic
- Physical Therapist Assistant
- Practical Nursing
- Dental Assisting
- Health Information Management
- Medical Assistant

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 541.463.5380
Automotive Technology 541.463.5380
Culinary Arts and Food Service Management 541.463.3503
Hotel/Restaurant/Tourism Management 541.463.3503
Early Childhood Education 541.463.3522
Energy Management Technician 541.463.3977
Fitness Specialist 541.463.5545
Flight Technology 541.463.4195
Graphic Design (the second year) 541.463.5409

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

Registration

Registration begins each term using a staged process over several days according to the cumulative number of Lane credits earned through studies at Lane (transfer credits do not count). Students can easily check their registration date and see if they have any holds or restrictions preventing registration by going to myLane under the myEnrollment tab and When Can I Register link. For information, visit the website at *lanecc.edu/calendars/registration-calendar*. For questions, email *AskLane@lanecc.edu*.

Schedule Changes

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

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

Increasing the number of credits for a variable credit class can be processed using 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.

Deadline to Drop a Class

Students who drop a class and meet the refund deadline of Sunday midnight of the first week of the term for classes that meet 11 weeks will be refunded all of the tuition. Tuition is not prorated. 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.

Overview of Academic Programs

Lane Community College is a comprehensive community college offering career 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 Campus 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 technical programs. Evening courses are listed in the class schedule on Lane's website at *lanecc.edu*.

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

Career Technical Programs

Career technical programs lead to certificates and Associate of Applied Science degrees. Many classes required to complete two-year degrees can be transferred to four-year colleges. Others do not transfer.

For information about specific programs, see Career and Technical Programs.

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 pages 52-58.

Associate of Arts Oregon Transfer Degree (AAOT)

- Designed for students who want flexibility to transfer to any public Oregon university.
- 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 Oregon public universities

Associate of Science Oregon Transfer: Business (ASOT-BUS)

- Designed for students who want flexibility to transfer to any public Oregon university 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

Associate of Science Oregon Transfer: Computer Science (ASOT-CS)

- Designed for students who want flexibility to transfer to any public Oregon university with computer-focused general education requirements.
- ASOT - CS accepted to meet lower division general education requirements
- Ensures junior status for registration purposes
- Limited transferability of career technical courses

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
- Limited transferability of career technical courses

Associate of Science: University of Oregon

- Designed for students who want to transfer to the University of Oregon with general education requirements
- Limited transferability of career technical courses

Associate of Science: Oregon State University

- Designed for students who want to transfer to Oregon State University with general education requirements
- 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
- Not eligible for federal financial aid
- Contact Counseling for information on Direct Transfer

Cooperative Education

Cooperative education (Co-op) offers internships for career technical and college transfer credit. Internships give students practical work experience related to their educational and career goals. Students get on-the-job learning experience at a business or organization related to their educational and career goals. Cooperative education is available in all academic departments. Most career technical programs require Co-op credits.

Advantages to the Student

- guidance in career expectations and demands
- 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

Co-op is a working partnership between the student, Lane Community College, and the Co-op employer. Classroom study at Lane along with supervised work experience is an integral part of a student's education.

Lane Community College's Cooperative Education is the second largest in the state of Oregon. An outstanding model program in the United States, 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. Student compensation is at a rate of pay comparable to employees who do similar work. In some instances, students may receive credit for volunteer placements. More than 800 employers participate in the program each year. Sixty-five percent of all Co-op students are retained by employers as regular employees after graduation, although employment is not guaranteed.

The requirements of a cooperative education program include successful completion of classroom and work experience. Work experience must be preceded by a consultation between the student and a Co-op coordinator (see list).

To get started with Co-op:

1. Contact the Co-op coordinator in your program to determine if you are ready for an internship
2. Work with your coordinator to set up a Co-op internship
3. Register for Co-op and begin your internship

Credits Course credit may be earned for work experience if a job is related to either the student's major or occupational goal. Students enrolled in co-op earn credit and a grade for their internship.

Co-op credits may not be audited or taken as pass/no pass. They can earn up to 12 credits per term and a maximum of 18 credits total while at Lane. One credit equals 36 hours of Co-op work experience. Unless prior approval is received from the Cooperative Education Dept. dean, students must enroll for a minimum of three credits. Co-op credits may not be earned for past work experience (see Student Records for Credit by Assessment). Cooperative Education administers this course. To find out more about Co-op education contact your Co-op coordinator or visit our website lanecc.edu/cooped.

The Cooperative Education Division administers co-op courses. To learn about cooperative education, visit the website: lanecc. edu/cooped/ or drop by the Co-op office, Building 19, Room 265 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.

Program or Transfer Area	Co-op Ed Coordinators
Accounting	Jamie Kelsch
Administrative Office Professional	Jamie Kelsch
Art & Applied Design	Teresa Hughes
Automotive Technology	Chuck Fike
Aviation Maintenance	Chuck Fike
Biology	Gerry Meenaghan
Business Management	Jamie Kelsch
Career Skills Training	Chuck Fike
Chemistry	Gerry Meenaghan
Coaching	Chuck Fike
Computer Information Technology	Gerry Meenaghan
Computer Network Operations	Gerry Meenaghan
Computer Programming	Gerry Meenaghan
Computer Simulation and Game Development	Gerry Meenaghan
Construction	Chuck Fike
Criminal Justice	Caoimhin OFearghail
Culinary Arts	Joe McCully
Dental Assisting	Leslie Greer
Dental Hygiene	Leslie Greer
Diesel Technology	Chuck Fike
Drafting	Gerry Meenaghan
Early Childhood Education (Pre-school)	Kathleen Lloyd
Education (K-12 Teacher Preparation)	Merrill Watrous
Emergency Medical Technician (EMT)	Darrek Mullins
Energy Management	Gerry Meenaghan
Engineering (Transfer)	Gerry Meenaghan
Environmental Studies	Gerry Meenaghan
Ethnic Studies	Beverly Farfan
Fitness	Chuck Fike
Flight Technology	Chuck Fike
Florence Center (all)	Jamie Kelsh
General Work Experience 180	Chuck Fike/Jamie Kelsch
General Work Experience 280	Chuck Fike
Geographic Information Science (GIS)	Staff
Geography	Staff
Geology	Gerry Meenaghan
Graphic Design	Teresa Hughes
Health Occupations (Cont. Ed.)	Jamie Kelsch
Health Information Management (HIM)	Shelley Williams
Hotel/Restaurant/Tourism Management	Joe McCully
Human Services	Christina Salter
International Work Experience	Gerry Meenaghan
Journalism	Teresa Hughes
Landscape	Chuck Fike
Manufacturing Technology	Chuck Fike
Mathematics	Gerry Meenaghan
Medical Assistant (MA)	Kate Barbee
Multimedia Design	Teresa Hughes
Music	Teresa Hughes
Nursing	Staff
Performing Arts	Teresa Hughes
Physical Therapist Assistant (Clinical Affiliation)	Beth Thorpe
Physics	Gerry Meenaghan
Political Science	Caoimhin O'Fearghail
Pre-Law	Caoimhin O'Fearghail
Psychology	Beverly Farfan
Science Technology	Gerry Meenaghan
Service Learning	Beverly Farfan
Sociology	Beverly Farfan
Sustainability Coordinator	Gerry Meenaghan
Web Design	Teresa Hughes
Welding	Chuck Fike

High School Connections

Curriculum for High School Students

Lane's High School Connections office assists high school students in making the transition from high school to college. Local students have an opportunity to earn college credit while being dually enrolled at their high school and Lane, through the College Now and RTEC programs. Lane Community College does not offer high school completion diplomas.

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 learning outcomes. Courses are taught in many subject areas including English, French, Spanish, art, social science, math, business, culinary, early childhood education, graphic design, drafting, fabrication/welding, and others. College Now credits are free for the 2018-19 academic year.

RTEC, Regional Technical and Early College, is a collaborative effort with local schools to provide early college opportunities to high school students. RTEC provides rigorous and relevant career technical training according to industry standards as well as academic transfer course offerings at the college. These classes fill the gaps where high schools can no longer offer these courses. RTEC provides both accelerated career technical and academic transfer courses for high schools that need advanced opportunities for their students. Courses are taught at Lane, at the high schools, or online in a variety of career technical and academic areas. The High School Connections office works with local school districts that want to sponsor their students for dual credit in career technical or academic classes at the college. Additionally, school districts contract with Lane to provide college-level classes directly at their location.

RTEC 101 Gateway to College and Careers is a credit course offered by the High School Connections Office to high school seniors who are interested in attending Lane after graduation. This course prepares students to skillfully navigate Lane systems, be familiar with the many programs and pathways available at Lane, and set their own course for college success.

RTEC 101 is a variable credit course for high-school aged students who want to improve their likelihood of success in a college environment with an emphasis on career technical education. Students will self assess interest areas and strengths, explore career pathways and gain skills in work ethics, test-taking strategies, and using appropriate modes of communication in the school setting. Additionally, students will be introduced to each of the Career Technical pathways offered at Lane and will understand not only the various options for careers, but also the varying requirements for entrance into these programs. Successful completion of this course will be the first step to classes in the RTEC center and elsewhere on campus.

The High School Connections office works with local school districts that want to sponsor their students for dual credit in career technical or academic classes at the college. Additionally, school districts contract with Lane to provide college-level classes directly at their location.

For more information about High School Connections programs, visit the website at lanecc.edu/hsconnections or call 541.463.5521.

Honors Program

The Lane Honors Program provides you with a transformative learning experience centered around scholarly inquiry, academic rigor, and intellectual growth.

As an honors student, you will receive many educational benefits, including:

- collaborative learning with other engaged students
- faculty mentorship
- guest speakers and honors events
- graduation from Lane with honors recognition
- a competitive edge when applying for scholarships to 4-year universities
- articulation agreements with 4-year university honors programs

If you are transferring to a four-year institution, you will be well-prepared for upper division coursework and university honors programs. If you are a non-transfer student, you will benefit from the program's opportunities for personal enrichment.

Lane honors classes fulfill general education electives and requirements for transfer degrees. Lane currently offers the following three types of honors classes:

- Honors options: traditional classes in which students can elect to complete honors-level coursework; open to all students.
- Honors sections: each student in the class completes honors-level coursework; open to all students.

For a list of current classes, to learn more about the Honors Program or to apply, please visit our website at *lanecc.edu/honors/* or email *honors@lanecc.edu* with questions.

LaneOnline

LaneOnline provides courses delivered through technology. The Associate of Arts Oregon Transfer, Associate of General Studies and Associate of Science degrees and significant coursework for other degrees and certificates can be completed through LaneOnline. There is an annual course schedule on the LaneOnline website to assist you in schedule planning.

In order to help easily locate them on the web schedule of classes, online and hybrid courses will have "online" or "hybrid" and the Online/Hybrid icon 🖵 listed next to the course title. All online courses can be viewed in one location by going to lanecc.edu/laneonline and clicking "Class Schedules" in the left-hand navigation bar, then choosing the desired term.

Online Courses Online courses are delivered on the web. Students may participate anytime, anywhere they have a computer with internet access. Interaction with the instructor and other students is provided through discussion forums and email. Some online courses have on-campus labs or exams, or require viewing video programs.

Hybrid Courses Hybrid courses combine traditional classroom activities with online learning so that time spent in the classroom is reduced but not eliminated. A portion of the class instruction is conducted online and the rest is conducted during regularly scheduled classroom meetings.

Telecourses Telecourses include weekly video programs, use of the internet, email, textbooks, assignments, and examinations. Videos can be streamed or purchased on DVD. Students can also view telecourses on cable TV, in the Lane Library, and at LCC at Cottage Grove and Florence. Exams are usually taken on campus.

Live Interactive Courses Students enroll and participate by attending on campus or through videoconferencing at an off campus location. These courses must be attended in person.

Tuition for LaneOnline courses is the same as other courses. All online courses and telecourses have a $25 fee. Addi- tional fees may be charged by instructional departments.

For more information about taking LaneOnline courses, call 541.463.5893 or see lanecc.edu/laneonline.

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.

Examples of Courses:

COOP 280SL	Cooperative Education: Service Learning
HE 255	Global Health
HS 201	Introduction to Human Services
HS 228	HIV/AIDS and Other Infectious Diseases

For information, visit *lanecc.edu/sl* or email *farfanb@lanecc.edu*

Tuition, Fees, Financial Aid and Payment

Noncredit Community Education Classes

For information about costs associated with Continuing Education and Small Business Development Center classes, please contact the respective departments.

Credit Classes

Credit students pay the following charges:

Tuition.....see below

Class fees.... listed next to each class in the online class schedule

Technology fee.....$9 per credit

Online Course fee..... $25 per course

Other fees .....see below

Tuition*

Residents of Oregon ..... $113.50 per credit hour

Non-residents of Oregon.....$270 per credit hour

International students:

Fall, winter and spring terms.....$236 per credit hour

Summer term.....$158 per credit hour

*Subject to change pending Board approval

Other Credit Student Fees

ASLCC Student Activity Fee*

Credit students taking main campus classes $56.05

Student Life (clubs) $1.74; ASLCC $9.14; BSU $.50; OSPIRG $3; Longhouse $3; International Student programs $2; SPA $.50; Childcare $1; Athletics and Recreational Sports $11; TORCH $2.90; Women's Program $2; Learning Garden $1.50; Military/Vets Center $1; NASA $.65; MeCHA $.65; GSA $.65; APISU $.50; OSA $2.65; ASLCC Legal Services $4; Co-op $7.62

*This fee is subject to change pending ASLCC election results.

Credit by Examination and Credit by Assessment

Examination/assessment fee .....$50 per review

First Time Credit Enrollment Fee $30

Student Health Fee .....$45 per term

Transportation Fee (nonrefundable)

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

All noncredit classes (included in the Registration fee) and credit classes not held on the main campus.....$5 per term

For more information, see the Locations and Maps section on page 8-9. Fee is subject to annual increases.

International credit students also pay

International student fee .....$12 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 from the Titan Store, Center Building.

Transcript Fee

Transcript $5

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

Transcripts are now available on **myLane** at lanecc.edu.Fees for transcripts ordered on **myLane** will need to be paid with VISA or MasterCard.

Transcripts that are purchased from Enrollment 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.....$4,725
Books*.....$1,389
Special and Miscellaneous Fees (varies by program).....$567
Student Activity Fees.....$168

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.

* Open Educational Resources (OER) Some classes at Lane use Open Educational Resources (OER). OER takes the place of more expensive textbooks, reducing the overall cost of taking the class. For more information on classes using free and low-cost materials, visit *lanecc.edu/oer* or *email oer@lanecc.edu*

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 technical programs. Some courses in the following programs currently have differential fees: Automotive Technology, Culinary Arts, Diesel Technology, Manufacturing Technology, Dental Hygiene, Dental Assistant, EMT/Paramedicine, Medical Assistant, Health Information Management, Nursing, Practical Nursing, and Physical Therapist Assistant.

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/esfs/enrollment-services-forms.* Students must hand the form directly to an Enrollment Services advisor at the main campus. Residency requirements must be met prior to the date that a term begins, and residency changes must be made prior to the start of the term.

* 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, and residency changes must be made prior to the start of the term.

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.

Please note that residency requirements are different at Oregon's public universities. Students intending to transfer should research specific residency requirements at public or private schools to which they will transfer. For more information, visit the website of the institution you are interested in attending.

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 dependents who have established permanent residence inside the college district within 90 days prior to the first day of the term and within three years 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 dependents 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 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

To apply for financial aid, students must submit a Free Application for Federal Student Aid (FAFSA) each academic year – summer through spring. The FAFSA is available at fafsa.gov. The FAFSA is available now for students applying for aid during the 2018-2019 academic year. The Financial Aid process takes approximately 6-8 weeks. Students should apply as early as possible after October 1, 2018 for the 2019-2020 academic year.

Lane offers three basic types of financial aid to eligible students: grants, work-study and loans. Typically, students are offered a combination of these financial aid awards. Loans must be repaid. Grants and work-study do not have to repaid as long as the student remains enrolled in the term they received funding.

Scholarships are a separate source of free aid. For more information, see *lanecc.edu/finaid/eligible*.

To view further information regarding the financial aid process at Lane, see *lanecc.edu/finaid*.

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* and access myLane. Once in myLane, click on "myFinances" tab, then click on "Make an Online Payment." Contact Enrollment 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 50850, Eugene, OR 97405-0999. 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 Services before you register. If the college doesn't receive your authorization in a timely manner, late fees will be added to your account balance. If you have questions, visit lanecc.edu/collfin/sponsored-accounts or email *SponsoredAccounts@lanecc.edu*.

Payment Plans

Lane offers interest-free payment plans that allow you to spread the cost of your education into affordable monthly or bi-weekly payments. More information on how to set up a payment plan can be found: lanecc.edu/collfin/college-account-payment-plans

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, and/or never attend the class.

*By registering, you have automatically accepted the terms of Lane's Deferred Billing Agreement. See *lanecc.edu/copps/documents/accounts-receivable-billing* to access the Deferred Billing agreement. Futhermore, by registering for any class at Lane, you are agreeing to retrieve your 1098T form by accessing the electronic version in myLane. The college does not mail 1098T's.

Payments On Account Using myLane at lanecc.edu Students will be able to make payments on outstanding balances using myLane. Students taking credit classes 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 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. myLane will accept partial or full payments using credit cards, checks, or savings accounts. 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 past, present or 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 information and instructions on setting this up at *lanecc.edu/esfs/tuition-fees-and-payments*. All transactions are handled through a secure payment system.

General Account Information

To find out how much you owe, access myLane at *lanecc.edu*, click on "myFinances" tab.

Once Open Registration begins for the next term, you must pay all money you owe the college for the previous term 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 myLane. It is your responsibility to maintain a current address, phone number and email in 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 will be moved to a collection agency.

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 collection agency for non-payment after four months*
- Oregon State Tax Return offset

* Students will be mailed a final notice for accounts that are overdue before the college assigns them to a collection agency which 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 Collection Agency After Four Months (120 days) Accounts will be turned over to a collection agency for non-payment after four months (120 days). Students will be mailed a final demand "pink" billing statement for past due accounts before the college assigns them to a collection agency. The collection agency will add their own fees and has the right to report past due accounts to a credit bureau. Failure to maintain a correct address in myLane will result in your account going to a collection agency if unpaid.

Past Due Accounts Must be Paid to 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 wanting to pay off outstanding debts owed to Lane cannot pay at Lane or in myLane and must contact the collection agency listed with the hold message in myLane to make payment arrangements.

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 myLane at *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 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.

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 laneccdebit card.
- The college applies all other refunds as a credit to your account. **Refund checks are mailed or loaded onto the laneccdebit 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 Refund Request online form available at *lanecc.edu/collfin/student-accounts-refund-request-information/* emergency documentation of the circumstances. Petitions received after the eighth week of the term and/or without documentation will be denied.

If you have a documented medical or emergency reason why you dropped your class after the refund deadline, you can fill out the Refund Request online form and submit it to Student Accounts. A committee will review your request and respond.

Contact Student Accounts, 541.463.3011, 4000 E. 30th Avenue, Eugene OR 97405, for petitions about **credit classes.**

The deadline for submitting petitions requesting a Refund Request is 30 days from the end of the term. Refund requests submitted after this date will only be considered when a medical emergency prevented you from using 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 Student Accounts at 541.463.3011.

Contact the following departments for refund petitions about **Community Education classes.**

- Continuing Education, 101 W. 10th Avenue, Eugene OR 97401
- Cottage Grove Center, 1275 South River Road, Cottage Grove, OR 97424
- Florence Center, 3149 Oak Street, Florence, OR 97439
- Small Business Development Center, 101 W. 10th Avenue, Suite 304, Eugene OR 97401
- 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.

Academic and Student Affairs

Academic Advising & Referral Center

Building 1, Room 207, 541.463.3800, academicadvising@lanecc.edu

Academic advising is available through the Academic Advising Referral Center. Advisors are located across campus and are situated in "neighborhoods" identified with: instructional programs, geographical areas and diversity services areas. The Academic Advising Referral Center offers students several academic advising services. Students can access their academic advisor by emailing academicadvising@lanecc.edu, by directly contacting the academic advisor, or through the website at lanecc.edu, choose Moodle, choose Academic Advising, choose the Academic Advising link for your chosen major or area of interest, or by calling 541.463.3800.

Academic advisors have in-depth knowledge of academic departments' procedures and resources. New students meet with an academic advisor during the first term at Lane. These meetings orient students to their academic programs and provide help with course planning. Students are encouraged to meet with an academic advisor on a regular basis throughout their stay at Lane. Representatives from four-year schools in the state and region make regular visits to Lane Community College to meet with students considering transfer. Schedules of these visits are available in the Academic Advising Referral Center.

Academic Learning Skills

Building 11, Room 245, 541.463.5439

Academic Learning Skills (ALS) offers courses to improve student success in lower division, career 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 and programs: Adult Basic and Secondary Education; English as a Second Language; Language, Literature and Communication; Health Careers; and Mathematics.

Students who take courses offered by Academic Learning Skills gain confidence and abilities to be successful in college-level classes. Students improve their reading, writing, vocabulary, critical thinking, math, and learning/study skills.

Credit Courses Academic Learning Skills offers courses for college credit in lecture and online formats. 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; and Writing.

Developmental Credit Limit Most of the courses in Academic Learning Skills are considered developmental courses. Students may be eligible to receive financial aid for up to 45-quarter credits (or equivalent) to complete developmental courses. For more information, contact Financial Aid at 541.436.3400 or visit *lanecc.edu/finaid.*

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. Students must meet with the Guided Studies counselor/advisor to set up an academic plan.

Center for Accessible Resources

Building 19, Room 265, 541.463.5150, (voice); TTY Relay: 711 541.463.4739, Fax: accessibleresources@lanecc.edu; lanecc.edu/disability

The Center for Accessible Resources' (CAR) mission is to provide equal access and reasonable accommodations that allow students to be active participants in the LCC community. CAR strives to promote student independence and resilience, and to foster and aide students in improving their self-advocacy skills. CAR partners with the LCC campus community to provide education, resources, and support through increasing awareness of accommodations, and promoting universal design and inclusive environments.

Some of the services that CAR provides are:

- Accommodations for classes, including:
  - Test accommodations (extended time, reduced distraction
  - Alternate format (computer text with digital audio, Braille)
  - Accessible Technology (computer software and hardware, and other devices)
  - Service Providers (sign language interpreter)
- Consultation, referrals and disability awareness information
- Accessibility information and maps

Center for Student Engagement

Center Building, Room 201 & 202, 541.463.3284

The Center for Student Engagement, or 'CSE', is the home base for student clubs on campus and is operated by professional staff and work-study students who serve as club assistants. Staff in the CSE offers advice and guidance to students who want to expand their academic experience to include extracurricular and co-curricular activities. We can help you find and join clubs that suit your interests, or assist you to develop a new group. The Council of Clubs meets in the CSE Meeting Room each week to discuss events, allocate resources, collaborate on projects, ratify new groups, and keep one another informed of the various activities on campus. Active clubs vary from year to year and represent many student interests on campus.

Student Life and Leadership Development

Student Life and Leadership includes many opportunities for students to become involved and gain leadership skills. These opportunities include the Black Student Union, Movimiento Estudiantil Chicano de Azatlan (MEChA), Native American Student Association, Asian Pacific Islander Student Union, Gender and Sexuality Alliance, Associated Students of Lane Community College Student Government (ASLCCSG), 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, programming, and communication through participation in committees, cultural programs, and workshops.

Student Government: ASLCC

Building 1, Room 201, 541.463.5290

The Associated Students of Lane Community College Student Government (ASLCCSG) legislative body is the Senate, composed of four executive officers, ten senators, and seven student staff positions (appointed, nonvoting positions). The purpose of ASLCCSG 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 student activity fee*. Contact the ASLCC president (541.463.5335), vice president (541.463.3197) or stop by their offices in Building 1, room 201 if you would like to: • serve on a college committee • plan an activity • become involved in student government • make suggestions and express concerns.

*This fee is subject to change pending the Student Activity Fee Recommendations (SAFC) to the President and Board of Education.

Student Government Programs-

The Rainy Day Food Pantry, Building 1, Room 201 The Rainy Day Food Pantry is a student led, student operated resource for all students at Lane. It is an official subsidiary of Food For Lane County and complies with all state and federal standards. The pantry is open through the week (hours vary each term) and is a welcoming place for students to get additional provisions to make ends meet. Services are provided anonymously.

Snack Shack Snack Shack Building 1, Second Floor, 541.463.5343 The student run snack shack is offered through Student Government and sells coffee, cold beverages and snacks etc. for students on a daily basis. Hours vary from 8 a.m.- 3:30 p.m. most days. Free coffee is offered every Wednesday. Proceeds from the Snack Shack help support the Rainy Day Food Pantry.

Asian Pacific Islander Student Union

Building 1, Room 210, 541.463.3245

The Asian Pacific Islander Student Union (APISU) mission is to offer a space for Asian and Pacific Islander students at Lane Community College (LCC) to meet and network in order to educate, promote, and encourage awareness of Asian Pacific Islander cultures and traditions at LCC and within our community locally, nationally, and internationally.

Black Student Union

Building 1, Room 210, 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 open to all students, regardless of race, creed, color, religious affiliation, or sexual orientation. Membership requires a commitment to the BSU mission. BSU is committed to the development of cross-cultural ties with all groups on campus and in the community at-large.

Native American Student Association

Building 1, Room 210 & Longhouse, 541.463.3660

The Native American Student Association (NASA) of Lane Community College assists American Indian, Alaskan Natives, and Indigenous peoples in maintaining cultural values while pursuing their educational goals. NASA emphasizes the support, safety, and the educational success of the Native Americans and other ethnicities of Lane Community College. NASA is also involved in the recruitment of Native American high school students and the retention of college students as they pursue their Post--Secondary Education.

Movimiento Estudiantil Chicano de Azatlan (MEChA)

Building 1, Room 210, 541.463.5144

Movimiento Estudiantil Chicano de Aztlán (MEChA) is a student organization that promotes higher education, cultura, and historia. MEChA was founded on the principles of self-determination for the liberation of our people. We believe that political involvement and education is the avenue for change in our society.

Gender & Sexuality Alliance

Building 1, Room 201, 541.463.5331

The Gender & Sexuality Alliance is a student-run organization dedicated to providing a safe and nurturing environment for LGBTQA people and their Straight Allies to come together and express themselves, while working toward bettering their community and combating homophobia.

Center for Student Engagement

Center Building, Room 201 & 202, 541.463.3284

The Center for Student Engagement, or 'CSE', is the home base for student clubs on campus and is operated by professional staff and work-study students who serve as club assistants. Staff in the CSE offers advice and guidance to students who want to expand their academic experience to include extracurricular and co-curricular activities. We can help you find and join clubs that suit your interests, or assist you to develop a new group. The Council of Clubs meets in the CSE Meeting Room each week to discuss events, allocate resources, collaborate on projects, ratify new groups, and keep one another informed of the various activities on campus. Active clubs vary from year to year and represent many student interests on campus.

Concepcion "Connie" Mesquita Multicultural Center

Building 1, Room 210, 541.463.5276

This center strives to create a space that is 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 our Student Identity Unions; and organizing events throughout the year that promote inclusion and understanding.

Connie Mesquita Multicultural Center Edificio 1, sala 210, 541.463.5276

Venga a la sala del Multi-Cultural Center y relagese, socialice y disfrutete o cafe 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 assistirle 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 encontrara información sobre servicios disponibles hacia la comunidad, tales como; comida, refugio,guarderias, y servicios de salud medica y dental.

Longhouse

Building 31, 541.463.3660

The Lane Community College Longhouse is a multi-use facility available to all students and provides program and classroom space for culturally appropriate activities. Lane Community College was the first in the State of Oregon to open the doors of a Longhouse on a community college campus. Situated in Kalapuya territory, the Longhouse is a sovereign space where Native American students and the community can share their values and cultures to create mutual learning relationships. The Longhouse at Lane Community College continues its mission to provide a culturally sustainable home and place of learning. The elegant building is a container of rich and diverse Native American cultures. The Longhouse has had a positive impact on the campus and is a place of hope in the present day.

Student Legal Services

Access the Law, 245 W. 13th Avenue, Eugene. 541.686.4890

Legal advice is free and available to all credit students on main campus and is funded through the mandatory student activity fee. An attorney is available 20 hours per week with limited hours during summer term. Appointments may be made through the Access the Law office, Information can be found on campus at the Center For Student Engagement Center Building 201, 541.463.3284

Maxwell Student Veterans Center

Building 19, Room 233, 541.463.5111

The Maxwell Student Veterans Center provides a place on campus for student veterans to gather. The Center provides a lounge space, quiet study room, computers, and a meeting/workshop room. The center is operated by professional staff and several student workers who help veterans access resources and connect to other veterans on campus. The center offers programs and workshops designed to support veterans' academic success and completion, as well as peer tutoring and mentoring. The center is also the home base for Lane's chapter of the Student Veteran Association.

Gender Equity Center

Building 1, Room 202, 541.463.5353

The Gender Equity Center is a respectful, inclusive, and supportive environment for people of all gender identities to explore, celebrate, and educate the campus community about gender equity. Equality assumes that life is a level playing field where everyone gets the same things in order to thrive. The reality is that we all start from different places. Equity means giving people what they need to thrive. The Gender Equity Center provides resources for students, staff and faculty including educational resources, programs, events and peer mentorship through the Peer Gender Ambassador Program. The Center is committed to being a learning place where all levels of understanding are welcome and respectful dialogue is encouraged. The Center provides space for student groups to meet and gather to build community across the gender spectrum.

Areas of focus include:

- Women in Transition academic program
- LGBTQ support and community building
- Transgender Advocacy and education
- Healthy Masculine Identities
- CTE Advising for non-traditional career fields
- Title IX and Sexual Assault support

Commencement

Commencement is the annual ceremony Lane has for all graduates who complete their degrees during the academic year. The commencement ceremony is held in June. There is no separate application to participate in commencement. Students who have applied for graduation, and who have not completed their studies can still participate in the ceremony.

Child Care

Child and Family Education Department Building 24, Room 114, 541.463.5517; *lanecc.edu/cfe/lcfc*

Lane Child and Family Center , Buildings 24, 25, 26

The Lane Child and Family Center is state licensed and nationally accredited through the National Association for the Education of Young Children and rated five stars by Oregon's Quality Rating and Improvement System. The preschool/child care program is located on the main campus and provides child care for children 30 months to 5 years of age for student, staff and community families. The center is open 7 a.m.-5:30 p.m., Monday-Friday during the academic year and 7 a.m.-5:30 p.m., Monday-Thursday the first 10 weeks of summer term. The professional teaching staff has extensive education and training in Early Childhood Education. The center is a teacher preparation school for students in the Early Childhood Education program and a cooperative preschool where parents can volunteer in the classroom and reduce their child care fees.

Child care grant and subsidy assistance is available. Students with children enrolled in the Lane Child and Family Center may qualify to receive a CCAMPIS grant, reducing child care expenses by 75 percent. For additional information and fee schedules, contact the Child and Family Education Department office or visit the web, lanecc.edu/cfe/lcfc.

Quality Care Connections, Building 24, 541.463.3954, or 800.222.3290

Quality Care Connections 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. Quality Care Connections pro- vides the following services:

Students Students who are parents can receive personalized referrals to child care options in Lane County 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, 541.463.3306.

Computer Labs

All students registered for credit classes have unlimited access to open computing labs on the main, Downtown, Cottage Grove and Florence campuses. The technology resource fee paid by each student provides this access.

Open lab hours:

- Main Campus – Monday-Thursday, 7:30 am-7 pm; Friday, 7:30 am-5:30 pm
- Downtown Center – For hours, call 541.463.6100
- Florence Campus – Monday-Thursday, 8 am 9 pm; Friday, 8 am-4 pm
- Cottage Grove Campus – Monday-Thursday, 9 am-6 pm; Friday, 9 am-2 pm

For more information including current hours and specific locations of open labs, visit the websites for the LCC Downtown Center, LCC at Florence and LCC at Cottage Grove.

In addition, many departments or programs provide computer labs for their enrolled students. For specific information about the location, hours and ADA access of Main Campus open computer labs and program-specific labs, go to *lanecc.edu/it/computerlabs* or call the Student Help Desk at 541.463.3333.

Counseling & Career Center

Building 1, Room 103, 541.463.3600, lanecc.edu/ccc

Free same day or future appointments can be made by calling or coming into our center.

Counselors proactively provide support that leads to student success and retention. We foster meaningful connections contributing to clearer academic and career direction, as well as increased confidence, self-advocacy, and motivation. Counselors empower students to recognize and overcome internal and external barriers in order to reach their goals. Access, equity, and inclusion principles help us prioritize our efforts.

Personal and Retention Counseling: We provide counseling and resource referrals for students with academic or personal concerns impacting their ability to reach short term and long term goals. During open hours, there is a counselor available to help students with crises or emergencies.

Career Counseling: Through individual counseling, workshops, and Career and Life Planning classes, we help students to clarify their interests, strengths, values, and goals; explore majors and career fields; and develop a vision for their future and next steps.

Substance Abuse Prevention: Lane provides drop-in substance abuse prevention services for all students, staff, and faculty. This includes support groups and/or information on a variety of addictive behavior concerns. (See page 27-28 for more information)

Human Development Classes: Counselors are faculty members who teach Human Development classes, including College Success (CG100), Career and Life Planning (CG140), Human Relations at Work (CG203), College Success: Back On Course (CG100BC), and Improving Parent-Child Relations (CG213). Some courses are offered online. CG100 (the 3-credit course only) and CG203 may fulfill the human relations requirement for associate of applied science degrees and certificates. All 3-credit CG courses fulfill the social science requirement for the associate of applied science, associate of general studies, and associate of science degrees. All CG courses (1-3 credits) will fulfill electives for the associate of arts Oregon transfer and other transfer degrees.

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.

The main campus Counseling and Career Center is open Monday through Friday, 8am-5pm, as well as summer term hours when the college is open. Contact the Florence center for information about counseling services on that campus.

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 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 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 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 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 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.

Enrollment Services

Building 1, First Floor, 541.463.3100, 877.520.5391, *lanecc.edu/esfs/ or Asklane@lanecc.edu*

Enrollment Services provides services for new and returning Lane students. These services include:

- Admission assistance
- Cash payments
- Receiving documents from students
- Assistance with myLane on:
  - Registration
  - Ordering official transcripts
  - Making credit card, debit, or check payments
  - Updating address, telephone and email information

Hours of operation: Monday-Friday, 8:30 a.m.-5:00 p.m.

Financial Aid

Building 1, First Floor (Lobby), 541.463.3400, *lanecc.edu/finaid,* email *finaid@lanecc.edu*

Financial aid provides assistance to new and returning students in accessing federal and state funding resources to help meet the cost of their educational goals. Staff is available by email, telephone, or in person to help students understand and navigate the financial aid process. Visit *lanecc.edu/finaid* for office hours and more information about the financial aid process.

First Year Experience

Lane's First Year Experience (FYE) guides first-year, degree-seeking students in their transition to and engagement with Lane Community College. Through online and in-person activities, the FYE exposes students to a variety of opportunities to help students make sound decisions in career, academic and financial arenas. Success coaches and peer mentors provide a welcoming, accessible environment (both in-person and online), where students can identify and overcome obstacles which could impede progression and goal attainment. Location: 1/103, Phone: (541) 463-5771 Email: FirstYearExperience@lanecc.edu

Food Services

Foodservices provides several food service options located throughout campus for students, faculty, staff, and visitors.

The LCC Food Court, located on the first floor of the Center Building, features six unique restaurant outlets offering a wide variety of menu options for breakfast, lunch, and dinner. All menus are inspired by using locally sourced materials, scratch cooking methods, and carefully selected products to ensure the highest quality.

LimeFresh Simple and healthy South-of-the-border inspired recipes with vibrant and bold flavors of the Latin world

B & D's Country Kitchen Simple yet classic recipes to satisfy your breakfast craving

Raw Berry Fresh soups and customizable salads

Five Spice Asian inspired wok cooking

Stonefire Hand stretched pizza made in our stone-fired oven and made-to-order delicatessen style sandwiches

Crush Burger Hot, fresh, and sustainably-sourced burger selections made-to-order

Blenders Espresso Bar has two locations, located on the second floor of the Center Building, right above the Food Court as well as in Building 30. Here we feature Global Delights coffee, which is fair-trade certified and 100% organic. Blenders offers a variety of coffee drinks, smoothies and hand-spun shakes, and various grab-n-go items such as pastries, yogurt, pre-made sandwiches, salads, and bottled beverages. Blenders Express is located in Building 16 offers superior drip coffee and fine teas. Grab-n-go items are also available including pastries, yogurts, salads, sandwiches and large selection of bottled beverages.

Our hours of operation vary due to the class schedules so please visit *lanecc.edu/food* for each outlet's hours of operation. Every outlet in Food Services accepts cash, all major credit cards, Apple Pay, and Android Pay.

Health Clinic

Building 18, Room 101, 541.463.5665

Health Clinic Staff Our staff includes family nurse practitioners, physicians, a registered nurse, medical assistants, front office staff, a clinic director, an administrative assistant, and students in Health Professions programs.

Services The Lane Community College Health Clinic provides a broad range of health care services to eligible Lane students and staff. Our mission is to provide affordable, 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 conditions. The clinic provides education to patients to enable them to be better consumers of health care and stewards of their own health.

Appointments can be made by calling the Health Clinic at 541.463.5665. Office visits are free of charge to all eligible students and staff. We offer some additional services at low cost including immunizations, in house labs, program and sports physicals, minor surgeries, and lesion removal. We provide lab services and utilize Quest Diagnostics to process specimens. Quest Diagnostics will bill you or your insurance. Available services include, but are not limited to:

- Diagnosis and treatment of many acute and chronic illnesses
- Sexual health
- STI testing and treatment
- Contraception management
- Wellness/annual exams for women and men
- Student program physicals
- Sports physicals
- Immunizations/titers
- Tobacco cessation
- Treatment of minor trauma including sprains, strains, cuts, and abrasions
- Behavioral health concerns including depression, anxiety, insomnia, and stress management with referral as appropriate
- Resources and referrals to specialty providers

Confidentiality All services provided are confidential. A confidential electronic medical record is established for each patient and is protected by Federal and State laws governing the release of these records. The electronic records are stored on a network and servers that are not a part of Lane Community College IT network. The records are only accessible by Health Clinic staff and not by any other department on campus (subject to Federal and State statutes).

Payment Methods The Health Clinic bills Trillium and DMAP for all services covered by the Oregon Health Plan. Payments for our fee-based services are due at the time of service (cash, check, or to an open LCC account). Lab costs will bill directly to your insurance or directly to you by Quest Diagnostics if you do not have insurance coverage.

Clinic Hours Fall, winter, and spring terms the clinic is open on all days classes are in session; summer term hours may vary and the campus, including the health clinic, is closed on Fridays during the summer.

Monday – Wednesday	8 a.m.-4:45 p.m.
Thursday	10 a.m.-4:45 p.m.
Friday	8 a.m. -4:45 p.m.

We are closed Saturday, Sunday, holidays, and any other time the campus is closed. There may be unscheduled closings due to inclement weather or other unforeseen circumstances.

If you have a medical emergency while on campus, please call Public Safety at 541.463.5555.

If you are not on campus, dial 911 or report to a local emergency department.

LCC Health Clinic does not provide after hours medical care.

Housing

Titan Court is a 6-story apartment community located in Downtown Eugene, Oregon. This certified LEED Gold community features Studio, 2 bedroom shared, and 4 bedroom apartments with an all-inclusive utility package. These apartment homes are leased individually by the bedroom and come fully furnished for an easier move. The building includes upgraded lighting, enhanced cabinetry, brand new appliances, high-end finishes, and a card access entry system. In addition, each unit is furnished with a 32" flat-panel HDTV with cable service. All residents are able to take advantage of the properties amenities which include the multimedia room with the large screen projector, on-site high efficiency laundry machines, quiet study lounges, computer lab with free printing, game room with Xbox One and PS4, free bike loan program, indoor bike storage and free onsite trash and recycling areas. Titan Court is within walking distance to many downtown attractions including the public library, bus station and many restaurants. Titan Court offers an engaging students first program filled with resident events to encourage social interaction and academic success. For more information, visit *titancourt.com* or call 541.344.2828.

The following options also 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.

The Student Life and Leadership Development department is not responsible for housing referrals. You must contact each complex individually.

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*

- 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* and at *lanecc.edu/studentlife/housing-information*.

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

International Programs

Building 11, Room 235; 541.463.3434; *lanecc.edu/international*

Admissions/Advising and Student Activities: Bldg. 11, Room 235

More than 400 international students from over 40 countries attend Lane Community College. Students who are in the United States on an F-1 student visa can study in either the ESL Program or in credit level classes. International Programs helps students create positive and successful educational experiences that include orientation to the college and community, immigration advising, academic advising, transfer planning, 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, Coffee Talk social hours, holiday celebrations and an annual International Day. Activities focus on making friends and learning about each other and other cultures.

International Programs supports students in maintaining their F-1 status and with SEVIS rules. SEVIS requirements mandate that international students successfully complete 12 credits/18 hours per term with a 2.0 GPA. Support is provided to international students with difficulty meeting this requirement through the International Success Program, which includes tutoring, required classes and extra advising. This is offered to help students meet their academic goals and stay in status with immigration rules and regulations. Students who do not meet these requirements have their SEVIS status terminated and must return home or transfer. For information about the SEVIS rules see lanecc.edu/international/immigration-policies.

Legal Services

Building 1, Room 206, 541.463.5365

Legal advice is free and available to all credit students on main campus through the mandatory student activity fee. An attorney is available 20 hours per week with limited hours during summer term. Appointments may be made through the Access the Law office, 541.686.4890, 245 W. 13th Avenue, Eugene.

Library

Center Building, Second Floor, 541.463.5273, *library.lanecc.edu*

The Library provides resources for the instructional, research, recreational, and general information needs of students, faculty, staff and community residents. The collection includes over 60,000 books and audiovisual materials, over 200,000 e-books, subscriptions to print periodicals, and a wide variety of databases offering online

access to over 90,000 periodicals. Remote access to the Library's catalog and full-text online databases is available to Lane students and staff. The Library's website is *library.lanecc.edu.*

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. Lane students can borrow materials from libraries in the Pacific Northwest and beyond. The library also provides computers and equipment, group study rooms, video viewing, a library classroom, and assistive technology.

Hours The Library is open 7:30 a.m.-7 p.m. Monday through Thursday and from 7:30 a.m.-5:00 p.m. Friday. The Library is closed Saturday and Sunday.

Open Educational Resources (OER) Some classes at Lane use Open Educational Resources (OER). OER take the place of more expensive textbooks, reducing the overall cost of taking the class. For more information on classes using free and low-cost materials, visit *lanecc.edu/oer* or email *oer@lanecc.edu*

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, symphonic band, jazz ensemble, chamber orchestra, and jazz combos. 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. Lane features a two-year curriculum designed for music majors, a vibrant music technology program, and a variety of general music courses accessible even to beginners. Individual lessons are available for voice and various instruments. Whether students already have some music training or want to get started, they can share the joy of making music at Lane.

Dance Dance students have a variety of performance opportunities throughout the year. Students perform on the main stage in Open Show at the end of each term. Open Show is an informal, supportive and fun performance opportunity where dancers of all levels hone their technical and performing skills. Intermediate and advanced level dancers audition for the Lane Dance Company where they work with faculty and guest choreographers on original and repertory work for the annual faculty concert Collaborations. The Works Student Dance Concert showcases student choreographers and dancers in a formal theatrical setting. Students move from the studio studying choreography, to the stage where they learn about lighting, costuming, and performance skills. Lane's dance program is designed for dance majors to transfer to 4-year programs. It is a two-year curriculum based in technique, somatics, creativity and performance that develops the dancer physically, intellectually and emotionally.

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 produces several shows a year. Casting policy puts students first and often includes guest artists and performers from the greater Lane community and beyond. Lane has earned a reputation for producing some of the best shows in the area.

The Student Production Association is the producing arm of the Theatre program offering students the opportunity to participate in all aspects of producing a full season of productions. Each year we regularly produce student written plays as well as an independent film. 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, call 541.463.5648.

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 the Titan Store on 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 the Titan Store at 541.463.5256.

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 health and fitness. Staff and students gain access to the center during open hours by registering for Fitness Education: Introduction and Fitness Education: Orientation. Students and staff may continue to take the course by registering for Fitness Education: Returning. 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.

Potential benefits of participation in a regular exercise program include: increased energy, improved ability to cope with stress, reduced risk of developing chronic diseases, increased focus and concentration, weight maintenance, and improved self-image.

Recreational Sports Program, Building 5, Room 204, 541.463.5293

A current valid student ID or other proof of current term enrollment is required for participation/purchase.

The Recreational Sports program offers a selection of services at discounted rates for eligible students. These include: community sports, family activities, trips and outings, on campus drop-in opportunities, and discounted admissions to local attractions/activities. Eligible Lane students may participate in local athletic leagues at discounted rates. The one-day and weekend events offer 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. Please visit the Recreation Office in the Building 5 foyer area for current term offerings. All recreational sports activities are governed by regulations provided in the Recreational 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 ten 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, Men's and Women's Soccer, and Women's Volleyball. Teams participate in the Northwest Athletic Conference (NWAC) with 36 other Idaho, Oregon, Washington, and Canadian colleges. The NWAC 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
Men's Soccer		
Women's Volleyball		

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 Email

Lane Community College has established email as an official means of communication with students.

Your student email account is used by the college to communicate important information such as course changes, information about your program of study, and notifications about academic recognition. You can also use the account for personal correspondence.

Students can get help with their email accounts at the Student Help Desk (SHeD) at 541.463.3333, email shed@lanecc.edu or visit the Student Help Desk in the library.

Student Government: ASLCC

Building 1, Room 210, 541.463.5290

The Associated Students of Lane Community College Student Government (ASLCCSG) legislative body is the Senate, composed of four executive officers, ten senators, and seven student staff positions (appointed, nonvoting positions). The purpose of ASLCCSG 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 student activity fee*. Contact the ASLCC president (541.463.5335), vice president (541.463.3197) or stop by their offices in Building 1, room 201 if you would like to: • serve on a college committee • plan an activity • become involved in student government • make suggestions and express concerns.

*This fee is subject to change pending the Student Activity Fee Recommendations (SAFC) to the President and Board of Education.

Student Government Programs

The Rainy Day Food Pantry, Building 1, Room 201 The Rainy Day Food Pantry is a student led, student operated resource for all students at Lane. It is an official subsidiary of Food For Lane County and complies with all state and federal standards. The pantry is open through the week (hours vary each term) and is a welcoming place for students to get additional provisions to make ends meet. Services are provided anonymously.

Snack Shack, Snack Shack Building 1, Second Floor, 541.463.5343 The student run snack shack is offered through Student Government and sells coffee, cold beverages and snacks etc. for students on a daily basis. Hours vary from 8 a.m.- 3:30 p.m. most days. Free coffee is offered every Wednesday. Proceeds from the Snack Shack help support the Rainy Day Food Pantry.

Student Life and Leadership Development

Building 1, Room 206, 541.463.5336

Student Life and Leadership includes many opportunities for students to become involved and gain leadership skills. These opportunities include the Black Student Union, Movimiento Estudiantil Chicano de Azatlan (MEChA), Native American Student Association, Asian Pacific Islander Student Union, Gender and Sexuality Alliance, Associated Students of Lane Community College Student Government (ASLCCSG), 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, programming, and communication through participation in committees, cultural programs, and workshops.

Asian Pacific Islander Student Union, Building 1, Room 210, 541.463.3245

The Asian Pacific Islander Student Union (APISU) mission is to offer a space for Asian and Pacific Islander students at Lane Community College (LCC) to meet and network in order to educate, promote, and encourage awareness of Asian Pacific Islander cultures and traditions at LCC and within our community locally, nationally, and internationally..

Black Student Union, Building 1, Room 210, 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 open to all students, regardless of race, creed, color, religious affiliation, or sexual orientation. Membership requires a commitment to the BSU mission. BSU is committed to the development of cross-cultural ties with all groups on campus and in the community at-large.

Concepcion "Connie" Mesquita Multicultural Center Building 1, Room 210, 541.463.5276

This center strives to create a space that is 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 our Student Identity Unions; and organizing events throughout the year that promote inclusion and understanding.

Connie Mesquita Multicultural Center Edificio 1, sala 210, 541.463.5276

Venga a la sala del Multi-Cultural Center y relagese, socialice y disfrute te o cafe 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 assistirle 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 encontrara información sobre servicios disponibles hacia la comunidad, tales como; comida, refugio,guarderias, y servicios de salud medica y dental.

Gender and Sexuality Alliance, Building 1, Room 201, 541.463.5331

The Gender & Sexuality Alliance is a student-run organization dedicated to providing a safe and nurturing environment for LGBTQA people and their Straight Allies to come together and express

themselves, while working toward bettering their community and combating homophobia.

Movimiento Estudiantil Chicano de Aztlán (MEChA), Building 1, Room 210, 541.463.5144

Movimiento Estudiantil Chicano de Aztlán (MEChA) is a student organization that promotes higher education, cultura, and historia. MEChA was founded on the principles of self-determination for the liberation of our people. We believe that political involvement and education is the avenue for change in our society.

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.

Student Help Desk (SHeD)

Center Building, 2nd Floor, 541.463.3333, *shed@lanecc.edu*; *lanecc.edu/learningcommons/student-help-desk*; live online chat and online knowledgebase at *help.lanecc.edu*

Knowledgeable staff are ready to provide immediate assistance to students with Moodle, myLane, wireless access and other academic technologies. Call, email, drop by, or use the online chat tool. The SHeD is open Monday-Friday, 8 a.m.-5 p.m. The Self-Help Knowledgebase has answers to many commonly asked questions and is available anytime.

Student Legal Services

Access the Law, 245 W. 13th Avenue, Eugene. 541.686.4890

Legal advice is free and available to all credit students on main campus and is funded through the mandatory student activity fee. An attorney is available 20 hours per week with limited hours during summer term. Appointments may be made through the Access the Law office, Information can be found on campus at the Center For Student Engagement Center Building 201, 541.463.3284

Student Publications

Denali Literary and Arts Magazine, Center Building, Room 457, 541.463.5419; Denali Office, Center Building, Room 024, 541.463.5897

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

Denali operates under the guidelines of the LCC Media Commission. A student editor is selected through a competitive hiring process in late spring. The editor may elect to work with a faculty advisor and editorial board. The magazine is published in spring of the following year and distributed free of charge to Lane Community College students and staff, and to the Lane County community.

Students wishing to submit copy or art, or become involved in any aspect of producing the magazine may contact the Denali editor at *denali@lanecc.edu.*

Students interested in earning Cooperative Education credit may contact Cooperative Education at 541.463.5203.

Torch, Center Building, Room 008, 541.463.5654

The Torch is an award-winning, student-produced, weekly campus newspaper with an average circulation of 2,200 copies. Published by authority of the Lane Community College Board of Education through the LCC Media Commission, it is an independent 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, photography, graphic arts, multimedia, 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. Any Lane County resident is eligible to work for the Torch, should they meet the hiring criteria.

Cooperative Education credit in journalism, graphic design, photography, web design, and media arts is available for students working on the Torch. Students interested in joining the Torch staff may contact the Torch editor at *editor@lcctorch.com* (541.463.5655) or Charlie Deitz, news and editorial advisor, at 541.463.5654.

Substance Abuse Prevention

The Recovery Center, Building 1, Room 226, 541.463.5178

The Recovery Center ("Recovering Sobriety, Recovering Culture") offers comprehensive and confidential substance abuse prevention services for students and staff. Services include information, referral and individual and group support, 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, other than what works.

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 open meetings, they are facilitated by Lane students and therefore are subject to time changes 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, email: *harrism@lanecc.edu* or call the center or visit *lanecc.edu/ccc/substance-abuse-prevention.*

Sustainability

Lane's commitment to sustainability is best summarized by its sustainability core value of:

- 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.

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

- Energy Management Technician
- Building Controls Technician Option
- Renewable Energy Technician Option
- Sustainability Coordinator
- Water Conservation Technician
- Watershed Science Technician

Extra-curricular activities include several student clubs:

- Global Health-Power to Change, contact: Susie Cousar at 541.463.5271 or *cousars@lanecc.edu*
- Green Chemistry Club, contact: John Thompson at 541.463.5199 or *thompsonj@lanecc.edu*
- Learning Garden Club, contact: Learning Garden Specialist at 541.463.5899 or *learninggarden@lanecc.edu*
- Oregon Student Public Interest Research Group, contact: 541.463.5166 or *ospirg@lanecc.edu*

To find current sustainability events and to learn more about sustainability at Lane visit the website at *lanecc.edu/sustainability.*

Testing Office

Building 1, Room 116, 541.463.5324, *lanecc.edu/testing*, *testingoffice@lanecc.edu*

For current information about Testing Service office hours, fees, to make an appointment and other details, please visit *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. The Testing Office provides 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 the Testing Office, 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. Students do not need a referral, however, to take General Education Development (GED) tests, screening exams conducted for various departments, or the placement tests for new students in reading, writing and math.

Many kinds of tests and assessments are available:

- Placement tests in reading, writing, and math (Main Campus, Cottage Grove Center and Florence Center).
- GED tests (Main Campus).
- Avant Place - Language placement test in Spanish and French (Main Campus)
- ATI TEAS (Main Campus)
- Vocational interest surveys (Main Campus, Cottage Grove Center and Florence Center).
- Personality inventories (Main Campus, Cottage Grove Center and Florence Center).

Titan Store (Bookstore)

Main Campus: Center Building, 1st floor, 541.463.5256, *titanstore.lanecc.edu.*

Downtown Campus Titan Store and Market: 975 Charnelton St., Eugene, 541.463.6156, titanstore.lanecc.edu

The Titan Store carries course materials, including textbooks, e-books, textbook rentals, general books, art supplies, computer hardware and software. Students may also purchase clothing, gifts and school supplies at the Titan Store. Course materials are available online at *titanstore.lanecc.edu.*

Visit *titanstore.lanecc.edu* for store hours and additional information.

TRiO Programs

TRiO Regular
Building 1, Room 219, 541.463.3131, *lanecc.edu/trio/*

TRiO STEM (Science/Technology/Engineering/Math)

Building 1, Room 218, 541.463.3138, *lanecc.edu/trio*

TRiO programs at Lane Community College help students succeed. These federally funded programs have the goal of helping students stay in school and successfully graduate from Lane Community College and if desired 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. TRiO staff are available to assist students individually with their concerns.

TRiO programs offer 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 full-time toward a degree at Lane 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/

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, discuss 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 learning process. 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 more clear. For assistance in specific areas, visit the tutoring centers listed below. For general questions, contact Liz Coleman, Tutoring Services Coordinator by email at *colemanl@lanecc.edu.*

Tutor Central/Writing Center, Center Building 211 (NE corner)

Tutors assist students in all aspects of writing across the curriculum, math 10/20, and computer skills. Students are motivated to study by our welcoming environment with a grand view of the north hills. Hours are generally Monday-Thursday, 9 am-4 pm and Friday, 9 am-1 pm. Summer hours are 10 am-2 pm. Visit the website for more updated hours. *lanecc.edu/tutor/tutor-central*.

Business Resource Center, Building 19, Room 249, 541.463.5799 *brc@lanecc.edu* (Fatima Farjé)

The Business Resource Center provides assistance in Accounting, AOP, and other business courses. Generally, it is open Monday-Saturday in fall, winter and spring terms. Summer term it is usually open Monday-Thursday. Schedules can change every term, so please visit *lanecc.edu/business-resource-center* for the current schedule.

CIT Computer Lab, Building 19, Room 135A

The Computer Information Technology Department has tutoring available for all students enrolled in all CS and CIS classes except CS 120 and CIS 101. Tutoring for CS 120 and CIS 101 is available in Tutor Central. Tutors are advanced majors in the field of computing. *lanecc.edu/cit/computer-lab.*

Foreign Languages, Center 450/451

French: Contact Karin Almquist, *almquistk@lanecc.edu*, 541.463.5140

Spanish: Contact Sylvie Matalon-Florendo, *florendos@lanecc.edu*, 541.463.5143

Math Resource Rooms, MTH 10 - MTH 97, Building 16, Room 163; MTH 105 and up, Building 16, Room 177 (Kristina Holton) 541.463.5399

Peer and professional tutors are available. *lanecc.edu/math /math-resource-center*

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/mdta-resource-center*

Online Tutoring Lane Community College has joined the Western eTutoring Consortium. Lane students are able to access free, online tutoring offered by 46 colleges and universities from seven states. Subjects include writing (synchronous and asynchronous), math, chemistry, physics, statistics, economics, calculus, accounting, psychology and more. Find more details at *lanecc.edu/tutor* and click on Online Tutoring Resources.

Science Resource Center, 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. *lanecc.edu/science/src*

Writing Center, Center Building, Room 211, Tutor Central, 541.463.5282 (Casey Reid)

Write with us. We're here to support you and your writing process on any piece of writing related to college or life. Come early and often. *lanecc.edu/wc*

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. To become a tutor, contact Amy Gaudia at 541.463.6184, *lanecc.edu/volunteertutor/.* If you need a tutor, please ask your instructor to help you submit the Tutor Request form.

Veterans Benefits and Certification

Building 1, first floor

VA Educational Benefits Building 19, Room 233, 541-463-5663, *VAEdBenefits@lanecc.edu, 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; 1-888-442-4551 or *gibill.va.gov*

Eligibility Rules VA Education Benefits are complex and students may have choices to make to determine under which benefit chapter they wish to utilize. All who qualify for benefits need to submit an application to the VA through *Vets.gov*. Students may qualify for more than one VA Benefit Chapter but can only be certified for one at a time. For more information, contact VA Educational Benefits at *VAEdBenefits@lanecc.edu*.

Credit Load/Payment For payment purposes during a standard term, 12 credits is considered full-time. A credit load less than 12 credits is pro-rated at the rate determined by the VA Benefit Chapter the student is receiving. For non-standard terms (summer) or courses that do not follow the standard term length, the actual dates of the course are reported to the VA.

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 are 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 is 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 is reimbursed retroactively by the VA after completion of a successful term.

Schedule Changes, Drops and Adds Veteran benefit students must report all schedule changes occurring after the first week of the term to *VAEdBenefits@lanecc.edu*. Schedule changes may impact

a student's VA reimbursement, particularly those occurring after the term's refund period (first week of the term). Students should communicate with the Veterans Services office before making schedule changes, drops, or adds to determine the possible impact on education benefits.

- **Within Drop Period** If courses are dropped any time during the first 30 days 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 drop period 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.

Important Veteran Benefit Information

Course Applicability Only courses satisfying program requirements (or prerequisites) outlined in a student's curriculum guide or graduation evaluation form can be certified for VA purposes. If a student takes a course that does not fulfill a program requirement, it cannot be certified with the VA. Excessive electives, for example, that are not needed to fulfill a student's program requirements, cannot be certified with the VA. Payment of tuition and fees for courses that do not meet VA applicability rules are the student's responsibility. In order for prerequisites to be certified with the VA for major requirements in math, English, and writing, testing results from Testing Services must indicate they are necessary. Students needing remedial courses (below 100 level) must enroll in the in-class version (not online) in order to receive VA benefits for these classes.

Repeating Courses Classes that are successfully completed may not be certified again for VA purposes if they are repeated. However, if a student fails a class, or if a program requires a higher grade than the one achieved in a particular class for successful completion, that course may be repeated. Payment of tuition and fees for courses that cannot be certified with the VA are the student's responsibility.

Program Changes Students utilizing veterans benefits must keep their program of pursuit current with the Veterans Services office and on their LCC account. VA Form 1995 or applicable needs to be completed and submitted to Veterans Service at the time a program of pursuit is changed.

Grades Grades are not reported to the VA but completed credits are reported. Students registering for classes but not receiving credit at the end of the term will have an amended certification processed with the VA which may result in a benefit reimbursement adjustment. Students are encouraged to successfully complete all classes for credit to avoid VA overpayment.

Program Planners All students utilizing VA education benefits must have a current term planner approved by an academic advisor and on file within the Veteran Services Office. To ensure course applicability and compliance with VA regulations, each term before classes are certified, the student's registered classes will be compared to the program planner. Only those classes required for successful program completion will be certified with the VA. Students are encouraged to communicate with academic advising prior to registering for any classes to ensure they are applicable and required for the program they are pursuing. Term planners need to be received in the Veterans Services Office no later than 45 days before the term starts to ensure no disruption of VA education benefits. Any changes to previous term planners will require the student to submit a new term planner.

Certification Timeline Approximately six weeks prior to the start of a term, CH 33 post 9/11 benefit students are pre-certified based on who has registered for classes at that time and have submitted a term planner. Students not registered at the time the pre-certification report is processed will be certified beginning after the first week of the term.

Veterans Services goal is to process all VA certifications within 30 days of the term starting. Students will receive an email from the VA at the time their certification is processed. Students will not be VA certified without an approved term planner, for that term, on file with the Veterans Services Office.

VA Payments Veteran benefit students should monitor their school's financial account on a regular basis. Failure to monitor and address unpaid charges may result in late fees or the inability to register for upcoming terms. VA and financial aid payments operate within different time periods. Students should not assume when the VA will make payments to them personally or when they will be applied to their school account. Unforeseen circumstances may occur which could delay when the VA processes a payment.

Flight Technology An addendum to the LCC Course Catalog is the Veteran's Information Bulletin, or VIB, which details current flight training costs (hourly aircraft rental and instructional rates, etc.). This VIB addendum will be provided to the veteran student upon first contact with Veterans Services.

Prior Credits (Transcripts) Students applying for VA benefits at Lane who have attended or received college credits at other schools, using VA benefits or not, must provide official transcripts to Lane within their first term of enrollment. This includes military transcripts (Joint Services Transcript or Community College of the Air Force). Unless all transcripts are submitted to Lane during the student's first term of enrollment, subsequent enrollment periods cannot be certified. Students' past enrollments will be checked with the National Student Clearinghouse. Students must avoid taking any classes at Lane that were successfully completed elsewhere. When official transcripts are reviewed, if it is found a student has received VA benefits at Lane for classes that were successfully completed elsewhere, this will be reported to the VA and may result in an adjustment to their education benefits.

Basic Choice Act A student is entitled to pay tuition and fees at Lane Community College at the rates provided for Oregon residents without regard to the length of time the person has resided in this state if the student resides in this state while enrolled in the institution and the student is:

- A Veteran using educational assistance under either chapter 30 (Montgomery G.I. Bill – Active Duty Program) or chapter 33 (Post-9/11 G.I. Bill), of title 38, United States Code, who lives in Oregon while attending a school located in Oregon (regardless of his/her formal State of residence) and enrolls in the school within three years of discharge or release from a period of active duty service of 90 days or more.
- Anyone using transferred Post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in Oregon while attending a school located in Oregon (regardless of his/her formal State of residence) and enrolls in the school within three years of the transferor's discharge or release from a period of active duty service of 90 days or more.
- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three year period following discharge or release as described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United States Code.
- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in Oregon while attending a school located in Oregon (regardless of his/her formal State of residence).

- Anyone using transferred Post-9/11 G.I. Bill benefits (38 U.S.C. § 3319) who lives in Oregon while attending a school located in Oregon (regardless of his/her formal state of residence) and the transferor is a member of the uniformed service who is serving on active duty.

The Gender Equity Center is a welcoming, inclusive and vibrant place for students to gather, socialize, and connect. The Center is a supportive entry point to Lane that provides services to assist women to attain their goals.

Services include:

- peer assistance with admission, registration, and applying for financial aid
- information, resources, referrals to campus and community organizations
- student computers

Women in Transition empowers women to become economically self-sufficient and improve their lives through access to education. Women in Transition offers:

- a learning community comprised of a LifeTransitions course paired with a Career & Life Planning course, focusing on increasing self-esteem, developing healthy relationships, decision-making, goal-setting, and career planning
- advanced classes in LifeTransitions 2 and LifeTransitions 3

The Career and Technical Education (CTE) Mentor provides support for students exploring CTE programs of study that lead to "high demand, high wage" occupations that are non-traditional for their gender. The Mentor provides ongoing support for all students. This includes: supplemental training, outreach, opportunity, leadership and career coaching. Emphasis is on recruiting and retaining students into pro- grams of study considered "non-traditional" for them.

Degree and Certificate Overview

A new academic year begins every summer term and ends with the following spring term. Every academic year Lane publishes a new catalog describing the policies, academic programs and requirements in effect during that academic year. The requirements for a program can change and it is the student's responsibility to know and adhere to the policies and requirements in their governing catalog.

Governing Catalog A student's governing catalog is the one in effect at the time the student first enrolls in credit classes. All two-year programs in this catalog are valid for five academic years and expire at the end of spring quarter of the fifth academic year; all one-year programs and Career Pathway Certificates are valid for three academic years and expire at the end of spring quarter of the third academic year. If a student has a break in attendance for four terms or more, that student is not eligible to use their original governing catalog.

Revisions to Catalog While Lane makes every effort to ensure the accuracy of the information in this catalog, changes may be necessary. Therefore, this catalog is not a contract between Lane and current or prospective students. If the College approves changes that affect this catalog, the revised requirements will be available online in myGradPlan, in academic departments, as well as in program advisors' offices. Students affected by changes should contact the appropriate program advisor, program coordinator, or academic dean.

Degrees and Certificates Lane may confer the following degrees and certificates upon satisfactory completion of these prescribed credit programs:Degrees and certificates with an* are career technical programs. The title of the career technical program will appear on the degree or certificate when awarded.

- Associate of Arts Oregon Transfer
- Associate of Science Oregon Transfer: Business
- Associate of Science Oregon Transfer: Computer Science
- Associate of General Studies
- Associate of Science
- Associate of Science: Oregon State University
- Associate of Science: University of Oregon
- *Associate of Applied Science
- *One-Year Certificate of Completion:
- *Two-Year Certificate of Completion:
- *Career Pathway Certificate of Completion:

Graduation Requirements Candidates for an associate degree or certificate must meet the following requirements:

- **Total Credits** Complete the number of credits as required for the individual degree, including foundational skills and discipline studies requirements.
- **Minimum Credits at Lane** Complete at least 24 credits. Career Pathways Certificates can be earned with fewer than 24 credits.
- **Grade Point Average** Earn a minimum cumulative GPA of 2.00 at Lane
- **Pass/No Pass** Students may select P/NP option for up to 16 credits toward a degree/certificate, unless 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
- **Apply for graduation** during the first week of your final term.

Exceptions for Program Requirements Lane does not authorize individual departments to waive degree requirements of Foundational Skills and Discipline Studies requirements. An instructional dean, or designee, may use any course on a student's transcript to substitute for any required major course limited up to 10 percent of the program for Career Technical programs only. The Academic Requirements Review Committee will consider petitions to substitute a college General Education requirement.

In accordance with the Rehabilitation Act of 1973, Section 504, colleges must be willing to modify academic requirements to prevent discrimination against eligible students with disabilities. Therefore, qualified students with disabilities may request that appropriate course substitutions be considered as a programmatic accommodation.

Graduation

Lane awards degrees and certificates to students at the end of summer, fall, winter, and spring terms. Students apply for their degrees or certificates the term they intend to complete. Application forms are submitted online through myLane.

Commencement

Commencement is the annual ceremony Lane has for all graduates who complete their degrees during the year. The commencement ceremony is held in June. There is no separate application to participate in commencement. Students who have applied for graduation and who have not completed their studies can still participate in the ceremony.

Transfer Guidelines for Degrees and Certificates

The following policies apply to transfer course work.

Lane uses course work from U.S. 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
- The Higher Learning Commission (formerly the North Central Association of Colleges and Schools)
- 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

Transfer Credit Process

Students transferring to Lane and seeking a Lane degree or certificate should submit official transcripts to Lane from postsecondary institutions previously attended. An official evaluation will be performed by a Lane degree evaluator when a student applies for graduation. Evaluation of credits may only be started after Lane has received your official transcript(s). Students are notified if the evaluation determines that they have not yet met graduation requirements. The results of an evaluation can be viewed in myGradPlan. All documents submitted to Lane become the property of Lane and are subject to federal law, as well as the Family Education Rights and Privacy Act. Courses may transfer even if Lane does not offer an identical course. Not all transfer course work is eligible to meet defined degree or certificate requirements. Under some circumstances, counselors and academic advisors for the program and/or major can offer an unofficial or non-Lane degree/certificate transcript evaluation. However, the official evaluation will occur upon request in your graduation term.

U.S. Transfer Credits

- Grades of 'Pass' are only transferable when the issuing institution defines the grade as C- or better.
- Coursework at 300 levels or above is reviewed on a case-by-case basis.
- The college or university must have been regionally accredited or be a candidate for regional accreditation when the coursework was taken. See list above.

International Transfer Credits

- Coursework listed on non-U.S. transcripts must be evaluated by an agency on the NACES website.
- A course-by-course evaluation is required.

Non-Traditional Transfer Credits

- Credit-by Assessment and Credit-by-Exam may be granted for some courses. Students can use these methods to earn credits when institutions are not regionally accredited for a maximum of 25 percent of the degree or certificate. More information is available at *lanecc.edu*.
- Lane will evaluate any of the following learning experiences for credit depending on test and score: Advanced Placement (AP), College-level Entrance Examination Program (CLEP), and International Baccalaureate (IB). DANTES (DSST) is accepted on a highly limited, case-by-case basis through faculty assessment. Military Service Credit, (AARTS, CCAF, CGI, and SMART) is considered for transfer evaluation based on American Council on Education (ACE) recommendation. Lane does not accept non-military ACE recommendations.
- A military Veteran may be granted three credits of PE applicable to all PE/Health degree requirements upon the submission of a DD214 with basic training completion.

Student Learning Assessment

For the purpose of assuring a high-quality learning environment, Lane conducts 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

From a cohort of 773 full-time, first-time in college, degree-seeking students who enrolled at Lane fall term 2013, by August 2016: 82 students in the cohort had completed a degree (11%), 171 students had transferred to another higher education institution (22%), and 120 students were still enrolled at Lane (16%). 110 students from the cohort (14%) had completed a degree by August 2017.

Outcomes for AAOT, ASOT-Business, ASOT-Computer Science, Oregon Transfer Module

Students earning the AAOT, ASOT-Business, ASOT-Computer Science, or the Oregon Transfer Module will complete coursework with the following General Education Outcomes:

Writing Outcomes

- 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.
- Demonstrate appropriate reasoning in response to complex issues.

Information Literacy Outcomes

- 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.
- Understand many of the economic, legal and social issues surrounding the use of information.

Mathematics Outcomes

- Use appropriate mathematics to solve problems.
- 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.

Speech/Oral Communication Outcomes

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

Arts and Letters Outcomes
- Interpret and engage in the Arts and Letters, making use of the creative process to enrich the quality of life.
- 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.

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

Science or Computer Science Outcomes
- 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.
- Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

Cultural Literacy Outcomes
- Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.
- Explore how culturally-based assumptions influence perceptions, behaviors, and policies.
- Examine the historical bases and evolution of diverse cultural ideas, behaviors, and issues.

Human Relations Outcomes for AAS and Certificates
Associates of Applied Science degrees and 1-year and 2-year certificates require students to successfully complete a course qualifying for human relations requirements. Courses on the Human Relations Courses list require students to meet at least three of the following eight outcomes:

1. Describe and use appropriate communication skills including non-verbal communication and active listening, barriers to communication and how to overcome them, assertive behavior and how it differs from passive and aggressive behavior.
2. Describe the characteristics of an effective work team, the typical stages of team development, and how to be a capable team member.
3. Understand the issues involved in working with people from different cultural backgrounds and how to work effectively in a diverse workplace.
4. Describe and demonstrate the rules of "principled negotiation" and conflict resolution.
5. Describe and demonstrate customer satisfaction skills for "internal" and "external" customers.
6. Identify character traits associated with being an ethical person and use a systematic method for making ethical decisions and behaving ethically in the workplace, in what sexual harassment is, how to prevent it, and how to deal with it if it occurs.
7. Describe and give examples of how to effectively manage workplace stress and anger.
8. Identify their individual work style and personality (i.e., where they like to focus their attention, the way they like to take in information and the way they like to make decisions), and the strengths and weaknesses of that style.

Associate of Arts Oregon Transfer Degree

The Associate of Arts Oregon Transfer (AAOT) degree is designed for students who want to complete the first two years of a college education, with flexibility to transfer to public universities in Oregon. The AAOT is a block-transfer degree, which means a student with an AAOT will have met the lower division general education requirements for baccalaureate degree programs.

A student selecting this transfer option still must meet the receiving university's admission requirements, including course standing, grade point average and foreign language. The AAOT does not guarantee admission to a public university, or admission to a competitive major, or junior standing in a major. Some transfer institutions also require additional upper-division general education courses.

NOTE: Each student is strongly encouraged to work with an academic advisor or counselor to match career and major goals, with an appropriate program, and to select appropriate courses for a major at an intended transfer institution.

Guidelines
1. Complete a total of 90 credits of college-level coursework (see notes).
2. Complete at least 24 credits at Lane.
3. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits, except for Health/Wellness/Fitness courses, which may be any number of credits.
4. All Elective courses may be any number of credits.
5. All courses must be passed with a grade of "C-," "P" or better.
6. Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.
7. Cumulative GPA must be at least 2.0 at the time when the Associate of Arts Oregon Transfer is awarded.

I. Foundational Skills

Writing
Students taking writing classes of three credits each must take WR 121/WR 121_H, and WR 122/WR 122_H, and either WR 123 or WR 227. Students taking writing classes of four credits each must take WR 121/WR 121_H, and WR 122/WR 122_H, or WR 227. A student must have eight credits of Writing. Meets the Information Literacy requirement.

Oral Communication
One course from the Oral Communication list.

Mathematics
One course in college-level mathematics including MTH 105, MTH 106, MTH 111, MTH 112 or any higher mathematics course.

Health/Wellness/Fitness
One or more courses totaling at least three credits from the Health/Wellness/Fitness list.

II. Discipline Studies

In addition to courses used for Foundational Skills, students must select additional courses in the areas identified below.

Cultural Literacy
One course from any discipline studies courses designated as meeting the statewide criteria for cultural literacy. Courses approved for the Cultural Literacy requirement are marked with an (*) in the lists of courses on the following pages. The credits for such courses only will be counted once toward the 90 credits required to complete the degree.

Arts/Letters
Three courses from two or more disciplines from the Arts and Letters list.

Social Science
Four courses chosen from two or more disciplines from the Social Science list.

Science/Math/Computer Science
Four courses from two or more disciplines including at least three laboratory courses in biological and/or physical science from the Science/Math/Computer Science lists.

Note: Only one of the BI 101s, and one of the BI 102s and one of the BI 103s will meet the Science/Math/Computer Science requirements for any Lane degree. (See the course description for more information).

III. Electives

Any college-level courses that bring total credits to 90 credits including:

- Up to 18 credits of Cooperative Education may be included as electives. See Cooperative Education/Internships in the Course Descriptions.
- Up to 12 credits of Individual Music Lessons (MUP) may be included as electives.
- 12 credits of Physical Education activity may be included within the entire degree (Electives and Health/Wellness Fitness).
- WR 115 may be included in the AAOT degree if completed summer 1999 or later.
- Up to 12 credits of Career Technical Education. See the list of Career Technical course prefixes in the Associate of Applied Science Degree section. Career Technical courses fulfilling Health/Wellness/Fitness requirements will not be counted in the 12-credit limit on Career Technical courses. Policies on accepting career technical credits vary at four-year institutions in Oregon. Consult an academic advisor about taking career technical courses as electives.

Notes

1. College-level courses are numbered 100 or higher. Courses numbered 001-099 identify developmental courses (e.g. RD 090), with the exception of ENG 110, 116, 117; MTH 100; RD 115; WR 110, 120, and WR 115 (taken before summer 1999, which are considered developmental.
2. Foundational Skills are open to demonstration of proficiency. Waiver testing is not the same as placement testing. Students should contact the appropriate academic department for information.
3. Second year foreign language courses, but not first year, may be included among courses that count toward the Arts and Letters requirement.
4. University second language admission requirements for transfer students graduating high school in 1997 and thereafter include one of the following:
   a) two terms of a college-level second language with an average grade of C- or above, OR
   b) two years of the same high school-level second language with an average grade of C- or above, OR
   c) satisfactory performance on an approved second language assessment of proficiency.
   d) demonstrated proficiency in American Sign Language meets this second language admission requirement.
5. Credit-by-Exam and Credit-by-Assessment may comprise up to 25% of total degree credits.
6. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
7. Lower-division college-level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by public universities in Oregon. In such cases, the courses in question will normally transfer as electives.
8. Courses numbered 199, 280, 298, or 299 count as electives and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved for Discipline Studies. Consult an academic advisor or counselor.

Associate of Science Oregon Transfer: Business

The Associate of Science Oregon Transfer in Business (ASOT- Business) degree has business-focused lower division general education requirements accepted by public universities in Oregon, and electives tailored for requirements at each intended transfer institution. Students transferring with this degree will have junior standing for registration purposes.

The ASOT-Business degree does not guarantee admission to Oregon universities, admission to a competitive business major, or junior standing in a major. Course, class standing, or GPA requirements for specific majors, departments, or schools are not necessarily satisfied by an ASOT-Business degree.

Each student is strongly encouraged to work with an academic advisor or counselor to select degree requirement courses that align with requirements at an intended transfer institution. Requirements at institutions vary, and elective choices differ depending on the intended transfer institution. Each student must contact the specific 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 transfer institution and the Business school/program.

Guidelines

1. Complete a total of 90 credits college-level coursework (see notes).
2. Complete at least 24 credits at Lane.
3. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits, except for Health/Wellness/Fitness courses, which may be any number of credits.
4. All Elective courses may be any number of credits.
5. All courses must be passed with a grade of "C-," "P" or better.
6. Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.
7. Cumulative Lane GPA must be at least 2.0 when the Associate of Science Oregon Transfer: Business degree is awarded.

Note: Many Business programs have competitive admission. Minimum GPA and grades will not generally be high enough to gain admission to competitive programs.

I. Foundational Skills

Writing
Students taking writing classes of three credits each must take WR 121/WR121_H, and WR 122/WR 122_H, and either WR 123 or WR 227. Students taking writing classes of four credits each must take WR 121/WR121_H, and WR 122/WR 122_H or WR 227. A student must have eight credits of Writing. Meets the Information Literacy requirement.

Oral Communications
One course from the Oral Communications list.

Mathematics
Three courses MTH 105 and above, one of which must be MTH 243.

Computer Applications
One computer applications course: CIS 101, CS 120.

II. Discipline Studies

In addition to courses used for Foundational Skills, students must select additional courses in the areas identified below.

Cultural Literacy
One course from any discipline studies courses designated as meeting the statewide criteria for cultural literacy. Courses approved for the Cultural Literacy requirement are marked with an (*) in the discipline studies lists of courses on the following pages. The credits for such courses only will be counted once toward the 90 credits required to complete the degree.

Arts/Letters
Three courses from two or more disciplines from the Arts and Letters list.

Social Sciences
Four courses from two or more disciplines from the Social Science list, with a minimum of two courses in "principles of economics" (to include microeconomics and macroeconomics) at the 200 level.

Science/Math/Computer Science
Four courses from two or more disciplines including at least three laboratory courses in biological and/or physical science from the Science/Math/Computer Science lists.

Note: Only one of the BI 101s, and one of the BI 102s and one of the BI 103s will meet the Science/Math/Computer Science requirements for any Lane Degree. (See the course description for more information.)

III. Business-Specific Requirements

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 public universities in Oregon 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

Any college-level courses that will bring total credits to 90 credits including:

- Up to 18 credits of Cooperative Education may be included as electives. See Cooperative Education/Internships in the course descriptions.
- Up to 12 credits of Individual Music Lessons (MUP) may be included as electives.
- Up to 12 credits of Physical Education activity may be included within the entire degree (Electives and Health/Wellness Fitness).
- WR 115 may be included in the degree as an elective if completed summer 1999 or later.
- Up to 12 credits of Career Technical Education. See the list of Career Technical course prefixes in the Associate of Applied Science Degree section. Career Technical courses fulfilling Health/Wellness/Fitness requirements will not be counted in the 12-credit limit on Career Technical courses. Policies on accepting Career Technical credits vary at the four-year institutions in Oregon. Consult an academic advisor about taking Career Technical courses as Electives.

V. University-Specific Prerequisites

Consult Lanes' Counseling and Advising department for a list of university-specific prerequisites and recommended coursework. Please note: Prerequisites and recommendations of specific institutions may change without notice.

Notes

1. College-level courses are numbered 100 or higher. Courses numbered 001-099 identify developmental courses (e.g. RD 090), with the exception of ENG 110, 116, 117; MTH 100, RD 115, WR 110, 120 and WR 115 (taken before summer 1999), which are considered developmental.
2. Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or academic advisor. Waiver testing is not the same as placement testing.
3. Second year foreign language courses, but not first year, may be included among courses that count toward the Arts and Letters requirement. American Sign Language (ASL) is considered a foreign language.
4. University second language admission requirements for transfer students graduating high school in 1997 and thereafter include one of the following:
   a) two terms of a college-level second language with an average grade of C- or above, OR
   b) two years of the same high school-level second language with an average grade of C- or above, OR
   c) satisfactory performance on an approved second language assessment of proficiency.
   d) demonstrated proficiency in American Sign Language meets this second language admission requirement.
5. Credit-by-Exam and Credit-by-Assessment may comprise up to 25% of total degree credits.
6. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
7. Lower-division college-level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by public universities in Oregon. In such cases, the courses in question will normally transfer as electives.
8. Courses numbered 199, 280, 298, or 299 count as electives, and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental, and may later be reviewed and approved for Discipline Studies. Consult an academic advisor or counselor.

Associate of Science Oregon Transfer: Computer Science

The Associate of Science Oregon Transfer in Computer Science (ASOT-CS) degree has computer science-focused lower division general education requirements accepted by public universities in Oregon, and electives tailored for requirements at each intended transfer institution. Students transferring with this degree will have junior standing for registration purposes only.

The ASOT-CS degree does not guarantee admission to Oregon universities, admission to a competitive computer science major, or junior standing in a major. Course, class standing, or GPA requirements for specific majors, departments, or schools are not necessarily satisfied by an ASOT-CS degree.

Each student is strongly encouraged to work with an academic advisor or counselor to select degree requirement courses that align with requirements at an intended transfer institution. Requirements at institutions vary, and elective choices differ depending on the intended transfer institution. Each student must contact the specific computer science school/program early in the first year of an ASOT-CS degree to be advised about additional requirements and procedures for admission consideration to the transfer institution and the school/program.

Guidelines

1. Complete a total of 90 credits of college-level coursework (see notes).
2. Complete at least 24 credits at Lane.
3. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits, except for Health/Wellness/Fitness courses, which may be any number of credits.
4. All Elective courses may be any number of credits.
5. All courses must be passed with a grade of "C-", "P" or better except for the following courses, which must be taken for a letter grade and passed with a grade of "C" or better. P/NP will not be accepted.
   - CS 160: Introduction to Computer Science
   - CS 161: Computer Science 1
   - CS 162: Computer Science 2
   - CS 260: Data Structures
6. Maximum 16 credits of "P" may be used toward this degree. This limit does not include courses only offered P/NP.
7. Cumulative Lane GPA must be at least 2.0 when the Associate of Science Oregon Transfer: Computer Science degree is awarded. NOTE: Many CS programs have competitive admission. Minimum GPA and grades will not generally be high enough to gain admission to competitive programs.

I. Foundational Skills

Writing
Students taking writing classes of three credits each must take WR 121/WR 121_H, and WR 122/WR 122_H, and either WR 123 or WR 227. Students taking writing classes of four credits each must take WR 121/WR 121_H, and WR 122/WR 122_H or WR 227. A student must have eight credits of Writing. Meets the Information Literacy requirement.

Note: WR 227 will meet additional requirements at some CS baccalaureate programs.

Oral Communication
One course from the Oral Communications list.

Mathematics
Two courses: MTH 251 Differential Calculus and MTH 252 Integral Calculus.

Health/Wellness/Fitness
One or more courses totaling at least three credits from the Health/Wellness/Fitness list.

II. Discipline Studies

Cultural Literacy
Courses approved for the Cultural Literacy requirement are marked with (*) in the discipline studies lists of courses on the following pages. The credits for such courses only will be counted once toward the 90 credits required to complete the degree.

Arts and Letters
Three courses from two or more disciplines from the Arts and Letters list.

Social Sciences
Four courses from two or more disciplines from the Social Science list.

Science/Math/Computer Science
Four courses from two or more disciplines including at least three laboratory courses in biological and/or physical science from the Science/Math/Computer Science lists.

Note 1: Only one of the BI 101s, and one of the BI 102s, and one of the BI 103s will meet the Science/Math/Computer Science requirements for any Lane Degree. (See the course description for more information.

Note 2: See academic advising team for your intended major at transfer institution. Some programs require physics.

Computer Science Specific Requirements
A minimum of sixteen credits in Computer Science consisting of the following courses:

All of the following courses must be taken for a letter grade and passed with a grade of "C" or better. P/NP will not be accepted.

- CS 160: Introduction to Computer Science
- CS 161: Computer Science 1
- CS 162: Computer Science 2
- CS 260: Data Structures

Note: Transfer institutions may have competitive admissions requirements requiring a higher grade in the above courses.

Electives
Any college-level courses that bring total credits to 90 credits including:

- Up to 18 credits of Cooperative Education may be included as electives. See Cooperative Education/Internships in the course descriptions.
- Up to 12 credits of Individual Music Lessons (MUP) may be included as electives.
- Up to 12 credits of Physical Education activity may be included within the entire degree (Electives and Health/Wellness/Fitness).
- WR 115 may be included in the degree as an elective if completed summer 1999 or later.
- Up to 12 credits of Career Technical Education. See the list of Career Technical course prefixes in the Associate of Applied Science Degree section. Career Technical courses fulfilling Health/Wellness/Fitness requirements will not be counted in the 12-credit limit on Career Technical courses. Policies on accepting Career Technical credits vary at the four-year institutions in Oregon. Consult an academic advisor about taking Career Technical courses as Electives.

V. University-Specific Prerequisites

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. Please carefully plan this in consultation with university specific CS program requirements. A current guide for university specific, lower division CS requirements is maintained at occcwiki.org or consult with an advisor from the target university program.

Notes

1. College-level courses are numbered 100 or higher. Courses numbered 001-099 identify developmental courses (e.g. RD 090), with the exception of ENG 110, 116, 117; MTH 100, RD 115, WR 110, 120 and WR 115 (taken before summer 1999), which are considered developmental.
2. Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or academic advisor. Waiver testing is not the same as placement testing.
3. Second year foreign language courses, but not first year, may be included among courses that count toward the Arts and Letters requirement. American Sign Language (ASL) is considered a foreign language.
4. University second language admission requirements for transfer students graduating high school in 1997 and thereafter include one of the following:
   a) two terms of a college-level second language with an average grade of C- or above, OR
   b) two years of the same high school-level second language with an average grade of C- or above, OR
   c) satisfactory performance on an approved second language assessment of proficiency.
   d) demonstrated proficiency in American Sign Language meets this second language admission requirement.
5. Credit-by-Exam and Credit-by-Assessment may comprise up to 25% of total degree credits.
6. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
7. Lower-division college-level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by public universities in Oregon. In such cases, the courses in question will normally transfer as electives.
8. Courses numbered 199, 280, 298, or 299 count as electives, and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved for Discipline Studies. Consult an academic advisor or counselor.
9. Students and academic advisors should recognize that although the ASOT-CS provides and excellent structure for many students intending on pursuing a computer science four year degree, it is not ideal for everyone. Students should consult closely with a computer science advisor at both their community college and the four year transfer institution.

Approved Courses for Oregon Transfer Degrees and Oregon Transfer Module

Only the following courses meet the AAOT, ASOT-Business, and ASOT-Computer Science Discipline Studies degree requirements.

The following courses also meet Oregon Transfer Module Discipline Studies degree requirements.

Note: Courses marked with (*) are approved for the Cultural Literacy requirement.

Arts and Letters

ARH 200	Graphic Design History
ARH 203*	Am. Indian Art/Arch.History
ARH 204	History of Western Art 1
ARH 205	History of Western Art 2
ARH 206	History of Western Art 3
ARH 207*	History of Indian Art
ARH 208*	History of Chinese Art
ARH 209*	History of Japanese Art
ARH 211	Early Modern Art: 1850-1910
ARH 212	Twentieth-Century Art
ARH 214	Arts of the United States
ARH 217*	Islamic Art
ARH 218	History of Photography
ARH 219	History of Photography
ARH 220	History of Photo: 1950-Present
ART 111	Introduction to Visual Arts
ART 115	Basic Design: Fundamentals
ART 115_H	Basic Design: Fundamentals
ART 115GD	Basic Design: Fundamentals GD
ART 116	Basic Design: Color
ART 117	Basic Design: 3-Dimensional
ART 118	Artist Books and Pop-up
ART 120	Interm.Artist Books and Pop-up
ART 131	Introduction to Drawing
ART 220	Documentary Photography
ART 231	Drawing: Intermediate
ART 234	Drawing: Figure
ART 237	Illustration 1
ART 240	Natural Science Drawing
ART 248	Stone Sculpture
ART 250	Ceramics: Hand Building
ART 251	Ceramics: Wheel Throwing
ART 253	Ceramics: Intermediate
ART 261	Photography 1
ART 262	Photography 2
ART 270	Printmaking: Traditional and Digital Etching
ART 271	Printmaking: Woodcut and Linocut
ART 272	Printmaking: Experimental Processes
ART 273	Printmaking: Intermediate Traditional and Digital Etching
ART 274	Printmaking: Intermediate Woodcut and Linocut
ART 275	Screen Printing
ART 276	Sculpture: Introduction
ART 277	Sculpture: Welding
ART 278	Sculpture: Wood
ART 281	Painting: Introduction
ART 282	Landscape & Arch Photog
ART 284	Painting: Intermediate
ART 285	Advanced Screen Printing
ART 291	Sculpture: Metal Casting
ART 293	Sculpture: Figure
ART 294	Watercolor: Introduction
ART 295	Watercolor: Intermediate
CINE 265	Film History 1: Silent Era to Early Sound
CINE 266	Film History 2: Sound Era through the 1960s
CINE 267	Film History 3: 1960s to Present
COMM 100	Basic Communications
COMM 105	Listening & Critical Thinking
COMM 111	Fund of Public Speaking
COMM 111_H	Fund of Public Speaking
COMM 112	Persuasive Speech
COMM 115*	Intro to Intercultural Comm
COMM 130	Business & Profes Comm
COMM 218	Interpersonal Communication
COMM 219	Small Group Communication
COMM 220*	Comm, Gender & Culture
COMM 262	Voice and Articulation
CW 201*	Chinuk Wawa
CW 202*	Chinuk Wawa
CW 203*	Chinuk Wawa
D 160	Dance Composition
D 251	Looking at Dance
D 256	Anatomy of the Moving Body
D 257	Dance Improvisation
D 260	Group Choreography
ENG 100	Children's Literature
ENG 104	Intro to Literature: Fiction
ENG 105	Intro to Literature: Drama
ENG 105_H	Intro to Literature: Drama

ENG 106	Intro to Literature: Poetry
ENG 107*	Survey of World Literature
ENG 108*	Survey of World Literature
ENG 109*	Survey of World Literature
ENG 151*	Black American Literature
ENG 194	Literature of Comedy
ENG 201	Shakespeare
ENG 203	Shakespeare
ENG 204	Survey of British Literature
ENG 205	Survey of British Literature
ENG 215*	Latino/a Literature
ENG 217	Read Writing & Digital Culture
ENG 218*	Lit. Islamic World
ENG 222*	Literature and Gender
ENG 232*	Native American Lit, Myth,Folk
ENG 240	Nature Literature
ENG 243*	Native American Autobiography
ENG 244*	Asian American Literature
ENG 250*	Intro to Folklore & Mythology
ENG 253	Survey of American Literature
ENG 254	Survey of American Literature
ENG 257*	Amer Working Class in Fiction
ENG 259*	AfricanAmer.Poetry,Plays&Film
ENG 260*	Introduction to Women Writers
ENG 261	Science Fiction
ENG 270	Bob Dylan: American Poet
ES 244*	Native American Story Telling
FA 255	Understand Movies:American Cin
FA 264*	Women Make Movies
FA 265*	African American Film Images
FA 270	Film Genres
FA276*	Gender, Race, Class in U.S. Cinema
FR 201	Second Year French
FR 202	Second Year French
FR 203	Second Year French
FR 288*	Study Abroad: French/Culture
HUM 100	Humanities Through the Arts
J 134	Photojournalism
J 216	Newswriting1
MUS 101	Music Fundamentals
MUS 111	Music Theory 1(First Term)
MUS 112	Music Theory 1
MUS 113	Music Theory 1
MUS 118	Music Technology MIDI/Audio 1
MUS 119	Music Technology MIDI/Audio 2
MUS 201	Intro Music & Its Literature
MUS 202	Intro Music & Its Literature
MUS 203	Intro Music & Its Literature
MUS 205*	Intro to Jazz History
MUS 211	Music Theory 2(First Term)
MUS 212	Music Theory 2(Second Term)
MUS 213	Music Theory 2(Third Term)
MUS 260*	History of HIP-Hop and Rap Mus
MUS 261	Music History
MUS 262	Music History
MUS 263	Music History
MUS 264*	History of Rock Music 1
MUS 265*	History of Rock Music 2
MUS 266*	History of Rock Music 3
MUS 268	History of Electronic Music
PHL 201	Ethics
PHL 202	Theories of Knowledge
PHL 203	Theories of Reality
PHL 221	Critical Thinking
SPAN 201	Spanish Second Year
SPAN 202	Spanish Second Year
SPAN 203	Spanish Second Year
TA 140	Acting Shakespeare
TA 141	Acting 1 (Beginning)
TA 142	Acting 2 (Beginning)
TA 143	Acting 3 (Beginning)
TA 144	Improvisational Theater 1
TA 241	Intermediate Acting 1
TA 242	Intermediate Acting 2
TA 243	Acting for the Camera
TA 272*	Introduction to Theatre
WR 240	Creative Nonfiction
WR 241	Intro to Imag. Writing:Fiction
WR 242	Intro to Imagin Writing:Poetry

Social Science

ANTH 101	Physical Anthropology
ANTH 102*	World Archaeology
ANTH 102_H*	World Archaeology
ANTH 103*	Cultural Anthropology
ANTH 227*	Prehistory of Mexico
ANTH 228*	Cultures of Mexico
ANTH 229*	Chicano Culture
ANTH 231*	American Indian Studies
ANTH 232*	American Indian Studies
ANTH 233*	American Indian Studies
CJA 214	Intro to Forensic Science
ECON 200	Princ of Economics: Intro
ECON 201	Princ of Economics: Microecono
ECON 202	Princ of Economics: Macroecon
ECON 204	Intro to International Econ
ECON 250*	Class, Race & Gender in US Eco
ECON 260	Intro to Environ & Nat Res Eco
ED 100	Introduction to Teaching
ED 233	Adolescent Lrng & Devt
ES 101*	Historical Racial & Ethnic Iss
ES 102*	Contempory Racial & Ethnic Iss
ES 212	Chicano/Latino Studies: Political and Ideological Perspectives
ES 213	Chicano/Latino Studies: Contemporary Identity and Cultural Issues
ES 221*	African American Studies: Down From the Pyramids, Up From Slavery
ES 223*	African American Studies: A Luta Continua: The Struggle Continues
ES 241*	Native American Studies
ES 244*	Native American Story Telling
ES 250*	Class, Race & Gender US Econom
GEOG 141	Natural Environment
GEOG 142*	Intro to Human Geography
GEOG 151	Digital Earth
GIS 151	Digital Earth
GIS 245	GIS 1
GIS 246	GIS 2
HE 212	Women's Health
HE 255*	Global Health & Sustainability
HST 101	History Western Civilization
HST 102	History Western Civilization
HST 103	History Western Civilization
HST 104*	World History
HST 105*	World History
HST 106*	World History
HST 195*	History of Vietnam War
HST 201*	History of United States
HST 202*	History of United States
HST 203*	History of the United States
HST 208	US History Since 1945
HST 209	American History: Civil War
HST 266*	US Women's History
HUM 100	Humanities Through the Arts
PHL 201	Ethics
PHL 202	Theories of Knowledge
PHL 203	Theories of Reality
PHL 221	Critical Thinking
PS 101	Modern World Governments
PS 201	U.S. Government & Politics
PS 202	U.S. Government & Politics
PS 203	State & Local Govern.&Politics
PS 205*	International Relations
PS 208	Intro to Political Theory
PS 211	Peace&Conflict: Global
PS 212	Peace&Conflict : National
PS 213	Peace&Conflict: Local
PS 225	Political Ideology

PS 275	Legal Processes Through Civil Rights and Liberties
PS 297	Environmental Politics
PSY 201	General Psychology
PSY 202	General Psychology
PSY 203	General Psychology
PSY 215	Lifespan Developmental Psychol
PSY 239	Intro to Abnormal Psy
SLD 103*	Post-Racial America: Challenges and Opportunities
SLD 111*	Chicano/Latino Leadership
SLD 112*	Chicano/Latino Leadership 2
SLD 113*	Chicano/Latino Leadership 3
SLD 121*	African American Leadership
SOC 108A*	Selected Topics: Women's Bodie
SOC 204	Intro to Sociology
SOC 205	Soc Strat & Soc Sys
SOC 206	Inst & Soc Change
SOC 207*	Women and Work
SOC 208*	Sport & Society
SOC 210	Marriage, Fam & Intimate Rel
SOC 211	Social Deviance
SOC 213*	Race and Ethnicity
SOC 218*	Sociology of Gender
SOC 225	Social Problems
SOC 228	Intro Environmental Sociology
WS 101*	Introduction to Women Studies

Science, Math, Computer Science Courses with Laboratories

Note: Only one BI 101, one BI 102, and one BI 103 will meet the Science/Math/Computer Science requirements for any Lane degree, regardless of letter option. Additional BI 101, 102, or 103 course credits will count as electives. BI 103G General Biology: Global Ecology also will satisfy the Cultural Literacy requirement. GS 142 and GS 147 may be taken with a lab for 4 credits or without a lab for 3 credits.

ASTR 121	Astronomy of the Solar System
ASTR 122	Stellar Astronomy
ASTR 123	Cosmology and the Universe
BI 101	General Biology
BI 101_H	General Biology:
BI 102	General Biology
BI 102_H	General Biology
BI 103	General Biology
BI 103_H	General Biology
BI 112	Cell Bio for Health Occupation
BI 211	Principles of Biology
BI 212	Principles of Biology
BI 231	Human Anatomy & Physiology I
BI 232	Human Anatomy & Physiology 2
BI 233	Human Anatomy & Physiology 3
BI 234	Introductory Microbiology
BOT 213	Principles of Botany
CH 104	Introduction to General Chem
CH 106	Introduction to Organic and Biological Chemistry
CH 114	Intro to Forensic Chemistry
CH 221	General Chemistry 1
CH 222	General Chemistry 2
CH 223	General Chemistry 3
CH 241	Organic Chemistry
CH 242	Organic Chemistry
CH 243	Organic Chemistry
CJA 214	Intro to Forensic Science
ENSC 181	Terrestrial Environment
ENSC 182	Atmos Envir & Climate Change
ENSC 183	Aquatic Environment
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 Geology
G 148	Geologic Hazards
G 201	Earth Materials & Plate Tecton
G 202	Earth's Surface Systems
G 203	Evolution of the Earth
GEOG 151	Digital Earth
GIS 151	Digital Earth
GIS 245	GIS 1
GIS 246	GIS 2
GS 101	General Science (Nature of NW)
GS 104	Physical Science
GS 105	Physical Science
GS 106	Physical Science
GS 142	Earth Science: Earth Revealed
GS 147	Oceanography
PH 101	Fundamentals of Physics
PH 102	Fundamentals of Physics
PH 103	Fundamentals of Physics
PH 201	General Physics
PH 202	General Physics
PH 203	General Physics
PH 211	General Physics with Calculus
PH 212	General Physics with Calculus
PH 213	General Physics with Calculus
SOIL 205	Introduction to Soil Science
WST 230	Watersheds and Hydrology
Z 213	Principles of Zoology

Non-Laboratory Science, Math, Computer Science Courses

ANTH 101	Physical Anthropology
ANTH 102*	World Archaeology
CH 112	Chemistry for Health Occup.
CS 133P	Beginning Programming: Python
CS 160	Orientation to Comput. Science
CS 161C+	Computer Science 1
CS 162C+	Computer Science 2
CS 161P	Computer Science 1
CS 162P	Computer Science 2
CS 233N	Intermediate Programming C#
CS 233P	Intermediate Prog.: Python
CS 240U	Adv. Unix/Linux:Server Mgmt.
CS 260	Data Structures 1
GEOG 141	Natural Environment
GS 142	Earth Science: Earth Revealed
GS 147	Oceanography
GS 201	Scientific Skepticism
MTH 105	Math in Society
MTH 106	Math in Society 2
MTH 107	Math in Society 3
MTH 111	College Algebra
MTH 112	Trigonometry
MTH 211	Fundamentals Elementary Math 1
MTH 212	Fundamentals Elementary Math 2
MTH 213	Fundamentals Elementary Math 3
MTH 231	Discrete Mathematics 1
MTH 232	Discrete Mathmatics 2
MTH 241	Elementary Calculus 1
MTH 242	Elementary Calculus 2
MTH 243	Intro Probability & Statistics
MTH 251	Calculus 1 (Differential Calculus)
MTH 252	Calculus 2 (Integral Calc)
MTH 253	Calculus 3 (Infinite Ser Seq)
MTH 254	Vector Calculus 1 (Intro V M)

MTH 255	Vector Calculus 2 (Intro V A)
MTH 256	Applied Differential Equations
MTH 260	Linear Algebra
MTH 265	Statistics for Scientists and Engineers
PSY 212	Learning and Memory

Oral Communication

COMM 100	Basic Communication
COMM 111	Fundamentals of Public Speaking
COMM 112	Persuasive Speech
COMM 130	Business and Professional Speech
COMM 218	Interpersonal Communication
COMM 219	Group Discussion

Health/Wellness/Fitness

+Note: Career Technical courses fulfilling Health/Wellness/Fitness requirements will not be counted in the 12-credit limit on CT courses.

D 152	Dance Basics
D 153	Pilates Workout
D 160	Dance Composition
D 161	Strength, Stretch & Tone:Gyro
D 172	Dancing the Fluid Body
D 175	Tap Dance Beginning
D 176	Fluid Yoga
D 177	Modern Dance 1
D 178	Modern Dance 2
D 179	Modern Dance 3
D 183	Meditation in Motion
D 184	Hip Hop 1
D 185	Ballet 1
D 186	Ballet 2
D 187	Ballet 3
D 188	Jazz Dance 1
D 189	Jazz Dance 2
D 194	Hip Hop 2
D 196	Balinese Dance
D 251	Looking at Dance
D 256	Anatomy of the Moving Body
D 257	Dance Improvisation
D 260	Group Choreography
FN 225	Nutrition
HE 152	Drugs, Society & Behavior
HE 209	Human Sexuality
HE 222	Consumer Health
HE 240	Holistic Health
HE 250	Personal Health
HE 252	First Aid
HE 255*	Global Health & Sustainability
HE 262	First Aid 2
HE 275	Lifetime Health & Fitness
PE 102	Combination Aerobics
PE 103	Cardio Kickboxing
PE 104	Body Sculpt
PE 106	Yogilates
PE 107	Zumba Fitness
PE 108	Conditioning
PE 109	Exercise & Weight Control
PE 110	Walk Jog
PE 111	Group Cycling
PE 113	Fitness Ed: Introduction
PE 114	Fitness Ed: Continue/Returning
PE 115	Jogging
PE 116	Stability Ball Fitness
PE 117	Strength Training
PE 119	Strength Training for women
PE 133	Meditation
PE 134	Tai Chi Chuan
PE 136	Yoga
PE 137	Gentle Yoga
PE 183W	Progressive Inter. Exercise
PE 185Z	Yoga Intermediate
PE 234	Tai Chi Chuan Intermediate
PE 237	Yoga Intermediate
PEAT 100	Cross Country Women's Condi. 1
PEAT 115	Soccer - Women's Cond. 1
PEAT 125	Basketball - Mens Cond 1
PEAT 130	Basketball - Women's Cond 1
PEAT 135	Track&Field -Women's Cond. 1
PEAT 145	Baseball - Men's Cond.1
PEAT 200	Cross Country Women's Conditioning 2
PEAT 215	Soccer - Women's Condition 2
PEAT 225	Basketball - Mens Cond 2
PEAT 230	Basketball Women's Condition 1
PEAT 235	Track&Field - Women's Cond. 2
PEAT 245	Baseball - Men' s Cond. 2

Associate of Science Degree

For students intending to transfer, the Associate of Science (AS) degree may best match general education requirements of some four-year colleges or universities. Requirements of the AS include a rigorous general education program balanced with electives.

A student selecting this transfer option still must meet the receiving university's admission requirements, including course standing, grade point average and foreign language. The AS is NOT a block transfer degree. It does not guarantee that a student will have met the lower division general education requirements for baccalaureate degree programs.

Each student is strongly encouraged to work with an academic advisor to match career goals with an appropriate major and to select appropriate courses at an intended transfer institution.

Guidelines

1. Complete a total of 90 credits of college-level coursework (see notes).
2. Complete at least 24 credits at Lane.
3. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits, except for Health/PE courses, which may be any number of credits.
4. All Elective courses may be any number of credits.
5. Pass all Foundational Skills courses with a grade of "C-" or "P" or better. Pass all Discipline Studies and Elective courses with a grade of "D-" or "P" or better.
6. Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.
7. Cumulative GPA must be at least 2.0 when the Associate of Science degree is awarded.

I. Foundational Skills

Writing

Two courses (minimum 3 credits each): WR 115 (summer 1999 or after), WR 121/WR 121_H, WR 122/WR 122_H, WR 123, WR 227

Mathematics

One course (minimum 4 credits): MTH 105 or higher

Health/Wellness/Fitness

Physical Education

Three credits: one course required from the AAOT list of activity classes under Health/Wellness/Fitness, plus two additional credits from PE 181-298. One credit from PE 186W accepted to meet this requirement.

OR

Health Education
One course from this list: EXMS 214, FN 225, HE 152, 209, 222, 240, 250, 255, 262, 275 or 290; or HE 125, 252 (summer 1997 or later), HI 101

II. Discipline Studies

In addition to courses used for Foundational Skills, students must select additional courses in the areas identified below.

Arts and Letters
Three courses from the following: Art, Art History, Communication, Dance, Effective Learning, Film Arts, Languages (CW, FR, SPAN, ASL, and other Transfer Languages), Humanities, Journalism, Literature, Music, Philosophy, Religion, Theater Arts, Writing, BA 214, CW 201-203, ES 244

Social Science
Three courses from the following: Anthropology, Career Guidance, Economics, Ethnic Studies, Geographic Information Science, Geography, History, Human Development, Human Services, Philosophy, Political Science, Psychology, Religion, Sociology, Women's Studies.

Science/Math/Computer Science
Nine courses from the following: Astronomy, Biology, Botany, Chemistry, Computer Science (CS prefix courses only, not CIS), Engineering, Geographic Information Science (GIS), Geology (G or ENSC), Mathematics (MTH 105 and higher), Physical Science (GS prefix), Physics, Zoology; ANTH 101, CJA 214, DA 110, DRF 205, DRF 207, ET 129, ET 130, ET 131, ET 145, ET 146, ET 151, ET 152, FT 113, GEOG 141, HO 150, HO 152, PSY 217, WST 230.

NOTE: Only one of the BI 101s, and one of the BI 102s and one of the BI 103s will meet the Science/Math/Computer Science requirements for any Lane Degree. (See the course description for more information).

III. Electives

Any college-level courses that bring total credits to 90 credits, including:

- Up to 18 credits of Cooperative Education may be included as electives. See Cooperative Education/Internships in the Course Descriptions.
- Up to 12 credits of Individual Music Lessons (MUP) may be included as electives.
- Up to 12 credits of Physical Education activity may be included within the entire degree (Electives and Health/Wellness Fitness).
- Up to 12 credits of Career Technical Education. See the list of Career Technical course prefixes in the Associate of Applied Science Degree section. Career Technical courses fulfilling Health/Wellness/Fitness requirements will not be counted in the 12-credit limit on Career Technical courses. Policies on accepting Career Technical credits vary at the four-year institutions in Oregon. Consult an academic advisor about taking Career Technical courses as Electives.

Notes

1. College-level courses are numbered 100 or higher. Courses numbered 001-099 identify developmental courses (e.g. RD 090), with the exception of ENG 110, 116, 117; MTH 100, RD 115, WR 110, 120 and WR 115 (taken before summer 1999), which are considered developmental.
2. Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or academic advisor. Waiver testing is not the same as placement testing.
3. University second language admission requirements for transfer students graduating high school in 1997 and thereafter include one of the following:
   a) two terms of a college-level second language with an average grade of C- or above, OR
   b) two years of the same high school-level second language with an average grade of C- or above, OR
   c) satisfactory performance on an approved second language assessment of proficiency.
   d) demonstrated proficiency in American Sign Language meets this second language admission requirement.
4. Credit-by-Exam and Credit-by-Assessment may comprise up to 25% of total degree credits.
5. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
6. Lower-division college-level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by public universities in Oregon. In such cases, the courses in question will normally transfer as electives.
7. Courses numbered 199, 280, 298, or 299 count as electives, and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental, and may later be reviewed and approved for Discipline Studies. Consult an academic advisor or counselor.

Associate of Science: University of Oregon

For students intending to transfer, the following Associate of Science (AS) degree may best match general education requirements for the University of Oregon (UO). Requirements of the AS degree include a rigorous general education program balanced with electives.

The AS-UO is NOT a block transfer degree. It does not guarantee that a student will have met the lower division general education requirements for baccalaureate degree programs. For some students planning to transfer to the UO, the AS-UO may be a better option than the AAOT.

Each student is strongly encouraged to work with an academic advisor to match career goals with an appropriate major and to select appropriate courses for transfer to the UO.

Guidelines

1. Complete a total of 90 credits of college-level coursework (see notes).
2. Complete at least 24 credits at Lane.
3. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits.
4. All Elective courses may be any number of credits.
5. Pass all Foundational Skills courses with a grade of "C-" or "P" or better. Pass all Discipline Studies and Elective courses with a grade of "D-" or "P" or better.
6. Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.
7. Cumulative GPA must be at least 2.0 when the Associate of Science: University of Oregon degree is awarded.

I. Foundational Skills

Writing
Two courses (minimum 3 credits each): WR 121/WR 121_H and either WR 122/WR 122_H or WR 123

Mathematics
One course (minimum of 4 credits): MTH 105 or higher

II. Discipline Studies

In addition to courses used for Foundational Skills, students must select additional courses in the areas identified below.

Each Discipline Studies area must include:

1. At least two courses from one subject area and at least two different subject areas
2. No more than three courses from the same subject area.
3. At least one course from a second subject area

Arts/Letters
15 credits from the Arts and Letters: AS-UO list

Social Science
15 credits from the Social Science: AS-UO list

Science/Math/Computer Science
15 credits from the Science/Math/Computer Science: AS-UO list

III. Electives

Any college-level courses that bring total credits to 90 credits. A maximum of 24 credits may be earned in the following areas:

1. Career Technical courses. See the list of Career Technical course prefixes in the Associate of Applied Science section.
2. PE and dance activity courses (Dance majors see Academic Advising team for limitations in major requirements)
3. Studio instruction in music – MUP (Music majors see Academic Advising team for limitations in major requirements)
4. Cooperative Education and supervised field experience
5. WR 115 may be included in the degree as an elective if completed summer 1999 or later.

Notes

1. College-level courses are numbered 100 or higher. Courses numbered 001-099 identify developmental courses (e.g. RD 090), with the exception of ENG 110, 116, 117; MTH 100, RD 115, WR 110, 120 and WR 115 (taken before summer 1999), which are considered developmental.
2. Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or academic advisor. Waiver testing is not the same as placement testing.
3. University second language admission requirements for transfer students graduating high school in 1997 and thereafter include one of the following:
   a) two terms of a college-level second language with an average grade of C- or above, OR
   b) two years of the same high school-level second language with an average grade of C- or above, OR
   c) satisfactory performance on an approved second language assessment of proficiency.
   d) demonstrated proficiency in American Sign Language meets this second language admission requirement.
4. Credit-by-Exam and Credit-by-Assessment may comprise up to 25% of total credits.
5. Repeatable courses vary from institution to instituition. Please check with the UO regarding repeat acceptance practices.
6. Lower-division college-level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by public universities in Oregon. In such cases, the courses in question will normally transfer as electives.
7. Courses numbered 199, 280, 298, or 299 count as electives, and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved for Discipline Studies. Consult an academic advisor or counselor.
8. The UO only allows one course in a student's major subject to count in a Discipline area. Example: Biology majors can only count one Biology course in the Science/Math/CS area at the UO.
9. A student selecting this transfer option still must meet the UO admission requirements, including course standing, grade point average and foreign language.

   Note: UO requires a minimum 2.25 GPA in all transfer credits for Oregon Residents (2.5 for nonresidents) for admission purposes.

Group I: ARTS AND LETTERS: AS-UO

* Courses used to fulfill the Arts and Letters group requirements cannot also be used to meet the foreign language requirements for the B.A. degree

**Transfer as ENG courses

Transfers to UO as Art History

ARH 200	Graphic Design History
ARH 203	American Indian Art & Architecture History
ARH 204, 205, 206	History of Western Art 1, 2, 3
ARH 207	History of Indian Art
ARH 208	History of Chinese Art
ARH 209	History of Japanese Art
ARH 211	Early Modern Art: 1850-1910
ARH 212	Twentieth-Century Art
ARH 214	Arts of the United States
ARH 217	Islamic Art
ARH 218, 219	History of Photography 1, 2
ARH 220	History of Photography: 1950-Present
ART 111	Intro to Visual Arts

Transfers to UO as Dance

D 251	Looking at Dance

Transfers to UO as English

ENG 100	Children's Literature
ENG 104	Intro to Literature: Fiction
ENG 105, 105_H	Intro to Literature: Drama / Honors
ENG 106	Intro to Literature: Poetry
ENG 107, 108, 109	Survey of World Literature 1, 2, 3
ENG 151	Black American Literature
ENG 194	Literature of Comedy
ENG 201, 203	Shakespeare 1, 2
ENG 204, 205	Survey of British Literature 1, 2
ENG 215	Latino/a Literature
ENG 217	Reading, Writing & Digital Culture
ENG 218	Literature of the Islamic World
ENG 222	Literature & Gender
ENG 232	Native American Literature, Myth & Folklore
ENG 240	Nature Literature
ENG 243	Native American Autobiography
ENG 244	Asian American Literature
ENG 253, 254	Survey of American Literature 1, 2
ENG 257	The American Working Class in Fiction & Non-Fiction
ENG 259	African American Poetry, Plays & Film
ENG 260	Intro to Women Writers
ENG 261	Science Fiction
ENG 270	Bob Dylan: American Poet
FA 255	Understanding Movies: American Cinema
FA 264	Women Make Movies
FA 265	African American Film Images

Transfers to UO as Folklore

ENG 250	Intro to Folklore & Mythology

Transfers to UO as French

FR 201, 202, 203	Second Year French 1, 2, 3
FR 288	Study Abroad: French Language & Culture in Normandy

NOTE: UO considers FR 203 and FR 288 as repeats. Students will receive credit for only one of these courses. Courses meeting the foreign language requirements for the B.A. degree cannot be used to fulfill the Arts & Letters general education requirement.

Transfers to UO as Humanities

HUM 100	Humanities Through the Arts

Transfers to UO as Music

MUS 101	Music Fundamentals

MUS 201, 202, 203	Intro to Music & Its Literature 1, 2, 3
MUS 205	Intro to Jazz History
MUS 260	History of Hip Hop & Rap
MUS 261, 262, 263	Music History 1, 2, 3
MUS 264, 265, 266	History of Rock Music 1, 2, 3

Transfers to UO as Native American Studies

CW 201, 202, 203	Second Year Chinuk Wawa 1, 2, 3

NOTE: Courses meeting the foreign language requirements for the B.A. degree cannot be used to fulfill the Arts & Letters general education requirement.

Transfers to UO as Philosophy

PHL 201	Ethics
PHL 202	Theories of Knowledge
PHL 203	Theories of Reality
PHL 221	Critical Thinking

Transfers to UO as Spanish

SPAN 201, 202, 203	Second Year Spanish 1, 2, 3

NOTE: Courses meeting the foreign language requirements for the B.A. degree cannot be used to fulfill the Arts & Letters general education requirement.

Transfers to UO as Speech

COMM 100	Basic Communications
COMM 111, 111_H	Fundamentals of Public Speaking / Honors
COMM 115	Intro to Intercultural Communication
COMM 218	Interpersonal Communication
COMM 220	Communication, Gender & Culture

Transfers to UO as Theater Arts

TA 272	Intro to Theatre

Group II: SOCIAL SCIENCE: AS-UO

Transfers to UO as Anthropology

ANTH 102, 102_H	World Archaeology / Honors
ANTH 103	Cultural Anthropology
ANTH 227	Prehistory of Mexico
ANTH 228	Cultures of Mexico
ANTH 229	Chicano Culture
ANTH 231, 232, 233	American Indian Studies

Transfers to UO as Business

BA 101	Intro to Business

Transfers to UO as Economics

ECON 200, 201, 202	Principles of Economics: Intro / Micro / Macro
ECON 204	Intro to International Economics
ECON 250	Class, Race & Gender in the US Economy
ECON 260	Intro to Environmental & Natural Resource Economy

NOTE: Lane considers ECON 250 and ES 250 as repeats. Students will receive credit for only one of these courses.

Transfers to UO as Educational Studies

ED 100	Intro to Teaching

Transfers to UO as Ethnic Studies

ES 101, 102	Racial & Ethnic Issues: Historical / Contemporary
ES 212, 213	Chicano / Latino Studies
ES 221, 223	African American Studies
ES 241	Native American Studies
ES 244	Native American Story Telling
ES 250	Class, Race & Gender in the US Economy
SLD 112, 113	Chicano / Latino Leadership 2, 3

NOTE: Lane considers ES 250 and ECON 250 as repeats. Students will receive credit for only one of these courses.

Transfers to UO as Geography

GEOG 142	Intro to Human Geography
GIS 151	Digital Earth

Transfers to UO as History

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 208	US History since 1945
HST 209	American History: The Civil War
HST 266	US Women's History

Transfers to UO as Political Science

PS 201, 202	US Government & Politics
PS 203	State & Local Government & Politics
PS 205	International Relations
PS 208	Intro to Political Theory
PS 211, 212, 213	Peace & Conflict Studies: Global / National / Local
PS 225	Political Ideology
PS 275	Legal Processes through Civil Rights & Liberties

Transfers to UO as Psychology

PSY 202, 203	General Psychology
PSY 215	Lifespan Developmental Psychology
PSY 231	Human Sexual Behavior
PSY 239	Intro to Abnormal Psychology

Transfers to UO as Sociology

SLD 101	Native Circles: It's Your Life
SLD 103	Post Racial America: Challenges & Opportunities
SLD 111	Chicano / Latino Leadership
SLD 121	African American Leadership
SOC 108A	Selected Topics in Women's Studies, Women's Bodies, Women's Selves
SOC 204	Intro to Sociology
SOC 205	Social Stratification & Social Systems
SOC 206	Institutions & Social Change
SOC 207	Women & Work
SOC 208	Sport & Society
SOC 210	Marriage, Family & Intimate Relations
SOC 211	Social Deviance
SOC 213	Race & Ethnicity
SOC 218	Sociology of Gender
SOC 225	Social Problems
SOC 228	Intro to Environmental Sociology

Transfers to UO as Women's and Gender Studies

WS 101	Intro to Women's Studies

GROUP III: SCIENCE/MATH/COMPUTER SCIENCE: AS-UO

* Students may receive credit for only one Calculus 1 class and one Calculus 2 class.

** Courses used to fulfill the Science group requirement cannot also be used to meet mathematics or computer and information science requirements for the B.S. degree.

Transfers to UO as Anthropology

ANTH 101	Physical Anthropology

Transfers to UO as Astronomy

ASTR 121	Astronomy of the Solar System
ASTR 122	Stellar Astronomy
ASTR 123	Cosmology & the Universe

Transfers to UO as Biology

BI 101E-K, 101_H	General Biology / Honors
BI 102B-J, 102_H	General Biology / Honors
BI 103A-M, 103_H	General Biology / Honors
BI 112	Cell Biology for Health Occupations
BI 211, 212	Principles of Biology 1, 2
BOT 213, Z 213	Principles of Biology 3: Botany / Zoology
BI 231, 232, 233	Human Anatomy & Physiology 1, 2, 3
BI 234	Introductory Microbiology

NOTE: UO considers all letter options of BI 101, BI 102, and BI 103 as repeats. Students will receive credit for only one BI 101, one BI 102, and one BI 103 course. UO considers BOT 213 and Z 213 as repeats. Students will receive credit for only one of these courses.

Transfers to UO as Chemistry

CH 104	Intro to General Chemistry
CH 106	Intro to Organic & Biological Chemistry
CH 112	Chemistry for Health Occupations

CH 114	Intro to Forensic Chemistry
CH 150	Preparatory Chemistry
CH 221, 222, 223	General Chemistry 1, 2, 3
CH 241, 242, 243	Organic Chemistry 1, 2, 3

Transfers to UO as Computer & Information Science

CS 120	Concepts of Computing: Information Processing
CS 133JS	Beginning Programming: Java Script
CS 160	Orientation to Computer Science
CS 161C+, 161P	Computer Science 1
CS 162C+, 162P	Computer Science 2
CS 233JS, 233N, 233P	Intermediate Programming: Java Script/C#/Python
CS 234N	Advanced Programming: C#
CS 260	Data Structures 1

NOTE: UO considers all letter options of CS 161 and CS 162 as repeats. Students will receive credit for only one CS 161 and one CS 162 course. Courses meeting Computer and Information Science requirements for the B.S. degree cannot be used to fulfill the Science/Math/Computer Science general education requirement.

Transfers to UO as General Science

ENSC 181	Terrestrial Environment
ENSC 182	Atmospheric Environment & Climate Change
ENSC 183	Aquatic Environment
GS 101	General Science (Nature of the Northwest)
GS 104, 105, 106	Physical Science 1, 2, 3
GS 109	Meteorology
GS 142	Earth Science: Earth Revealed
GS 147	Oceanography
HO 150, 152	Human Body Systems 1, 2

Transfers to UO as Geography

GEOG 141	Natural Environment

Transfers to UO as Geology

G 101	Earth's Dynamic Interior
G 102	Earth's Dynamic Surface
G 103	Evolving Earth
G 146	Rocks & Minerals
G 147	National Parks Geology
G 148	Geologic Hazards
G 201	Earth Materials & Plate Tectonics
G 202	Earth's Surface Systems
G 203	Evolution of the Earth
SOIL 205	Intro to Soil Science

Transfers to UO as Human Physiology

FN 225	Nutrition

Transfers to UO as Mathematics

MTH 105, 106, 107	Math in Society 1, 2, 3
MTH 211, 212, 213	Fundamentals of Elementary Math 1, 2, 3
MTH 231, 232	Discrete Math 1, 2
MTH 241, 242	Elementary Calculus 1, 2
MTH 243	Intro to Probability & Statistics
MTH 251, 252, 253	Calculus 1, 2, 3
MTH 260	Linear Algebra
MTH 265	Statistics for Scientists & Engineers

NOTE: Students may receive credit for MTH 241 or MTH 251, but not both. Students may receive credit for MTH 242 or MTH 252, but not both. Courses meeting the Mathematics requirements for the B.S. degree cannot be used to fulfill the Science/Math/Computer Science general education requirement.

Transfers to UO as Physics

PH 101, 102, 103	Fundamentals of Physics 1, 2, 3
PH 201, 202 203	General Physics 1, 2, 3
PH 211, 212, 213	General Physics with Calculus 1, 2, 3

Transfers to UO as Psychology

PSY 201	General Psychology
PSY 212	Learning & Memory

MULTICULTURAL REQUIREMENT: AS-UO

Bachelor's degree candidates at the UO, including those with an AAOT, ASOT-Business, or ASOT-Computer Science, must complete one course in two of the following categories: AC – American Cultures; IP – Identity, Pluralism & Tolerance; and IC – International Cultures. A minimum of 6 credits in approved courses must be earned.

Area A: American Cultures

ANTH 229	Chicano Culture
ANTH 231, 232, 233	American Indian Studies
ARH 203	American Indian Art & Architecture History
ENG 151	Black American Literature
ENG 215	Latino/a Literature
ENG 232	Native American Literature, Myth & Folklore
ENG 243	Native American Autobiography
ENG 259	African American Poetry, Plays & Film
ES 101, 102	Racial & Ethnic Issues: Historical / Contemporary
ES 212	Chicano / Latino Studies
ES 221, 223	African American Studies
ES 241	Native American Studies
ES 244	Native American Story Telling
FA 265	African American Film Images
MUS 205	Intro to Jazz History
MUS 260	History of Hip Hop & Rap
MUS 264, 265, 266	History of Rock Music 1, 2, 3
SLD 101	Native Circles: It's Your Life
SLD 103	Post Racial America: Challenges & Opportunities
SLD 112, 113	Chicano / Latino Leadership
SLD 121	African American Leadership
SOC 225	Social Problems

Area B: Identity, Pluralism & Tolerance

COMM 115	Intro to Intercultural Communication
COMM 220	Communication, Gender & Culture
ECON 250	Class, Race & Gender in the US Economy
ENG 222	Literature & Gender
ENG 250	Intro to Folklore & Mythology
ENG 260	Intro to Women Writers
ES 213	Chicano / Latino Studies
ES 250	Class, Race & Gender in the US Economy
FA 264	Women Make Movies
FA 276	Gender, Race & Class in US Cinema
HS 267	Cultural Competence in Human Services
HST 195	History of the Vietnam War
HST 266	US Women's History
SOC 108A	Selected Topics in Women's Studies, Bodies, Selves
SOC 204	Intro to Sociology
SOC 205	Social Stratification & Social Systems
SOC 207	Women & Work
SOC 213	Race & Ethnicity
SOC 218	Sociology of Gender
WS 101	Intro to Women's Studies

Area C: International Cultures

ANTH 102, 102_H	World Archaeology / Honors
ANTH 103	Cultural Anthropology
ANTH 227	Prehistory of Mexico
ANTH 228	Cultures of Mexico
ARH 207	History of Indian Art
ARH 208	History of Chinese Art
ARH 209	History of Japanese Art
ARH 217	Islamic Art
ENG 107, 108, 109	Survey of World Literature 1, 2, 3
ENG 218	Literature of the Islamic World
ENG 244	Asian American Literature
GEOG 142	Intro to Human Geography
HST 104, 105 106	World History
SLD 111	Chicano / Latino Leadership

Associate of Science: Oregon State University

For students intending to transfer, the following Associate of Science (AS) degree may best match general education requirements for Oregon State University (OSU). Requirements of the AS degree include a rigorous general education program balanced with electives.

The AS-OSU is **not** a block transfer degree. It does not guarantee that a student will have met the lower division general education requirements for baccalaureate degree programs. For some students planning to transfer to OSU, the AS-OSU may be a better option than the AAOT.

Each student is strongly encouraged to work with an academic advisor to match career goals with an appropriate major and to select appropriate courses for transfer to OSU.

Guidelines

1. Complete a total of 90 credits of college-level coursework (see notes).
2. Complete at least 24 credits at Lane.
3. Skill Courses and Perspectives Courses must be a minimum of 3 credits.
4. All Elective courses may be any number of credits.
5. Pass all Skills Courses with a grade of "C-" or "P" or better. Pass all Perspectives Courses and Elective courses with a grade of "D-" or "P" or better.
6. Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.
7. No single course can be used to satisfy more than one area of the Skill or Perspectives courses, even though some courses are approved for more than one area.
8. Cumulative GPA must be at least 2.0 when the Associate of Science degree is awarded.

I. Skill Courses

1. Writing I (3 credits) -- see the Skill Courses: AS-OSU list
2. Writing II (3 credits) -- see the Skill Courses: AS-OSU list
3. Writing III/Speech (3 credits) -- see the Skill Courses: AS-OSU list
4. Mathematics (3 credits) -- see the Skill Courses: AS-OSU list
5. Health/Fitness (3 credits) -- see the Skill Courses: AS-OSU list

II. Perspectives Courses

In addition to Skill Courses, students must select additional courses in each of the areas identified below. No more than two courses from any one department may be used to satisfy the Perspectives area.

1. Physical Science with lab (4 credits) -- see the Perspectives Courses: OSU list
2. Biological Science with lab (4 credits) -- see the Perspectives Courses: OSU list
3. Choice of an additional Physical or Biological Science with lab (4 credits) -- see the Perspectives Courses: OSU list
4. Western Culture (3 credits) -- see the Perspectives Courses: OSU list
5. Cultural Diversity (3 credits) -- see the Perspectives Courses: OSU list
6. Literature and the Arts (3 credits) -- see the Perspectives Courses: OSU list
7. Social Processes and Institutions (3 credits) -- see the Perspectives Courses: OSU list
8. Difference, Power, and Discrimination (3 credits) -- see the Perspectives Courses: OSU list

III. Electives

Any college-level courses that bring total credits to 90 credits. Limitations include:

1. Career Technical courses -12 credit maximum. See the list of Career Technical course prefixes in the Associate of Applied Science section.
2. PE and dance activity courses -- 11 credit maximum (Dance majors see Academic Advising team for limitations in major requirements)
3. Studio instruction in music (MUP) -- 12 credit maximum (Music majors see Academic Advising team for limitations in major requirements)
4. Co-operative Education and supervised field experience --12 credits maximum.
5. WR 115 may be included in the degree as an elective if completed summer 1999 or later.

Notes

1. College-level courses are numbered 100 or higher. Courses numbered 001-099 identify developmental courses (e.g. RD 090), with the exception of ENG 110, 116, 117; MTH 100, RD 115, WR 110, 120 and WR 115. (taken before summer 1999), which are considered developmental.
2. Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or academic advisor. Waiver testing is not the same as placement testing.

   Note: OSU requires a minimum 2.25 GPA in college-level transfer credits for admission processes.
3. University second language admission requirements for transfer students graduating high school in 1997 and thereafter include one of the following:
   a) two terms of a college-level second language with an average grade of C- or above, OR
   b) two years of the same high school-level second language with an average grade of C- or above, OR
   c) satisfactory performance on an approved second language assessment of proficiency.
   d) demonstrated proficiency in American Sign Language meets this second language admission requirement.
4. Credit-by-Exam and Credit-by-Assessment may comprise up to 25% of total degree credits.
5. Repeatable courses may be used once to meet Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements. See limitations under Electives for maximum credits allowed for subject categories.
6. Lower-division college-level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by public universities in Oregon. In such cases, the courses in question will normally transfer as electives.
7. Courses numbered 199, 280, 298,or 299 count as electives and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental and later may be reviewed and approved for Discipline Studies.
8. Only the highest grade for a repeated course will be calculated in the GPA for the purposes of admissions to OSU.
9. OSU requires an additional 9 credits of junior or senior year courses to satisfy general education ("Baccalaureate Core") requirements for all bachelor's degrees. These credits must be taken at OSU.
10. A student selecting this transfer option must still meet OSU admission requirements, including course standing, grade point average and foreign language. Note: OSU requires a minimum 2.25 GPA in college-level transfer credits for admission purposes.

Skill Courses: AS-OSU

Writing I

WR 121	Intro to Academic Composition
WR 121_H	Intro to Academic Composition-Honors

Writing II

BA 214	Business Communications
J216	Newswriting I
WR 122	Argument, Research & Multimodal Composition
WR 122_H	Argument, Style and Research & Multimodal Composition-Honors
WR 123	Composition: Research
WR 227	Technical Writing
WR 240	Creative Nonfiction
WR 241	Intro to Imag Writing: Fiction
WR 242	Intro to Imag Writing: Poetry

Writing III

COMM 111	Fund of Public Speaking
COMM 112	Persuasive Speech
COMM 218	Interpersonal Communication
COMM 219	Small Group Discussion

Mathematics

MTH105	Intro to Contemporary Math
MTH106	Intro to Contemporary Math 2
MTH111	College Algebra
MTH112	Trigonometry
MTH211	Fundamentals of Elementary Math 1
MTH241	Elementary Calculus 1
MTH251	Calculus 1 - Differential Calc

Fitness

HE 275	Lifetime Health & Fitness

Perspectives Courses: AS-OSU

Physical Science

CH 104	Introductory Chemistry 1
CH 110	Chemistry in Everyday Life
CH 114	Forensic Chemistry
CH 221, 222, 223	General Chemistry 1, 2, 3
ENSC 181	Terrestrial Environment
ENSC 182	Atmospheric Environment & Population
ENSC 183	Aquatic Environment
ENSC 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 Geology
G 160	Regional Geologic Field Studies
G 201	Earth Materials & Plate Tectonics
G 202	Earth's Surface Systems
G 203	Evolution of the Earth
GIS/GEOG 151	Digital Earth
GS 104	Physical Science
GS 105	Physical Science
GS 106	Physical Science
PH 101	Fund Physics
PH 102	Fund of Physics
PH 103	Fund of Physics
PH 201	General Physics
PH 202	General Physics
PH 203	General Physics
PH 211	Gen Physics with Calculus
PH 212	Gen Physics with Calculus
PH 213	Gen Physics with Calculus

Biological Science

BI 101	General Biology
BI 101_H	General Biology-Honors
BI 101E	Gen Bio - Ocean Life Foundation
BI 101F	Gen Biology-Survey of Biology
BI 101I	Gen Bio - Botanical Beginnings
BI 101J	Gen Bio - Unseen Life on Earth
BI 101K	Gen Biology: Intro to Genetics
BI 102	General Biology
BI 102_H	General Biology-Honors
BI 102B	Gen Biology-Jungle Biology
BI 102C	Gen Biology-Marine Biology
BI 102D	Gen Biology-Survey of Biology
BI 102E	Gen Biology-Animal Biology
BI 102G	Gen Biology-Genetics & Society
BI 102H	Gen Biology-Forest Biology
BI 102I	General Biology-Human Biology
BI 102J	General Biology - Ethnobotany
BI 103	General Biology
BI 103A	Gen Biology-Birds of Oregon
BI 103B	Gen Biology-Field Biology
BI 103D	Gen Biology-Sea Birds/Mammals
BI 103E	Gen Biology-Survey of Biology
BI 103F	Gen Bio - Wildflowers of Oregon
BI 103G*	Gen Biology-Global Ecology
BI 103H	Gen Biology-Mushrooms
BI 103 J	Gen Biology-Forest Ecology
BI 103K	Gen Biology-Animal Behavior
BI 103L	Gen Bio - Evolution & Diversity
BI 103M	Gen Bi - Biodiv & Sustainability
BI 211	Principles of Biology
BI 212	Principles of Biology
BI 234	Introductory Microbiology
BOT 213	Principles of Botany
Z 213	Principles of Zoology

Western Culture

ARH 204, 205, 206	History of Western Art
ARH 212	Twentieth Century Art
CINE 265	Film History 1: Silent Era to Early Sound
CINE 266	Film History 2: Sound Era through 1960s
CINE 267	Film History 3: 1960s to the Present
ENG 107, 108, 109	Survey of World Literature
ENG 201, 203	Shakespeare
ENG 204, 205	Survey of British Literature
ENG 250	Intro to Folklore And Myth
ENG 253	Survey of American Lit
ENG 254	Survey of American Lit
FA 255	Understd Movies: Amer Cinema
HST 101, 102, 103	History Western Civilization
HST 104, 105, 106	World History
HST 201, 202, 203	History of the United States
HST 207	History of the American West
HST 208	Us History Since 1945
PHL 201	Intro Philosophy: Ethics
PHL 205	Contemporary Moral Issues
PS 208	Intro to Political Theory

Cultural Diversity

ANTH 227	Prehistory of Mexico
ANTH 228	Cultures of Mexico
ANTH 231, 232, 233	American Indian Studies
ARH 203	Surv Amer Indian Art/Architect
ARH 207	History of Asian Art: India
ARH 208	History of Asian Art: China
ARH 209	History of Asian Art: Japan
ENG 232	Native American Literature
ENG 243	Native American Autobiography
ENG 244	Asian American Literature
ES 101	Historical Racial & Ethnic Iss
ES 223	African-American Studies
ES 241	The Native American Experience
GEOG 201	World Regional Geography
HST 104, 105, 106	World History
MUS 108	Music in World Cultures

Literature and the Arts

ART 111	Introduction to Visual Arts
ARH 204, 205, 206	History of Western Art 1, 2, 3
ARH 207	History of Indian Art
ARH 208	History of Chinese Art
ARH 209	History of Japanese Art
CINE 265	Film History 1: Silent Era to Early Sound
CINE 266	Film History 2: Sound Era through the 1960s
CINE267	Film History 3: 1960s-Present
ART 202	Survey of Western Art

ART 204	History of Western Art
ART 205	History of Western Art
ART 206	History of Western Art
ART 207	History of Asian Art: India
ART 208	History of Asian Art: China
ART 209	History of Asian Art: Japan
ART 211	Surv Visual Arts: Early Modern
ENG 104	Intro to Literature: Fiction
ENG 105	Intro to Literature: Drama
ENG 106	Intro to Literature: Poetry
ENG 107	Survey of World Literature
ENG 108	Survey of World Literature
ENG 109	Survey of World Literature
ENG 151	Black American Literature
ENG 205	Survey of British Literature
ENG 215	Latino/a Literature
ENG 222	Literature and Gender
ENG 250	Intro to Folklore and Myth
ENG 253	Survey of American Lit
ENG 254	Survey of American Lit
ENG 257	The American Working Class
ENG 259	African Amer Poetry/Plays/Film
ENG 260	Intro to Women Writers
FA 255	Understd Movies: Amer Cinema
FA 264	Women Make Movies
FA 265	African American Film Images
HUM 100	Humanities Through the Arts
MUS 201	Intro Music and Its Lit
MUS 202	Intro to Music and Its Lit
MUS 203	Intro Music and Its Lit
MUS 205	Intro Jazz History
MUS 261	Music History
MUS 262	Music History
MUS 263	Music History
MUS 264	History of Rock Music 1
MUS 265	History of Rock Music 2
MUS 266	History of Rock Music 3
TA 272	Introduction to Theater

Social Processes and Institutions

ANTH 103	Cultural Anthropology
ECON 201	Prin Econ: Microeconomics
ECON 202	Prin Econ: Macroeconomics
ECON 204	Intro to International Econ
ECON 260	Environ. Natural Resource Ec
GEOG 142	Intro to Human Geography
HE 209	Human Sexuality
HST 101	History Western Civilization
HST 102	History Western Civilization
HST 103	History Western Civilization
PS 201	American Govt & Politics
PS 202	American Govt & Politics
PS 205	International Relations
PSY 201	General Psychology
PSY 202	General Psychology
PSY 203	General Psychology
SOC 204	Introduction to Sociology
SOC 205	Social Stratificatn & Soc Sys
SOC 206	Institutions & Social Change

Difference Power and Discrimination

ES 102	Contemporary Racial and Ethnic Issues
ES 212	Chicano/Latino Studies Chicano/Latino Studies
ES 213	African-American Studies
ES 221	African-American Experience
HST 201	History of the United States
HST 202	History of the United States
HST 203	History of the United States
SOC 213	Race and Ethnicity
SOC 225	Social Problems

Associate of General Studies

The Associate of General Studies degree provides an alternative for students pursuing some transfer programs to meet individual goals, balancing general education and elective transfer or career technical coursework. Award of this degree does not guarantee admission to a state four-year institution, or that all lower division general education requirements have been met, nor does it ensure junior status at a state four-year institution.

A student selecting this option still must meet the receiving university's admission requirements, including course standing, grade point average and foreign language.

All courses should be aligned with the student's intended program of study and the degree requirements at the intended transfer institution.

Each student is strongly encouraged to work with an academic advisor or counselor to match career goals with an appropriate program, and to select appropriate courses for a major at an intended transfer institution.

Guidelines

1. Complete a total of 90 credits college-level coursework (see notes).
2. Complete at least 24 credits at Lane.
3. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits, except for Health/PE courses, which may be any number of credits.
4. All Elective courses may be any number of credits.
5. Pass all Foundational Skills courses with a grade of "C-" or "P" or better. Pass all Discipline Studies and Elective courses with a grade of "D-" or "P" or better.
6. Cumulative GPA must be at least 2.0 when the Associate of General Studies degree is awarded.
7. Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.

I. Foundational Skills

English Composition

Two courses (minimum 3 credits each): WR 115 (summer 1999 or after), WR 121/WR 121_H, WR 122/WR 122_H, WR 123, WR 227

Mathematics

One of the following options:

One Course (minimum 4 credits): MTH 105 or higher

OR

Two courses (minimum 4 credits each): MTH 052 or higher and one of the following: CIS 101 or CS 120 (MTH 052 does not meet college-level course requirements).

Health/Wellness/Fitness

Three credits, one course required from the list of activity classes from the AAOT, plus additional credits from PE 181-298 or the listing to total three credits. One credit from PE 186W accepted to meet this requirement.

OR

Three credits EXMS 214, FN 225, HE 152, 209, 222, 240, 250, 255, 262, 275 or 290; or HE 125, 252 (summer 1997 or later), HI 101.

II. Discipline Studies

In addition to courses used for Foundational Skills, students must select additional courses in the areas identified below.

Arts and Letters
12 credits from the following: Art, Art History, Communications, Dance, Effective Learning, Film Arts, Language (CW, FR, SPAN, ASL, and other Transfer Languages), Humanities, Journalism, Literature, Music, Philosophy, Religion, Theater Arts, Writing, ES 244

Social Science
12 credits from the following: Anthropology, Career Guidance (CG), Economics, Ethnic Studies, Geographic Information Science (GIS), Geography, History, Human Development (HD), Human Services (HS), Philosophy, Political Science, Psychology, Religion, Sociology, Women's Studies, Humanities

Science/Math/Computer Science
14 credits from the following: Astronomy, Biology, Botany, Chemistry, Computer Science (CS prefix courses only, not CIS), Engineering, Geographic Information Science (GIS), Geology (G or ENSC), Mathematics (MTH 105 and higher), Physical Science (GS prefix), Physics, Zoology; ANTH 101, CJA 214, DA 110, DRF 205, DRF 207, ET 129, ET 130, ET 131, ET 145, ET 146, ET 151, ET 152, FT 113, GEOG 141, HO 150, HO 152, PSY 217, WST 230.

NOTE: Only one of the BI 101s, and one of the BI 102s and one of the BI 103s will meet the Science/Math/Computer Science requirements for any Lane Degree. (See the course description for more information).

III. Electives
Any college-level courses that bring total credits to 90 credits including:

- Up to 18 credits of Cooperative Education may be included as electives. See Cooperative Education/Internships in the Course Descriptions.
- Up to 12 credits of Individual Music Lessons (MUP) may be included as electives.
- Up to 12 credits of Physical Education activity may be included within the entire degree (Electives and Health/Wellness Fitness).
- Although there are no limits on Career Technical courses for the AGS, policies on accepting Career Technical credits vary at the four-year institutions in Oregon. Consult an academic advisor about taking Career Technical courses as Electives.

Notes
1. College-level courses are numbered 100 or higher. Courses numbered 001-099 identify developmental courses (e.g. RD 090), with the exception of ENG 110, 116, 117; MTH 100, RD 115, WR 110, 120 and WR 115. (taken before summer 1999), which are considered developmental.
2. Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or academic advisor.
3. University second language admission requirements for transfer students graduating high school in 1997 and thereafter include one of the following:
   a) two terms of a college-level second language with an average grade of C- or above, OR
   b) two years of the same high school-level second language with an average grade of C- or above, OR
   c) satisfactory performance on an approved second language assessment of proficiency.
   d) demonstrated proficiency in American Sign Language meets this second language admission requirement.
4. Credit-by-Exam and Credit-by-Assessment may comprise up to 25% of total degree credits.
5. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
6. Lower-division college-level courses (100 and 200-level) taken at Lane may not meet the requirements of an upper-division course with a similar title and content offered by public universities in Oregon. In such cases, the courses in question will normally transfer as electives.
7. Courses numbered 199, 280, 298, or 299 count as electives, and do not meet Discipline Studies requirements. Courses numbered 199 and 299 are experimental, and may later be reviewed and approved for Discipline Studies. Consult an advisor or counselor.

Associate of Applied Science

Associate of Applied Science degrees train graduates for immediate employment and direct entry into the workforce. Many career technical programs require cooperative education or internships and may require licensure exams or certifications. Career Technical courses do not necessarily transfer to other institutions. See the index for Career Technical course prefixes.

Students who wish to pursue an AAS degree must choose a career technical program and follow the requirements listed for that program (see Career Technical programs for specific curriculum).

Each student is strongly encouraged to work with a Lane academic advisor or counselor to match career goals with an appropriate program. Each AAS degree has specific program requirements. The following information is provided only as an overview of the AAS degree.

Guidelines
1. Total credits for an AAS degree range from 90-108 credits, depending on program requirements. Complete program with a minimum of 24 credits earned at Lane.
2. Foundational Skills and Discipline Studies courses must be a minimum of 3 credits, except for Health/PE courses, which may be any number of credits.
3. Pass all Foundational Skills and Discipline Studies courses with a grade of "C-" or "P" or better.
4. Pass all required program core courses with a letter grade of "C-" or better, unless your AAS program has different requirements.
5. Developmental courses may not be used unless specified in the program.
6. Cumulative GPA must be at least 2.0 when the Associate of Applied Science degree is awarded.

I. Foundational Skills
Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact a counselor or academic advisor. Waiver testing is not the same as placement testing.

Writing
Three credits (one class). See your program for the specific required class. If none is listed, you must take one course, WR 115 (Summer 1999 or after) or higher.

Mathematics
One course, minimum 3 credits. See your program for the specific required class. If none is listed, take one course, MTH 025 or higher.

Physical Education or Health
Three credits, of any PE activity class.

OR

Three credits EXMS 214, FN 225, HE 152, 209, 222, 240, 250, 255, 262, 275 or 290; or HE 125, 252 (summer 1997 or later), HI 101

II. Discipline Studies

In addition to courses used for Foundational Skills in section 1, twelve additional credits are required with 3 credits minimum from Arts and Letters; 3 credits minimum from Human Relations, 3 credits minimum from Science/Math/Computer Science; and remaining credits from any of the 4 disciplines.

Arts and Letters

Three credits minimum from one subject prefix as specified by program, or if not specified, chosen from Art, Art History, Communication, Dance, Effective Learning, English, Film Arts, Foreign Language, Humanities, Journalism, Literature, Music, Philosophy, Religion, Theater Arts, Writing, BA 214, CW 201-203, or ES 244.

Human Relations

Three credits minimum from one subject prefix as specified by program, or if not specified, chosen from the approved Human Relations list.

Social Science

Three credits minimum from one subject prefix as specified by program, or if not specified, chosen from the following: Anthropology, Career Guidance (CG), Economics, Ethnic Studies, Geographic Information Science (GIS), Geography, History, Philosophy, Human Development (HD), Human Services (HS), Political Science, Psychology, Religion, Sociology, Women's Studies; CJA 214, HUM 100, SLD 103, SLD 121

Science/Math/Computer Science

Three credits minimum as specified by program, or if not specified, chosen from Astronomy, Biology, Botany, Chemistry, Computer Science (CS prefix only, not CIS), Engineering, Geographic Information Science, Geology (G or ENSC), Mathematics (must be a higher level course than the minimum required by the program), Physical Science (GS prefix), Physics, Zoology; ANTH 101, ANTH 102, CJA 214, DA 110, DRF 205, DRF 207, ET 129, ET 130, ET 131, ET 145, ET 146, ET 151, ET 152, FT 113, GEOG 141, HO 150, HO 152, or PSY 217.

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.

Human Relations Courses

Three credits from this list will meet the Human Relations component for AAS degrees and certificates.

BA 278	Leadership and Team Dynamics
CG 100	College Success
CG 203	Human Relations at Work
COMM 130	Business and Professional Communication
COMM 218	Interpersonal Communication
COMM 219	Small Group Discussion

Career Technical Courses

Policies on accepting career technical credits vary at the four-year colleges in Oregon. Consult an academic advisor about taking career technical courses as electives for transfer to a four-year institution.

Career Technical courses currently offered at Lane are identified by the following subject codes:

AM	Automotive
APR	Apprenticeship
AS	Aerospace Science
AUD	Audio Production
AV	Aviation Maintenance
BT	Business Technology
CA	Culinary Arts
CIS	Computer Information Systems
CNC	Computer Numerical Control
CSK	Career Skills
CST	Construction
DA	Dental Assisting
DH	Dental Hygiene
DRF	Drafting
DS	Diesel
ECE	Early Childhood Education
EMT	Emergency Medical Technology
ET	Electronic Technology
FLS	Fitness and Lifestyle Specialist
FN	Food and Nutrition
FT	Flight Technology
GD	Graphic Design
GWE	General Work Experience
HDFS	Human Development and Family Studies
HI	Health Informatics
HIM	Health Information Management
HIT	Health Information Technology
HO	Health Occupations
HRTM	Hotel, Restaurant, Tourism Management
HS	Human Services
LA	Legal Assistant
MA	Medical Assisting
MDP	Multimedia Production
MFG	Manufacturing
MUL	Multimedia
NRG	Energy Management
NRS	Nursing
OST	Occupational Skills Training
PN	Practical Nursing
PTA	Physical Therapist Assistant
RTEC	Regional Technology Education Consortium
SUST	Sustainability
VP	Video Production
WATR	Water Conservation
WLD	Welding
WST	Water Shed Technologies

Career Technical subject codes previously used by Lane include: AB, AIL, AVN, APPR, BVDP, CSP, EET, ELT, EXMS, HI, IT, LAT, LE, LGL, MMT, MO, MS, NUR, OA, PA, PGS, PST, PTV, RE, RH, RT, RVS, SS

Career Technical Certificates

Students are encouraged to contact an academic 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 technical degrees. Refer to the individual programs for more specific requirements.

Students should check with their major academic advising team for possible associate degree options.

I. Foundational Skills

Students must complete all 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.

Writing

One course, minimum 3 credits as specified by the program, or if not specified, WR 115W, WR 115 (Summer 1999 or after) or higher.

Mathematics

One course, minimum 3 credits as specified by the program, or if not specified, MTH 025 or higher.

Human Relations
Three credits minimum as specified by program, or if not specified, chosen from the Human Relations list.

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.

- Career Technical Certificates of Completion are between 45-108 credits, including Less-Than One Year Certificate (12-44 credits), One-Year Certificate (45-60 credits), and Two-Year Certificate (61-108 credits).
- Pass all required program core courses with a letter grade of "C-" or better, unless your AAS program has different requirements.
- Some career 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 Services at *lanecc.edu/esfs/enrollment-services-forms.*
- Programs may have specific courses listed to fulfill the Foundational Skills 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 under the Cooperative Education/Internships in the course descriptions may be used.
- A maximum of 12 credits of Physical Education list from the AAOT under Health/Wellness/Fitness 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.

Career Pathway Certificates

Career Pathway Certificates of Completion (CPC) are between 12-44 credits and are fully embedded in an Associate of Applied Science degree or One-Year Certificate. They acknowledge proficiency in specific technical skills and are a "milestone" toward completion of a more advanced program. CPCs help students qualify for entry-level jobs, enhance their current program, or advance in their current field of employment.

Career Pathway Certificates offered at Lane
Lane divides CPCs into two categories—Model A: Beginning and Model B: Advanced. Curriculum for the following CPCs may be found in the Career Technical program descriptions.

To learn more about Career Pathway Certificates of Completion, contact the academic department responsible for the certificate or an academic advisor, https://www.lanecc.edu/advising

Model A Certificates
These are front end certificates ideal for students transitioning from Adult Basic Skills, English as a Second Language or dislocated workers looking for entry level jobs in a new career field, or those interested in short term training. These certificates may be taken independently and require minimal academic prerequisites or professional preparation.

Basic Health Care, embedded in Health Information Management AAS
Customer Service, embedded in Administrative Office Professional AAS
Early Childhood Teacher's Aide 1, embedded in Early Childhood Education AAS
Front End Web Development, embedded in Computer Programming AAS
Group Exercise Instructor, embedded in Fitness and Lifestyle Specialist One Year Certificate
Manufacturing Technician 1, embedded in Manufacturing Technology AAS
Meeting, Convention, and Special Events Manager, embedded in Hotel/Restaurant/Tourism Management AAS
Trade Worker Apprenticeship Technologies, embedded in Construction Trades, General Apprenticeship AAS
Trade Worker Apprenticeship Technologies, embedded in Electrician Apprenticeship Technologies AAS
Trade Worker Apprenticeship Technologies, embedded in Industrial Mechanics and Maintenance Technology Apprenticeship AAS Model

Model B Certificates
These are advanced certificates ideal for professional development of those currently employed or those seeking to enhance their current or previous educational path. They support the development of specialized skills within a career field. In many cases, they require either significant academic prerequisites or demonstrated professional expertise.

Commercial Unmanned Aerial Systems: Aerial Photography, embedded in Commercial Unmanned Aerial Systems AAS (pending state approval)
Commercial Unmanned Aerial Systems: Geographic Information Science, embedded in Commercial Unmanned Aerial Systems AAS (pending state approval)
Computer Network Monitoring and Management, embedded in Computer Network Operations AAS
Computer Network Security, embedded in Computer Network Operations AAS
Database Specialist, embedded in Computer Programming AAS
Guidance and Curriculum, embedded in Early Childhood Education AAS
Infant and Toddler, embedded in Early Childhood Education AAS
Legal Office Skills, embedded in Administrative Office Professional AAS
Manufacturing Technician 2, embedded in Manufacturing Technology AAS
Medical Coding, embedded in Health Information Management AAS
MIDI and Audio Production, embedded in Music Technology and Production AAS
MIDI Production, embedded in Music Technology and Production AAS
Mobile Application Development, embedded in Computer Programming AAS
Office Software Specialist, embedded in Administrative Office Professional AAS
Shielded Metal Arc Welder, embedded in Fabrication Welding AAS
Small Business Ownership, embedded in Administrative Office Professional AAS
Wire Drive Welder, embedded in Welding Processes One-Year Certificate

Oregon Transfer Module

A state-approved Transcription Notation (not a degree or certificate)

For students intending to transfer within a year to a public university in Oregon, 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.

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 public institution.

Oregon Transfer Module credits also may not match program requirements in the receiving school. Students are encouraged to meet with a counselor or academic advisor for planning their courses. The Oregon Transfer Module includes 45 credits of course work, equivalent to 3 academic quarters.

I. Foundational Skills

Writing
Two courses of college-level composition (WR 121/WR 121_H and WR 122/WR 122_H, WR 123, or WR 227)

Oral Communications
One course of fundamentals of speech or communication (COMM 100, 111, 112, 130, 218, 219)

Mathematics
One course in college-level mathematics designated by the college as meeting the statewide criteria for mathematics.

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

II. Discipline Studies (must be at least 3 credits each)

Arts and Letters
Three courses from approved list under AAOT degree

Social Sciences
Three courses from approved list under the AAOT degree

Science/Math/Computer Science
Three courses from the approved list under the AAOT degree including at least one biological or physical science with a lab

III. Additional Requirements

- Electives as needed to bring the total credits to 45. Courses must be from the Disciplines Studies (Arts and Letters, Social Sciences, or Science/Math/Computer Science).
- Grades: All courses must have a grade of "C-" or better.
- Cumulative GPA: Students must have a minimum cumulative GPA of 2.0 at the time the module is posted to the student's transcript.
- Developmental Courses 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.

Career Communities

Career-Technical Programs and Transfer Interest Areas

To help students explore college majors and career fields related to their interests, Lane has organized career-technical programs and transfer interest areas into eight Career Communities:

- Arts and Communications;
- Business and Office Professionals;
- Computer Science and Information Technology;
- Culinary, Hospitality, and Tourism;
- Health, Medical, and Fitness;
- Industrial Trades, Technologies, Transportation, and Apprenticeship;
- Science, Natural Resources, Math, and Engineering;
- Social Sciences, Social Services, and Education.

We encourage students to browse one or more categories of interest and review the list of related majors. Consider taking courses in these areas to explore your interests, meet with the assigned academic advising teams to learn about classes and degree options, and visit the Counseling and Career Center to explore career fields and occupations. You can see these Career Communities online at lanecc.edu/ccc/career-communities.

Career-Technical Programs

Career-technical programs train graduates for immediate employment and direct entry into the workforce.

Curriculum requirements and descriptions for Lane's career-technical degrees and certificates may be found in the Career-Technical section of this catalog. (In the Career-Technical section, the Career Pathways Certificates are listed with their corresponding AAS degrees.) 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 the academic advising teams or the department offering a particular program. Work closely with the academic advising team assigned to these programs to plan your courses and stay on track toward completion. Email addresses for academic advising teams are listed in the following chart.

Depending upon the career-technical program in which they are enrolled, students can earn: an Associate of Applied Science degree, a Two-Year Certificate of Completion, a One-Year Certificate of Completion, a Less-Than-One-Year Certificate, a Career Pathways Certificate, or a combination of these.

Lane also offers noncredit opportunities for career training and continuing education. See Continuing Education.

Transfer Interest Areas

The following chart contains a list of transfer interest areas (majors) to help students choose Lane courses that may transfer to another college or university. Not all majors are offered at every college or university, and there are many additional majors not listed here.

For some of these transfer areas, Lane may have specific articulation agreements and transfer guides with Oregon universities, but not for all. An articulation agreement is a signed agreement with a specific college or university that specifies a list of courses to be equivalent for a particular major or for general degree requirements.

Although the majority of these transfer areas lead to bachelor's degrees, some lead to associate's degrees at other community colleges and some require graduate-level education beyond a bachelor's degree (these are designated as "pre-professional").

Lane offers six transfer degrees: Associate of Arts Oregon Transfer (AAOT), Associate of Science: University of Oregon (AS:UO), Associate of Science: Oregon State University (AS:OSU), Associate of Science Oregon Transfer: Business (ASOT: BUS), Associate of Science Oregon Transfer: Computer Science (ASOT: CS), and the

Associate of Science (AS). Learn more about transfer degrees in the Degree and Certificate Overview.

Work closely with the academic advising team assigned to these transfer interest areas to plan your courses and develop the best transfer plan for your goals. Email addresses for academic advising teams are listed in the chart.

On the following chart, the notations in each column indicate the following:

- LTOY: Less-Than-One-Year Certificate of Completion
- CPC: Career Pathway Certificate of Completion
- 1-Yr: One-Year Certificate of Completion
- 2-Yr: Two-Year Certificate of Completion
- AAS: Associate of Applied Science Degree
- Transfer Interest Area: Work closely with assigned academic advisors to develop a transfer plan before transferring to another college or university

Note: Some programs listed below can be pursued as either a career-technical program or a transfer interest area. Work closely with the academic advising team to decide which fits your goals.

ARTS AND COMMUNICATIONS

	Certificate (LTOY)	Certificate CPC	Certificate 1-Yr	Certificate 2-Yr	AAS	Transfer interest area	Academic Advising Contact
Advertising						✔	ArtsPrograms@lanecc.edu
Architecture						✔	ArtsPrograms@lanecc.edu
Arts Administration						✔	ArtsPrograms@lanecc.edu
Art History						✔	ArtsPrograms@lanecc.edu
Dance						✔	ArtsPrograms@lanecc.edu
English and Literature						✔	SocSci-LLCPrograms@lanecc.edu
Fashion Design						✔	ArtsPrograms@lanecc.edu
Film Studies						✔	ArtsPrograms@lanecc.edu
Fine and Studio Arts						✔	ArtsPrograms@lanecc.edu
Graphic Design					✔	✔	ArtsPrograms@lanecc.edu
Interior Design						✔	ArtsPrograms@lanecc.edu
Journalism						✔	ArtsPrograms@lanecc.edu
Language Studies						✔	SocSci-LLCPrograms@lanecc.edu
Linguistics						✔	SocSci-LLCPrograms@lanecc.edu
Media Studies and Communications						✔	ArtsPrograms@lanecc.edu
MIDI and Audio Production		✔					ArtsPrograms@lanecc.edu
MIDI Production		✔					ArtsPrograms@lanecc.edu
Multimedia Design			✔		✔		ArtsPrograms@lanecc.edu
Music						✔	ArtsPrograms@lanecc.edu
Music Technology						✔	ArtsPrograms@lanecc.edu
Music Technology & Sound Engineering					✔		ArtsPrograms@lanecc.edu
Product Design						✔	ArtsPrograms@lanecc.edu
Public Relations						✔	ArtsPrograms@lanecc.edu
Speech and Communication Studies						✔	SocSci-LLCPrograms@lanecc.edu
Theatre Arts and Acting						✔	ArtsPrograms@lanecc.edu
Web Design			✔				ArtsPrograms@lanecc.edu
Writing Studies						✔	SocSci-LLCPrograms@lanecc.edu

BUSINESS AND OFFICE PROFESSIONALS

	Certificate (LTOY)	Certificate CPC	Certificate 1-Yr	Certificate 2-Yr	AAS	Transfer interest area	Academic Advising Contact
Accounting					✔	✔	BusinessAdvising@lanecc.edu
Administrative Office Professional					✔		BusinessAdvising@lanecc.edu
Business Administration						✔	BusinessAdvising@lanecc.edu
Business Assistant			✔				BusinessAdvising@lanecc.edu
Business Information Systems						✔	BusinessAdvising@lanecc.edu
Business Management					✔		BusinessAdvising@lanecc.edu
Customer Service		✔					BusinessAdvising@lanecc.edu
Entrepreneurship						✔	BusinessAdvising@lanecc.edu
Finance						✔	BusinessAdvising@lanecc.edu
Legal Office Skills		✔					BusinessAdvising@lanecc.edu
Management						✔	BusinessAdvising@lanecc.edu
Marketing						✔	BusinessAdvising@lanecc.edu
Office Software Specialist		✔					BusinessAdvising@lanecc.edu
Operations Management						✔	BusinessAdvising@lanecc.edu
Small Business Ownership		✔					BusinessAdvising@lanecc.edu
Sports Business						✔	BusinessAdvising@lanecc.edu

COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

	Certificate (LTOY)	Certificate CPC	Certificate 1-Yr	Certificate 2-Yr	AAS	Transfer interest area	Academic Advising Contact
Computer Engineering						✔	CITPrograms@lanecc.edu
Computer Network Monitoring and Management		✔					CITPrograms@lanecc.edu
Computer Network Operations					✔		CITPrograms@lanecc.edu
Computer Network Security		✔					CITPrograms@lanecc.edu
Computer Programming					✔		CITPrograms@lanecc.edu
Computer Science						✔	CITPrograms@lanecc.edu
Computer Simulation and Game Development					✔		CITPrograms@lanecc.edu
Computer Simulation and Game Development: Art Option					✔		CITPrograms@lanecc.edu
Front End Web Development		✔					CITPrograms@lanecc.edu
Database Specialist		✔					CITPrograms@lanecc.edu
Mobile Application Development		✔					CITPrograms@lanecc.edu

CULINARY, HOSPITALITY, AND TOURISM

	Certificate (LTOY)	Certificate CPC	Certificate 1-Yr	Certificate 2-Yr	AAS	Transfer interest area	Academic Advising Contact
Baking and Pastry	✔						CulinaryHospPrograms@lanecc.edu
Culinary Arts and Food Service Management					✔		CulinaryHospPrograms@lanecc.edu
Hospitality Management						✔	CulinaryHospPrograms@lanecc.edu
Hotel/Restaurant/Tourism Management					✔	✔	CulinaryHospPrograms@lanecc.edu
Meeting, Convention, and Special Events Manager		✔					CulinaryHospPrograms@lanecc.edu

HEALTH, MEDICAL, AND FITNESS

	Certificate (LTOY)	Certificate CPC	Certificate 1-Yr	Certificate 2-Yr	AAS	Transfer interest area	Academic Advising Contact
Basic Health Care		✔					HIMProgram@lanecc.edu
Chiropractic Medicine (pre-professional)						✔	Sci-MathPrograms@lanecc.edu
Communication Disorders and Sciences						✔	SocSci-LLCPrograms@lanecc.edu
Dental Assisting			✔				DAProgram@lanecc.edu
Dental Hygiene					✔	✔	DHProgram@lanecc.edu
Dentistry (pre-professional)						✔	Sci-MathPrograms@lanecc.edu
Emergency Medical Technician			✔				EMTParamedicProgram@lanecc.edu
Fitness and Lifestyle Specialist			✔				EMSPrograms@lanecc.edu
Group Exercise Instructor		✔					EMSPrograms@lanecc.edu
Health Care Administration						✔	AlliedTransferPrograms@lanecc.edu
Health Information Management			✔		✔		HIMProgram@lanecc.edu
Human Physiology						✔	Sci-MathPrograms@lanecc.edu
Medical Assistant			✔				MAProgram@lanecc.edu
Medical Coding		✔					HIMProgram@lanecc.edu
Medical Imaging						✔	AlliedTransferPrograms@lanecc.edu
Medical Technology						✔	Sci-MathPrograms@lanecc.edu
Medicine (pre-professional)						✔	Sci-MathPrograms@lanecc.edu
Nursing					✔	✔	NursingProgram@lanecc.edu
Nutrition						✔	AlliedTransferPrograms@lanecc.edu
Occupational Therapy (pre-professional)						✔	Sci-MathPrograms@lanecc.edu

Optometry (pre-professional)						✔	Sci-MathPrograms@lanecc.edu
Paramedicine					✔		EMTParamedicProgram@lanecc.edu
Pharmacy (pre-professional)						✔	Sci-MathPrograms@lanecc.edu
Physical Education						✔	AlliedTransferPrograms@lanecc.edu
Physical Therapist Assistant					✔		PTAProgram@lanecc.edu
Physical Therapy (pre-professional)						✔	Sci-MathPrograms@lanecc.edu
Physician Assistant (pre-professional)						✔	Sci-MathPrograms@lanecc.edu
Practical Nursing			✔				NursingProgram@lanecc.edu
Public Health						✔	AlliedTransferPrograms@lanecc.edu
Veterinary Medicine (pre-professional)						✔	Sci-MathPrograms@lanecc.edu

INDUSTRIAL TRADES, TECHNOLOGIES, TRANSPORTATION, APPRENTICESHIP

Apprenticeship Lane offers apprenticeship programs in the following industries, with options to earn a 1-year certificate or AAS degree: Carpenters, HVAC Technicians/Installers, Inside Electricians, Limited Energy Technicians, Limited Maintenance Electricians, Manufacturing Plant Electricians, Millwrights, Plumbers, Sheet Metal Workers

	Certificate (LTOY)	Certificate CPC	Certificate 1-Yr	Certificate 2-Yr	AAS	Transfer interest area	Academic Advising Contact
Aerial Photography		✔					AdvTechPrograms@lanecc.edu
Automotive Technology				✔	✔		AdvTechPrograms@lanecc.edu
Aviation Maintenance Technician				✔	✔		AdvTechPrograms@lanecc.edu
Commercial Unmanned Aerial Systems					✔		AdvTechPrograms@lanecc.edu
Construction Management						✔	AdvTechPrograms@lanecc.edu
Construction Technology			✔		✔		AdvTechPrograms@lanecc.edu
Construction Trades, General Apprenticeship			✔		✔		AdvTechPrograms@lanecc.edu
Diesel and Automotive Technology						✔	AdvTechPrograms@lanecc.edu
Diesel Technology				✔	✔		AdvTechPrograms@lanecc.edu
Drafting			✔		✔		AdvTechPrograms@lanecc.edu
Electrician Apprenticeship Technologies			✔		✔		AdvTechPrograms@lanecc.edu
Fabrication and Welding Technology			✔		✔		AdvTechPrograms@lanecc.edu
Flight Technology					✔		AdvTechPrograms@lanecc.edu
Industrial Mechanics and Maintenance Technology			✔		✔		AdvTechPrograms@lanecc.edu

Limited Electrician Apprenticeship Technologies	✔						AdvTechPrograms@lanecc.edu
Manufacturing Technician 1		✔					AdvTechPrograms@lanecc.edu
Manufacturing Technician 2		✔					AdvTechPrograms@lanecc.edu
Manufacturing Technology					✔		AdvTechPrograms@lanecc.edu
Manufacturing Technology: Computer Numerical Control Technician Option					✔		AdvTechPrograms@lanecc.edu
Shielded Metal Arc Welder		✔					AdvTechPrograms@lanecc.edu
Trade Worker Apprenticeship Technologies (Construction)		✔					AdvTechPrograms@lanecc.edu
Trade Worker Apprenticeship Technologies (Electrician)		✔					AdvTechPrograms@lanecc.edu
Trade Worker Apprenticeship Technologies (Industrial Mechanics)		✔					AdvTechPrograms@lanecc.edu
Unmanned Aerial Systems: Geographic Information Science		✔					AdvTechPrograms@lanecc.edu
Welding Processes			✔				AdvTechPrograms@lanecc.edu
Wire Drive Welder		✔					AdvTechPrograms@lanecc.edu

SCIENCE, NATURAL RESOURCES, MATH, AND ENGINEERING

	Certificate (LTOY)	Certificate CPC	Certificate 1-Yr	Certificate 2-Yr	AAS	Transfer interest area	Academic Advising Contact
Animal Sciences						✔	Sci-MathPrograms@lanecc.edu
Agriculture Sciences						✔	Sci-MathPrograms@lanecc.edu
Biochemistry						✔	Sci-MathPrograms@lanecc.edu
Biology						✔	Sci-MathPrograms@lanecc.edu
Botany						✔	Sci-MathPrograms@lanecc.edu
Chemistry						✔	Sci-MathPrograms@lanecc.edu
Crop and Soil Science						✔	Sci-MathPrograms@lanecc.edu
Earth, Ocean and Atmospheric Sciences						✔	Sci-MathPrograms@lanecc.edu
Energy Management			✔				Sci-MathPrograms@lanecc.edu

Energy Management Technician					✔		Sci-MathPrograms@lanecc.edu
Energy Management Technician: Building Controls Technician Option					✔		Sci-MathPrograms@lanecc.edu
Engineering						✔	Sci-MathPrograms@lanecc.edu
Engineering Technologies						✔	Sci-MathPrograms@lanecc.edu
Environmental Science						✔	Sci-MathPrograms@lanecc.edu
Environmental Studies						✔	Sci-MathPrograms@lanecc.edu
Fisheries and Wildlife Science						✔	Sci-MathPrograms@lanecc.edu
Forestry						✔	Sci-MathPrograms@lanecc.edu
Geology						✔	Sci-MathPrograms@lanecc.edu
Horticulture						✔	Sci-MathPrograms@lanecc.edu
Mathematics						✔	Sci-MathPrograms@lanecc.edu
Microbiology						✔	Sci-MathPrograms@lanecc.edu
Natural Resources						✔	Sci-MathPrograms@lanecc.edu
Physics						✔	Sci-MathPrograms@lanecc.edu
Science (General)						✔	Sci-MathPrograms@lanecc.edu
Sustainability Coordinator					✔		Sci-MathPrograms@lanecc.edu
Water Conservation Technician					✔		Sci-MathPrograms@lanecc.edu
Zoology						✔	Sci-MathPrograms@lanecc.edu

SOCIAL SCIENCES, SOCIAL SERVICES, AND EDUCATION

	Certificate (LTOY)	Certificate CPC	Certificate 1-Yr	Certificate 2-Yr	AAS	Transfer interest area	Academic Advising Contact
Anthropology						✔	SocSci-LLCPrograms@lanecc.edu
Criminal Justice					✔	✔	SocSci-LLCPrograms@lanecc.edu
Criminal Justice: Juvenile Corrections			✔				SocSci-LLCPrograms@lanecc.edu
Early Childhood Education			✔		✔	✔	EducationAdvising@lanecc.edu
Early Childhood Teacher Aide 1		✔					EducationAdvising@lanecc.edu
Economics						✔	SocSci-LLCPrograms@lanecc.edu
Education (Elementary)						✔	EducationAdvising@lanecc.edu

Education (Secondary)						✔	EducationAdvising@lanecc.edu
Ethnic Studies						✔	SocSci-LLCPrograms@lanecc.edu
Geographic Information Science	✔						SocSci-LLCPrograms@lanecc.edu
Geography						✔	SocSci-LLCPrograms@lanecc.edu
Guidance and Curriculum		✔					EducationAdvising@lanecc.edu
History						✔	SocSci-LLCPrograms@lanecc.edu
Human Development						✔	SocSci-LLCPrograms@lanecc.edu
Human Services					✔	✔	SocSci-LLCPrograms@lanecc.edu
Infant and Toddler		✔					EducationAdvising@lanecc.edu
International Studies						✔	SocSci-LLCPrograms@lanecc.edu
Law (pre-professional)						✔	SocSci-LLCPrograms@lanecc.edu
Liberal Studies						✔	SocSci-LLCPrograms@lanecc.edu
Philosophy						✔	SocSci-LLCPrograms@lanecc.edu
Political Science						✔	SocSci-LLCPrograms@lanecc.edu
Psychology						✔	SocSci-LLCPrograms@lanecc.edu
Public Policy Administration						✔	SocSci-LLCPrograms@lanecc.edu
Religious Studies						✔	SocSci-LLCPrograms@lanecc.edu
Social Science (General)						✔	SocSci-LLCPrograms@lanecc.edu
Social Work and Counseling (pre-professional)						✔	SocSci-LLCPrograms@lanecc.edu
Sociology						✔	SocSci-LLCPrograms@lanecc.edu
Women's and Gender Studies						✔	SocSci-LLCPrograms@lanecc.edu

Transfer

All Oregon community colleges and public universities in Oregon 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.

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.

General education and graduation requirements for specific majors vary among colleges and universities. Lane's Counseling and Advising Center, a complete resource for students who plan to transfer credit from Lane, has information on colleges and universities and the degree programs they offer. Counselors and academic 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. In addition to information presented here, please be sure to consult with a counselor or academic advisor.

Students who have a major in mind, and also want to optimize the amount of coursework that will count toward it, should work closely with an academic advisor. General transfer information is available at *ous.edu/stucoun/transfer/planning*.

For students intending to become teachers, specific recommendations on structuring their AAOT degrees are given at: How to become an Oregon Teacher, *ous.edu/stucoun/prospstu/teached*.

Second Language Requirement for Admission 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.

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 academic advisor at Lane. Direct transfer does not qualify for federal financial aid.

Each student planning to transfer must learn the program requirements of the intended transfer school. Transfer requirements change often. 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 (OSU) 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. Regardless of the number of credits, the financial aid is administered by OSU.

Degrees

For information about degrees and limitation, see the Degree and Certificate Overview section.

Policies and Procedures

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 committee is to ensure 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

Academic Requirements Review Committee petitions are available from Enrollment Services at *lanecc.edu/esfs/enrollment-services-forms* and are processed by completion specialists

Academic Standards and Probation A student who does not achieve satisfactory academic progress (SAP) 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. See Academic Standards and Alert System in the index.

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. Through Lane's No Show Drop Procedure, students must attend at least one full class session during the first week of the class and for online classes participate in at least one meaningful class activity. Failure to comply will result in the instructor notifying the academic department to process a "No Show Drop." College instructors may allow visits to one or two class sessions at their own discretion. For more than two visits by the same individual, the written approval of the appropriate department chair/director is required.

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* about one week before registration begins. Registration usually begins the fourth week of the preceding term except fall term, which occurs the preceding spring term.

Transfer Credits Students are encouraged to use the Transfer Tool *(lanecc.edu/esfs/general-information-transferring-credits)* in order to see how credits from other institutions transfer to Lane. Transfer information is updated regularly; some transfer partners will have more extensive listings than others. Students may request an instructional department review of 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.

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 may be reviewed using the Credit-by-Assessment process.

Cooperative Education Cooperative education provides students the opportunity to learn on-the-job while earning 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 Dean, 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.
- **Honors Courses** span a range of disciplines and topics. Honors courses are designated with _H following the course ID, e.g. Anth 102_H. Any Lane student can enroll in an honors course or request the honors option for courses designated as honors option classes. Admission into the Lane Honors Program, however, requires a formal application. For more information, visit lanecc.edu/honors.
- **Developmental credit courses** have numbers below 100. Pre-college courses may be required as prerequisites to college-level courses or as part of a career technical certificate or applied degree. Developmental courses do not transfer to a four-year institution.
- **College-level transfer credit courses** count toward completion of a degree or certificate and are generally accepted for transfer by other institutions.
- **Career technical credit courses** count toward Associate of Applied Science degrees or certificates. With some limits, career technical courses may count as electives for transfer degrees. Career technical courses are not automatically accepted for transfer by other institutions. See the index Career Technical course prefixes.
- **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.

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.

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 Ceremony 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 ten to twelve weeks. Students applying for degrees or certificates and completing their programs fall or winter terms will receive their degrees earlier in the year. There is a $10 fee for duplicate or additional copies of diploma parchment.

The names of students in the graduation ceremony keepsake brochures reflect those who have earned a degree or certificate summer, fall and winter terms. Those who have been cleared to graduate spring term, pending successful completion of classes will have their names published, as well. Students participating in the ceremony graduating after spring term will have their names published in the next year's brochure.

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.

myGrad Plan Lane students may view their progress toward degree and certification completion in myLane under the myGradPlan tab.

Oregon Transfer Module OTM designation will be posted in the student's transcript upon completion.

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 Services Building 1, First Floor, 541.463.3100, (877) 520-5391, or TTY 541.463.4722

Processes online admissions, provides registration and billing assistance to all students.

Financial Aid Building 1, First Floor (Lobby), 541.463.3400

Financial Aid responds to all questions and issues regarding financial aid.

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.

* Notated on official transcripts

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 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 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.

myLane Lane Community College students use web registration on myLane. Using the web, students register for classes from any computer connected to the Internet. For information about myLane, visit Lane's website at *lanecc.edu*.

Program A Career Technical program is state approved curriculum arranged to provide career 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 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 myLane for advising purposes. Students can request an official transcript through myLane or in person from Enrollment 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 myLane. The deadline to make schedule changes (adds/drops, pass/nopass, audit options) to full-term classes is midnight Friday of the eighth week of the term. A "full term" is 11 to 12 weeks. Exceptions to this are classes that begin and end at times other than the first and last week of the term. Contact Enrollment 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).

Dropping Classes When a student does not attend classes, it is the student's responsibility to drop the classes using myLane. To drop from classes, use myLane by midnight Friday of the eighth week of a full-term class.

No Show Drop Students will 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 one class session of all class meetings the first week of the term. This period coincides with the refund period. Significant changes to the No Show Drop went into effect fall 2014. Refer to lanecc.edu/esfs/administrative-withdrawals for complete details.

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 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 Services for further information.

Lane provides all students with a nine digit "L" number as user ID for 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 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 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. You must provide and accurate Social Security number to be eligible for a 1098-T.

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 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. Progress Review petitions are processed through Enrollment Services 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 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.*

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 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
- 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 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 myLane to provide Lane with a password that you can share with others. Individuals with these passwords must offer these when contacing Enrollment 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 myLane at *lanecc.edu*, or through the National Student Clearinghouse at studentclearinghouse.org. The fee is $5 per transcript through 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 myLane, by mail or in person at Enrollment 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 Services receives an official (sealed) transcript of that work. Only official transcripts from regionally accredited U.S. institutions and international institutions with an evaluation agency will be considered. Once received, transcripts become the property of Enrollment Services. Lane cannot provide anyone, including the student, a copy of a transcript from another school. Students should order a copy from their transfer institution for their personal use. Students wishing to have transfer work evaluated must submit the online transcript evaluation form at lanecc.edu/esfs/request-transcript-evaluation.

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 myLane. Unofficial advising transcripts also may be printed from 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.

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

** Note: The NC grade is scheduled for possible elimination. Review current status at lanecc.edu/copps/documents/grades-definition.

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.

Grade Point Average (GPA): 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
TOTAL GPA Credit	6	TOTAL POINTS	19.60

19.60 ÷ 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.

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 (Credit attempted, not earned) 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." NC processes are under review and subject to change. Review current status at lanecc.edu/copps/documents/grades-definition.

Academic Progress Standards and Alert System The college has a responsibility to help credit students achieve their educational goals. To meet this responsibility, the college tracks students' progress and provides assistance to students who, for whatever reason, do not meet the college's minimum Academic Progress Standards (APS). These standards are different from the Financial Aid Satisfactory Academic Progress Standards (SAP) *lanecc.edu/finaid/satisfactory-academic-progress* and apply to all students.

Academic Progress Standards (APS) Academic Progress Standards are based on academic performance for each term. Students are required to attain a minimum GPA of 2.0 and complete at least 67% of attempted credits each term.

Special Note: Attempted credits include all credits a student is enrolled in at the beginning of the second week of the term, after

the Refund Deadline. Refund deadlines for summer terms can vary. Check the Refund Schedule *lanecc.edu/esfs/refund-drop-schedule-change-deadline-information* for details.

Term	GPA	Completion Rate	Academic Standing	Intervention
1st	Less than 2.0	Less than 67%	Alert 1	Requires completion of Keys to Success Workshop (online) accessed on your Moodle page
2nd	Less than 2.0	Less than 67%	Alert 2	Requires Keys to Success Workshop (in-person) *lanecc.edu/ccc/alert-2-keys-success-person-workshop*
3rd	Less than 2.0	Less than 67%	Alert 3	Requires enrollment in College Success: Back On Course (1 credit) *lanecc.edu/ccc/alert-3-back-course*
4th	Less than 2.0	Less than 67%	Dismissal	Requires out for two terms a completed petition to return *lanecc.edu/ccc/alert-4-academic-dismissal*

Petitions to return to Lane Students who do not meet the Academic Progress Standards for a fourth term will be dismissed from college credit classes and programs for a minimum of two academic terms. To be reinstated, students will submit a completed Petition to Return to Lane available at the Alert 4 Information Session and on the Alert 4/Dismissal Moodle site. Petitions must be turned in a minimum of six weeks prior to the beginning of the academic term the student wants to return.

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 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. The audit counts as an attempted credit.

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 Request to Absolve Repeated Courses from the Cumulative Grade Point Average form. The form is available in myLane under the Enrollment tab. 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.

NOTE: Many institutions will not recognize Petition to Absolve process when calculating a GPA for admission purposes.

Student Policies and Complaint Procedures

Lane Community College policies and procedures are subject to change without prior notice.

Board Policies Directly Affecting Lane Students

Student Services—Global Directions BP720

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 BP630

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 BP410
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.

Use of Intoxicants and Controlled Substances BP420
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/copps/documents/alcoholic-beverages-campus);* 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.

Admissions for Credit Students PB705
Lane Community College accepts all students who are 18 or over or have a high school diploma or GED. Students who are under 18 and have not graduated may still attend if they follow the guidelines for Under 18 Students. 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, mental or physical disability, religion, expunged record, veterans' status or association with any member of these protected groups.

Tuition BP725
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).

For adjustments:

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. Prior to approval of the tuition increase, the board will review the index options, affordability and access for students, and the revenue requirements of the college.

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

- Coordinator, 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:** Center for Accessible Resources, Building 1, Room 218, 541.463.5059, TTY Relay: 711

- **Problems with access to Lane's facilities:** Todd Smith, Interim Director, Facilities Management and Planning, Building 7, Room 204B, 541.463.5566
- **Employee workplace accommodations:** Sharon Daniel, Human Resources, Building 3, Room 114, 541.463.5589
- **Disability related complaints/Section 504 Coordinators**: Center for Accessible Resources, Building 1, Room 218, 541.463.3010, TTY: 711 (student and program issues); Dennis Carr, Human Resources, Building 3, Room 114, 541.463.5585 (staff and employment issues)
- **Student rights, responsibilities and conduct**: Kerry Levett, 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 Diethlamide ("LSD," "Acid"), Mescaline, MDA, MDMA, DMT, STP, Psilocybinhallucinations; 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.) Opiumlethargy; apathy; loss of judgment and self-control; tolerance; dependence; convulsions; coma; death.

Deliriants Mental confusion. (A.) Aerosol products (B.) Lighter Fluid (C.) Paint Thinner and other Inhalantsdamage to brain, lungs; convulsions; death.

Alcohol A sedative drugtolerance; 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 complete and submit the "Under 18 Students Parent/Guardian form" 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/finaid*

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 in district 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, affirmative 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 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. Accommodations for Access
Center for Accessible 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 Center for Accessible 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 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 progressive alerts and eventual dismissal from the College.

H. Complaint Procedures See Student Policies and Complaint Procedures.

I. Additional Rights of Petition and Appeal
For grade and academic appeals process, contact Enrollment 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 Student Life and Leadership Development Office 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 Campus, 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 grievance procedures: The Student Code of Conduct, Student Complaint Procedure, and the Student Sexual Misconduct and Harassment Procedure. These procedures are available on the college's website, myLane, and OrgSync.

Contact Office of Academic and Student Affairs, 541.463.5732.

V. Discipline

The Student Code of Conduct and the student conduct process apply to the conduct of individual students and all College affiliated student organizations. For the purposes of student conduct, a student (a) is enrolled as a student and/or registered for one or more credit hours including dually enrolled students in multiple institutions; (b) is enrolled in a non-credit program or (c) was enrolled under (a) or (b) within four proceeding terms is considered a "Student" for purposes of the procedure or (d) if the person has submitted an application for admission, financial aid or any other service provided by the College that requires student status.

The Student Code of Conduct is not applicable to students enrolled only in College Now courses on their local high school campuses. Lane Community College reserves the right to clarify appropriate students to whom the Student Code of Conduct is applicable.

Students are required to provide identification such as a photo identification card or class schedule on demand to campus safety personnel, faculty or administrators.

Students deserve fair and equal treatment, so instructors, staff 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. Dismissal as a result of faculty action is counted toward the maximum number of absences allowed in the class.

If a student is dismissed for inappropriate behavior, faculty may 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 through the processes outlined in the Student Code of Conduct.

Campus Public Safety may be called to assist in any disciplinary situation. The assisting Public Safety 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 Campus, 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

Lane Community College is a community learning institution committed to fostering a campus environment conducive to academic inquiry, a productive campus life, and thoughtful study and discourse. The student conduct program, within the Office of Academic and Student Affairs, is committed to an educational and developmental process that balances the interests of individual students with the interests of the College community.

A community exists on the basis of shared values and principles. At the College, student members of the community are expected to uphold and abide by certain standards of conduct that form the basis of the Student Code of Conduct. These standards are embodied within a set of Values that include integrity, social justice, respect, community, and responsibility.

Each member of the College community bears responsibility for their individual conduct and is expected to assume reasonable responsibility for the behavior of others. When members of the community fail to exemplify these five values by engaging in violation of the rules below, campus conduct proceedings are used to assert and uphold the Student Code of Conduct.

The student conduct process at Lane Community College is not intended to punish students; rather, it exists to protect the interests of the community and to challenge those whose behavior is not in accordance with the college's policies and procedures. Sanctions are intended to challenge students' moral and ethical decision-making and to help bring behavior into accord with community expectations. When a student is unable to conform their behavior to community expectations, the student conduct process may determine the student should no longer share in the privilege of participating in this community.

The purpose of this Student Code of Conduct is to protect the individual rights of students and employees 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 employees, property protection, record security, and other education-related services.

Through this Student 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 should be aware that the student conduct process is quite different from criminal and civil court proceedings. Procedures and rights in student conduct procedures are conducted with fairness to all, but do not include the same protections of due process afforded by the courts. Due process, as defined within these procedures, assures written notice and a Student Conduct Conference before an objective decision-maker. No student will be found in violation of College policy or procedure without information showing it is more likely than not (preponderance of evidence) that a violation occurred, and any sanctions will be proportionate to the severity of the violation and to the cumulative conduct history of the student. This determination does not require a standard beyond a reasonable doubt, and the technical rules of evidence applicable to civil and criminal procedures shall not apply.

Students cited with code violation are entitled to due process as described in the code and may appeal certain consequences of violations.

NOTE: At the time of the catalog publication, the Student Code of Conduct was in the process of revision. The Student Code of Conduct can be found on the college's website, myLane, and OrgSync. For a written copy of the Student Code of Conduct, please contact the Executive Dean of Student Affairs, 541.463.5725.

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 Annual Security (Clery) Report is located at lanecc.edu/psd/clery-compliance-information 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, Downtown Campus, and the Downtown Center. The Cottage Grove and Florence campuses, Lane's Aviation Academy, KLCC radio station, and the Willamette Dental Clinic receive investigative, training, prevention, and consulting services from Public Safety, but are primarily served by their local law enforcement agencies. Police departments in these jurisdictions also report incidents to the college's Public Safety department. Public Safety provides services at the Downtown Campus including the Titan Court residential facility 7 days a week. In order to contact a downtown officer, call 541.463.6267.

Lane Community College Public Safety Officers are certified under the Oregon Department of Public Safety Standards and Training. Officers maintain an atmosphere conducive to education, contribute to a safe campus environment, enforce parking and traffic regulations, conduct investigations of reported crimes, and share reports with other law enforcement agencies.

Public Safety officers are authorized to enforce motor vehicle and parking laws on campus. Officers are charged with responding to crimes, medical emergencies and violations of college policy/rules and may cite or arrest perpetrators of criminal acts or college policy violations. In addition, officers utilize law enforcement tools such as the Criminal Justice Information System, Law Enforcement Data System (LEDS).

Preventing Crimes

Education The majority of criminal incidents on campus result from leaving property unattended, lockers unlocked and valuable property visible in cars. The Public Safety department provides speakers on crime prevention, active shooter/violent actor response, self-defense, personal safety, sexual assault prevention and other criminal justice and safety topics.

Intoxicants Drugs and intoxicants are not permitted on campus, except under very specific circumstances, which are detailed in the Student Policies section. Special note: Marijuana use or possession in any form remains illegal on all of Lane Community College's campuses and properties.

Lighting and Landscaping College staff work constantly to maintain good lighting and to clear undergrowth to improve visual access on campus and prevent crime.

Patrol Service Public Safety conducts patrols of the campus by squad car, motorized T-3, bicycle, and by foot. This comprehensive patrol policy promotes community policing and crime prevention activities. In addition to patrol service, Public Safety works closely with the Lane County Sheriff's Department, Eugene Police Department, and federal agencies such as Homeland Security and the FBI.

Emergency Assistance

Public Safety Officers are always on duty (24/7/365) on campus. To contact Public Safety:

Red Telephones Use one of the 40 red telephones on main campus and at the Downtown Campus. These emergency phones automatically ring in the Public Safety department when the receiver is lifted

Blue Telephones There are a small number of "blue" emergency phones located in outside areas of the campus. These phones connect directly to Public Safety Emergency (5555).

All emergency phones are checked periodically to ensure that they function.

Dial 5555 On campus 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.

Campus Elevators All call boxes in elevator cars connect to Public Safety Emergency (5555).

Emergency Car Services Emergency car battery packs are offered 24 hours a day. Call or visit Public Safety. Individuals must pick up the packs at Public Safety, Building 13, Room 107 and a valid photo ID is necessary for this free service. 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 taken into custody, cited, issued an order to appear, or subject to other campus and court referrals. Public Safety Officers may also facilitate contact between the victim and other law enforcement agencies.

Services

In addition to direct law enforcement services and support, Public Safety will also make referrals to other appropriate campus offices to assist complainants and crime victims. These referrals include, but are not limited to: The Women's Center, the Title IX officer, Academic and Student Affairs, Veterans Resource Office, Human Resources, the Center for Accessibility Resources, and the Counseling Department.

Other Services Public Safety provides numerous other services including: criminal background checks, access control system assistance, electronic fingerprinting, dignitary protection, alarm monitoring and response, safety escorts, copies of accident reports, and personal safety instruction.

Public Safety is also the primary facilitator and supporter of a campus warming center. This center provides shelter and meals for any individual when the temperature drops to 30 degrees F or lower.

Public Safety also maintains the official campus lost and found service. Individuals who have lost or found property, should contact Public Safety at 541.463.5558 or stop by the Public Safety office.

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, as well as the complete campus Annual Security Report, may be found at the Public Safety web site: *lanecc.edu/psd/clery-compliance-information*.

For more information about Lane's Public Safety Department, contact 541.463.5558.

Career Technical Programs

To request this information in an alternate format please contact the Center for Accessible Resources at 541.463.5150 or *accessibleresources@lanecc.edu*.

Career Technical Programs

Accounting

Offered by the Business Department 541.463.5221

Associate of Applied Science Degree

Program Coordinator Chris Culver, 541.463.5153, *culverc@lanecc.edu*

Purpose To prepare graduates to enter the field of accounting.

Learning Outcomes The student who successfully completes all Accounting requirements will:

- anticipate and actively explore innovative solutions to technological and organizational challenges.
- 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.
- organize and manage the daily business functions of an organization.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.
- 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.
- use software including word processing, spreadsheets, and databases to input, manage, and interpret information to meet organizational needs.
- work independently within diverse business environments; apply individual strengths and critical thinking to collaborative efforts.
- create and present professional documents, work papers, and presentations for both internal and external users.
- apply accounting theory to analyze accounting information.
- understand and monitor the financial, tax, payroll, legal, and other compliance requirements for a variety of organizational entities.
- plan, budget, and evaluate financial performance.

Cooperative Education (Co-op) Students earn credit while gaining relevant 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 future employment. Contact Jamie Kelsch, Co-op Coordinator, Bldg. 19, Rm. 253A, 541.463.5540, *kelschj@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 23 annually

Statewide openings - 251 annually

Lane County average hourly - $18.57; average annual - $38,642

Oregon average hourly - $19.53; average annual - $40,629

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$2,835
Computers/Internet Service	$1,500
Resident Tuition and General Student Fees	$12,739
Total Estimated Cost	$17,074

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- An approved 3-credit Health class can be substituted for the PE requirements. Please speak with your academic advisor
- BT 020 must be taken for a letter grade, not P/NP
- Students must place at least into WR 121 or WR 121_H and MTH 095, or take classes to reach these levels before enrolling in program courses. Consult course descriptions for prerequisites on other courses.
- All program core courses (BA, BT) must be taken for a letter grade, and must be completed with a grade of "C" or better to meet program requirements. See course listings for prerequisites.
- Foundational Requirements (writing, math, communication and Health/Wellness/Fitness courses) may be completed with a grade of "C-" or a "Pass".
- Before enrolling in BT 120 MS WORD for Business or BT 123 MS EXCEL for Business, students are expected to have a basic knowledge of the Windows operating system and the ability to type 30 words per minute accurately.
- Before enrolling in BA 214 Business Communications, students must pass BT 108 Business Proofreading and Editing.
- These courses may only be offered once per year. Check the schedule below for required terms. BT170 Payroll Rec & Actng BT223 MS EXCEL for Business - Expert BT272 Tax Concepts & Preparation BT221 Budgeting for Managers BT286 Professional Bookkeeping

First Year	**Fall**
MTH 095 Intermediate Algebra or higher	5
Physical Education Requirement	1
BT 120 MS WORD for Business	4
BT 108 Business Proofreading and Editing	4
WR121 Academic Composition or WR 121_H Academic Composition	4
	Winter
BA 101 Introduction to Business	4
BT 165 Introduction to the Accounting Cycle	4
BA 214 Business Communications	4
BA 281 Personal Finance	4
	Spring
BT 163 QuickBooks	4
BT 206 Co-op Ed: Business Seminar	2
Physical Education Requirement	1
MTH 105 Math in Society or higher	4
BT 123 MS EXCEL for Business	4
Second Year	**Fall**
BA 211 Financial Accounting	4
BT 170 Payroll Records & Accounting	4
BA 278 Leadership & Team Dynamics	4
Communication Course	4
	Winter
BT 221 Budgeting for Managers	4
BT 223 MS EXCEL for Business-Expert	4
BT 230 Sustainable Paperless Office Practices using Adobe Acrobat	4
BT 286 Professional Bookkeeping	4
	Spring
Physical Education Requirement	1
BA 280AC Co-op Ed: Accounting	3
BT 272 Tax concepts & Preparation	4
BA 226 Business Law	4

Administrative Professional

Offered by the Business Department, 541.463.5221

Associate of Applied Science Degree

Career Pathway Certificate - Administrative Professional: Customer Service

Career Pathway Certificate - Administrative Professional: Legal Office Skills

Career Pathway Certificate - Administrative Professional: Office Software Specialist

Career Pathway Certificate - Administrative Professional: Small Business Ownership

Program Coordinator Judy Boozer, Bldg. 19, Rm. 253C, 541.463.5765, *boozerj@lanecc.edu*

Purpose To train students to manage professionally the administrative functions related to a well-run business/organization. This includes managing/coordinating projects, using personal computers for internet research, word processing, and financial analysis, handling correspondence, maintaining electronic and manual files, assisting with financial record keeping, operating a variety of equipment, assisting and greeting customers/clients, answering telephones, utilizing social media appropriately for the needs of the business/organization, assuming some executive decision-making responsibilities, and collaborating digitally. Upon successful completion of the first year courses, students will be eligible for the Business Assistant One-Year Certificate of completion.

Learning Outcomes The student who successfully completes all Administrative Professional requirements will:

- organize and manage the daily business functions of an organization.
- 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.
- 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.
- have enhanced employment opportunities based on selection of directed electives, such as accounting, legal, and medical.
- use communication, teamwork, and interpersonal skills for internal and external customer support.
- understand accounting as the 'language of business'.
- 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.
- use software including word processing, spreadsheet, database, and presentation tools to input, manage, and interpret information to meet organizational needs.
- engage customers and co-workers in a purposeful manner listening to and accurately interpreting their responses within diverse cultural contexts.
- preform in management level positions after additional experience is acquired.

Cooperative Education (Co-op) Students earn credit while gaining relevant 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 future employment. Contact Jamie Kelsch, Co-op Coordinator, Bldg. 19, Rm. 253A, 541.463.5540, *kelschj@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 42 annually

Statewide openings - 485 annually

Lane County average hourly - $17.45; average annual - $36,296

Oregon average hourly - $18.18; average annual - $37,814

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$2,966
Computers/Internet Service	$1,500
Resident Tuition and General Student Fees	$13,238
Total Estimated Cost	$17,704

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- The AP program has graded keyboarding skill levels built into several courses.
- Prerequisites are required for some courses. See course descriptions.
- All Business Department majors must have a computer that meets minimum system requirements. Contact the department or academic advisor for details.
- All program core courses (BA, BT, CS) must be taken for a letter grade, and must be completed with a grade of 'C' or better to meet program requirements. See course listings for prerequisites.
- Foundational Requirements (writing, math, communication and Health/Wellness/Fitness courses) may be completed with a grade of 'C-' or 'Pass'.
- Students must place at least into WR 121 or WR 121_H and MTH 065, or take classes to reach these levels before enrolling in program core courses.
- Before enrolling in BT 120 MS WORD for Business or BT 123 MS EXCEL for Business, students are expected to have a basic knowledge of the Windows operating system and the ability to type 30 words per minute accurately and key 130-132 strokes per minute.
- Before enrolling in BA 214 Business Communications, students must pass BT 108 Business Proofreading and Editing.
- These courses may only be offered once per year. Check the schedule below for required terms. BA224 Human Resource Management BA250 Small Business Management BT144 Administrative Procedures BT170 Payroll Rec & Actng BT181 Customer Service BT220 MS WORD for Business - Expert BT223 MS EXCEL for Business - Expert BT221 Budgeting for Managers BT228 Integrated Office Applications BT271 AOP Advanced Projects

First Year	**Fall**
BT 120 MS WORD for Business	4
CS 120 Concepts of Computing: Information Processing	4
WR121 Academic Composition or WR 121_H Academic Composition	4
MTH 065 Elementary Algebra or higher	4
	Winter
BA 101 Introduction to Business	4
BT 123 MS EXCEL for Business	4
BT 165 Introduction to the Accounting Cycle	4
BT 108 Business Proofreading and Editing	4

	Spring
BA 206 Management Fundamentals	4
BA 214 Business Communications	4
BT 144 Administrative Procedures	4
BT 163 QuickBooks	4
BT 206 Co-op Ed: Business Seminar	2
Second Year	**Fall**
PE/Health Requirement	3
BA 224 Human Resource Management	4
BT 220 MS WORD for Business - Expert	3
Communication Course	4
Directed Elective	3 - 8
	Winter
BA 226 Business Law	4
BT 228 Integrated Office Applications	4
BT 230 Sustainable Paperless Office Practices using Adobe Acrobat	4
Directed Elective	4 - 8
	Spring
BA 278 Leadership & Team Dynamics	4
BT 271 Administrative Office Professional Advanced Projects	4
Directed Elective	4 - 8
BA280AA Co-op Ed: Administrative Office Professional	3

Directed Electives

HIM 112 Medical Insurance Procedures	3
BT 170 Payroll Records & Accounting	4
BT 221 Budgeting for Managers	4
BT 223 MS EXCEL for Business-Expert	4
BA 211 Financial Accounting	4
LA 100 Legal Procedures (Taught Elsewhere)	4
LA 101 Introduction to Paralegal Studies (Taught Elsewhere)	3
LA 102 Legal Terminology (Taught Elsewhere)	3
LA 105 Civil Litigation (Taught Elsewhere)	3
LA 128 Legal Procedures 2 (Taught Elsewhere)	4
LA 132 Ethics for the Legal Professional (Taught Elsewhere)	3
HO 100 Medical Terminology 1	3
HO 110 Health Office Procedures	3
BA 223 Marketing	4
BT 181 Customer Service	4
CIS 101 Computer Fundamentals	4
BT 150 Business Web Pages with WordPress	3
BA 250 Small Business Management	4
BA 280AA Co-op Ed: Administrative Office	3
BA280CS Co-op Ed: Customer Service	3
BA 281 Personal Finance	4
CIS 125D Software Tools 1: Databases	4

Administrative Professional: Customer Service

Offered by the Business Department 541.463.5221

Career Pathway Certificate

Program Coordinator LuAnne Johnson, Bldg. 19, Rm. 254B, 541.463.5767, *johnsonlm@lanecc.edu*

Purpose This Career Pathway Certificate is designed for individuals who are interested in employment or advance opportunities in the various customer service fields. Students may find employment in call centers, customer service centers, or departments within businesses that have a significant customer service component.

Learning Outcomes The graduate of the Customer Service Certificate of Completion will be able to:

- utilize keyboarding and business software skills to help support customers.
- communicate in written and verbal forms to help serve customers.
- work effectively as an individual and within teams to help meet customer needs.
- deliver effective initial customer service and promote customer satisfaction.

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

	Fall
Choice of: CIS 101 Computer Fundamentals; CS 120 Concepts of Computing: Information Processing	4
BA 278 Leadership & Team Dynamics	4
	Winter
COMM 218 Interpersonal Communication	4
BT 120 MS WORD for Business	4
	Spring
Choice of: BA 280CS Co-op Ed: Customer Service; BA 101 Introduction to Business	3 - 4
BT 181 Customer Service	4

Administrative Professional: Legal Office Skills

Offered by the Business Department, 541.463.5221

Career Pathway Certificate

Program Coordinator Business Department, Bldg. 19, Rm. 137, 541.463.5221

Purpose This Career Pathway Certificate of Completion is designed for those with office experience who wish to expand their options for employment in law-related business and government offices. It also prepares students for transfer into the second year of Umpqua Community College's AAS Degree in Paralegal Studies, which is offered completely online. Legal careers require criminal and personal background checks. The partnership between Lane and Umpqua allows students to work toward their Legal Office Certificate while at Lane, and if they choose to continue their education, they can transfer that certificate to Umpqua to begin second year classes of the AAS in Paralegal Studies. Federal regulations prohibit students from majoring in a degree not awarded from the institution they are attending. Please see your academic advisor to discuss major options while you are attending Lane. Federal regulations also prohibit receiving financial aid for the same term at more than one institution. Students who plan to transfer to Umpqua to pursue an AAS in Paralegal Studies will need to stop receiving financial aid from Lane and apply for financial aid from Umpqua when they transfer.

Learning Outcomes Students earning the Legal Office Skills Certificate of Completion will be able to:

- use and understand basic legal terminology and concepts.
- demonstrate an understanding of the role of lawyers in the legal system.
- demonstrate an understanding of the roles and duties of all levels of legal support personnel in the legal environment.
- prepare accurately formatted legal documents, letters, and pleadings and compose correspondence commonly used in legal settings.
- draft basic pretrial documents.

- demonstrate an understanding of pretrial and trial procedures.
- develop questions for gathering information and facts in preparation for trial.
- evaluate and practice rules of ethics as they would apply to civil litigation.
- demonstrate an understanding of ethics as they relate to confidentiality, competence, fees, billing, conflicts of interest, and UPL.
- demonstrate an understanding of the purposes and functions of court rules, schedules, and procedures.
- demonstrate a basic knowledge of requirements for recording and filing documents with the proper court offices.
- demonstrate an understanding of and use a variety of legal office systems including document management and calendaring.
- demonstrate an understanding of and practice basic functions of legal billings and timekeeping, client relations, and litigation support.
- use law library, computing and communication services to obtain legal forms, information, and data from regional, national, and international networks.
- work independently within diverse business environments; apply individual strengths and critical thinking to collaborative efforts.
- use research and analytical skills to support the activities of the organization.

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All courses must be taken for a letter grade, and must be completed with a grade of 'C' or better or repeated to meet program requirements.
- Students are expected to have the ability to accurately type 40 words per minute before taking LA 100. The Business Department at Lane offers free placement tests to assist students in determining skill levels. Students who are unable to meet the minimum
- The LA course sequence is offered through Umpqua Community College Fall, Winter Spring and Winter, Spring, Summer.

	Fall
Choice of:	
WR 121 Academic Composition	
WR 121_H Academic Composition - Honors	4
LA 100 Legal Procedures (Taught Elsewhere)	4
LA 102 Legal Terminology (Taught Elsewhere)	3
BT 108 Business Proofreading and Editing	4
	Winter
CS 120 Concepts of Computing: Information Processing	4
LA 101 Introduction to Paralegal Studies (Taught Elsewhere)	3
LA 128 Legal Procedures 2 (Taught Elsewhere)	4
MTH 065 Elementary Algebra or higher	4
	Spring
Choice of:	
COMM 105 Listening and Critical Thinking	
COMM 218 Interpersonal Communication	
COMM 219 Small Group Discussion	4
BA 214 Business Communications	4
LA 105 Civil Litigation (Taught Elsewhere)	3
LA 132 Ethics for the Legal Professional (Taught Elsewhere)	3

Administrative Professional: Office Software Specialist

Offered by the Business Department, 541.463.5221

Career Pathway Certificate

Program Coordinator Judy Boozer, Bldg. 19, Rm. 253C, 541.463.5765, *boozerj@lanecc.edu*

Purpose This Career Pathway Certificate of Completion is designed for administrative professional personnel who are interested in career enhancement or for current Business students with administrative experience who wish to expand their software proficiency. In today's competitive job market, 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:

- create, format, save, edit, paginate, and print documents.
- 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.
- navigate the Windows operating environment.
- 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, multi-sheet 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.
- create and apply character and paragraph styles, generate and update document indexes, tables of contents, and captions; demonstrate mastery in working with document sections, templates, and mail merge.

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions
- All Business Department majors must have a computer that meets minimum system requirements. Contact the department or academic advisor for details
- All courses must be taken for a letter grade, and must be completed with a grade of 'C' or better to meet program requirements. See course listings for prerequisites
- Students must place at least into WR 121 or WR 121H and MTH 065, or take classes to reach these levels before enrolling in program core courses. WR 121 or WR 121_H and MTH 065 must be taken for a letter grade, and must be completed with a grade of 'C-
- Before enrolling in BT 120 MS WORD for Business or BT 123 MS EXCEL for Business, students are expected to have a basic knowledge of the Windows operating system and the ability to type 30 words per minute accurately and key 130-132 strokes per minute

- The AP program has graded keyboarding skill levels built into several courses.

BT 120 MS WORD for Business	4
BT 123 MS EXCEL for Business	4
BT 220 MS WORD for Business - Expert	3
BT 223 MS EXCEL for Business-Expert	4
BT 228 Integrated Office Applications	4
CIS 125D Software Tools 1: Databases	4
BT 230 Sustainable Paperless Office Practices using Adobe Acrobat	4

Administrative Professional: Small Business Ownership

Offered by the Business Department 541.463.5221

Career Pathway Certificate

Program Coordinator Judy Boozer, Bldg. 19, Rm. 253C, 541.463.5765, *boozerj@lanecc.edu*

Purpose This Career Pathway Certificate is designed for individuals who may want to own and operate a business in the near term or 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.

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.

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

	Fall
BA 101 Introduction to Business	4
BT 123 MS EXCEL for Business	4
BT 165 Introduction to the Accounting Cycle	4
	Winter
BA 223 Marketing	4
BA 226 Business Law	4
BT 150 Business Web Pages with WordPress	3
	Spring
BA 206 Management Fundamentals	4
BA 250 Small Business Management	4
BT 163 QuickBooks	4

Automotive Technology

Offered by the Advanced Technology Division, 541.463.5380

Associate of Applied Science Degree

Two-Year Certificate of Completion - Automotive Technology

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

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.

Accreditation Automotive Technology, certified by the National Automotive Technicians Education Foundation, a non-profit foundation within the National Institute for Automotive Service Excellence

Admission Information *lanecc.edu/advtech/at/admission-information* or contact the Advanced Technology Division, *AdvTech-Programs@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Automotive Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 21 annually

Statewide openings - 303 annually

Lane County average hourly - $21.70; average annual - $45,136

Oregon average hourly - $21.44; average annual - $44,585

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,324
Differential Fees*	$2,717
Instruments/Tools	$3,170
Program Specific Fees	$960
Resident Tuition and General Student Fees	$13,122
Total Estimated Cost	$21,293

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All AM and MTH courses must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better, or pass, to fulfill program requirements.
- WR115W and the PE/Health requirements must be passed with a "C-" or better to fulfill program requirements.
- See course descriptions for prerequisite information.
- For choices in Foundational Skills and Discipline Studies, see AAS degree description.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

First Year	**Fall**
MTH 085 Applied Geometry for Technicians	4
AM 243 Electrical and Electronic Systems	12
	Winter
AM 145 Engine Repair	12
PE/Health Requirement	3
WLD 121 Shielded Metal Arc Welding 1	4
	Spring
AM 147 Suspension and Steering	6
AM 149 Manual Drive Trains and Axles	6
WR 115W Introduction to College Writing: Workplace Emphasis	3
Second Year	**Fall**
AM 143 Brakes	8
AM 246 Heating and Air Conditioning	4
CS 120 Concepts of Computing: Information Processing	4
Choice of: Science or Computer Science Course	
ET129 Electrical Theory 1	4
	Winter
AM 244 Engine Performance	12
Choice of:	
COMM 100 Basic Communications	
COMM 105 Listening and Critical Thinking	
COMM 218 Interpersonal Communications	4
CG 203 Human Relations at Work	3
	Spring
AM 242 Automatic Transmissions/Transaxles	12
AM 280 Co-op Ed: Automotive	3

Automotive Technology

Offered by the Advanced Technology Division, 541.463.5380

Two-Year Certificate of Completion

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

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.

Admission Information *lanecc.edu/advtech/at/admission-information*or contact the Advanced Technology Division, *AdvTech-Programs@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Automotive Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County: 21 positions

Statewide: 303 positions

Lane County average hourly - $21.70; average annual - $45,136

Oregon average hourly - $21.44; average annual - $44,585

Costs Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.

Books	$951
Differential Fees*	$2,717
Instruments/Tools	$3,170
Program Specific Fees	$940
Resident Tuition and General Student Fees	$11,700
Total Estimated Cost	$19,478

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

49-3023.01

Standard Occupational Classification: 43-3023.01 Go to the Department of Labor's O*Net website for a profile of this occupation: Automotive Master Mechanics Onetonline.org/link/summary/49-3023.01 Or check on these O*Net Related Occupations: Automotive Specialty Technicians onetonline.org.link/summary/49-3023.02

In academic year 2014-15, fewer than 10 students completed this certificate within 2 years -- the actual number is withheld to preserve the confidentiality of students.

The program is designed to take 6 full-time enrolled terms, or about 2 academic years of study to complete -- i.e., "normal time."

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time graduation rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- All AM and MTH courses must be completed with a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
- WR 115W and the PE/Health courses must be completed with a Pass or "C-" or better, or pass, to fulfill program requirements.
- See course descriptions for prerequisite information.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

First Year	**Fall**
AM 243 Electrical and Electronic Systems	12
MTH 085 Applied Geometry for Technicians	4
	Winter
AM 145 Engine Repair	12
WLD 121 Shielded Metal Arc Welding 1	4
	Spring
AM 147 Suspension and Steering	6
AM 149 Manual Drive Trains and Axles	6
PE/Health Elective	3
Second Year	**Fall**
AM 143 Brakes	8
AM 246 Heating and Air Conditioning	4
WR 115W Introduction to College Writing: Workplace Emphasis	3
	Winter
AM 244 Engine Performance	12
CG 203 Human Relations at Work	3
	Spring
AM 242 Automatic Transmissions/Transaxles	12
AM 280 Co-op Ed: Automotive	3

Aviation Maintenance Technician

Offered by the Lane Aviation Academy, 541.463.4303

Associate of Applied Science Degree

Two-Year Certificate of Completion - Aviation Maintenance Technician

Program Coordinator Patrick O'Connor, Division Dean of Advanced Technology , 541.463.5710

Purpose To prepare technicians to repair and maintain the operating condition of aircraft, and qualify for Federal Aviation Administration (FAA) certification exams (written, oral and practical) for the airframe and powerplant airman certificate.

Learning Outcomes The student who successfully completes all Aviation Maintenance Technician requirements 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.

Accreditation Aviation Maintenance, approved under Part 147 of the Federal Aviation Regulations of the Federal Aviation Administration

Admission Information Contact Lane Aviation Maintenance

Technology: *lanecc.edu/aviationacademy*

Phone: 541.463.4303 Email: *amt@lanecc.edu*

Advising and Counseling Aviation Maintenance Program Advisors are: * Claudia Riumallo: Office: Bldg. 12, Rm. 120A, Phone: 541.463.5378 Email: *riumalloc@lanecc.edu* * Sarah Rick: Bldg. 12, Rm 119B, Phone: 541.463.5292 Email: *ricks@lanecc.edu* Advisor Drop-in hours are updated weekly *at: https://classes.lanecc.edu/course/info.php?id=31255*

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 Chuck Fike, Aviation Maintenance Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 1 annually

Statewide openings - 46 annually

Graduates may have many opportunities nationally.

Lane County average hourly - $26.76 average annual - $55,666

Oregon average hourly - $28.31; average annual - $58,878

Costs Estimate based on 2017-18 costs. All amounts are subject to change. See the online credit class schedule for the most current information.

Books	$500
Certification, Licensure, Exams, Physicals	$1,500
Instruments/Tools	$1,000
Program Specific Fees	$2,700
Resident Tuition and General Student Fees	$13,992
Total Estimated Cost	$19,692

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- See course descriptions for prerequisite and corequisite information.
- Graduates may also transfer to a four-year university preparing for a professional degree.
- For choices in Foundational Skills and Discipline Studies, see AAS degree description.
- Foundational Skills (except MTH) and Discipline Studies are not required for two-year FAA Airframe and Powerplant airman's certificate exams.
- WR 115W Introduction to College Writing: Workplace Emphasis or higher writing is a prerequisite but in any case must be completed before the end of the Second Year.
- WR and PE/Health requirement must be passed with a Pass or

'C-' or better to fulfill program requirements.

- MTH 085 (or higher math) must be taken no later than the second winter term.
- MTH 075 or equivalent is a prerequisite but in any case must be completed before the end of the first year.
- MTH 060 and 065 or MTH 070 may substitute for MTH 075.
- All AV and MTH courses must be taken for a letter grade, not P/NP, and must be passed with a 'C-' or better to fulfill program requirements.
- Minimum placement score of 68 in Reading, completion of RD 080 or RD 087 and EL 115, 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.

Prerequisites

MTH 075 Applied Algebra for Technicians
WR 115W Introduction to College Writing: Workplace Emphasis

First Year	**Fall**
AV 192 General 101	6
AV 193 General 102	6
MTH 085 Applied Geometry for Technicians	4
	Winter
AV 196 General 105	6
AV 194 General 103	6
AV 262 Airframe 2	6
	Spring
AV 195 General 104	6
AV 263 Airframe 3	6
AV 264 Airframe 4	6
Second Year	**Fall**
AV 261 Airframe 1	6
AV 271 Powerplant 1	6
AV 272 Powerplant 2	6
	Winter
AV 273 Powerplant 3	6
AV 274 Powerplant 4	6
Human Relations requirement	3
Science/Computer Science requirement	3
	Spring
AV 283 Powerplant Return to Service	6
AV 282 Airframe Return to Service	6
PE/Health requirement	3
Arts and Letters requirement	3
AV 280 Optional elective Co-op Ed Av Maint	0

Additional Electives

	Spring
AV 280 Optional elective Co-op Ed Av Maint	0

Aviation Maintenance Technician

Offered by the Lane Aviation Academy, 541.463.4303

Two-Year Certificate of Completion

Program Coordinator Patrick O'Connor, Division Dean of Advanced Technology , 541.463.5710

Purpose To prepare technicians to repair and maintain the operating condition of aircraft, and qualify for Federal Aviation Administration (FAA) certification exams (written, oral and practical) for the airframe and powerplant airman certificate.

Learning Outcomes The student who successfully completes all Aviation Maintenance Technician requirements 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.

Admission Information Contact Lane Aviation Maintenance Technology: *lanecc.edu/aviationacademy*

Phone: 541.463.4303 Email: *amt@lanecc.edu*

Advising and Counseling Aviation Maintenance Program Advisors are: * Claudia Riumallo: Office: Bldg. 12, Rm. 120A, Phone: 541.463.5378 Email: *riumalloc@lanecc.edu* * Sarah Rick: Office: Bldg. 12, Rm 119B, Phone: 541.463.5292 Email: *ricks@lanecc.edu* Advisor Drop-in hours are updated weekly *at: https://classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Aviation Maintenance Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County: 1 positions

Statewide: 46 positions

Graduates may have many opportunities nationally.

Lane County hourly average - $26.76; annual average - $55,666

Oregon hourly average - $28.31; annual average - $58,878

Costs Estimate based on 2017-18 costs and are subject to change. See the online credit class schedule for the most current information.

Books	$500
Certification, Licensure, Exams, Physicals	$1,500
Instruments/Tools	$1,000
Program Specific Fees	$2,700
Resident Tuition and General Student Fees	$13,236
Total Estimated Cost	$18,936

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

49-3011.00

Standard Occupational Classification: 49-3011.00 Go to the Department of Labor's O*Net website for a profile of this occupation: Aircraft Mechanics and Service Technicians Onetonline.org/link/summary/49-3011.00 Or check on these O*Net Related Occupations: Aircraft Structure, Surfaces, Rigging, and Systems Assemblers onetonline.org.link/summary/51-2011.00 Office Clerks, General onetonline.org/link/summary/43-9061.00

In academic year 2014-15, 15 students completed this certificate.

The program is designed to take 8 terms, or about 24 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane,

enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- See course descriptions for prerequisite and corequisite information.
- All AV and MTH courses must be taken for a letter grade, not P/NP, and must be passed with a 'C-' or better to fulfill program requirements.
- MTH 060 and 065 or MTH 070 may substitute for MTH 075.
- MTH 075 is a prerequisite, but in any case must be completed before the end of the first year.
- MTH 085 (or higher) must be completed no later than the second winter term.
- WR and PE/Health requirement must be passed with a Pass or 'C-' or better to fulfill program requirements.
- WR 115W is a prerequisite and should be taken before the first year.

Prerequisites

MTH 075 Applied Algebra for Technicians
WR 115W Introduction to College Writing: Workplace Emphasis

First Year	**Fall**
AV 193 General 102	6
AV 192 General 101	6
MTH 085 Applied Geometry for Technicians	4
	Winter
AV 196 General 105	6
AV 194 General 103	6
AV 262 Airframe 2	6
	Spring
AV 195 General 104	6
AV 263 Airframe 3	6
AV 264 Airframe 4	6
Second Year	**Fall**
AV 271 Powerplant 1	6
AV 272 Powerplant 2	6
AV 261 Airframe 1	6
	Winter
AV 273 Powerplant 3	6
AV 274 Powerplant 4	6
Human Relations requirement	3
	Spring
AV 283 Powerplant Return to Service	6
AV 282 Airframe Return to Service	6
PE/Health Elective	3

Business Assistant

Offered by the Business Department, 541.463.5221

One-Year Certificate of Completion

Program Coordinator Business Department, Bldg. 19, Rm. 137, 541.463.5221

Purpose To train business 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 Professional Two-Year Associate of Applied Science degrees.

Learning Outcomes The graduate will be able to:

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.
- work independently within diverse business environments; apply individual strengths and critical thinking to collaborative efforts.
- 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.
- 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.
- 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.
- organize and manage the daily business functions of a business/organization.

Job Openings Projected through 2020

Lane County: 32 positions

Statewide: 384 positions

Lane County average hourly - $14.56; average annual - $30,293

Oregon average hourly - $14.92; average annual - $31,026

Costs Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.

Books	$1,681
Computers/Internet Service	$1,500
Resident Tuition and General Student Fees	$6,674
Total Estimated Cost	$9,855

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

43-6014.00

Go to the Department of Labor's O*Net website for a profile of this occupation: Secretaries and Administrative Assistants, Except Legal, Medical, and Executive Onetonline.org/link/summary/43-6014.00 Or check on these O*Net Related Occupations: Receptionists and Information Clerks onetonline.org.link/summary/43-4171.00 Office Clerks, General onetonline.org/link/summary/43-9061.00

In academic year 2014-15, 18 students completed this certificate.

The program is designed to take 4 terms, or about 15 months of study to complete.

69% of the Title IV students completed this certificate within 1 year. Note: The federally required method for calculating this rate assumes students will declare their completion program major immediately, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many community college students attend part-time, explore several majors, stop out for a term or more, change majors, and brush-up on their academic skills to be better prepared for college level courses, all of which affect this narrowly defined on-time graduation rate.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- See course descriptions for prerequisite requirements
- Students must place at least into WR 121 or WR 121_H and MTH 065, or take classes to reach these levels before enrolling in program courses
- Foundational Requirements (writing and math) may be completed with a grade of 'C-' or 'Pass'. All other required prerequisites and courses must be taken for a letter grade, not P/NP, and be passed with grade of 'C' or better
- Before enrolling in BT 120 MS WORD for Business or BT 123 MS EXCEL for Business, students are expected to have a basic knowledge of the Windows operating system and the ability to type 30 words per minute accurately and key 130-132 strokes per minute on a
- Before enrolling in BA 214 Business Communications, students must pass BT 108 Business Proofreading and Editing

	Fall
WR121 Academic Composition or WR 121_H Academic Composition	4
BT 120 MS WORD for Business	4
CS 120 Concepts of Computing: Information Processing	4
MTH 065 Elementary Algebra or higher	4
	Winter
BT 108 Business Proofreading and Editing	4
BA 101 Introduction to Business	4
BT 123 MS EXCEL for Business	4
BT 165 Introduction to the Accounting Cycle	4
	Spring
BA 206 Management Fundamentals	4
BA 214 Business Communications	4
BT 163 QuickBooks	4
BT 206 Co-op Ed: Business Seminar	2
Choice of: BT 144 Administrative Procedures / BA 281 Personal Finance	4
BA 278 Leadership & Team Dynamics	4

Business Management

Offered by the Business 541.463.5221

Associate of Applied Science Degree

Program Coordinator John Price 541.463.5156

Purpose Students completing the Business Management Associate of Applied Science (AAS) degree will be prepared for positions in management, marketing, and accounting. The degree includes electives to enable students to focus on one business area or develop a general background prior to assuming management positions.

Learning Outcomes The student who successfully completes all Business Management requirements will:

- demonstrate an understanding of the functions of leading, planning, organizing, and controlling in an organization.
- make informed business decisions based on the use analysis of financial and budgetary data.
- select appropriate marketing strategies for an organization.
- apply critical thinking and analytical skills in decision-making and problem solving.
- use software including word processing, spreadsheets, and databases to manage and interpret information to meet organizational needs.
- perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations.
- apply adaptive managerial, supervisory and leadership practices in a variety of situations.
- contribute to the planning, implementation, and evaluation of organizational goals and work products.

Cooperative Education (Co-op) Students earn credit while gaining relevant 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 future employment. Contact Jamie Kelsch, Co-op Coordinator, Bldg. 19, Rm. 253A, 541.463.5540, *kelschj@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 7 annually

Statewide openings - 63 annually

Lane County average hourly - $30.32; average annually - $63,057

Oregon average hourly - $30.71; average annually - $63,872

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$2,040
Computers/Internet Service	$1,500
Resident Tuition and General Student Fees	$12,620
Total Estimated Cost	$16,160

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- An approved 3-credit Health class can be substituted for the PE requirements. Please speak with your academic advisor.
- All program core courses (BA, BT) must be taken for a letter grade, and must be completed with a grade of "C" or better to meet program requirements. See course listings for prerequisites.
- Foundational Requirements (writing, math, communication and Health/Wellness/Fitness courses) may be completed with a grade of "C-" or a "Pass"
- These courses may only be offered once per year. Check the schedule below for required terms. BA222 Finance BA224 Human Resource Management BA250 Small Business Management BT144 Administrative Procedures BT170 Payroll Rec & Actng BT181 Customer Service BT221 Budgeting for Managers

First Year	Fall
WR121 Academic Composition or WR121_H Academic Composition	4
BT 108 Business Proofreading and Editing	4
BT 120 MS WORD for Business	4
MTH 095 Intermediate Algebra or higher	5
	Winter
MTH 105 Math in Society or higher	4
BA 101 Introduction to Business	4
BT 123 MS EXCEL for Business	4
Communication Course	4
	Spring
Choice of: BA211 Financial Accounting / BT165 Intro to the Accounting Cycle	4
BA 214 Business Communications	4
BT 206 Co-op Ed: Business Seminar	2
BA 206 Management Fundamentals	4
Physical Education Requirement	1

Second Year	Fall
BA 222 Financial Management	4
BA 281 Personal Finance	4
BA 223 Marketing	4
Physical Education Requirement	1
Directed Elective	3 - 4
	Winter
General Elective	4
BA 278 Leadership & Team Dynamics	4
Directed Elective	3 - 4
BA 226 Business Law	4
	Spring
Physical Education Requirement	1
BT 291 Operations Management	4
Directed Elective	4
BA 280 Co-op Ed: Business Management	3
Directed Elective	4

Directed Electives

BT 181 Customer Service	4
BA 238 Sales	3
BT 253 Digital Marketing	4
BT 163 QuickBooks	4
BT 221 Budgeting for Managers	4
BA 250 Small Business Management	4
BT 150 Business Web Pages with WordPress	3
BT 170 Payroll Records & Accounting	4
BT 230 Sustainable Paperless Office Practices using Adobe Acrobat	4
BT 144 Administrative Procedures	4
BA 224 Human Resource Management	4

Commercial Unmanned Aerial Systems

PENDING STATE APPROVAL: This Associate of Applied Science program is intended to prepare students for successful careers as commercial Unmanned Aerial Systems (UAS) operators. Please contact the Aviation Academy for information at 541.463.4195

Aerial Photography

PENDING STATE APPROVAL: This Career Pathway Certificate program is intended to prepare students for successful careers as commercial Unmanned Aerial Systems (UAS) operators. Please contact the Aviation Academy for information at 541.463.4195

Unmanned Aerial Systems: Geographic Information Science

PENDING STATE APPROVAL: This Career Pathway Cerificate program is intended to prepare students for successful careers as commercial Unmanned Aerial Systems (UAS) operators. Please contact the Aviation Academy for information at 541.463.4195

Computer Information Systems

This program is being discontinued. Students currently enrolled in the program should contact Academic Advising at 541.463.3800 for more information about completing core courses.

Computer Information Systems: Accounting Applications Option

This program is being discontinued. Students currently enrolled in the program should contact Academic Advising at 541.463.3800 for more information about completing core courses.

Computer Information Systems: Geographic Information Systems Option

This program is being discontinued. Students currently enrolled in the program should contact Academic Advising at 541.463.3800 for more information about completing core courses.

Computer Information Systems:Programming Option

This program is being discontinued. Students currently enrolled in the program should contact Academic Advising at 541.463.3800 for more information about completing core courses.

Computer Network Operations

Offered by the Computer Information Technology Department, 541.463.5221

Associate of Applied Science Degree

Career Pathway Certificate - Computer Network Monitoring and Management

Career Pathway Certificate - Computer Network Security

Program Coordinator Joseph Colton, Bldg. 19, Room 144, 541.463.5249, *coltonj@lanecc.edu*

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 student who successfully completes all Computer Network Operations requirements will:

- install and configure workstations and servers.
- 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.
- demonstrate an understanding of network security issues and tools.
- demonstrate an understanding of the basic features of wireless networking.
- develop skills for doing network performance monitoring.
- 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.

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 Gerry Meenaghan, Cooperative Education Coordinator, Bldg. 19, Rm. 154, 541.463.5883.

Job Openings Projected through 2020

Lane County openings - 18 annually

Statewide openings - 256 annually

Lane County average hourly - $21.93; average annual - $45,632

Oregon average hourly - $25.12; average annual - $52,261

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,501
Program Specific Fees	$208
Resident Tuition and General Student Fees	$11,609
Total Estimated Cost	$13,318

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All courses must be completed for a letter grade of C-, except for the Communications, Writing, Math, PE/Health, and Human Relations requirements and CS 206 which may be completed with a "Pass" grade.
- 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, 260 Discrete Mathematics 1, 2, 3.
- The Computer Network Operations degree contains 3 second-year CS/CIS/GIS electives. Students may want to consider using electives to take a sequence of courses from the Network Security certificate curriculum, or from one of the other degrees or certs.
- For more information about electives, students should contact the program lead to help determine what elective courses best fit their goals.
- Second Year Requirements - A personal laptop is recommended for second-year students in the degree program. Please contact the Program Lead for options and system requirements.
- Instead of CS 133P and CS 233P the student may take any two required programming courses that are a sequence from one of the other CIT degree programs: - CS 161C+ and CS 162C+ - CS 133JS and CS 233JS - CS 133 N and 233N - CS 275 and CS 276

First Year	**Fall**
Elective: CIS 140W Introduction to Operating Systems: Windows Clients	4
CIS 100 Computing Careers Exploration	1
CS 179 Introduction to Computer Networks	4
Choice of:	
MTH 082 Math for Network Operations -	
MTH 111 College Algebra or higher	4 - 5
	Winter
CS 240W Advanced Windows: Server Management	4
CS 133P Beginning Programming: Python	4
CS 206 Co-op Ed: Computer Information Technology Seminar	2
PE/Health Requirement	3
CS 279 Essentials of Network Administration	4
	Spring
Human Relations Requirement - CG 203 Human Relations at Work	3
CS 233P Intermediate Programming: Python	4
CS 273 Introduction to Virtualization and Cloud Computing	4
Choice of:	
WR 121 Academic Composition	
WR 121_H Academic Composition - Honors	4
Second Year	**Fall**
CIS 125D Software Tools 1: Databases	4
CIS 140U Introduction to Unix/Linux	4
CS 284 Network Security Fundamentals	4
CS/CIS/GIS/Math Elective - CS188 Wireless Networking	4
	Winter
Choice of:	
CIS 225 Computer End-User Support	
CIS 245 Project Management	4
WR 227 Technical Writing	4
CS 289 Cisco Router and Switch Administration	4
CS 240U Advanced Unix/Linux: Server Management	4
	Spring
CS 280CN Co-op Ed: Computer Network Operations	3
CS/CIS/GIS/Math Elective - CS 285 Operating Systems Hardening	4
CS/CIS/GIS/Math Elective - CS 286 Firewalls and VPNs	4
CS 288 Network Monitoring and Management	4

Computer Network Monitoring and Management

Offered by the Computer Information Technology Department, 541.463.5221

Career Pathway Certificate

Program Coordinator Joseph Colton, Bldg. 19, Room 144, 541.463.5249, *coltonj@lanecc.edu*

Purpose Prepare graduates to manage and monitor modern network operating systems and the services provided by current, industry-standard platforms, including troubleshooting and proactive management for growth.

Learning Outcomes The student who successfully completes all Computer Network Monitoring and Management requirements will:

- understand the performance fundamentals required to keep computer networks efficient.
- install and configure Windows and Linux servers and Cisco routers and switches.
- identify sources of network performance problems and resolve them.
- implement the SNMP protocol on various networked devices.
- understand the importance of proactive management and planning for growth.
- install and configure an enterprise network monitoring package to track performance and availability of services.
- learn how to implement event handlers and notification/alert systems.
- learn to use protocol analysis software to monitor traffic and solve network problems.

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All courses must be completed with a letter grade of "C-" or better.

CS 240W Advanced Windows: Server Management	4
CS 240U Advanced Unix/Linux: Server Management	4
CS 288 Network Monitoring and Management	4
CS 289 Cisco Router and Switch Administration	4

Computer Network Security

Offered by the Computer Information Technology Department, 541.463.5221

Career Pathway Certificate

Program Coordinator Don Easton, Bldg.19 Rm. 148

Purpose To train those who already have networking skills to secure workstations, servers, and other networking devices.

Learning Outcomes The student who successfully completes all Computer Network Security requirements 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.

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All courses must be completed with a letter grade of "C-" or better.

CS 188 Wireless Networking	4
CS 284 Network Security Fundamentals	4
CS 285 Operating System Hardening	4
CS 286 Firewalls and VPNs	4

Computer Programming

Offered by the Computer Information Technology Department, 541.463.5221

Associate of Applied Science Degree

Career Pathway Certificate - Database Specialist

Career Pathway Certificate - Front End Web Development

Career Pathway Certificate - Mobile Application Development

Program Coordinator Mari Good, Bldg. 19, Rm. 158, 541.463.5838, *goodm@lanecc.edu*

Purpose To prepare technicians for entry-level positions as software developers.

Learning Outcomes The student who successfully completes all Computer Programming requirements 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.

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 Gerry Meenaghan, Cooperative Education Coordinator, Bldg. 19, Rm. 231A, 541.463.5883.

Job Openings Projected through 2020

Lane County openings - 11 annually

Statewide openings - 170 annually

Lane County average hourly - $30.01; average annual - $63,046

Oregon average hourly - $48.26; average annual - $79,570

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$2,809
Program Specific Fees	$208
Resident Tuition and General Student Fees	$11,728
Total Estimated Cost	$14,745

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- Communications, Writing, Math, PE/Health, and Human Relations requirements and CS 206 may be completed with a 'Pass' grade.
- CS 133N, CS 233N, and CS 234N must be completed for a letter grade of B-. All other courses must be completed for a letter grade of C-.
- For more specific information about the Fall/Winter/Spring CS/CIS/GIS elective sequences please contact the Program Lead 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 electives.
- Students who complete the Computer Programming Degree will have completed all of the coursework to earn the Database Specialist Career Pathway Certificate.
- Second Year Requirements - A personal laptop is recommended for second-year students in the degree program. Please contact the Program Lead for options and system requirements.

First Year	**Fall**
Communications Elective choice of:	
COMM100 Basic Communications	
COMM111 Fundamentals of Public Speaking	
COMM112 Persuasive Speech	
COMM130 Business and Professional Speech	
COMM219 Small Group Communication	
COMM220 Communication, Gender and Culture	4
CIS 100 Computing Careers Exploration	1
CS 133N Beginning Programming: C#	4
CIS 195 Web Authoring 1	4
PE/Health requirement	3
	Winter
CG 203 Human Relations at Work	3
Choice of:	
WR 121 Academic Composition	
WR 121_H Academic Composition - Honors	4
ART 216 Digital Design Tools	3
CS 233N Intermediate Programming C#	4
CS 133JS Beg. Programming: JavaScript	4
	Spring
MTH 095 Intermediate Algebra or higher	5
CS 233JS Intermediate Programming: JavaScript	4
CIS 125D Software Tools 1: Databases	4
CS 234N Advanced Programming: C#	4
Second Year	**Fall**
CS/CIS/GIS Elective	4
CIS 244 Systems Analysis	4
CS 295N Web Development 1: ASP.NET	4
WR 227 Technical Writing	4
CS 206 Co-op Ed: Computer Information Technology Seminar	2
	Winter
CS 275 Database Systems and Modeling	4
CS 296N Web Development 2: ASP.NET	4
CS 246 System Design	4
CS/CIS/GIS Elective	4
	Spring
CS/CIS/GIS Elective	4
CS 280PR Co-op Ed: Computer Programming	3
CS 276 Database SQL Programming	4
CS 297 Programming Capstone	4

Database Specialist

Offered by the Computer Information Technology Department, 541.463.5221

Career Pathway Certificate

Program Coordinator Mari Good, Bldg. 19, Rm. 158, 541.463.5838, *goodm@lanecc.edu*

Purpose To prepare technicians for entry-level positions as database specialists.

Learning Outcomes The certificate recipient will:

- design, implement, test, debug and document relational database systems using a variety of current tools and technologies.
- understand the use of database to support organizational processes.
- translate database related problems into SQL logic and expressions.
- use appropriate library and information resources to research database technologies and support lifelong technical learning.

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All courses must be completed with a letter grade of 'C-' or better
- Prerequisites are required for some courses. See course descriptions

CIS 125D Software Tools 1: Databases	4
CIS 244 Systems Analysis	4
CS 275 Database Systems and Modeling	4
Choice of: - CIS276R Data Integration, Analytics and Reporting - CS276 Database SQL Programming	4

Front End Web Development

Offered by the Computer Information Technology Department

Career Pathway Certificate

Program Coordinator Mari Good, Bldg. 19, Rm. 158, 541.463.5838, *goodm@lanecc.edu*

Purpose This program of 6 courses will provide students with the opportunity to develop the knowledge and skills necessary to become an entry level front-end web developer. A front-end web developer is responsible for implementing visual and interactive elements that users engage with through their web browser when using a web application. Students who complete this program will have strong skills in the following frontÂend web development technologies: HTML, CSS, object oriented programming and JavaScript programming. They will also have been exposed to several JavaScript frameworks that are used in modern front-end development.

Learning Outcomes The student who successfully completes all Front End Web Development requirements will:

- design and build attractive web sites using HTML and CSS.
- design and build interactive web sites using client-side JavaScript.
- design and build interactive web sites using modern JavaScript features, libraries and frameworks.
- understand and apply object oriented programming concepts.
- evaluate your own web site implementation work and the work of other students. Provide constructive feedback orally and in writing.

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

CIS 195 Web Authoring 1	4
CS 133JS Beg. Programming: JavaScript	4
CS 233JS Intermediate Programming: JavaScript	4
CS 133N Beginning Programming: C#	4
CS 233N Intermediate Programming C#	4
ART 216 Digital Design Tools	3

Mobile Application Development

Offered by the Computer Information Technology Department, 541.463.5221

Career Pathway Certificate

Program Coordinator Brian Bird, Bldg. 19, Rm. 152, 541.463.3024, *birdb@lanecc.edu*

Purpose To prepare technicians for entry-level positions as mobile application programmers.

Learning Outcomes The student who successfully completes all Mobile Application Development requirements will:

- design, implement, test, debug and document mobile application based computer programs using a variety of current tools and technologies.
- understand the use of mobile application 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.

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All courses must be completed with a letter grade of 'C-' or better.
- Students completing the Computer Programming AAS degree must complete CS 133N and CS 233N with a letter grade of 'B-' or better.

CS 133N Beginning Programming: C#	4
CS 233N Intermediate Programming C#	4
CS 235IM Introduction to Mobile Applications Development: IOS	4
CS 235AM Intermediate Mobile Application Development: Android	4

Computer Simulation and Game Development

Offered by the Computer Information Technology Department, 541.463.5221

Associate of Applied Science Degree

Associate of Applied Science Degree Option - Computer Simulation and Game Development: Art Option

Program Coordinator Jim Bailey, Bldg. 19, Rm. 146, 541.463.3148, *baileyj@lanecc.edu*

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 student who successfully completes all Computer Simulation and Game Development requirements will:

- create computer simulations or games using industry standard development tools.
- design, program, test, debug and document computer simulation or game programs using a variety of current tools and technologies.

- develop programming knowledge and skills with a current commercial programming language.
- 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.

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 Gerry Meenaghan, Cooperative Education Coordinator, Bldg. 19, Rm. 231A, 541.463.5883.

Job Openings Projected through 2020

Lane County openings - 11 annually

Statewide openings - 170 annually

Lane County average hourly - $30.31; average annual - $63,046

Oregon average hourly - $38.26; average annual - $79,570

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,468
Computers/Internet Service	$1,500
Program Specific Fees	$208
Resident Tuition and General Student Fees	$12,320
Total Estimated Cost	$15,496

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All courses must be completed for a letter grade of C-, except for the Writing, Math, PE/Health, and Human Relations requirements and CS 206 which may be completed with a 'Pass' grade.
- Second Year Requirements - A personal laptop is required for second-year students in the degree program. If you receive financial aid, some of those funds may be used for this purchase. Please contact the Program Lead for options and system requirements.

First Year	**Fall**
CIS 100 Computing Careers Exploration	1
CIS 125G Software Tools 1: Game Development	4
CS 161C+ Computer Science 1	4
Directed Elective	3
Directed Elective	3
	Winter
Choice of :	
MTH112 Trigonometry	
MTH251 Calculus 1	
MTH231 Discrete Mathematics 1	4 - 5
FA 221 Computer Animation	4
CS 162C+ Computer Science 2	4
ART 245 Drawing for Media	4
	Spring
CS 233N Intermediate Programming C#	4
CIS 126 Game Design: Principles and Practices	4
FA 222 Computer Animation 2	4
Directed Elective	3
Second Year	**Fall**
CS 260 Data Structures 1	4
CS 206 Co-op Ed: Computer Information Technology	
Seminar	2
WR121 Academic Composition or WR121_H Academic Composition	4
PE/Health Requirement	3
CIS 135G Software Tools 2: Game Development	4
	Winter
CS 246 System Design	4
Communication Requirement	4
Choice of:	
WR 227 Technical Writing	
FA 261 Writing for Interactive Design	3
Choice of:	
CS 235AM Intermediate Mobile App Dev: Android	
CS 235IM Intermediate Mobile App Dev: IOS	4
	Spring
CG 203 Human Relations at Work	3
Directed Elective	3
CS 280GD Co-op Ed: Computer Simulation & Game Development	3
CS 297 Programming Capstone	4

Directed Electives

ART 117 Basic Design: 3-Dimensional	3
ART 234 Drawing: Figure	3
ART 293 Sculpture: Figure	3
MUL 119 Introduction to Animation	3
MUL 223 Digital Sculpting and Texture	3
MUL 103 Time-Based Tools	4
AUD 120 Audio Production	4
MUS 118 Music Technology MIDI/Audio 1	4
MUS 119 Music Technology MIDI/Audio 2	4
CS 133N Beginning Programming: C#	4
CS 234N Advanced Programming: C#	4
CS 133P Beginning Programming: Python	4
CS 233P Intermediate Programming: Python	4

Computer Simulation and Game Development: Art Option

Offered by the Computer Information Technology

Associate of Applied Science Degree Option

Program Coordinator Jim Bailey, Bldg. 19, Rm. 146, 541.463.3148, *baileyj@lanecc.edu*

Purpose Students completing the Computer Simulation and Game Development: Art Option will be prepared for positions working as artists for computer game development companies. Their skills will be general enough that they can also get jobs in animation or as graphic artists.

Learning Outcomes The student who successfully completes all Computer Simulation and Game Development: Art Option requirements will:

- create computer simulations or games using industry-standard development tools.
- become proficient in developing and applying effective visual design and production strategies for creating concept art, 3D models, and animations, for business, education, and entertainment industries.
- understand the concepts, potential, and implications of communicating ideas using interactive media technologies.
- develop skills and knowledge in computer animation using industry-standard tools.
- design, create, and test state machines to control animations for simulation or game programs using a variety of industry-standard tools and technologies.
- use appropriate library and information resources to research simulation and game development issues, to design tools and technologies, and to support lifelong technical learning.

Cooperative Education (Co-op) Co-op is a required and important part of this 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 Gerry Meenaghan, Cooperative Education Coordinator, Bldg. 19, Rm. 231A, 541.463.5883.

Job Openings Projected through 2020

Lane County openings - 11 annually

Statewide openings - 170 annually

Lane County average hourly - $30.31; average annual - $63,046

Oregon average hourly - $38.26; average annual - $79,570

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,345
Computers/Internet Service	$1,500
Program Specific Fees	$208
Resident Tuition and General Student Fees	$10,726
Total Estimated Cost	$13,779

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All courses must be completed for a letter grade of C-, except for the Communications, Writing, Math, PE/Health, and Human Relations requirements and CS 206 which may be completed with a 'Pass' grade.
- Second Year Requirements - A personal laptop is required for second-year students in the degree program. If you receive financial aid, some of those funds may be used for this purchase. Please contact the Program Lead for options and system requirements.

First Year	**Fall**
Choice of:	
MTH 060 Beginning Algebra	
MTH 065 Elementary Algebra	
MTH 070 Introductory Algebra	
MTH 095 Intermediate Algebra	
MTH 111 College Algebra or any 200 level or higher Mathematics course	4
ART 131 Introduction to Drawing	3
ART 216 Digital Design Tools	3
WR 121 Academic Composition or higher	4
	Winter
CIS 100 Computing Careers Exploration	1
MUL 212 Digital Imaging	4
FA 221 Computer Animation	4
ART 286 Sculpting for Animators	3
PE/Health Requirement	3
	Spring
CIS 125G Software Tools 1: Game Development	4
CIS 126 Game Design: Principles and Practices	4
ART 245 Drawing for Media	4
FA 222 Computer Animation 2	4
Second Year	**Fall**
Directed Elective	3
CIS 135G Software Tools 2: Game Development	4
ART 116 Basic Design: Color	3
CS 206 Co-op Ed: Computer Information Technology Seminar	2
CG 203 Human Relations at Work	3
	Winter
Directed Elective	3
Directed Elective	3
Choice of:	
WR 227 Technical Writing	
FA 261 Writing for Interactive Design	3
MUL 223 Digital Sculpting and Texture	3
CS 246 System Design	4
	Spring
Directed Elective	3
CS 280GD Co-op Ed: Computer Simulation & Game Development	3
MUL 208 Motion Capture for Animation	4
CS 297 Programming Capstone	4

Directed Electives

ART 117 Basic Design: 3-Dimensional	3
ART 234 Drawing: Figure	3
ART 293 Sculpture: Figure	3
MUL 223 Digital Sculpting and Texture	3
MUL 119 Introduction to Animation	3
MUL 103 Time-Based Tools	4
AUD 120 Audio Production	4
(Taught Elsewhere)	
MUS 118 Music Technology MIDI/Audio 1	4
MUS 119 Music Technology MIDI/Audio 2	4
CS 133N Beginning Programming: C#	4
CS 233N Intermediate Programming C#	4
CS 234N Advanced Programming: C#	4
CS 133P Beginning Programming: Python	4
CS 233P Intermediate Programming: Python	4

Construction Technology

Offered by the Advanced Technology Division, 541.463.5380

Associate of Applied Science Degree

One-Year Certificate of Completion - Construction Technology

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

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 Upon completion of this degree, 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.

Admission Information See *lanecc.edu/advtech/cst* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Automotive Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 34 annually

Statewide openings - 590 annually

Lane County average hourly - $24.68; average annual - $51,333

Oregon average hourly - $23.37; average annual - $48,600

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,720
Instruments/Tools	$250
Program Specific Fees	$450
Resident Tuition and General Student Fees	$12,174
Total Estimated Cost	$14,594

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All CST and MTH courses must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
- WR and PE/Health requirement must be passed with a Pass or "C-" or better to fulfill program requirements.
- For choices in Foundational Skills and Discipline Studies, see AAS degree description.
- See course descriptions for prerequisite and corequisite information.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

First Year	**Fall**
CST 118A Building Construction A	5
CST 110 Blueprint Reading 1	3
CST 111 Construction Orientation and Environment	2
MTH 085 Applied Geometry for Technicians	4
CS 120 Concepts of Computing: Information Processing	4
	Winter
CST 118B Building Construction B	5
WR 115 Introduction to College Composition	4
CST 122 Construction Codes	2
CST 211 Blueprint Reading 2	3
PE/Health Elective	3
	Spring
CST 118C Building Construction C	5
CST 116 Construction Estimating	4
CST 119 Building Construction Surveying	3
Human Relations Requirement	3
Second Year	**Fall**
DRF 160 Computer-Aided Drafting and Design	4
Directive Elective (see list of courses below)	4
Arts and Letters Requirement	3
CST 280 Co-op Ed: Construction	3
	Winter
Directed Electives (see list of courses below)	6
Science or Computer Science Course	3
Choice of:	
DRF137 Architectural Plans	
DRF211 Sustainable Building Systems	4
CST 280 Co-op Ed: Construction	3
	Spring
CST 280 Co-op Ed: Construction	3
Choice of:	
Arts/Letters, Science	
Computer Science course	
Social Science/Human Relations requirement	3
Directed Electives (see list of courses below)	8

Directed Electives

APR 101 Trade Skills Fundamentals	4
BA 101 Introduction to Business	4
BT 165 Introduction to the Accounting Cycle	4
DRF 205 Drafting: Structures	4
WLD 121 Shielded Metal Arc Welding 1	1 - 4
WLD 122 Shielded Metal Arc Welding 2	1 - 4
MTH 070 Introductory Algebra	5
MTH 075 Applied Algebra for Technicians	4
MTH 095 Intermediate Algebra	5
DRF 210 Commercial Buildings	4
DRF 220 Building Information Modeling	4
DRF 207 Drafting: Strength of Materials	4
APR 106 Plumbing Trade Introduction	2
CST 201 Sustainable Building Practices	3
APR 105 Electrical Wiring for the Trades	4
ET 129 Electrical Theory 1	4
ET 130 Electrical Theory 2	4

Construction Technology

Offered by the Advanced Technology Division, 541.463.5380

One-Year Certificate of Completion

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

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 one-year certificate 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.

Admission Information See *lanecc.edu/advtech/cst* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Automotive Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County: 26 positions

Statewide: 579 positions

Lane County average hourly - $16.30; average annual - $33,889

Oregon average hourly - $18.53; average annual - $38,538

Costs Estimates based on 2017-18 data for full-time students.

Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.

Books	$900
Instruments/Tools	$250
Program Specific Fees	$160
Resident Tuition and General Student Fees	$6,339
Total Estimated Cost	$7,649

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

47-2061.00

Standard Occupational Classification: 47-2061.00 Go to the Department of Labor's O*Net website for a profile of this occupation: Construction Laborers Onetonline.org/link/summary/47-2061.00 Or check on these O*Net Related Occupations: Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters onetonline.org.link/summary/47-3011.00

In academic year 2014-15, 6 students completed this certificate.

The program is designed to take 4 terms, or about 15 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- All CST and MTH courses must be taken for a letter grade, not P/NP, and must be passed with a "C-" or better to fulfill program requirements.
- WR and PE/Health requirement must be passed with a "C-" or better to fulfill program requirements.
- See course descriptions for prerequisite information.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

	Fall
CST 110 Blueprint Reading 1	3
CST 111 Construction Orientation and Environment	2
MTH 085 Applied Geometry for Technicians	4
CST 118A Building Construction A	5
CS 120 Concepts of Computing: Information Processing	4
	Winter
CST 122 Construction Codes	2
CST 211 Blueprint Reading 2	3
PE/Health Elective	3
CST 118B Building Construction B	5
WR 115 Introduction to College Composition	4
	Spring
CST 116C Construction Estimating C	4
CST 119 Building Construction Surveying	3
Human Relations Requirement	3
CST 118 Building Construction	5

Construction Trades, General Apprenticeship

Offered by the Advanced Technology Division, 541.463.5380

Associate of Applied Science Degree

One-Year Certificate of Completion - Construction Trades, General Apprenticeship

Career Pathway Certificate - Trade Worker Apprenticeship Technologies

Program Coordinator Joy Crump, Bldg. 15 Rm. 201, 541.463.5496, *crumpj@lanecc.edu.*

Purpose To provide a structured system of training in construction trades or occupations, leading to certification and journey-level status, only for apprentices who are sponsored by individual employers, accepted by a Joint Apprenticeship Training Committee, and registered with the State of Oregon Bureau of Labor and Industries.

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 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.

Licensing & 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. In addition, 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 degree in Operations Management or Bachelor of Applied Science degree in Technology and Management. The Construction Trades, General Apprenticeship 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. Licensing or Other Certification: HVAC technician/installer and plumber trades require successful completion of trade-specific

licensure examinations through the Oregon Building Codes Division.

Admission Information Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries and accepted by a Joint Apprenticeship Training Committee. Information is available at *boli.state.or.us*.

Advising and Counseling *lanecc.edu/advising/advisors*

Job Openings Projected through 2020

Carpenter

Lane County openings - 34 annually

Statewide openings - 590 annually

HVAC

Lane County openings - 6 annually

Statewide openings - 95 annually

Plumber

Lane County openings - 9 annually

Statewide openings - 143 annually

Sheet Metal

Lane County openings - 6 annually

Statewide openings - 97 annually

Carpenter

Lane County average hourly - $24.68; average annual - $51,333

Oregon average hourly - $23.37; average annual - $48,600

HVAC

Lane County average hourly - $23.46; average annual - $48,797

Oregon average hourly - $24.85; average annual - $51,686

Plumber

Lane County average hourly - $30.30; average annual - $63,012

Oregon average hourly - $36.24; average annual - $75,372

Sheet Metal

Lane County average hourly - $26.07; average annual - $54,218

Oregon average hourly - $24.77; average annual - $51,541

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,400
Resident Tuition and General Student Fees	$10,100
Total Estimated Cost	$11,500

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- complete 8000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journeyman 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
- WR 115W and MTH 060 must be completed with a grade of "Pass" or "C-" or better.
- See AAS degree page for choices in Arts and Letters, Human Relations, and Science/Math/Computer Science.

General Education

WR 115W Introduction to College Writing: Workplace Emphasis or higher	3
PE/Health Requirement	3
Arts and Letters requirement	3
Human Relations requirement	3
Science/Math/Computer Science requirement	3
Choice of: Arts and Letters requirement Human Relations/Social Science requirement Science/Math/Computer Science requirement	3
MTH 060 Beginning Algebra or higher	4

Carpenter (36 credits)

APR 115 Carpentry Skill Fundamentals	3
APR 116 Carpentry Framing Fundamentals	3
APR 117 Carpentry Framing and Introduction to Concrete	3
APR 118 Carpentry Framing and Finishing	3
APR 119 Carpentry Commercial Plans and Exterior Finish	3
APR 120 Carpentry Interior Finish	3
APR 201 Carpentry Basic Rigging and Practices	3
APR 202 Carpentry Concrete Practices	3
APR 203 Carpentry Forms and Tilt-up Panels	3
APR 204 Carpentry Advanced Layout and Building Systems	3
APR 205 Carpentry Advanced Planning and Management	3
APR 206 Carpentry Equipment and Site Layout	3

HVAC Technician/Installer (41-44 credits)

APR 101A Trade Skills Fundamentals	4
APR 172 Sheet Metal/HVAC/R Blueprint Reading	3
APR 210 HVAC Systems 1	4
APR 211 HVAC Systems 2	4
APR 212 HVAC Systems 3	4
APR 220 Electrical Apprenticeship Code and Exam Preparation	6 - 9
APR 190 Electrical Theory 1	4
APR 191 Electrical Theory 2	4
APR 285 Motors	4
APR 286 Motors 2	4

Plumber (40 credits)

APR 160 Plumbing Skill Fundamentals	4
APR 161 Plumbing Materials & Fixtures	4
APR 162 Plumbing Basic Waste Water Systems	2
APR 163 Plumbing Calculations & Print Reading	4
APR 164 Plumbing Basic Installation 1	4
APR 165 Plumbing Basic Installation 2	2
APR 260 Plumbing Water Supply Systems	4
APR 261 Plumbing Piping Sizing and Systems	4
APR 262 Plumbing Advanced Waste Systems	2
APR 263 Plumbing Code and Test Preparation	10

Sheet Metal Worker (46 credits)

APR 101A Trade Skills Fundamentals	4
APR 170 Introduction to Sheet Metal Apprenticeship	4
APR 171 Sheet Metal Basic Layout	4
APR 172 Sheet Metal/HVAC/R Blueprint Reading	3
APR 270 Architectural Sheet Metal	4
APR 271 Sheet Metal Building Codes and Installation	4
APR 272 Sheet Metal Duct Design	4
APR 273 General Sheet Metal Fabrication	4
APR 274 Sheet Metal Shop Fabrication	4
MTH 085 Applied Geometry for Technicians	4
APR 185 Shielded Metal Arc Welding 1	1
APR 186 Wire Drive Welding 1	2
APR 275 Sheet Metal Project Supervision	4

Program Electives to complete 90 credits for degree:

Additional Electives

CST 118 Building Construction	5
WLD 121 Shielded Metal Arc Welding 1	1 - 4
WLD 139 Welding Lab	1 - 3
APR 106 Plumbing Trade Introduction	2
BA 101 Introduction to Business	4
CS 120 Concepts of Computing: Information Processing	4

APR 101 Trade Skills Fundamentals	4
CST 110 Blueprint Reading 1	3
CST 111 Construction Orientation and Environment	2
CST 116 Construction Estimating	4
CST 119 Building Construction Surveying	3
HE 152 Drugs, Society and Behavior	3
HE 252 First Aid	3
MTH 085 Applied Geometry for Technicians	4
MTH 095 Intermediate Algebra	5
NRG 103 Sustainability in The Built Environment	3
NRG 121 Air Conditioning System Analysis	3
NRG 124 Energy Efficiency Methods	4
NRG 158 Thermal Design and Installation 1	4
NRG 159 Thermal Design and Installation 2	4
WATR 101 Introduction to Water Resources	3
WLD 122 Shielded Metal Arc Welding 2	1 - 4
WLD 143 Wire Drive Welding 1	1 - 4

Journeyman card from Oregon Bureau of Labor and Industries Apprenticeship and Training Division (22 credits)

State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion	22

Construction Trades, General Apprenticeship

Offered by the Advanced Technology Division, 541.463.5380

One-Year Certificate of Completion

Program Coordinator Joy Crump, Bldg. 15 Rm. 201, 541.463.5496, *crumpj@lanecc.edu*.

Purpose Students may earn a Certificate of Completion in Construction Trades, General Apprenticeship by successfully completing 36-46 core related training credits with a grade of "C" or better in all courses, and completing related instruction in communications, computation, and human relations.

Learning Outcomes The graduate will:

- apply theory as it relates to trade competencies.
- perform the duties and responsibilities of the individual construction trade/occupation.

Licensing & 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 Exams: HVAC technician/installer and plumber trades require successful completion of trade-specific licensure examinations through the Oregon Building Codes Division.

Admission Information Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries. Information is available at *boli.state.or.us*.

Advising and Counseling *lanecc.edu/advising/advisors*

Job Openings Projected through 2020

Carpenter

Lane County openings - 34 annually

Statewide openings - 590 annually

HVAC

Lane County openings - 6 annually

Statewide openings - 95 annually

Plumber

Lane County openings - 9 annually

Statewide openings - 143 annually

Sheet Metal

Lane County openings - 6 annually

Statewide openings - 97 annually

Carpenter

Lane County average hourly - $24.68; average annual - $51,333

Oregon average hourly - $23.37; average annual - $48,600

HVAC

Lane County average hourly - $23.46; average annual - $48,797

Oregon average hourly - $24.85; average annual - $51,686

Plumber

Lane County average hourly - $30.30; average annual - $63,012

Oregon average hourly - $36.24; average annual - $75,372

Sheet Metal

Lane County average hourly - $26.07; average annual - $54,218

Oregon average hourly - $24.77; average annual - $51,541

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,000
Resident Tuition and General Student Fees	$10,300
Total Estimated Cost	$11,300

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- complete 8000 hours of State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journeyman card or BOLI-ATD Certificate of Completion in BOLI-ATD Trade: Carpenter, HVAC Technician, Plumber, or Sheet Metal Worker.
- complete related instruction (communication, computation, human relations) 9 credits
- complete core-related training 36-46 credits

Related Instruction (9 credits)

Computation (min. 3 credits)	3
Human Relations (3 credits)	3
Communication (min. 3 credits)	3

Carpenter (36 credits)

APR 115 Carpentry Skill Fundamentals	3
APR 116 Carpentry Framing Fundamentals	3
APR 117 Carpentry Framing and Introduction to Concrete	3
APR 118 Carpentry Framing and Finishing	3
APR 119 Carpentry Commercial Plans and Exterior Finish	3
APR 120 Carpentry Interior Finish	3
APR 201 Carpentry Basic Rigging and Practices	3
APR 202 Carpentry Concrete Practices	3
APR 203 Carpentry Forms and Tilt-up Panels	3
APR 204 Carpentry Advanced Layout and Building Systems	3
APR 205 Carpentry Advanced Planning and Management	3
APR 206 Carpentry Equipment and Site Layout	3

HVAC Technician/Installer (41-44 credits)

APR 101A Trade Skills Fundamentals	4
APR 172 Sheet Metal/HVAC/R Blueprint Reading	3
APR 210 HVAC Systems 1	4
APR 211 HVAC Systems 2	4
APR 212 HVAC Systems 3	4

APR 220 Electrical Apprenticeship Code and Exam Preparation	6 - 9
APR 190 Electrical Theory 1	4
APR 191 Electrical Theory 2	4
APR 285 Motors	4
APR 286 Motors 2	4

Plumber (40 credits)

APR 160 Plumbing Skill Fundamentals	4
APR 161 Plumbing Materials & Fixtures	4
APR 162 Plumbing Basic Waste Water Systems	2
APR 163 Plumbing Calculations & Print Reading	4
APR 164 Plumbing Basic Installation 1	4
APR 165 Plumbing Basic Installation 2	2
APR 260 Plumbing Water Supply Systems	4
APR 261 Plumbing Piping Sizing and Systems	4
APR 262 Plumbing Advanced Waste Systems	2
APR 263 Plumbing Code and Test Preparation	10

Sheet Metal Worker (46 credits)

APR 101A Trade Skills Fundamentals	4
APR 170 Introduction to Sheet Metal Apprenticeship	4
APR 171 Sheet Metal Basic Layout	4
APR 172 Sheet Metal/HVAC/R Blueprint Reading	3
APR 270 Architectural Sheet Metal	4
APR 271 Sheet Metal Building Codes and Installation	4
APR 272 Sheet Metal Duct Design	4
APR 273 General Sheet Metal Fabrication	4
APR 274 Sheet Metal Shop Fabrication	4
APR 275 Sheet Metal Project Supervision	4
MTH 085 Applied Geometry for Technicians	4
APR 185 Shielded Metal Arc Welding 1	1
APR 186 Wire Drive Welding 1	2

Journeyman card from Oregon Bureau of Labor and Industries Apprenticeship and Training Division, prior certification credits (22 credits)

Journeyman card (22 credits)	22

Trade Worker Apprenticeship Technologies

Offered by the Advanced Technolgy Division

Career Pathway Certificate

Program Coordinator Joy Crump, Bldg. 15 Rm. 201, 541.463.5496, *crumpj@lanecc.edu.*

Purpose To provide a structured system of training in construction fundamentals to prepare students with the skills and knowledge required to enter the construction trade.

Learning Outcomes The graduate will:

- complete a minimum of 4,000 hours State of Oregon-approved on-the-job training.
- successfully complete all required core related-training with a grade of â œCâ or better for individual trade.
- apply theory as it relates to trade competencies.
- perform the duties and responsibilities of the individual construction trade/occupation.
- repair, install, and maintain a variety of building construction projects using trade specific tools and techniques in compliance with building codes and OSHA regulations.

Admission Information Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries and accepted by a Joint Apprenticeship Training Committee. Information is available at *boli.state.or.us*.

Advising and Counseling *lanecc.edu/advising/advisors*

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Carpenters (18 credits)

APR 115 Carpentry Skill Fundamentals	3
APR 116 Carpentry Framing Fundamentals	3
APR 117 Carpentry Framing and Introduction to Concrete	3
APR 118 Carpentry Framing and Finishing	3
APR 119 Carpentry Commercial Plans and Exterior Finish	3
APR 120 Carpentry Interior Finish	3

HVAC Technician/Installer (12 credits)

APR 101A Trade Skills Fundamentals	4
APR 190 Electrical Theory 1	1 - 4
APR 191 Electrical Theory 2	1 - 4

Plumbers (20 credits)

APR 160 Plumbing Skill Fundamentals	4
APR 161 Plumbing Materials & Fixtures	4
APR 162 Plumbing Basic Waste Water Systems	2
APR 163 Plumbing Calculations & Print Reading	4
APR 164 Plumbing Basic Installation 1	4
APR 165 Plumbing Basic Installation 2	2

Sheet Metal Workers (12 credits)

APR 101A Trade Skills Fundamentals	4
APR 170 Introduction to Sheet Metal Apprenticeship	4
APR 171 Sheet Metal Basic Layout	4

Criminal Justice

Offered by the Social Science Division, 541.463.5427

Associate of Applied Science Degree

Program Coordinator Caoimhin OFearghail, 541.463.5361, *ofearghailc@lanecc.edu*

Purpose To offer preparation for career employment in law enforcement, 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 student who successfully completes all Criminal Justice requirements will:

- 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.
- express a thorough knowledge of the criminal justice system.
- formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.
- meet the educational requirements some entry-level public safety careers.
- understand the importance of interdisciplinary knowledge and the need for a well-rounded education in public safety.
- use appropriate library and information resources to research professional issues and support lifelong learning.

Advising and Counseling Andi Graham Academic Advisor and Ben Fisher Academic Advisor contact at socsci-*llcprograms@lanecc.edu*

Cooperative Education (Co-op) Co-op provides opportunities for field experience with various local public safety agencies including local law enforcement, corrections, courts, and commercial

security organizations. Students may participate on a full or part-time basis.

Job Openings Projected through 2020

Law Enforcement Lane County openings - 14 annually

Law Enforcement Statewide openings -191 annually

Correctional Officers Statewide openings - 122 annually

Law Enforcement Oregon average hourly - $34.07; average annual - $70,872

Laws Enforcement Lane County average hourly - $33.66; average annual - $70,019

Correctional Officers Oregon average hourly - $28.12; average annual - $58,497

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition. Criminal Justice course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Books	$2,600
Resident Tuition and General Student Fees	$12,855
Total Estimated Cost	$15,455

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All CJA courses must be completed with a letter grade of 'C' or better to satisfy program requirements.
- All courses must be completed with a letter grade.
- Courses that satisfy transfer general education requirements are recommended: BI, BOT, Z, CH, G, GS, PH
- CH 114 Forensic Chemistry can satisfy the Biological or Physical Science requirement

First Year	**Fall**
Directed Elective	3 - 4
WR121 Academic Composition or WR121_H Academic Composition	4
CJA 100 Introduction to Criminal Justice 1	3
SOC 204 Introduction to Sociology	4
COMM 105 Listening and Critical Thinking	4
	Winter
Choice of; WR122 Argument, Research and Multimodal Composition or WR122_H Argument, Research and Multimodal Composition	4
Arts and Letters elective	3
CJA 110 Introduction to Criminal Justice 2	3
SOC 205 Social Stratification and Social Systems	4
COMM 100 Basic Communications	4
	Spring
CJA 101 Introduction to Criminology	3
CS 120 Concepts of Computing: Information Processing or higher	4
SOC 206 Institutions and Social Change	4
Choice of: HE250 Personal Health, HE252 First Aid, HE 275 Lifetime Health and Fitness	3
Second Year	**Fall**
COMM 218 Interpersonal Communication	4
Biological or Physical Science requirement	3 - 4
CJA 213 Interviewing and Interrogation	3
CJA 220 Introduction to Criminal Law	3
PS 201 U.S. Government and Politics	3
	Winter
Directed elective	3 - 4
Biological or Physical Science elective	4 - 5
CJA 222 Criminal Law: Procedural Issues	3
CJA 280 Co-op Ed: Criminal Justice	3
PS 202 U.S. Government and Politics	3
	Spring
MTH 095 Intermediate Algebra or higher	5
CJA 280 Co-op Ed: Criminal Justice	3
PS 203 State and Local Government and Politics	3
PSY 203 General Psychology	4
Arts and Letters elective	3
Directed Electives	
CJA 201 Juvenile Delinquency	3
CJA 210 Criminal Investigation 1	3
CJA 214 Introduction to Forensic Science	4
CJA 232 Correctional Casework	3
CJA 243 Narcotics and Dangerous Drugs	3
CH 114 Introduction to Forensic Chemistry	4
HS 102 Psychopharmacology	4
SOC 211 Social Deviance	3

Criminal Justice: Juvenile Corrections

Offered by the Social Science Division, 541.463.5427

One-Year Certificate of Completion

Program Coordinator Caoimhin OFearghail, *541.463.5361, ofearghailc@lanecc.edu*

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.

Learning Outcomes The student who successfully completes all Criminal Justice: Juvenile Corrections requirements will:

effectively supervise juvenile offenders.

- monitor and ensure a safe environment for juvenile offenders.
- provide support services to juvenile offenders.
- provide social and life skills training to juvenile offenders.
- assist in the treatment process and provide crisis intervention with juvenile offenders.

Advising and Counseling Andi Graham Academic Advisor and Ben Fisher Academic Advisor contact at socsci-*llcprograms@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 Caoimhin OFearghail, Juvenile Corrections Co-op Coordinator, 541.463.5361, *OFearghailc@lanecc.edu*

Job Openings Projected through 2020

Statewide openings: 122

Corrections Officers

Oregon average hourly - $28.12; average annual - $58,497

Costs Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.

Books	$1,400
Resident Tuition and General Student Fees	$6,674
Total Estimated Cost	$8,074

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

21-1021.00

Standard Occupational Classification: 21-1021.00 Go to the Department of Labor's O*Net website for a profile of this occupation: Child, Family, and School Social Workers Onetonline.org/link/summary/21-1021.00 Or check on these O*Net Related Occupations: Probation Officers and Correctional Treatment Specialists onetonline.org.link/summary/21-1092.00

In academic year 2014-15, 1 student completed this certificate.

The program is designed to take 4 terms, or about 15 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All CJA, HS, PSY, and SOC courses must be completed with a letter grade of 'C' or better to satisfy program requirements.
- WR courses must be completed with a letter grade.
- Math and CS courses must be completed with a grade of C- or better, or pass.
- MTH 095 is recommended for students going on to complete the 2-yr AAS degree in Criminal Justice. Students should be advised that it may take up to 4 terms to complete.

Fall	
Choice of:	
WR121 Academic Composition or	
WR121_H Academic Composition	4
HS 206 The Criminal Addict: Issues & Interventions	3
MTH 060 Beginning Algebra or higher	4
PSY 201 General Psychology	4
COMM 218 Interpersonal Communication	4
Winter	
CJA 201 Juvenile Delinquency	3
CS 120 Concepts of Computing: Information Processing	4
HS 205 Youth Substance Abuse	3
PSY 202 General Psychology	4
PSY 239 Introduction to Abnormal Psychology	3
Spring	
CJA 101 Introduction to Criminology	3
CJA 232 Correctional Casework	3
CJA 280 Co-op Ed: Criminal Justice	3
HS 209 Crisis Intervention and Prevention	3
PSY 215 Lifespan Developmental Psychology	4

Culinary Arts and Food Service Management

Offered by the Culinary Arts & Hotel/Restaurant/Tourism Management, 541.463.3518

Associate of Applied Science Degree

Less than One-Year Certificate of Completion - Baking and Pastry

Program Coordinator Wendy Milbrat, 541.463.3518, *milbratw@lanecc.edu*or email: *CulinaryHospPrograms@lanecc.edu*

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 cooks, 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.

Learning Outcomes The student who successfully completes all Culinary Arts and Food Service Management requirements 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 fundamental baking and pastry knowledge and skills.
- perform mathematical functions related to food service operations.
- successfully plan and prepare large culinary events in the Center for Meeting and Learning.

Accreditation Culinary Arts, 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 be eligible to receive national certification status as a Certified Culinarian (CC).

Admission Information A separate application to the program is required. Admission information is available from the Culinary Arts and Hotel/Restaurant/Tourism Management office, Building 19, Room 204 or online at *lanecc.edu/culinary*. Or email: *CulinaryHospPrograms@lanecc.edu*

Advising and Counseling Program Advisors, Claudia Riumallo and Sarah Rick

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 job openings. For more information contact Joe McCully, Cooperative Education Coordinator, Bldg.19, Rm. 210, 541.463.3516, *mccullyj@lanecc.edu*

Job Openings Projected through 2020

Chefs and Head Cooks

Lane County openings - 4 annually

Statewide openings - 55 annually

Food Service Managers
Lane County openings - 11 annually
Statewide openings - 145 annually

Production Bakers
Lane County openings - 12 annually
Statewide openings - 96 annually

Restaurant Cooks
Lane County openings - 68 annually
Statewide openings - 1161 annually

Supervisors and Managers of Food Preparation and Serving Workers
Lane County openings - 40 annually
Statewide openings - 559 annually

Chefs and Head Cooks
Lane County average hourly - $20.94, average annual $43,555
Oregon average hourly $23.70 , annual average annual - $49,284

Food Service Managers
Lane County average hourly - $21.41 , average annual $44,529
Oregon average hourly - $24.95 , average annual - $51,895

Production Bakers
Lane County average hourly - $15.28 , average annual -$31,790
Oregon average hourly $14.57 , average annual - $30,306

Restaurant Cooks
Lane County average hourly - $13.12 , average annual - $27,288
Oregon average hourly $13.11 , average annual - $27,253

Supervisors and Managers of Food Preparation and Serving Workers
Lane County average hourly - $14.87 , average annual - $30,934
Oregon average hourly $15.77 , average annual - $32,788

Costs (Estimate based on 2017-18 tuition and fees for 2-yr program) The total of all the differential fees attached to Culinary Arts courses and other fees may change during the year - see the online credit class schedule for fees assigned to courses.

Books	$850
Differential Fees*	$2,760
Instruments/Tools	$190
Program Specific Fees	$1,793
Resident Tuition and General Student Fees	$11,802
Uniforms	$200
Total Estimated Cost	$17,595

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Must be a credit-level student. Students can enter the Culinary Arts program in fall, winter, or spring terms. Fall term entry is highly recommended in order to begin the foundational Cooking Theories course sequence. Complete college placement tests with the following minimum scores: writing-70, reading-68 and readiness for MTH 025'''taking the Arithmetic section of the Accuplacer test and scoring 75 or higher and attach copies of test score sheets to application.
- A Lane County Food Handlers card is required for entry into the program.
- General Education Requirements (21 total credits) may be completed prior to program entry or any program term. For complete details refer to the college catalog or meet with your academic advisor.
- Prerequisites are required for some courses. See course descriptions.
- All courses required for this program must be taken for a letter grade, not P/NP, and must be passed with a grade of C- or better.
- To reach 2nd year status, the following classes must be taken and passed with min grade of C-: CA 163, CA 175, CA 200, HRTM 105, HRTM 106, and MTH 025 or higher.
- Directed electives may be met in any term of the two-year program. Check current class schedule for which Directed Electives are offered in a given term.
- 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 or WR 121_H for WR 115W 2. Add MTH 111 and MTH 112 3. Add a speech course 4. Add WR 122 and WR 123
- MS PowerPoint and Excel are used extensively. If students are not familiar with these programs, they are encouraged to take these classes prior to or during their first year in the program.

First Year	**Fall**
General Education Requirement: MTH 025C Basic Mth. App. (culinary) or higher	3
CA 160 Introduction to Cooking Theories 1	7
CA 175 Foodservice Sanitation and Safety	2
HRTM 105 Restaurant Operations	3
	Winter
HRTM 106 Introduction to Hospitality Management	3
General Education Requirement: WR115 or higher	4
CA 162 Introduction to Cooking Theories 2	7
FN 105 Nutrition for Foodservice Professionals	3
	Spring
General Education Requirement: HE 252 First Aid	3
Culinary Directed Elective: Choose from directed elective list	2
CA 163 Introduction to Cooking Theories 3	7
CA 200 Menu Management	3
General Education Requirement: Human Relations (see college catalog for details)	3
Second Year	**Fall**
HRTM 260 Hospitality Human Resources and Supervision	3
CA 292 Advanced Cooking Theories 1	7
HRTM 265 Hospitality Financials 1	3
General Education Requirement: Arts and Letters (see college catalog for details)	3
	Winter
CA 293 Advanced Cooking Theories 2	7
HRTM 275 Hospitality Financials 2	3
HRTM 290 Hospitality Leadership	3
Culinary Directed Elective: Choose from directed electives list	2
General Education Requirement: Science/Math /Computer Science (see college catalog for details)	3
	Spring
CA 294 Advanced Cooking Theories 3	7
CA 176 Concepts of Taste and Flavor	3
HRTM 220 Sustainability in the Hospitality Industry	2
General Education Requirement: Choice of Social Science or Science/Math/Computer Science or Arts and Letters (see college catalog for details)	3
	Summer
CA 280 Co-op Ed: Culinary Arts, Second Year	7

Directed Electives

BI 103H General Biology-Mushrooms	4
BT 163 QuickBooks	4
BT 123 MS EXCEL for Business	4
BT 122 MS POWERPOINT for Business	3
BT 120 MS WORD for Business	4
CA 120 Culinary Adventuring: Seasonal Baking and Pastry	2
CA 121 Culinary Adventuring: The Composition of Cake	2
CA 123 Culinary Adventuring: International Baking & Pastry	2
CA 130 Culinary Adventuring: Oregon Wine Country	2

CA 159 Kitchen Fundamentals	2
CA 163A Beginning Baking and Pastry	3
CA 163B Intermediate Baking and Pastry	2
CA 163C Advanced Baking and Pastry	2
CS 120 Concepts of Computing: Information Processing	4
FN 110 Personal Nutrition	3
HRTM 100 Introduction to Culinary and Hospitality	3
HRTM 104 Introduction to Travel and Tourism	3
HRTM 109 Principles of Meetings and Convention Management	3
HRTM 110 Hospitality Sales and Marketing	3
HRTM 140 Hospitality Law and Security	3
HRTM 209 Advanced Principles of Meeting, Convention, and Special Event Management	3
HRTM 205 Managing the Restaurant Operation	3
HRTM 230 Hotel Operations 1	3
HRTM 231 Hotel Operations 2	3
HRTM 286 Bar and Beverage Management	3
HST 104, 105, or 106 World History	4
PHL 201 Ethics	4
COMM 115 Introduction to Intercultural Communication	4
COMM 130 Business and Professional Communication	4
SUST 101 Introduction to Sustainability	3
SUST 120 Gardening and Sustainable Food Systems	3
Choice of:	
WR 121 Academic Composition	
WR 121_H Academic Composition	4
BA 278 Leadership & Team Dynamics	4
CA 122 Artisan Breads	2

Baking and Pastry

Offered by the Culinary Arts & Hotel/Restaurant/Tourism Management, 541.463.3518

Less than One-Year Certificate of Completion

Program Coordinator Wendy Milbrat, 541.463.3518, *milbratw@lanecc.edu*

Purpose The certificate in Baking and Pastry is for students who want to gain entry into the food service industry as beginning bakers and pastry cooks.

Learning Outcomes The student who successfully completes all Baking and Pastry requirements 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 Information A separate application to the program is required. Admission information is available from the Culinary Arts and Hotel/Restaurant/Tourism Management office, Building 19, Room 204 or online at *lanecc.edu/culinary*; or email: *CulinaryHospPrograms@lanecc.edu*

Advising and Counseling Program advisor's, Claudia Riumallo and Sarah Rick. Located in Building 12

Costs (Estimate based on 2017-18 tuition and fees for program)

Books	$250
Differential Fees*	$831
Program Specific Fees	$686
Resident Tuition and General Student Fees	$2,843
Total Estimated Cost	$4,610

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- This certificate is a fall term start only.
- Must be a credit level student. Complete college placement tests with the following minimum scores: writing 70, reading 68 and readiness for MTH 025 or higher, taking the Arithmetic section of the Accuplacer test and scoring 75 or higher and attach copies of test score sheets to application.
- Students that do not meet reading and/or math requirements may apply to PASS Lane Summer programming for alternative admission process. PASS Lane contact is Marcia Koening (*koenigm@lanecc.edu*) 541.463.5818, Bldg. 11/244
- A Lane County Food Handlers card is required for entry into the program.
- Prerequisites are required for some courses. See course descriptions.
- All courses required for this certificate must be taken for a letter grade, not P/NP, and must be passed with a grade of C- or better.

Fall	
CA 175 Foodservice Sanitation and Safety	2
CA 163A Beginning Baking and Pastry	3
CA 120 Culinary Adventuring: Seasonal Baking and Pastry	2
MTH 025C Basic Mth. App. (Culinary Math) strongly recommended.	3
Winter	
CA 163B Intermediate Baking and Pastry	2
CA 123 Culinary Adventuring: International Baking and Pastry	2
CA 122 Artisan Breads	2
Spring	
CA 163C Advanced Baking and Pastry	2
CA 120 Culinary Adventuring: Seasonal Baking and Pastry	2
CA 121 Culinary Adventuring: The Composition of Cake	2

Dual-Degree Option for Culinary Arts Students/Graduates

Offered by the Culinary Arts & Hotel/Restaurant/Tourism Management, 541.463.3518

Associate of Applied Science Degree

Program Coordinator Wendy Milbrat, 541.463.3518, *milbratw@lanecc.edu;*or email: *CulinaryHospPrograms@lanecc.edu*

Purpose Advising Plan for Culinary Arts AAS students (Completing a second Two-Year Associate of Applied Science degree) Students who have obtained the 2 yr. AAS degree in Culinary Arts during the 2014-15 academic year or later may also complete the 2 yr AAS degree in Hotel/Restaurant/Tourism Management to enhance their industry skill set and education. This list shows the nine classes (24 credits) needed to complete this degree. Note: This dual degree is not an option for Hotel/Restaurant/Tourism Management graduates seeking a Culinary Arts 2 yr. AAS degree.

Learning Outcomes The student who successfully completes all Dual-Degree Option for Culinary Arts Students/Graduates requirements will:

Costs This cost is in addition to the AAS Culinary Arts and Food Service Management degree.

Books	$350
Program Specific Fees	$80
Resident Tuition and General Student Fees	$3,012
Total Estimated Cost	$3,442

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

First Year	Fall
HRTM 230 Hotel Operations 1	3
HRTM 226 Banquet Operations 1	2
HRTM 110 Hospitality Sales and Marketing	3
	Winter
HRTM 231 Hotel Operations 2	3
HRTM 140 Hospitality Law and Security	3
HRTM 227 Banquet Operations 2	2
	Spring
HRTM 205 Managing the Restaurant Operation	3
HRTM 286 Bar and Beverage Management	3
HRTM 228 Banquet Operations 3	2

Dental Assisting

Offered by the Health Professions Division, 541.463.5617

One-Year Certificate of Completion

Program Coordinator Leslie Greer, Dental Assisting Program and Co-op Coordinator, Bldg. 30, Rm. 226, 541.463.5638, *greerl@lanecc.edu*

Purpose Prepares graduates for employment in the dental field with emphasis on current concepts and hands-on skills for clinical chairside assisting. Included classes also offer some cross-training and pathways to dental receptionist-bookkeeper.

Learning Outcomes Upon completion of the Dental Assisting program, all graduates will be able to:

- demonstrate knowledge and ability to write/edit multiple types of professional communications.
- demonstrate knowledge and skill required to accurately expose, develop and mount diagnostic radiographs using multiple systems.
- demonstrate knowledge and skills needed to compute mixing amounts and calculate formulas utilized in dental procedures.
- 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 required to systematically collect diagnostic data.
- demonstrate knowledge and skills needed to maintain a professional working environment.
- demonstrate knowledge and skills required to provide an aseptic environment and prevent disease transmission.
- demonstrate application of principles of ethical reasoning, decision making and professional responsibility.
- demonstrate interpersonal communication and collaborative skills to effectively interact with diverse population groups, health care providers, dental professionals and community groups.
- demonstrate knowledge and skills required to perform or assist with a variety of clinical treatments used in all areas of dentistry.

Accreditation Dental Assisting, American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Dept. of Education. The Commission may be contacted at 800.621.8099 or 312.440.4653 or 211 East Chicago Avenue, Chicago, Illinois 60611.

Licensing & Certification Upon graduation and successful completion of the board exams, students will qualify for the following: Certified Dental Assistant (CDA) - National credential Expanded Function Dental Assistant (EFDA)- Oregon credential Expanded Function Orthodontic Assistant (EFODA) - Oregon credential Oregon Radiological Proficiency - Oregon X-ray license Additional certificates to: Place pit and fissure sealants (Oregon) Place denture soft relines (Oregon) Place gingival retraction cord (Oregon)

Admission Information Contact the Health Professions Division or see *lanecc.edu/hp/dental/dental-assisting* Dental Assisting is a concentrated program that requires good reading and study skills. Dexterity for manipulation of small items and good eyesight are also required. Evidence of a physical examination (within the previous nine months), immunizations, eye exam, drug screen and background check must be submitted prior to the start of the program. This program and profession includes possible exposure to blood borne pathogens and infectious diseases. Training is included to minimize risk to students and patients.

Advising and Counseling For assistance with meeting application or program requirements, contact Kelly Ochoco in Building 30 Room 102, or Allene Gibson in Building 30 Room 101. You can also E-mail *DAProgram@lanecc.edu* with your specific questions.

Cooperative Education (Co-op) Co-op is a required class for students enrolled in the Dental Assisting Program. Through Co-op, students spend approximately 24 hours a week during spring term working in a minimum of two different professional dental offices. Co-op field experience offers students the opportunity to gain skills, connect theory and practice, and make contacts for job openings. The required co-op seminar provides instruction on skills and documents needed to find employment.

Job Openings Projected through 2020

Lane County: 18

Statewide: 186

Openings are estimated to increase by 25%.

Lane County hourly average - $19.63; annual average - $40,824

Oregon hourly average - $20.81; annual average - $43,281

Costs (Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees.)

Books	$600
Certification, Licensure, Exams, Physicals	$4,317
Differential Fees*	$1,076
Resident Tuition and General Student Fees	$5,296
Uniforms	$375
Total Estimated Cost	$11,664

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

CIP cide = 51.0601

Health Services - Dental Assisting/Assistant

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- All DA courses must be passed with a class average of 75% or

higher to remain in the program. (Courses with both a didactic and laboratory/clinical component must have a minimum grade of 75% in BOTH components to qualify as passing.)

- DA 110 (Dental Health Sciences) will be offered online beginning summer term, 2018. If preferred, a combination of HO 150 and 152 (Human Body Systems 1 & 2) or a combination of BI 231 and 232 (Anatomy and Physiology 1 & 2) can be substituted DA 110.
- Human Relations prerequisites may be selected from the list below
- Some courses have prerequisites. See course descriptions
- All pre-req courses must be taken for a letter grade and passed with a 'C' or higher (C- not accepted).
- For DA courses, students must be accepted and enrolled in the Dental Assisting program*
- * The employed dental assistant may be eligible to register for any DA course offered if space permits AND the working assistant meets state credentialing qualifications by contacting the Program Coordinator, Leslie Greer 541.463.5638
- Although pre-requisite courses are not required to apply, their grades are used for application points and will make the application more competitive. Recommended pre-requisites can also accrue application points.

Prerequisites

MTH 052 Math for Health and Physical Sciences
Choice of:
CIS 101 Computer Fundamentals
CS 120 Concepts of Computing: Information Processing
Choice of:
WR 115 Introduction to College Writing
WR 121 Academic Composition
WR 121_H Academic Composition-Honors
HO 100 Medical Terminology 1
DA 110 Dental Health Sciences (3 credits) **

** Options that can be substituted for DA 110: 1) a combination of Human Body Systems 1 & 2 (HO 150 & 152), 6 credits total 2) a combination of Anatomy & Physiology 1 & 2 (BI 231 & 232), 8 credits total

Human Relations Courses accepted for the DA program requirement (the courses below focus on skills needed to be successful in small group communications).Choose one course from the list below:

COMM 219 Small Group Communications
COMM 218 Interpersonal Communication
CG 203 Human Relations at Work
BA 278 Leadership & Team Dynamics
HO 110 Health Office Procedures

	Fall
DA 195 Chairside Procedures 1	5
DA 105 Infection Control in Dentistry	2
DA 115 Dental Anatomy	3
DA 192 Dental Materials	3
DA 210 Dental Radiology	4
DA 107 Dental Health Education 1	1
	Winter
DA 108 Dental Health Education 2	3
DA 193 Dental Materials 2	3
DA 194 Dental Office Procedures	3
DA 211 - Dental Radiology 2	3
DA 196 Chairside Procedures 2	7
	Spring
DA 102 Advanced Clinical Experiences	3
DA 103 Dentistry Law and Ethics	2
DA 206 Co-op Ed: Dental Assisting Seminar	1
DA 280 Co-op Ed: Dental Assisting	6

Dental Hygiene

Offered by the Health Professions Division, 541.463.5617

Associate of Applied Science Degree

Program Coordinator Sharon Hagan RDH, M.S. Dental Hygiene Program and Co-op Coordinator, Bldg. 19, Rm. 263A, 541.463.5616, *hagans@lanecc.edu*

Purpose To Prepare dental hygiene students for entry into the dental hygiene profession as a licensed clinician providing preventive, therapeutic, restorative and educational methods for the control of oral disease and promotion of optimal oral health

Learning Outcomes Purpose To prepare dental hygiene students for entry into the dental hygiene profession as a licensed clinician providing preventive, therapeutic, restorative and educational methods for the control of oral disease and promotion of optimal health.

- demonstrate application of principles of ethical reasoning, decision making and professional responsibility in the provision and support of evidence based oral health care services, research, patient care and practice management.
- demonstrate critical thinking, problem solving and self-evaluation in the provision of comprehensive care, selection of patient management strategies,and professional competence development.
- 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.
- access, critically appraise, apply and communicate evidence based practices for all periodontal classifications within diverse patient populations.
- demonstrate interpersonal communication and collaborative skills to effectively interact with diverse population groups, health care providers, dental professionals and community groups.
- demonstrate application of refined instrumentation skills for periodontal, restorative and therapeutic interventions for individuals at all stages of life.
- demonstrate application of behavioral sciences and patient centered approaches to promote, improve and maintain oral health.
- use assessment, planning, implementation and evaluation for the provision of dental hygiene services and disease prevention strategies within diverse, multicultural and special needs populations, and community groups.
- demonstrate use of mathematical and statistical concepts in the application of clinical and preventive dental care strategies.
- use appropriate library and information resources to research professional issues, develop community health program planning and to support lifelong learning.
- experiential Learning: membership in the Student American Dental Hygienist's Association (SADHA) at the state and national level. Professional meetings and continuing education offerings. Assessment, Planning, Implemenation and Evaluation of community health programs. Off campus experiences with community clinics, school-based screenings, presentations for health fairs, classrooms, inter-professional collaboration and visitations to specialty and general dental offices/clinics.

Accreditation Dental Hygiene, accredited by The American Dental Association's Commission on Dental Accreditation, a specialized accrediting board recognized by the U.S. Dept. of Education. The Commission may be contacted at 312.440.4653 or 211 East Chicago Avenue, Chicago, Illinois 60611.

Licensing & Certification Registered Dental Hygienist

Admission Information See *lanecc.edu/hp/dental/dental-hygiene* for additional information and the admission packet.

Advising and Counseling For assistance in meeting program or application requirements, please go to Counseling and

Advising in Building 1, Room 103, or e-mail *DHProgram@lanecc.edu*

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.

Job Openings Projected through 2020

Mid-Willamette -Mid-Coast region openings - 13 annually

Statewide openings - 129 annually

Lane County average hourly - $38,63; average annual - $80,361

Oregon average hourly - $39.35; average annual - $81,849

Costs Program costs include: tuition and general student fees; course fees for professional supplies; Instrument and restorative instructional supplies; books, uniforms and magnification lenses; program specific course fees for dental hygiene education; and professional exams, licensure fees and physicals.

Books	$1,300
Certification, Licensure, Exams, Physicals	$3,260
Differential Fees*	$12,114
Instruments/Tools	$6,300
Program Specific Fees	$2,470
Residential Tuition General Fees	$11,500
Total Estimated Cost	$36,944

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Students must be accepted in Dental Hygiene Program to enroll in DH courses
- All courses listed below must be passed with a letter grade of 'C' or better

Prerequisites

BI 112 Cell Biology for Health Occupations
CH 112 Chemistry for Health Occupations
Choice of:
  WR 121 Academic Composition
  WR 121_H Academic Composition
BI 231 Human Anatomy and Physiology 1
BI 232 Human Anatomy and Physiology 2
BI 233 Human Anatomy and Physiology 3
FN 225 Nutrition
Choice of:
  SOC 204 Introduction to Sociology
  SOC 205 Social Stratification and Systems
  SOC 206 Institutions and Social Change
MTH 052 Math for Introductory Physical Sciences
Choice of:
  PSY- 201,202,203 General Psychology
Choice of:
  COMM 100 Basic Communication
  COMM 111 Fundamentals of Public Speaking
DH 280 Co-op Ed: Dental Hygiene

First Year	**Fall**
DH 107 Dental Infection Control and Safety	1
DH 243A Oral Roentgenology 1	2
DH 113 Dental Anatomy and Histology	2
DH 118A Clinical Dental Hygiene 1	4
DH 118B Clinical Dental Hygiene 1 Lab	2
DH 228 Oral Biology 1	4
DH 243B Oral roentgenology 1 Lab	1
	Winter
DH 119A Clinical Dental Hygiene 2	3
DH 119B Clinical Dental Hygiene 2 Lab	4
DH 139 Special Needs Patient and Dental Emergencies	2
DH 229 Oral Pathology for the Dental Hygienist	3
DH 244A Oral Roentgenology 2	1
DH 244B Oral Roentgenology 2 Lab	1
	Spring
Choice of:	
WR 123 Composition: Research	
WR 227 Technical Writing	
WR227_H Technical Writing	4
DH 120A Clinical Dental Hygiene 3:Lecture/seminar	3
DH 254 Pharmacology	3
DH 120B Clinical Dental Hygiene 3 Clinic Lab	4
DH 132 Dental Materials for the Dental Hygienist	2
Second Year	**Fall**
DH 220A Clinical Dental Hygiene 4-Lecture/seminar	2
DH 233 Anesthesia/Analgesia for Dental Hygiene Therapy	3
DH 270 Periodontology 1	2
DH 220B Clinical Dental Hygiene 4 Lab	5
DH 275 Restorative Dentistry 1	3
	Winter
DH 221A Clinical Dental Hygiene 5	2
DH 221B Clinical Dental Hygiene 5 Lab	6
DH 237 Community Dental Health	3
DH 271 Periodontology 2	1
DH 276 Restorative Dentistry 2	3
	Spring
DH 234 Trends and Issues in Dental Hygiene	2
DH 238 Community Dental Health	1
DH 277 Restorative Dentistry 3	1
BI 234 Introductory Microbiology	4
DH 222B Clinical Dental Hygiene 6 Lab	5
DH 222A Clinical Dental Hygiene 6	2

Diesel Technology

Offered by the Advanced Technology Division, 541.463.5380

Associate of Applied Science Degree

Two-Year Certificate of Completion - Diesel Technology

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose To prepare the graduate for employment in occupations such as heavy equipment technician and highway truck technician. Possible job opportunities are available with truck fleets, logging fleets, heavy construction companies, OEM dealerships, road construction contractors, parts sales, general heavy equipment repair shops, agriculture fleets and repair shops.

Learning Outcomes The student who successfully completes all Diesel Technology requirements will:

- access library, computing, and communications services and obtain information and data from regional and national networks.
- identify and explain various technologies used in the repair of on- and off-highway vehicles.
- demonstrate and use industry safety standards.
- demonstrate math skills using formulas to find force, pressure, area, and volume.
- use lab station simulators to diagnose and troubleshoot system components.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose diesel fuel systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis,

assembly and operation using industry standard tooling and equipment, to diagnose brake systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.

- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose power train systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment to diagnose hydraulic systems and components found on highway trucks, off highway vehicles and stationary hydraulic systems including construction equipment, agriculture equipment, marine applications, truck equipment and plant hydraulics.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose diesel electrical systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose diesel engines and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.

Accreditation Diesel Technology, evaluated and accredited by the Association of Equipment Distributors Foundation (AEDF). Membership: Northwest Diesel Industry Council (NDC) and Oregon Trucking Association (OTA).

Admission Information See *lanecc.edu/advtech/ds* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Automotive Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Specialty	Oregon	Lane County
Mobile Heavy Machinery Mechanics	59	7
Farm Equipment Mechanics	37	0
Heavy and Tractor-Trailer Truck Drivers	690	61
Bus and Truck Mechanical/Diesel Specialists	127	13
First-Line Supervisors of Mechanics	136	10
Recreational Vehicle Service Technicians 1	9	0
Industrial Machinery Mechanics	274	18
Totals:	1342	109

Wages

Lane County average hourly - $24.35; average annual - $50,642

Oregon average hourly - $24.47; average annual - $50,894

Costs (Estimate based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Books	$2,220
Differential Fees*	$2,724
Instruments/Tools	$400
Program Specific Fees	$1,770
Resident Tuition and General Student Fees	$13,833
Total Estimated Cost	$20,947

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- WR 115 and the PE/Health requirement must be completed with a Pass or "C-" grade or better.
- Arts and Letters choices are listed on the Associate of Applied Science degree page.
- All DS, MFG courses and MTH 075/085 must be completed with a letter grade of "C-" or better.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

First Year	**Fall**
DS 155 Heavy Equipment Hydraulics	12
MTH 075 Applied Algebra for Technicians	4
	Winter
PE/Health Requirement	3
DS 154 Heavy Duty Braking Systems	12
WLD 121 Shielded Metal Arc Welding 1	4
	Spring
Human Relations Requirement	3
DS 158 Heavy Equipment Chassis and Power Trains	12
WR 115W Introduction to College Writing: Workplace Emphasis	3
Second Year	**Fall**
Choice of: MFG101 Safety and Basic Shop Practice / WLD122 Shielded Metal Arc Welding 2	3 - 4
DS 256 Diesel and Auxiliary Fuel Systems	12
MTH 085 Applied Geometry for Technicians	4
	Winter
DS 257 Diesel Electrical Systems	12
WLD 143 Wire Drive Welding 1	4
CS 120 Concepts of Computing: Information Processing or higher	4
	Spring
DS 259 Diesel Engines and Engine Overhaul	12
Arts and Letters Requirement	3
DS280 Cooperative Education: Diesel	3

Diesel Technology

Offered by the Advanced Technology Division, 541.463.5380

Two-Year Certificate of Completion

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose To prepare the graduate for employment in occupations such as heavy equipment technician and highway truck technician. Possible job opportunities are available with truck fleets, logging fleets, heavy construction companies, OEM dealerships, road construction contractors, parts sales, general heavy equipment repair shops, agriculture fleets and repair shops.

Learning Outcomes The graduate will:

- access library, computing, and communications services and obtain information and data from regional and national networks.
- identify and explain various technologies used in the repair of on- and off-highway vehicles.
- demonstrate and use industry safety standards.
- demonstrate math skills using formulas to find force, pressure, area, and volume.
- use lab station simulators to diagnose and troubleshoot system components.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose diesel fuel systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose brake systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose power train systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment to diagnose hydraulic systems and components found on highway trucks, off highway vehicles and stationary hydraulic systems including construction equipment, agriculture equipment, marine applications, truck equipment and plant hydraulics.
- demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose diesel electrical systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation.

Admission Information See *lanecc.edu/advtech/ds* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Automotive Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Specialty Oregon Lane County

Mobile Heavy Machinery Mechanics 59 7

Farm Equipment Mechanics 37 0

Heavy and Tractor-Trailer Truck Drivers 690 61

Bus and Truck Mechanical/Diesel Specialists 127 13

First-Line Supervisors of Mechanics 136 10

Recreational Vehicle Service Technicians 19 0

Industrial Machinery Mechanics 274 18

Totals: 1342 109

Lane County average hourly - $24.35; average annual - $50,642

Oregon average hourly - $24.47; average annual - $50,894

Costs (Estimate based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Books	$2,100
Differential Fees*	$2,724
Instruments/Tools	$400
Program Specific Fees	$1,770
Resident Tuition and General Student Fees	$12,174
Total Estimated Cost	$19,168

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

49-3031.00

Standard Occupational Classification: 49-3031.00 Go to the Department of Labor's O*Net website for a profile of this occupation: Bus and Truck Mechanics and Diesel Engine Specialists Onetonline.org/link/summary/49-3031.00 Or check on these O*Net Related Occupations: Mobile Heavy Equipment Mechanics, Except Engines onetonline.org.link/summary/49-3042.00

In academic year 2014-15, 8 students completed this certificate.

The program is designed to take 8 terms, or about 24 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- Arts and Letters choices are listed on the Associate of Applied Science degree page.
- WR115 and the PE/Health requirement must be completed with a Pass or "C-" grade or better.
- All DS, MFG courses and MTH 075 must be completed with a letter grade of "C-" or better.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

First Year	Fall
DS 155 Heavy Equipment Hydraulics	12
MTH 075 Applied Algebra for Technicians	4

-	Winter
DS 154 Heavy Duty Braking Systems	12
WLD 121 Shielded Metal Arc Welding 1	4
	Spring
DS 158 Heavy Equipment Chassis and Power Trains	12
WR 115W Introduction to College Writing: Workplace Emphasis	3
Human Relations Requirement	3
Second Year	**Fall**
Choice of:	
MFG101 Safety and Basic Shop Practice	
WLD122 Shielded Metal Arc Welding 2	3 - 4
DS 256 Diesel and Auxiliary Fuel Systems	12
	Winter
DS 257 Diesel Electrical Systems	12
WLD 143 Wire Drive Welding 1	4
	Spring
DS 259 Diesel Engines and Engine Overhaul	12
PE/Health Elective	3

Drafting

Offered by the Advanced Technology Division, 541.463.5380

Associate of Applied Science Degree

One-Year Certificate of Completion - Drafting

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose Purpose The Drafting program trains and prepares graduates from diverse backgrounds to work with and assist architects, engineers, other designers, and technicians as part of construction, manufacturing, or engineering teams. Coursework prepares graduates to work collaboratively as design paraprofessionals across a range of capacities using a variety of software platforms. Students build skills in problem-solving, analysis, technical graphics, and basic design. Successful graduates are able to communicate effectively in multiple formats.

Learning Outcomes The graduate will be able to:

- demonstrate basic competence in the use of CAD, solid modeling, and building information modeling software.
- visualize three-dimensional objects from multiple viewing directions and translate three-dimensional objects into two-dimensional drawings.
- create mechanical and architectural drawings which follow recognized national standards for format, annotation, lines, and symbols.
- demonstrate basic understanding of mechanisms and mechanical design strategies.
- conduct research to solve basic design problems.
- solve problems and manage projects as part of a team.
- use quantitative thinking to translate concepts of a problem-solving task into mathematical language and solve using mathematical operations.
- communicate clearly in written, verbal, and graphic formats.

Admission Information See *lanecc.edu/advtech/dft* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Gerry Meenaghan, Drafting Co-op Coordinator, Bldg 19, Rm.154. 541.463.5883, *meenaghang@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 4 annually

Statewide openings - 66 annually

Lane County average hourly - $22.47 to $26.28; average annual - $46,748 to $ 54,655

Oregon average hourly - $25.12 to $29.11; average annual - $52,258 to $60,558

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$2,757
Program Specific Fees	$731
Resident Tuition and General Student Fees	$11,582
Total Estimated Cost	$15,070

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- PE/Health requirement, WR 121, and DRF 206 must be completed with a grade of "Pass" or "C-" or better.
- Human Relations and Health/PE choices are listed on the Associate of Applied Science degree page.
- All DRF and CST courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

First Year	**Fall**
Human Relations Requirement	3
CS120 Concepts of Computing: Information Processing or higher computer science	4
MTH 075 Applied Algebra for Technicians or higher	4
DRF 160 Computer-Aided Drafting and Design	4
	Winter
DRF 137 Architectural Plans	4
Directed Elective	4
MTH 085 Applied Geometry for Technicians or higher	4
CST 122 Construction Codes	2
	Spring
ET 121 Shop Practices	2
COOP 206 Co-op Ed: Internship Seminar	2
Choice of:	
WR 121 Academic Composition	
WR 121_H Academic Composition	4
DRF 121 Mechanical Drafting	4
DRF 245 Solid Modeling	4
Second Year	**Fall**
DRF 235 Mechanical Design Skills	4
DRF 210 Commercial Buildings	4
DS 155 Heavy Equipment Hydraulics	1
PE/Health Requirement	3
DRF 205 Drafting: Structures	4
	Winter
DRF 236 Machine Elements	4
DRF 207 Drafting: Strength of Materials	4
DRF 220 Building Information Modeling	4
WR 227 Technical Writing	4
	Spring
Directed Elective	3 - 4
Directive Elective	3 - 4
DRF 211 Sustainable Building Systems	4
ENGR 280D Co-op Ed: Drafting	3

Directed Electives

ART 117 Basic Design: 3-Dimensional	3
ART 216 Digital Design Tools	3
CIS 102 Problem Solving with Computers	4
CIS 140W Introduction to Operating Systems: Windows Clients	4
CIS 195 Web Authoring 1	4
CS 179 Introduction to Computer Networks	4
CST 116 Construction Estimating	4
DS 154 Heavy Duty Braking Systems	1 - 12
DS 257 Diesel Electrical Systems	1 - 12
DS 259 Diesel Engines and Engine Overhaul	1 - 12
GIS 151 Digital Earth	4
GIS 245 GIS 1	4
GS 104 Physical Science	4
GS 105 Physical Science	4
MFG 101 Safety and Basic Shop Practice	3
MUL 101 Introduction to Media Arts	3
MUL 212 Digital Imaging	4
WLD 143 Wire Drive Welding 1	1 - 4
WLD 151 Fundamentals of Metallurgy	1 - 3

Drafting

Offered by the Advanced Technology Division, 541.463.5380

One-Year Certificate of Completion

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose The Drafting program trains and prepares graduates from diverse backgrounds to work with and assist architects, engineers, other designers, and technicians as part of construction, manufacturing, or engineering teams. Coursework prepares graduates to work collaboratively as design paraprofessionals across a range of capacities using a variety of software platforms. Students build skills in problem-solving, analysis, technical graphics, and basic design. Successful graduates are able to communicate effectively in multiple formats.

Learning Outcomes The student who successfully completes all Drafting requirements will:

- demonstrate basic competence in the use of CAD and solid modeling software.
- visualize three-dimensional objects from multiple viewing directions and translate three-dimensional objects into two-dimensional drawings.
- create mechanical and architectural drawings which follow recognized national standards for format, annotation, lines, and symbols.
- communicate clearly in written, verbal, and graphic formats.

Admission Information See *lanecc.edu/advtech/dft* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Gerry Meenaghan, Drafting Co-op Coordinator, Bldg 19, Rm. 154. 541.463.5883, *meenaghang@lanecc.edu*

Job Openings Projected through 2020

Lane County: 4 positions

Statewide: 66 positions

Lane County average hourly - $22.47 to $26.28; average annual - $46,748 to $ 54,655

Oregon average hourly - $25.12 to $29.11; average annual - $52,258 to $60,558

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,246
Program Specific Fees	$372
Resident Tuition and General Student Fees	$5,865
Total Estimated Cost	$7,483

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

17-3011.01

Go to the Department of Labor's O*Net website for a profile of this occupation: Architectural Drafters Onetonline.org/link/summary/17-3011.01 Or check on these O*Net Related Occupations: Civil Drafters onetonline.org.link/summary/17-3011.02 Mechanical Drafters onetonline.org/link/summary/17-3013.00

In academic year 2014-15, 9 students completed this certificate.

The program is designed to take 4 terms, or about 15 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- PE/Health requirement, WR 121, and DRF 206 must be completed with a grade of "Pass" or "C-" or better.
- Human Relations and Health/PE choices are listed on the Associate of Applied Science degree page.
- All DRF and CST courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

Fall	
CS 120 Concepts of Computing: Information Processing or higher computer science	4
Human Relations Requirement	3
MTH 075 Applied Algebra for Technicians or higher	4
DRF 160 Computer-Aided Drafting and Design	4
Winter	
DRF 137 Architectural Plans	4
MTH 085 Applied Geometry for Technicians or higher	4
Directed Elective: Choose One	4
CST 122 Construction Codes	2
Spring	
Choice of: WR 121 Academic Composition / WR 121_H Academic Composition	4

ET 121 Shop Practices	2
COOP 206 Co-op Ed: Internship Seminar	2
DRF 121 Mechanical Drafting	4
DRF 245 Solid Modeling	4

Directed Electives

ART 117 Basic Design: 3-Dimensional	3
ART 216 Digital Design Tools	3
CIS 102 Problem Solving with Computers	4
CIS 140W Introduction to Operating Systems: Windows Clients	4
CS 179 Introduction to Computer Networks	4
CST 116 Construction Estimating	4
GIS 151 Digital Earth	4
GIS 245 GIS 1	4
GS 104 Physical Science	4
GS 105 Physical Science	4
MUL 212 Digital Imaging	4
WLD 143 Wire Drive Welding 1	1 - 4

Early Childhood Education

Offered by the Social Science Department, 541.463.5427

Associate of Applied Science Degree

One-Year Certificate of Completion - Early Childhood Education

Career Pathway Certificate - Early Childhood Teacher Aide

Career Pathway Certificate - Guidance and Curriculum

Career Pathway Certificate - Infant and Toddler

Program Coordinator Jean Bishop, *bishopj@lanecc.edu;*541.463.5287, Building 24, Room 121. Please also see Jean to set up a student teaching (ECE 240) schedule.

Purpose An academic program designed to develop skilled professionals to work in a variety of early childhood settings such as: private and public child care centers, in-home family child care and early intervention programs. Graduates care for and educate young children and may work with families and communities as parenting coaches, policy makers and advocates.

Learning Outcomes The student who successfully completes all Early Childhood Education requirements will: choose age-appropriate guidance strategies that enhance each child's self-esteem and self worth.The strategies must develop in children the ability to solve their own problems in challenging situations and in everyday life. design and effectively use Reggio and other inspired curriculum approaches to maximize children's abilities to make choices, explore personal power and develop empathy and caring. facilitate the operation of child development 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

- facilitate the operation of child development 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.
- choose age-appropriate guidance strategies that enhance each child's self-esteem as well as develop the ability to solve problems in challenging situations and in everyday life.
- design and effectively use Reggio and other inspired curriculum approaches to maximize children's abilities to make choices, explore personal power and develop empathy and caring.

Admission Information Please consult: *lanecc.edu/socialscience/ece*

Advising and Counseling Lori Areford and Josh Baker can be reached at *EducationAdvising@lanecc.edu.*

Cooperative Education (Co-op) Please contact Kathleen Lloyd, *lloydk@lanecc.edu;*541.463.5527, Building 24/27 Early Childhood Education (ECE) majors are required to complete 5 credits of ED280EC to earn the ECE AAS degree. Students are eligible to enroll in the course and work in an off-campus, community site once they have completed 3 terms of student teaching ECE 240. Cooperative education work sites and schedules vary.

Job Openings Projected through 2020

Childcare Worker

Lane County openings - 31 annually

Statewide openings - 426 annually

Teacher Assistant

Lane County openings - 51 annually

Statewide openings - 534 annually

Preschool Teacher

Lane County openings - 23 annually

Statewide openings - 230 annually

Childcare Worker

Lane County average hourly wage - $10.92; average annual - $22,710

Oregon average hourly wage- $11.95; average annual - $24,852

Teacher Assistant

Lane County average annual - $28,513

Oregon average annual -$30,222

Preschool Teacher

Lane County average hourly wage- $13.49; average annual - $28,062

Oregon average hourly wage- $14.91; average annual - $31,026

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,800
Program Specific Fees	$150
Resident Tuition and General Student Fees	$8,650
Total Estimated Cost	$10,600

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- See course descriptions for prerequisite information
- MTH course must be taken for a grade, not P/NP
- For choices in Foundational Skills and Discipline Studies, see AAS degree description.

First Year	**Fall**
ECE 110 Observing Young Children's Behavior	1
ECE 120 Introduction to Early Childhood	2
ECE 130 Guidance of Young Children	3
WR 115 Introduction to College Composition	4
ECE 105 Health and Safety Issues in Early Childhood Education	2
	Winter
ECE 150 Creative Activities for Children	3
ECE 170 Infants and Toddlers Development	4
MTH 025 Basic Mathematics Applications or higher	3
CG 203 Human Relations at Work	3
Directed Elective (choose from list below)	3

	Spring
CG 213 Improving Parent and Child Relationships	6
ECE 160 Exploring Early Childhood Curriculum	4
FN 130 Family Food and Nutrition	3
Directed Elective (choose from the list below)	3
HDFS 226 Child Development	3
ECE 240 Supervised Student Teaching, LCC Child Care Center.	4
Second Year	**Fall**
ECE 240 Supervised Student Teaching, LCC Child Care Center.	4
ECE 210 - Applying Early Childhood Curriculum	4
Science/Math/Computer Science requirement	4
Arts/Letters requirement	3
	Winter
ECE 240 Supervised Student Teaching, LCC Child Care Center.	4
Discipline Studies requirement, Choice of	
Arts and Letters	
Social Science	
Science/Math/Computer Science	4
ECE 230 Family, School, Community Relations	3
HDFS 227 Children Under Stress	3
	Spring
ED 280ECCo-op Ed: Early Childhood Ed.	7
ECE 250 Infant and Toddler Environments	3
ECE 260 Administration of Child Care Programs	3
Choice of:	
Health Requirement	
Physical Education Activity requirement	3

Directed Electives

	Spring
Directed Elective (refer to list below) Directed electives may be selected from the following list. Alternative courses must be approved by the Program Coordinator in advance.	
ENG 100 Children's Literature	
HDFS 228 Young Children with Special Needs	
ECE 253 Diversity Issues in Early Childhood Education	
One extra term of ECE 240, Supervised Student Teaching, LCC Child Care Center.	
CG 213 Improving Parent and Child Relationships	6

Early Childhood Education

Offered by the Social Science, 541.463.5427

One-Year Certificate of Completion

Program Coordinator Contact Jean Bishop, *bishopj@lanecc.edu;*541.463.5287, Building 24, Room 201. Please contact Jean to set up an ECE 240 student teaching schedule.

Purpose To prepare students for successful careers as early childhood professionals in a variety of settings such as private and public child care programs as well as in-home family childcare.

Learning Outcomes The student who successfully completes all Early Childhood Education requirements will: choose age-appropriate guidance strategies that enhance each child's self-esteem and self worth. The strategies must develop in children the ability to solve their own problems in challenging situations and in everyday life. design and effectively use Reggio and other inspired curriculum approaches to maximize children's abilities to make choices, explore personal power and develop empathy and caring. 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

- 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.
- choose age-appropriate guidance strategies that enhance each child's self-esteem and self worth. The strategies must develop in children the ability to solve their own problems in challenging situations and in everyday life.
- design and effectively use Reggio and other inspired curriculum approaches to maximize children's abilities to make choices, explore personal power and develop empathy and caring.
- 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.

Admission Information *lanecc.edu/socialscience/ece*

Advising and Counseling Lori Areford, *educationadvising@lanecc.edu*; Building 19, Room 254F Josh Baker *educationadvising@lanecc.edu*; Building 19, Room 253M

Job Openings Projected through 2020

Lane County openings - 23 annually

Statewide openings - 230 annually

Lane County average hourly wage- $14.91; average annual - $31,026

Oregon average hourly wage- $13.49; average annual - $28,062

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,650
Resident Tuition and General Student Fees	$5,002
Total Estimated Cost	$6,652

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

25-2011.00

Go to the Department of Labor's O*Net website for a profile of this occupation: Preschool Teachers, Except Special Education Onetonline.org/link/summary/25-2011.00

In academic year 2014-15, 10 students completed this certificate.

The program is designed to take 4 terms, or about 15 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- MTH course must be taken for a grade, not P/NP
- See course descriptions for prerequisite information
- For choices in Foundational Skills and Discipline Studies, see AAS degree description.
- All CG, ECE, ED, FN, HDFS, and directed electives must be taken for a grade, not P/NP, and must be passed with a 'C-' or better to fulfill program requirements

Fall

ECE 105 Health and Safety Issues in Early Childhood Education	2
ECE 110 Observing Young Children's Behavior	1
ECE 120 Introduction to Early Childhood	2
ECE 130 Guidance of Young Children	3
WR 115 Introduction to College Composition	4

Winter

CG 203 Human Relations at Work	3
Directed Elective (choose from list below)	3
ECE 150 Creative Activities for Children	3
ECE 170 Infants and Toddlers Development	4
MTH 025 Basic Mathematics Applications or higher	3

Spring

HDFS 226 Child Development	3
Directed Elective (choose from list below)	3
ECE 240, Supervised Student Teaching, LCC Child Care Center.	4
ECE 160 Exploring Early Childhood Curriculum	4
FN 130 Family Food and Nutrition	3

Directed Electives

Directed Elective (refer to list below) Directed electives may be selected from the following list. Alternative courses must be approved by the Program Coordinator in advance.

ENG 100 Children's Literature	
HDFS 228 Young Children with Special Needs	
ECE 253 Diversity Issues in Early Childhood Education	
One extra term of ECE 240, Supervised Student Teaching, LCC Child Care Center.	
CG 213 Improving Parent and Child Relationships	6

Early Childhood Teacher Aide

Offered by the Social Science Department, 541.463.5427

Career Pathway Certificate

Program Coordinator 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, as well as online at *lanecc.edu/cfe/ece.*

Purpose Prepares student to work in an early childhood education setting as a Teacher Aide 1 as defined by the Oregon Child Care Division. Students completing this certificate will also achieve Level 7.5 in the Oregon Professional Development Registry for Early Childhood

Learning Outcomes The graduate will:

- develop a creative Imagination to understand suitable art forms to offer young children.
- be able to explain theories of development relating to the early years.
- express and understand the use of guidance that supports moral autonomy in young children.
- identify state rules and regulations regarding health and safety which govern licensing of early childhood programs.
- demonstrate in a supervised lab school setting awareness of consistent, appropriate guidance and developmentally appropriate.

Advising and Counseling Lori Areford can be reached at *educationadvising@lanecc.edu*. Leslie Soriano can be reached at *sorianol@lanecc.edu* or at 541.463.5512.

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All classes, with the exception of ECE 105 are articulated at LCC as College Now classes.
- ECE 105 and ECE 130 must be taken at LCC (or a similar class at another college) for college credit.

ECE 105 Health and Safety Issues in Early Childhood Education	2
ECE 120 Introduction to Early Childhood	2
ECE 130 Guidance of Young Children	3
ECE 150 Creative Activities for Children	3
HDFS 226 Child Development	3
ECE 240, Supervised Student Teaching, LCC Child Care Center.	4

Guidance and Curriculum

Offered by the Social Science Department, 541.463.5427

Career Pathway Certificate

Program Coordinator Jean Bishop, *bishopj@lanecc.edu;* 541.463.5287

Purpose Prepares graduates to work as early childhood education teaching assistants.

Learning Outcomes The graduate will:

- analyze teaching experiences and goals, then match planning to philosophy of teaching and educational practice.
- explain theories of development relating to the early years.
- express and understand the use of developmentally appropriate guidance.
- identify developmental characteristics and developmental needs of young children in the areas of physical, intellectual, emotional, social and language development.

Advising and Counseling Lori Areford can be reached at *educationadvising@lanecc.edu.* Leslie Soriano can be reached at *sorianol@lanecc.edu* or at 541.463.5512.

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All ECE courses must be taken for a grade, not P/NP, and must be passed with a 'C-' or better to fulfill program requirements

ECE 120 Introduction to Early Childhood	2
ECE 130 Guidance of Young Children	3
ECE 150 Creative Activities for Children	3
ECE 160 Exploring Early Childhood Curriculum	4
ECE 210 Applying Early Childhood Curriculum	4

Infant and Toddler

Offered by the Social Science Department, 541.463.5427

Career Pathway Certificate

Program Coordinator Jean Bishop, *bishopj@lanecc.edu;*541.463.5287, Building 24, Room 121

Purpose Prepares students to plan environments of high quality for infants and toddlers and to carry out developmentally appropriate curriculum.

Learning Outcomes The graduate will: choose suitable equipment and materials for infants and toddlers express and understand the use of developmentally appropriate guidance identify developmental characteristics and developmental needs of infants and toddlers in the areas of physical, intellectual, emotional, social and language development identify state rules and regulations which govern certification of infant and toddler centers

- choose suitable equipment and materials for infants and toddlers.
- express and understand the use of developmentally appropriate guidance.
- identify developmental characteristics and developmental needs of infants and toddlers in the areas of physical, intellectual, emotional, social and language development.
- identify state rules and regulations which govern certification of infant and toddler centers.

Admission Information Please consult: *lanecc.edu/socialscience/ece*

Advising and Counseling Lori Areford and Josh Baker can be reached at *Educationadvising@lanecc.edu.*

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All ECE and HDFS courses must be taken for a grade, not P/NP, and must be passed with a 'C-' or better to fulfill program requirements

ECE 130 Guidance of Young Children	3
ECE 250 Infant and Toddler Environments	3
HDFS 226 Child Development	3
ECE 170 Infants and Toddlers Development	4
ECE 240 Supervised Student Teaching-LCC Child Care Center	4

Electrician Apprenticeship Technologies

Offered by the Advanced Technology Division, 541.463.5380

Associate of Applied Science Degree

One-Year Certificate of Completion - Electrician Apprenticeship Technologies

Less than One-Year Certificate of Completion - Limited Electrician Apprenticeship Technologies

Career Pathway Certificate - Trade Worker Apprenticeship Technologies

Program Coordinator Joy Crump, Bldg. 15 Rm. 201, 541.463.5496, *crumpj@lanecc.edu*

Purpose To provide a structured system of training in the electrician trade or occupation leading to certification and journey-level status, only for apprentices who are sponsored by individual employers, accepted by a Joint Apprenticeship Training Committee, and registered with the State of Oregon Bureau of Labor and Industries.

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.

Licensing & 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. In addition, the Oregon community college Electrician Apprenticeship Technologies pathway provides statewide transfer opportunities, laddered certificates of completion, and an optional transfer path into Oregon Institute of Technology Bachelor of Science degree in Operations Management or Bachelor of Applied Science degree in Technology and Management. 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. Electrician trades require successful completion of trade-specific licensure examinations through the Oregon Building Codes Division.

Admission Information Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries and accepted by a Joint Apprenticeship Training Committee. In most cases, minimum qualifications to begin an apprenticeship include a minimum age of 18 years, a high school diploma or GED, and high school or college level Algebra with a â œCâ grade or higher (or equivalent).

Advising and Counseling *lanecc.edu/advising/advisors*

Job Openings Projected through 2020

Lane County openings - 20 annually

Statewide openings - 273 annually

Lane County average hourly - $30.24; average annual - $62,902

Oregon average hourly - $32.88; average annual - $68,388

Apprentice Wages - 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*

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition. Electrician Apprenticeship Technologies course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses. Costs of books and tools for the related training classes in the electrician programs vary with each individual trade/occupation.

Books	$1,500
Resident Tuition and General Student Fees	$10,000
Total Estimated Cost	$11,500

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- 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.
- Prerequisites are required for some courses. See course descriptions.
- All courses must be completed with a letter grade of 'C' or better.

General Education

WR 115W Introduction to College Writing: Workplace Emphasis or higher 3
PE/Health Requirement 3
Arts and Letters requirement 3
Human Relations requirement 3
Science/Math/Computer Science requirement 3
Choice of:
Arts and Letters requirement
Human Relations/Social Science requirement
Science/Math/Computer Science requirement 3
MTH 060 Beginning Algebra or higher 4

Journeyman card from Oregon Bureau of Labor and Industries Apprenticeship and Training Division (22 credits)

State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion 22

Limited Maintenance Electrician (20-21 credits)

APR 189 Shop Practices 2
APR 220 Electrical Apprenticeship Code and Exam Preparation ..... 2 - 3
APR 191 Electrical Theory 2 4
APR 285 Motors 4
APR 286 Motors 2 4
APR 190 Electrical Theory 1 ..... 1 - 4

Limited Energy Technician License B (26-27 credits)

APR 101A Trade Skills Fundamentals 4
APR 140 Electrical Systems Installation Methods 4
APR 141 Limited Voltage Electrical Circuits 4
APR 142 Devices, Testing Equipment and Code 4
APR 143 Limited Voltage Cabling 4
APR 144 Communications 4
APR 220 Electrical Apprenticeship Code and Exam Preparation ..... 2 - 3

Limited Energy Technician License A (38-39 credits)

APR 101A Trade Skills Fundamentals 4
APR 140 Electrical Systems Installation Methods 4
APR 141 Limited Voltage Electrical Circuits 4
APR 142 Devices, Testing Equipment and Code 4
APR 143 Limited Voltage Cabling 4
APR 144 Communications 4
APR 220 Electrical Apprenticeship Code and Exam Preparation ..... 2 - 3
APR 240 Audio and Intrusion Systmes 4
APR 241 Fire Alarm Systems and Nurse Call 4
APR 242 Limited Voltage System Integration 4

Manufacturing Plant Electrician (38-41 credits)

APR 185 Shielded Metal Arc Welding 1 2
APR 189 Shop Practices 2
APR 220 Electrical Apprenticeship Code and Exam Preparation ..... 6 - 9
APR 292 Programmable Controllers 3 4
APR 290 Programmable Controllers 1 4
APR 291 Programmable Controllers 2 4
APR 190 Electrical Theory 1 4
APR 191 Electrical Theory 2 ..... 1 - 4
APR 285 Motors ..... 1 - 4
APR 286 Motors 2 ..... 1 - 4

Inside Wire Electrician (45-48 credits)

APR 130 Electrical Principles 5
APR 131 Electrical Principles/Residential Wiring 5
APR 132 Electrical Residential Wiring Lab 3
APR 133 Electrical Generators, Transformers, and Motors 1 5
APR 134 Electrical Generators, Transformers and Motors 2 5
APR 135 Electrical, Generators, Transformers, and Motors Lab 3
APR 220 Electrical Apprenticeship Code and Exam Preparation ..... 6 - 9
APR 225 Electrical Motor Controls 5
APR 226 Electrical Grounding/Bonding and Blueprint Reading 5
APR 227 Electrical System Troubleshooting 3

Program Electives to complete 90 credits for degree:

Additional Electives

CST 118 Building Construction 5
DRF 160 Computer-Aided Drafting and Design 4
APR 101 Trade Skills Fundamentals 4
APR 105 Electrical Wiring for the Trades 4
CS 120 Concepts of Computing: Information Processing 4
CST 110 Blueprint Reading 1 3
CST 111 Construction Orientation and Environment 2
HE 152 Drugs, Society and Behavior 3
HE 252 First Aid 3
MTH 085 Applied Geometry for Technicians 4
MTH 111 College Algebra 5
MTH 112 Trigonometry 5
WLD 121 Shielded Metal Arc Welding 1 ..... 1 - 4

Electrician Apprenticeship Technologies

Offered by the Advanced Technology Division, 541.463.5380

One-Year Certificate of Completion

Program Coordinator Joy Crump, Bldg. 15 Rm. 201, 541.463.5496, *crumpj@lanecc.edu*

Purpose Students may earn a Certificate of Completion in Electrician Apprenticeship Technologies by successfully completing core related training credits, and completing related instruction in communications, computation, and human relations.

Learning Outcomes The graduate will:

- apply theory to electrical wiring.
- repair and install electrical wire devices according to licensure regulations to meet National Electrical Code and Oregon Building Codes Division for Inside Electrician, Limited Energy Technician-License A, and/or Manufacturing Plant Electrician.

Licensing & 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 Information 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*. 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).

Advising and Counseling *lanecc.edu/advising/advisors*

Job Openings Projected through 2020

Lane County openings - 20 annually

Statewide openings - 273 annually

Lane County average hourly - $30.24; average annual - $62,902

Oregon average hourly - $32.88; average annual - $68,388

Apprentice Wages - 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*

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition. Electrician Apprenticeship Technologies course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses. Costs of books and tools for the related training classes in the electrician programs vary with each individual trade/occupation.

Books	$1,300
Resident Tuition and General Student Fees	$7,200
Total Estimated Cost	$8,500

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All courses must be completed with a letter grade of 'C' or better.
- To earn the certificate, student must:
- complete State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journeyman 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 38-48 Total Credits 47-57

Related Instruction (9 credits)

Communication	3
Computation	3
Human Relations	3

Journeyman card from Oregon Bureau of Labor and Industries Apprenticeship and Training Division

Limited Energy Technician License A (38-39 credits)

APR 101A Trade Skills Fundamentals	4
APR 140 Electrical Systems Installation Methods	4
APR 141 Limited Voltage Electrical Circuits	4
APR 142 Devices, Testing Equipment and Code	4
APR 143 Limited Voltage Cabling	4
APR 144 Communications	4
APR 220 Electrical Apprenticeship Code and Exam Preparation	2 - 3
APR 240 Audio and Intrusion Systmes	4
APR 241 Fire Alarm Systems and Nurse Call	4
APR 242 Limited Voltage System Integration	4

Manufacturing Plant Electrician (38-41 credits)

APR 189 Shop Practices	2
APR 220 Electrical Apprenticeship Code and Exam Preparation	6 - 9
APR 292 Programmable Controllers 3	4
APR 190 Electrical Theory 1	4
APR 185 Shielded Metal Arc Welding 1	2
APR 191 Electrical Theory 2	4
APR 285 Motors	4
APR 286 Motors 2	4
APR 290 Programmable Controllers 1	4
APR 291 Programmable Controllers 2	4

Inside Wire Electrician (45-48 credits)

APR 130 Electrical Principles	5
APR 131 Electrical Principles/Residential Wiring	5
APR 132 Electrical Residential Wiring Lab	3
APR 133 Electrical Generators, Transformers, and Motors 1	5
APR 134 Electrical Generators, Transformers and Motors 2	5
APR 135 Electrical, Generators, Transformers, and Motors Lab	3
APR 220 Electrical Apprenticeship Code and Exam Preparation	6 - 9
APR 225 Electrical Motor Controls	5
APR 226 Electrical Grounding/Bonding and Blueprint Reading	5
APR 227 Electrical System Troubleshooting	3

Limited Electrician Apprenticeship Technologies

Offered by the Advanced Technology Division, 541.463.5380

Less than One-Year Certificate of Completion

Program Coordinator Joy Crump, Bldg. 15 Rm. 201, 541.463.5496, *crumpj@lanecc.edu.*

Purpose Students may earn a Certificate of Completion in Limited Electrician Apprenticeship Technologies by successfully completing core related training credits and providing a State of Oregon Apprenticeship Training Journeyman card or BOLI-ATD Certificate of Completion.

Learning Outcomes Graduates will be able to:

- 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.

Licensing & 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 Information 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*. 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).

Advising and Counseling *lanecc.edu/advising/advisors*

Job Openings Projected through 2020

Lane County openings - 20 annually

Statewide openings - 273 annually

Lane County average hourly - $30.24; average annual - $62,902

Oregon average hourly - $32.88; average annual - $68,388

Apprentice Wages - 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*

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition. Electrician Apprenticeship Technologies course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses. Costs of books and tools for the related training classes in the electrician programs vary with each individual trade/occupation.

Books	$875
Resident Tuition and General Student Fees	$6,025
Total Estimated Cost	$6,900

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All courses must be completed with a letter grade of "C" or better.
- 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 Journeyman card or BOLI-ATD Certificate of Completion
- complete core related training 20-27 credits

Journeyman card from Oregon Bureau of Labor and Industries Apprenticeship and Training Division (22 credits)

Limited Maintenance Electrician (20-21 credits)

APR 189 Shop Practices	2
APR 220 Electrical Apprenticeship Code and Exam Preparation	2 - 3
APR 190 Electrical Theory 1	4
APR 191 Electrical Theory 2	4
APR 285 Motors	4
APR 286 Motors 2	4

Limited Energy Technician License B (26-27 credits)

APR 101A Trade Skills Fundamentals	4
APR 140 Electrical Systems Installation Methods	4
APR 141 Limited Voltage Electrical Circuits	4
APR 142 Devices, Testing Equipment and Code	4
APR 143 Limited Voltage Cabling	4
APR 144 Communications	4
APR 220 Electrical Apprenticeship Code and Exam Preparation	2 - 3

Trade Worker Apprenticeship Technologies

Offered by the Advanced Technology

Career Pathway Certificate

Program Coordinator Joy Crump, Bldg. 15 Rm. 201, 541.463.5496, *crumpj@lanecc.edu.*

Purpose To provide a structured system of training in electrical fundamentals to prepare students with the foundational skills and knowledge required to enter the electrical trade.

Learning Outcomes The graduate will:

- complete 4000 hours State of Oregon-approved on-the-job training.
- successfully complete all required core related-training courses with a grade of â œCâ or better.
- apply theory to electrical systems.
- repair and maintain electrical systems according to state and safety regulations for the electrical apprenticeship trades.

Admission Information Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries and accepted by a Joint Apprenticeship Training Committee. Information is available at *boli.state.or.us*.

Advising and Counseling *lanecc.edu/advising/advisors*

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Limited Energy Technician License A (24 credits)

APR 101A Trade Skills Fundamentals	4
APR 140 Electrical Systems Installation Methods	4
APR 141 Limited Voltage Electrical Circuits	4
APR 142 Devices, Testing Equipment and Code	4
APR 143 Limited Voltage Cabling	4
APR 144 Communications	4

Manufacturing Plant Electrician (16 credits)

APR 190 Electrical Theory 1	1 - 4
APR 191 Electrical Theory 2	1 - 4
APR 285 Motors	1 - 4
APR 286 Motors 2	1 - 4

Inside Wire Electrician (26 credits)

APR 130 Electrical Principles	5
APR 131 Electrical Principles/Residential Wiring	5
APR 132 Electrical Residential Wiring Lab	3
APR 133 Electrical Generators, Transformers, and Motors 1	5
APR 134 Electrical Generators, Transformers and Motors 2	5
APR 135 Electrical, Generators, Transformers, and Motors Lab	3

Energy Management Technician (ONLINE)

Offered by the Institute for Sustainable Practices, 541.463.6160

Associate of Applied Science Degree

Associate of Applied Science Degree Option - Energy Management Technician: Building Controls Technician Option

One-Year Certificate of Completion - Energy Management Technician

Program Coordinator Roger Ebbage, Bldg. DCA, Rm. 404, *ebbager@lanecc.edu*541.463.6160

Purpose The Energy Management Technician is exclusively online and prepares students for a career in Energy Management. Through this program, students will learn how residential and commercial building systems consume energy by understanding how they work and the interaction between one another. Students will be able to evaluate and measure consumption and make an informed recommendation on building system energy efficiency improvements. Employment is found with Government, Utilities, Engineering Firms, School Districts, Community Action Programs, and Residential Weatherization Practitioners!

Learning Outcomes Upon completion of this degree/certificate the graduate will:

- evaluate the energy use patterns for residential and commercial buildings and recommend energy efficiency measures and renewable energy solutions for high energy consuming buildings.
- understand the interaction between energy consuming building systems and make energy use reduction recommendations based on that understanding.
- construct energy evaluation technical reports and make presentations for potential project implementation.
- 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., excel and other computer software).
- develop and evaluate inferences and predictions that are based on collected data.
- interpret the concepts of a problem-solving task, and, using

mathematics, translate concepts into energy related projects.
- use appropriate library and digital information resources to research professional objectives and support lifelong learning.
- read and analyze building blue prints including floor, mechanical, and electrical plans. Read elevations, sections, schedules, and construction notes.

Accreditation Energy Management, Renewable Energy Program Accreditation awarded by the Interstate Renewable Energy Council, (IREC Standard 01022:2011 for accreditation and certification of renewable energy training programs and instructors).

Licensing & Certification Association of Energy Engineers Certified Energy Manager In Training (EMIT)

Admission Information Roger Ebbage, Bldg. DCA, Rm. 404, *ebbager@lanecc.edu*.Students must apply to the program by completing an Energy Program application. Applicants must have completed Math 065 or 070 prior to enrollment. Individual courses may be taken with department/instructor approval.

Advising and Counseling Roger Ebbage, Bldg. DCA, Rm. 404, *ebbager@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 their degree requirements. Contact Gerry Meenaghan at: *MeenaghanG@lanecc.edu*Phone: 541.463.5883 Office: Building 19, Room 154

Job Openings Projected through 2020

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.

Energy Management: $40,000-$50,000 annually.

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition. * Subject to change without notice.

Program Specific Fees	$1,000
Resident Tuition and General Student Fees	$10,227
Total Estimated Cost	$11,227

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements
- Completion of Math 65 or Math 70 or Program Coordinator permission must be obtained prior to enrolling in the program.
- It is recommended but not required, that General Education requirements are taken prior to entering the program.
- Deviation from the prescribed course sequence will impact a student's ability to complete the program in a two year time frame.
- All NRG courses are offered fully online.
- MTH 95 can be taken any term but must be completed by the end of the first year.
- Directed Electives may be taken online or locally at Lane Community College or transferred in from another institution.
- Lane Community College does not offer CST 110, Ph 101/102, online. These courses must be taken locally at Lane Community College or transferred in from another institution.
- Health/PE requirement, Directed Electives, WR 121, and WR 227 may be taken any term.
- Prerequisites are required for some courses. See course descriptions.

First Year	**Fall**
MTH 095 Intermediate Algebra or higher	5
BT 123 MS EXCEL for Business	4
NRG 101 Introduction to Energy Management	3
PH 101 Fundamentals of Physics	4
CST 110 Blueprint Reading 1	3
	Winter
Choice of:	
WR 121 Academic Composition	
WR 121_H Academic Composition	4
NRG 111 Residential/Light Commercial Energy Analysis	3
PH 102 Fundamentals of Physics	4
NRG 103 Sustainability in The Built Environment	3
NRG 154 Alternative Energy Technologies	3
	Spring
NRG 124 Energy Efficiency Methods	4
NRG 131 Lighting Fundamentals	3
WR 227 Technical Writing	4
NRG 121 Air Conditioning System Analysis	3
NRG 206 A/B Coop Seminar	2
Second Year	**Fall**
NRG 122 Commercial Air Conditioning System Analysis	3
Human Relations Requirement	3
WATR 202 Fostering Sustainable Practices	3
Directed Elective	3
	Winter
NRG 112 Commercial Energy Use Analysis	4
NRG 123 Energy Control Strategies	4
PE/Health Requirement	3
Directed Elective	3
	Spring
NRG 142 Energy Accounting	3
NRG 110 Energy Efficiency Industry Software Applications	4
NRG 280 Co-op Ed: Energy Management	6
Directed Electives	
DRF 167 CAD 1	4
DRF 168 CAD 2	4
BT 223 MS EXCEL for Business-Expert	4
SPAN 101 Spanish, First-Year	5
SPAN 102 Spanish, First-Year	5
BA 101 Introduction to Business	4
PS 297 Environmental Politics	4
PSY 201 General Psychology	4
COMM 100 Basic Communications	4
COMM 105 Listening and Critical Thinking	4
COMM 111 Fundamentals of Public Speaking	4
COMM 112 Persuasive Speech	4
COMM 218 Interpersonal Communication	4
MTH 111 College Algebra	5
Any Water Conservation Technician Course	
Additional NRG280 Coop Ed	
NRG 105 Green Careers Exploration	3

Energy Management Technician: Building Controls Technician Option

Offered by the Institute for Sustainable Practices, 541.463.6160

Associate of Applied Science Degree Option

Program Coordinator Roger Ebbage, Bldg. DCA, Rm. 404, *ebbager@lanecc.edu*541.463.6160

Purpose Through this program, students will learn how residential and commercial building systems consume energy by understanding how systems work and the interaction between one another. Students will be able to evaluate and measure consumption and make an informed recommendation on building system energy efficiency improvements. Students will also learn the basics of Building Controls systems and how they are fundamental to achieving higher levels of energy efficiency through

building operation. Employment is found with Controls System Suppliers, Controls Installation Contractors, Government, Utilities, Engineering Firms, School Districts.

Learning Outcomes The student who successfully completes all Energy Management Technician: Building Controls Technician Option requirements will:

- 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., excel and other computer software).
- construct energy evaluation technical reports and make presentations for potential project implementation.
- develop and evaluate inferences and predictions that are based on collected data.
- evaluate the energy use patterns for residential and commercial buildings and recommend energy efficiency measures and renewable energy solutions for high energy consuming buildings.
- interpret the concepts of a problem-solving task, and, using mathematics, translate concepts into energy related projects.
- read and analyze building blue prints including floor, mechanical, and electrical plans.
- understand the interaction between energy consuming building systems and make energy use reduction recommendations based on that understanding.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- analyze a variety of commercial HVAC and lighting systems from a controls perspective.
- become familiar with modules and electronics commonly used to implement building automation schemes.
- write building control systems schemes.
- understand control system management software.
- diagnose and troubleshoot existing building control systems.

Licensing & Certification Association of Energy Engineers Certified Energy Manager In Training (EMIT)

Admission Information Roger Ebbage, Bldg. DCA, Rm. 404, *ebbager@lanecc.edu.*Students must apply to the program by completing an Energy Program application. Applicants must have completed Math 065 or 070 prior to enrollment. Individual courses may be taken with department/instructor approval.

Advising and Counseling Roger Ebbage, Bldg. DCA, Rm. 404, *ebbager@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 their degree requirements. Contact Gerry Meenaghan at: *MeenaghanG@lanecc.edu*Phone: 541.463.5883 Office: Building 19, Room 154

Job Openings Projected through 2020

Employment opportunities in the Energy Management - Building Controls Industry are excellent. Students must consider the entire Western United States when seeking employment, as those willing to relocate will have greater employment opportunities.

Building Controls Technician: $40,000-65,000

Program Specific Fees	$1,000
Resident Tuition and General Student Fees	$10,227
Total Estimated Cost	$11,227

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Completion of Math 65 or Math 70 or Program Coordinator permission must be obtained prior to enrolling in the program.
- It is recommended but not required, that General Education requirements are taken prior to entering the program.
- Deviation from the prescribed course sequence will impact a student's ability to complete the program in a two year time frame.
- Human Relations, Health/PE requirements, WR 121, and WR 227 may be taken any term.
- MTH 95 can be taken any term but must be completed by the end of the first year
- Prerequisites are required for some courses. See course descriptions.

First Year	**Fall**
BT 123 MS EXCEL for Business	4
NRG 101 Introduction to Energy Management	3
PH 101 Fundamentals of Physics	4
MTH 095 Intermediate Algebra	5
CST 110 Blueprint Reading	3
	Winter
NRG 111 Residential/Light Commercial Energy Analysis	3
CS 133JS Beg. Programming: JavaScript	4
CS 179 Introduction to Computer Networks	4
PH 102 Fundamentals of Physics	4
	Spring
NRG 121 Air Conditioning System Analysis	3
NRG 124 Energy Efficiency Methods	4
NRG 131 Lighting Fundamentals	3
NRG 103 Sustainability in The Built Environment	3
NRG 206 A/B Coop Seminar	2
	Summer
Choice of: WR 121 Academic Composition / WR 121_H Academic Composition	4
NRG280 - Cooperative Education: Energy Management to be taken Summer term	6
Second Year	**Fall**
NRG 185 Lighting Controls	4
NRG 122 Commercial Air Conditioning System Analysis	3
NRG 123 Energy Control Strategies	4
WR 227 Technical Writing	4
	Winter
NRG 112 Commercial Energy Use Analysis	4
NRG 182 Commercial HVAC Controls	4
NRG 181 Direct Digital Controls 1	4
PE/Health requirement	3
Human Relations Requirement	3
	Spring
NRG 184 Direct Digital Controls 2	4
NRG 183 Controls Retuning and Troubleshooting	4
NRG 142 Energy Accounting	3

Energy Management Technician

Offered by the Institution for Sustainable Practices 541.463.6160

One-Year Certificate of Completion

Program Coordinator Roger Ebbage, *ebbager@lanecc.edu*541.463.6160

Purpose A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing energy-efficient systems or monitoring energy use. Includes instruction in principles of energy conservation, instrumentation calibration, monitoring systems and test procedures, energy loss inspection procedure,s energy conservation techniques, and report

preparation. Equipped with the appropriate set of skills, an Energy Management Technician also oversees the energy purchase and consumption of a building (residential or commercial) or portfolio of buildings. The Energy Management Technician will make energy efficiency recommendations to building owners as a result of investment level 3 energy audits.

Learning Outcomes Upon completion of this 1-year certificate, the student will be able to:

- evaluate the energy use patterns for residential and commercial buildings and recommend energy efficiency measures and renewable energy solutions for high energy consuming buildings.
- understand the interaction between energy consuming building systems and make energy use reduction recommendations based on that understanding.
- construct energy evaluation technical reports and make presentations for potential project implementation.
- 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., excel and other computer software).
- develop and evaluate inferences and predictions that are based on collected data.
- interpret the concepts of a problem-solving task, and, using mathematics, translate concepts into energy-related projects.
- use appropriate library and digital information resources to research professional objectives and support lifelong learning.
- read and analyze building blueprints including floor, mechanical, and electrical plans. Read elevations, sections, schedules, and construction notes.

Licensing & Certification Association of Energy Engineers Certified Energy Manager in Training (CEMEMIT)

Admission Information Contact Roger Ebbage, *ebbager@lanecc.edu* or complete the program application: *lanecc.edu/sustainability/nweei/program-admission-form*

Advising and Counseling Roger Ebbage *ebbager@lanecc.edu* 541.463.*6160, nweei.org/degrees/*

Cooperative Education (Co-op) Coop is not required but available through the Lane Community College Cooperative Education. Contact Gerry Meenaghan, *meenaghang@lanecc.edu*541.463.5883

Job Openings Projected through 2020

Employment opportunities in the Energy Management and Building Automation (controls) industries are excellent. Students must consider the entire northwest when seeking employment as those willing to relocate will have the best employment opportunities.

$40,000 - $50,000 Annually

Costs Estimate based on 2017-18 tuition and fees. (Consult Lane's website for updated tuition.) Subject to change without notice.

Program Specific Fees	$500
Resident Tuition and General Student Fees	$6,000
Total Estimated Cost	$6,500

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- Completion of Math 65 or Math 70 or Program Coordinator permission must be obtained prior to enrolling in the program.
- Completion of Physics 102 or Program Coordinator permission must be obtained prior to enrolling in the program.
- MTH 95 can be taken any term.
- WR 227 can be taken any term.
- Human Relations Requirement can be taken any term.

	Fall
CG 203 Human Relations at Work	3
NRG 101 Introduction to Energy Management	3
WR 227 Technical Writing	4
MTH 095 Intermediate Algebra or higher	5
CST 110 Blueprint Reading 1	3
	Winter
NRG 111 Residential/Light Commercial Energy Analysis	3
NRG 121 Air Conditioning System Analysis	3
NRG 124 Energy Efficiency Methods	4
NRG 131 Lighting Fundamentals	3
PH 102 Fundamentals of Physics or higher	4
	Spring
NRG 112 Commercial Energy Use Analysis	4
NRG 142 Energy Accounting	3
NRG 110 Energy Efficiency Industry Software Applications	4
NRG 123 Energy Control Strategies	4
NRG 122 Commercial Air Conditioning System Analysis	3

Fabrication/Welding Technology

Offered by the Advanced Technology Division, 541.463.5380

Associate of Applied Science Degree

One-Year Certificate of Completion - Fabrication Welding

One-Year Certificate of Completion - Welding Processes

Career Pathway Certificate - Shielded Metal Arc Welder

Career Pathway Certificate - Wire Drive Welder

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose To prepare the graduate for employment in entry-level and higher positions in metal fabrication industries. Graduates will begin 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, as well as self-employment. 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 will:

- apply knowledge of forming, fitting, and welding processes.
- demonstrate entry-level fabrication techniques and welding processes and application including GTAW, structural and pipefitting, metallurgy, and quality control procedures.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- use blueprint-reading skills, cost estimating, applied science of materials, and mathematics necessary to the profession.
- demonstrate and use industry safety standards.
- use mathematical formulas to calculate area, volume, and weight of metal objects.

Admission Information Normal program entry is fall term. A mandatory program orientation is held for new students for fall term (dates available from Advance Technology Counselor/Advisor). Contact Advisor/Counselor for assistance for winter and spring term entry, email: *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Fabrication/Welding Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 47 annually

Statewide openings - 547 annually

Lane County average hourly - $19.87 to $26.07; average annual - $41,316 to $54,218

Oregon average hourly - $18.45 to $27.76; average annual - $38,383 to $57,732

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,654
Instruments/Tools	$845
Program Specific Fees	$3,430
Resident Tuition and General Student Fees	$12,648
Total Estimated Cost	$18,577

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All WLD and MTH courses must be completed with a letter grade of "C-" or better. MFG course must be completed for a letter grade.
- WR115W and PE/Health requirement must be completed with a "C-" or better or Pass grade.
- Choices for requirements in Arts and Letters, Social Science, and Science are listed on the Associate of Applied Science degree page.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

First Year	**Fall**
WLD 112 Fabrication/Welding 1	12
MTH 085 Applied Geometry for Technicians	4
	Winter
WLD 113 Fabrication/Welding 2	12
CG 203 Human Relations at Work	3
	Spring
WLD 114 Fabrication/Welding 3	12
WR 115W Introduction to College Writing: Workplace Emphasis	3
Second Year	**Fall**
MFG 101 Safety and Basic Shop Practice	3
WLD 215 Fabrication/Welding 4	12
Choice of:	
Arts/Letters Requirement	
Social Science Requirement	3
	Winter
WLD 216 Fabrication/Welding 5	12
PE/Health Requirement	3
Science or Computer Science Course	3
	Spring
WLD 217 Fabrication/Welding 6	12
Welding Elective	3
Arts and Letters Requirement	3

Fabrication Welding

Offered by the Advanced Technology Division, 541.463.5380

One-Year Certificate of Completion

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose The Fabrication/Welding Certificate Program prepares graduates for employment as Welders/Fabricators.

Learning Outcomes 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 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.

Admission Information See *lanecc.edu/advtech/wld* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Fabrication/Welding Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County: 23 positions

Statewide: 257 positions

Lane County average hourly - $19.97; average annual - $41,546

Oregon average hourly - $21.38; average annual - $44,477

Costs Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.

Books	$763
Instruments/Tools	$300
Program Specific Fees	$1,632
Resident Tuition and General Student Fees	$5,865
Total Estimated Cost	$8,560

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

51-4121.06

Go to the Department of Labor's O*Net website for a profile of this occupation: Structural Metal Fabricators and Fitters onetonline.org/link/summary/51-4121.06 Or check on these O*Net Related Occupations: Welders, Cutters, and Welder Fitters onetonline.org.link/summary/51-2041.00

In academic year 2014-15, 6 students completed this certificate.

The program is designed to take 4 terms, or about 15 months of study to complete.

70% of the Title IV students completed this certificate within 1 year. Note: The federally required method for calculating the on

time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All WLD and MTH courses must be completed with a letter grade of "C-" or better.
- WR 115W must be completed with a "C-" or better or Pass grade.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

	Fall
WLD 112 Fabrication/Welding 1	12
MTH 085 Applied Geometry for Technicians	4
	Winter
WLD 113 Fabrication/Welding 2	12
WR 115W Introduction to College Writing: Workplace Emphasis	3
	Spring
WLD 114 Fabrication/Welding 3	12
CG 203 Human Relations at Work	3

Welding Processes

Offered by the Advanced Technology Division, 541.463.5380

One-Year Certificate of Completion

Program Coordinator Tracy Rea, Bldg. 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose To prepare the graduate for employment for entry-level and higher positions in metal fabrication industries. The graduate begins work in light or heavy metal fabrication as welders. Training and experience can lead to careers in technical sales, supervision, estimating, quality control, inspection, specialty welding, and teaching. The welding processes certificate program prepares graduates for employment as welder-trainees or welders.

Learning Outcomes 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.

Admission Information See *lanecc.edu/advtech/wld* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Fabrication/Welding Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Room 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County: 23 positions

Statewide: 257 positions

Lane County average hourly - $19.97; average annual - $41,546

Oregon average hourly - $21.38; average annual - $44,477

Costs Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.

Books	$652
Instruments/Tools	$385
Program Specific Fees	$1,890
Resident Tuition and General Student Fees	$6,339
Total Estimated Cost	$9,266

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All WLD and MTH courses must be completed with a letter grade of "C-" or better. WR 115W must be completed with a "C-" or better or Pass grade.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.

	Fall
MTH 085 Applied Geometry for Technicians	4
WLD 111 Blueprint Reading for Welders	3
WLD 256 Gas Tungsten Arc Welding 2	3
WLD 121 Shielded Metal Arc Welding 1	4
WLD 143 Wire Drive Welding 1	4
WLD 160 Wire Drive Welding 4	4
	Winter
Directed Elective	1 - 4
WLD 257 Gas Tungsten Arc Welding 3	3
CG 203 Human Relations at Work	3
WLD 122 Shielded Metal Arc Welding 2	4
WLD 154 Wire Drive Welding 2	4
	Spring
WLD 242 Gas Tungsten Arc Welding 1	3
WR 115W Introduction to College Writing: Workplace Emphasis	3
WLD 159 Wire Drive Welding 3	4
Directed Electives	
DRF 160 Computer-Aided Drafting and Design	4
ENGR 280W Co-op Ed: Welding	3 - 12
WLD 139 Welding Lab	1 - 3
WLD 140 Welder Qualification (Cert): Wire Drive Processes	3
WLD 141 Welder Qualification (Cert): SMAW	3
WLD 142 Pipe Welding Lab: Carbon Steel	3

Shielded Metal Arc Welder

Offered by the Advanced Technology Division, 541.463.5380

Career Pathway Certificate

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose To prepare the graduate for employment for entry-level positions in the metal fabrication industry.

Learning Outcomes The graduate will:

- demonstrate proficiency at a industry entry-level with Shielded Metal Arc Welding.
- weld and cut metal as is typical of circumstances found in industrial environments.
- demonstrate and use industry safety standards.

Admission Information See *lanecc.edu/advtech/wld* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Fabrication/Welding Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County: 1 positions

Statewide: 11 positions

Lane County average hourly - $20.23; average annual - $42,075

Oregon average hourly - $18.45; average annual - $38,383

Costs (Estimate based on 2017-18 data for full-time students. Consult Lane's website for updated tuition and fees.

Books	$267
Program Specific Fees	$630
Resident Tuition and General Student Fees	$2,192
Total Estimated Cost	$3,089

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.
- Students may be able to substitute an alternative welding course. Please see an academic advisor to arrange pre-approved substitutions.

	Fall
WLD121 Shielded Metal Arc Welding 1	4
MTH 085 Applied Geometry for Technicians	4
	Winter
WLD122 Shielded Metal Arc Welding 2	4
	Spring
WLD141 Welder Qualification (Certification): SMAW	3

Wire Drive Welder

Offered by the Advanced Technology Division, 541.463.5380

Career Pathway Certificate

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose To prepare the graduate for employment for entry-level positions in the metal fabrication industry.

Learning Outcomes The graduate will:

- demonstrate proficiency at a industry entry-level with various wire drive processes.
- weld and cut metal as is typical of circumstances found in industrial environments.
- demonstrate and use industry safety standards.

Admission Information See *lanecc.edu/advtech/wld* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Fabrication/Welding Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County: 1 positions

Statewide: 11 positions

Lane County average hourly - $20.23; average annual - $42,075

Oregon average hourly - $18.45; average annual - $38,383

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$274
Program Specific Fees	$702
Resident Tuition and General Student Fees	$2,192
Total Estimated Cost	$3,168

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- Minimum placement score of 68 in Reading, or completion of RD 080, or RD 087 AND EL 115, or prior college. A high school diploma or equivalent is recommended for all applicants to this program.
- Students may be able to substitute an alternative welding course. Please see an academic advisor to arrange pre-approved substitutions.

	Fall
WLD143 Wire Drive Welding 1	4
MTH 085 Applied Geometry for Technicians	4
	Winter
WLD154 Wire Drive Welding 2	4
	Spring
WLD140 Welder Qualification (Certification): Wire Drive	3

Fitness and Lifestyle Specialist

Offered by the Health, Physical Education and Athletics Division, 541.463.5545

One-Year Certificate of Completion

Career Pathway Certificate - Group Exercise Instructor Certificate

Program Coordinator Call Wendy Simmons,541.463.5551

Purpose The Fitness Specialist Certificate is to prepare students for various careers in the fitness industry, including personal training, group exercise instruction, coaching, wellness coaching.

Learning Outcomes The graduate will:

- administer various basic fitness assessments including the measurement of cardiovascular endurance, body composition,

flexibility, muscular strength and endurance in gym or health club settings.
- apply and interpret basic algebraic formulas to fitness assessment data and exercise programming.
- demonstrate interpersonal skills in the areas of leadership, motivation, and communication.
- design and demonstrate safe and effective exercise programs for apparently healthy individuals and groups within current fitness industry standards and best practices.
- respond to the needs of a diverse clientele and demonstrate inclusive practices.
- understand and apply basic behavior modification strategies to enhance exercise and health behavior change with clients.
- 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 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.

Admission Information Please consult *lanecc.edu/healthpe/fitness-specialist-information*

Job Openings Projected through 2020

Total Annual Openings

Oregon: 177

Lane: 23

Average Hourly

Oregon: $19.23

Lane: $19.11

Average Annual

Oregon: $40,000

Lane: $39,737

Costs Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.

Books	$390
Resident Tuition and General Student Fees	$5,688
Total Estimated Cost	$6,078

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

39-9031.00

Standard Occupational Classification: 39-9031.00 Go to the Department of Labor's O*Net website for a profile of this occupation: Fitness Trainers and Aerobics Instructors Onetonline.org/link/summary/39-9031.00 Or check on these O*Net Related Occupations: Recreation Workers onetonline.org.link/summary/39-9032.00

In academic year 2014-15, 12 students completed this certificate.

The program is designed to take 4 terms, or about 15 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

	Fall
HE 161 Cardiopulmonary Resuscitation	1
Choice of:	
PE106 Yogilates	
PE108 Conditioning	
PE117 Strength Training	
PE137 Gentle Yoga	1
FLS 120 Fitness Assessment & Exercise Prescription Field Techniques	3
FLS 130 Principles of Strength Training and Conditioning Instruction	2
FLS 140 Applied Exercise Physiology 1	3
MTH 020 Math Renewal	4
FLS 195 Interdisciplinary Practicum	1
Winter	
Choice of:	
PE106 Yogilates	
PE108 Conditioning	
PE117 Strength Training	1
WR121 Academic Composition WR121_H A cademic Composition	4
FLS 150 Techniques of Group Exercise Leadership	2
FLS 160 Applied Anatomy and Kinesiology	3
FLS 170 Mental Dynamics of Exercise and Sport	3
FLS 195 Interdisciplinary Practicum	1
Spring	
FLS185 Career Preparation	3
Choice of:	
HE222 Consumer Health	
HE250 Personal Health	
HE252 First Aid	
HE275 Lifetime Health & Fitness	
HE255 Global Health and Sustainability	3 - 4
Human Relations Requirement	3
FLS 190 Injury Prevention and Management	3
FLS 195 Interdisciplinary Practicum	2
FLS 110 Coaching Healthy Eating	2

Group Exercise Instructor Certificate

Offered by the Health, Physical Education and Athletics Division, 541.463.5545

Career Pathway Certificate

Program Coordinator Call Wendy Simmons, 541.463.5551.

Purpose Prepare students to become instructors in group fitness activities, such as aerobics, step, cycling, circuit, yoga, muscle conditioning, interval and other group exercise modalities. The curriculum and Interdisciplinary Practicum experiences serve as an entry point into the career of instructing group exercise. National certification and further training in specific styles of group exercise is often required.

Learning Outcomes Upon completion of this certificate, students will:
- demonstrate excellent interpersonal skills in the areas of leadership, exercise motivation, and communication (written, verbal, and non-verbal).
- design, evaluate, and instruct safe and effective group exercise classes utilizing a variety of exercise modalities.
- understand the role of proper nutrition and training techniques as they relate to physical fitness and weight management.
- apply nationally recognized standards for group exercise instruction.

- appropriately modify and adapt group classes to meet the needs of a variety of participants.
- communicate to participants the benefits, risks, and precautions involved with participation in group exercise.
- identify and communicate the unique benefits of group exercise in the health and fitness industry.
- identify and implement risk management strategies and safety precautions to ensure a safe and productive exercise experience for all participants.

Job Openings Projected through 2020

Total Annual Openings

Oregon: 177

Lane: 23

Average Hourly

Oregon: $19.23

Lane: $19.11

Average Annual

Oregon: $40,000

Lane: $39,737

Costs Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.

Books	$250
Resident Tuition and General Student Fees	$1,545
Total Estimated Cost	$1,795

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Fall	
FLS 120 Fitness Assessment & Exercise Prescription Field Techniques	3
FLS 130 Principles of Strength Training and Conditioning Instruction	2
FLS 140 Applied Exercise Physiology 1	3
FLS 195 Interdisciplinary Practicum	1
HE 161 Cardiopulmonary Resuscitation	1
Winter	
FLS 150 Techniques of Group Exercise Leadership	2
FLS 160 Applied Anatomy and Kinesiology	3
FLS 170 Mental Dynamics of Exercise and Sport	3
Spring	
FLS 190 Injury Prevention and Management	3

Flight Technology

Offered by the Lane Aviation Academy, 541.463.4195

Associate of Applied Science Degree

Program Coordinator Paul Lancaster - Chief Flight Instructor

Purpose To prepare students for successful careers as pilots in the air transportation industry.

Learning Outcomes The student who successfully completes all Flight Technology requirements 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.

Accreditation Flight Technology Private Pilot Instrument and Commercial Flight Training is FAA Part 141 approved.

Licensing & Certification After successful completion of the college courses and completion of the subsequent FAA practical tests, the student will receive FAA Private Pilot, Instrument Rating and Commercial Pilot Certificates.

Admission Information Contact Lane Aviation Academy: *lanecc.edu/aviationacademy Phone:*541.463.4195 Email: *flight@lanecc.edu*

Advising and Counseling Flight Technology Program Advisors are: * Claudia Riumallo: Office: Bldg. 12, Rm.120 A, Phone: 541.463.5378, Email: *RiumalloC@lanecc.edu* * Sarah Rick: Office: Bldg. 12, Rm.119 B, Phone: 541.463.5292, Email: *RickS@lanecc.edu* Advisor Drop-in hours are updated weekly at: *lanecc.edu/advtech/counselor-and-advisor-drop-hours*

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 Chuck Fike, Flight Technology Co-op Coordinator, Bldg. 19, Rm. 231, 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County openings: 18 annually

Statewide openings: 80 annually

National openings: 10,620+ annually for commercial pilots, aircraft pilots and flight engineers, and airline pilots and copilots

Flight instructors earn from $15,000-45,000.

Entry-level airline pilots earn $28,000 through their probationary period.

Air carrier line pilots earn $45,000-250,000 annually.

Costs Estimate based on 2017-18 costs and are subject to change. See the online credit class schedule for the most current information.

Books	$1,800
Certification, Licensure, Exams, Physicals	$1,000
Instruments/Tools	$300
Program Specific Fees	$45,803
Resident Tuition and General Student Fees	$12,233
Total Estimated Cost	$61,136

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All GS and FT courses (except FT 102) must be completed with a letter grade, not P/NP, and must be passed with a grade of 'C-' or better to satisfy program requirements.
- CS 120, FT 102, MTH 095 and WR 121 must be completed with a grade of 'C-' or better.
- Choices for Arts and Letters and Human Relations requirements are listed on the Associate of Applied Science degree page. Students may complete the 3 credits of Arts and Letters and 3 credits of Human Relations prior to program entry.
- A VIB (Veterans Information Bulletin) with current program

costs is provided in Flight Technology's initial Application Packet .

- Graduates may also transfer to a four-year university preparing for a professional degree
- All Private, Instrument, and Commercial flight courses must be completed to fulfill the AAS degree requirements.
- Private Pilot courses are to be chosen based on student size. Students under 220 lbs, under 6'2", under 39" sitting height choose FT 141, FT 142, and FT 143. Students at or above these limits choose FT 141W, FT 142W, and FT143W.
- Students must complete the 105 required core credits to be awarded the AAS in Flight Technology.

Prerequisites

An applicant may complete the following courses prior to program entry: * Arts and Letters requirement: 3 credits * Human Relations requirement: 3 credits

First Year	**Fall**
Choice of:	
FT 141 Private Pilot - Stage One	
FT 141W Private Pilot - Stage One	6
FT 102 General Aviation Careers	1
FT 103 Aircraft Safety Development	4
FT 250 Private Pilot Ground School	5
	Winter
Choice of:	
FT 142 Private Pilot - Stage Two	
FT 142W Private Pilot - Stage Two	3
Choice of:	
FT 143 Private Pilot - Stage Three	
FT 143W Private Pilot - Stage Three	3
MTH 095 Intermediate Algebra or higher mathematics	5
	Spring
FT 115 Aircraft Structures and Systems	3
FT 221 Commercial Pilot - Stage One	3
FT 222 Commercial Pilot - Stage Two	3
FT 251 Commercial Pilot Ground School	4
FT 261 Air Traffic Control and Airspace	1
Choice of:	
WR 121 Composition: Academic Composition or higher writing	
WR 121_H Composition: Academic Composition or higher writing	4
	Summer
FT 201 Instrument Rating - Stage One	4
FT 223 Commercial Pilot - Stage Three	2
Second Year	**Fall**
GS 109 Meteorology	5
CS 120 Concepts of Computing or higher computer science	4
FT 224 Commercial Pilot - Stage 4	4
FT 252 Instrument Ground School	4
FT 262 Aviation Law and Regulations	1
	Winter
FT 202 Instrument Rating - Stage Two	5
FT 254 Aerodynamics	3
FT 256 Flight Instructor-Airplane and Instrument Flight Instructor-Airplane Ground School	3
PE/Health requirement	3
	Spring
BA 254 General Aviation Management	3
FT 228 Multiengine Ground School	2
FT 203 Instrument Rating - Stage Three	3
FT 255 Fundamentals of Instruction and Human Factors	3
	Summer
FT 225 Commercial Pilot - Stage Five	5

Additional Electives

FT 249 ATP	1 - 6
FT 249 CFIA	1 - 6
FT 249 CFII	1 - 6
FT 249 MEI	1 - 4
FT 249 Multiengine	1 - 3
FT 280 Co-op Ed: Flight Technology (optional)	3
FT 124 UAS Flight Lab	1 - 6
FT 123 UAS Commercial Test Prep	3

Geographic Information Science

Offered by the Social Science Division, 541.463.5427

Less than One-Year Certificate of Completion

Program Coordinator Lynn Songer, *songerl@lanecc.edu,* 541.463.5493

Purpose The GIS less-than-one-year certificate is to provide students with the technical skills and geospatial content to employ geospatial information science (GIS) in support of their career and education goals in: science, business, resource management, public safety, and urban and regional planning. GIS 151, GIS 245 and GIS 246 transfer to many Oregon four-year colleges and support current graduates and working professionals as they update their technical skills. The GIS classes are required or directed elective in several AAS degrees such as: Computer Aided Design, Environmental Science, Programming, Criminal Justice, General Science and Civil Engineering.

Learning Outcomes The student who successfully completes all Geographic Information Science requirements will:

- collect and input data into a GIS system using: GPS, Digitizing, Geocoding.
- create, manage, and update spatial data.
- design and generate various cartographic products for planning or presentations.
- manage information in a GIS database.
- perform routine data analysis-buffer, query, union, intersect.

Accreditation Endorsed by the National GEO Tech Center of Excellence.

Advising and Counseling Andi Graham Academic Advisor or Ben Fisher Academic Advisor at socsci-*llcprograms@lanecc.edu*

Job Openings Projected through 2020

Lane County openings current number 4 annually

Statewide openings current number 48 annually

Lane County average hourly- $28.93 average annual- $60,176

Oregon average hourly-$31.33 average annual - $65,179

Costs The software is designed to run on a PC with Windows operating system. For a MAC you will need to add a dual boot with Windows.

Books	$200
Program Specific Fees	$105
Resident Tuition and General Student Fees	$1,520
Total Estimated Cost	$1,825

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Prerequisite

CIS 101 Computer Fundamentals
MTH 060 Beginning Algebra or higher

Course Requirements

GIS 151 Digital Earth	4
GIS 245 GIS 1	4
GIS 246 GIS 2	4

Graphic Design

Offered by the Arts Division, 541.463.5409

Associate of Applied Science Degree

Program Coordinator Contact Arts Division, Bldg. 11, Room 101

Purpose To prepare graduates for entry-level positions in the fields of graphic and digital design.

Learning Outcomes The student who successfully completes all Graphic Design requirements 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.

Admission Information Open admission for first year. Limited admission for second year. See *lanecc.edu/mediaarts/graphic design/second-year-graphic-design-program*.

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 is required for completion of the graphic design program. Contact Teresa Hughes, Graphic Design Cooperative Education Coordinator, Bldg. 17, Rm. 106, 541.463.3179, *hughest@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 11 annually

Statewide openings - 1328 annually

Lane County average hourly - $21.56; average annual - $44,834

Oregon average hourly - $24.27 average annual - $50,481

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Instruments/Tools	$1,500
Resident Tuition and General Student Fees	$9,006
Total Estimated Cost	$10,506

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Foundational Skills and Discipline Studies courses can be taken P/NP or for a letter grade of C- or higher: WR 121, WR 121_H, MTH 60, CG 203, Science, and Health/PE.
- All major courses must be taken for a letter grade, not P/NP.
- Major courses that serve as a prerequisite in a sequence must be passed with a B- or higher: ART 131, ART 115, ART 115_H, MUL 105, ART 216, ART 119, ART 225, ART 116, MUL 212, ART 221, ART 222, ART 227, ART 228, & ART 289. All remaining major courses must be passed with a C- or higher.

First Year	**Fall**
GD 110 Introduction to Graphic Design	1
ART 216 Digital Design Tools	3
ART 115 Basic Design: Fundamentals	3
ART 131 Introduction to Drawing	3
MUL 105 Digital Photography	4
	Winter
ARH200 Graphic Design History	3
ART 119 Typography 1	3
Science, Math, Computer Science Requirement	4
MUL 212 Digital Imaging	4
Choice of:	
ART 231 Drawing: Intermediate	
ART 234 Figure Drawing	
ART 237 Illustration	
ART 245 Drawing for Media	3
	Spring
CG 203 Human Relations at Work	3
ART 116 Basic Design: Color	3
MUL 218 Business Practices for Media Arts	3
WR 121 Academic Composition WR121_H Academic Composition	4
ART 225 Digital Illustration	3
Second Year	**Fall**
Any Media Arts or Studio Art Class not required for the major	3 - 4
MTH 060 Beginning Algebra or higher	4
MUL 220 Intermediate Typography	3
ART 221 Graphic Design 1	4
Directed Elective	3
ART 227 Graphic Design Production 1	3
	Winter
Physical Education or Health	3
ART 222 Graphic Design 2	4
ART 228 Graphic Design Production 2	4
ART 280GD Co-op Ed: Graphic Design	3
ART 289 Web Production	3
	Spring
MUL 205 Design Studio	3
ART 223 Graphic Design 3	4
ART 229 Graphic Design Production 3	4
ART 280GD Co-op Ed: Graphic Design	3
ART 290 Design Concepts for the Web	3

Directed Electives

	Fall
Any Media Arts or Studio Art Class not required for the major	3 - 4

Health Information Management

Offered by the Health Professions Division, 541.463.5617

Associate of Applied Science Degree

One-Year Certificate of Completion - Health Information Management

Career Pathway Certificate - Basic Health Care

Career Pathway Certificate - Medical Coding

Program Coordinator Shelley K. Williams, BA, RN, RHIT

Purpose This degree can be earned completely online. This program prepares individuals to work in the field of health information management (HIM). HIM is a diverse yet evolving field that incorporates medicine, management, finance, information technology and law into one dynamic career path. Graduates will be prepared to manage paper and electronic medical records, collect, aggregate, analyze, summarize and disseminate individual and aggregate clinical data. HIM professionals also protect and control the security and quality of records as well as supervise data entry and technical maintenance personnel. The HIM program includes instruction in: clinical and biomedical science data and information requirements; database management; data coding and validation; information security; quality control; health information content and structure; medical

business procedures; legal requirements, as well as HIM professional standards.

Learning Outcomes Upon completion of this degree, the student will:

- apply critical and creative thinking, problem solving, and effective inter-professional communication skills related to health information management.
- apply principles of healthcare privacy, confidentiality, legal, ethical issues and data security.
- apply quantitative and qualitative methodologies to process healthcare information.
- demonstrate knowledge of dynamic healthcare delivery systems and regulatory environments.
- demonstrate knowledge of healthcare billing, coding and reimbursement policies.
- demonstrate knowledge of healthcare terminology and medical conditions.
- evaluate, use, and integrate information technology to support medical decision making and processes.
- demonstrate the application of information technology in the HIM environment.
- demonstrate the principles of leadership and management in the HIM environment.

Licensing & Certification The Associate Degree Health Information Management Program is in Candidacy Status, pending accreditation review by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)

Admission Information Students are admitted three times per year (fall, winter, and spring terms). Admission is restricted and is based on a program application. Please consult *classes.lanecc.edu/course/view.php?id=31269&section=1*

Advising and Counseling Advising and counseling is available in Building 1, Room 103. E-mail *HIMprogram@lanecc.edu*

Cooperative Education (Co-op) Co-op is required for students to earn their AAS HIM Degree. Students must complete a minimum of 3 credit hours of 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 professional contacts for the future. Work schedules and work sites vary. Students are required to be admitted into the HIM Program, complete a minimum of two thirds of their program coursework, have their coop requirements met, and have instructor approval prior to registering. Contact the HIM Cooperative Education Coordinator, Shelley Williams, Room 209, Bldg. 30, 541.463.5182.

Job Openings Projected through 2020

Lane County: 12

Statewide: 142

Lane County: hourly average: $20.28, annual average $42,197

Statewide: hourly average $21.69, annual average $45,115

Costs Estimated based on 2017-18 Oregon resident tuition and fees. Consult Lane's website for updated tuition and fees for prerequisite and program courses. Prerequisite costs will vary for transfer students.

Certification, Licensure, Exams, Physicals	$450
Computers/Internet Service	$1,100
Differential Fees*	$1,005
Resident Tuition and General Student Fees	$10,792
Total Estimated Cost	$13,347

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All BT, CIS, CS, HO, HIM, and HIT courses must be completed no later than five years after HIM program acceptance.
- All BT, CIS, CS, HO, HIM, and HIT courses must be completed no more than five years prior to HIM program acceptance.
- Completion with a grade of 'C' or better of 3-course series HIM 270, HIM 271, and HIM 273 may be substituted for HIM114 Introduction to Coding.
- Prerequisites are required for some courses. See course descriptions.
- Completion of BI 231, 232, and 233 with a "C" or higher is an acceptable equivalent for HO 150 and HO152
- All COOP, BT, CIS, CS, HO, HIM, HIT, MTH, COMM, and WR courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C" or better to satisfy program requirements.

Prerequisites

HO 100 Medical Terminology 1
HO 110 Health Office Procedures
HO 150 Human Body Systems 1
HO 152 Human Body Systems 2
MTH052 Math for Physical Science, or higher, or - Credit by Exam for MTH060 or higher, or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, or Statistics), or IB (Mathematics, or Math Studies, or Further Mathematics, or Statistics)
Choice of:
  CS 120 Concepts of Computing: Information Processing
  CIS101 Computer Fundamentals
  BT120 MS Word for Business
WR115 Introduction to College Writing

First Year	**Fall**
HIM 101 Introduction to Health Care and Public Health in the US	4
HIM 154 Introduction to Disease Processes	3
HIT 105 EHR for the Provider Office	3
HIM 120 Introduction to Health Information Management	3
HIM 153 Introduction to Pharmacology	3
	Winter
HIM 220 Legal and Ethical Aspects of Healthcare	3
HIT 107 Integrated Electronic Heatlh Records	4
HIM 114 Introduction to Medical Coding	4
HIM 222 Reimbursement Methodologies	4
	Spring
Arts & Letters: Students Choice	4
Social Science: Students choice	4
HIT 111 Implement and Customize Electronic Health Records	4
HIM 183 Introduction to Health Information Systems	4
Second Year	**Fall**
HIM 241 Health Information Management Applications 1	4
HIM 200 Healthcare Statistics	3
CIS 125D Software Tools 1: Databases	4
HIM 270 ICD-10-Coding 1	5
	Winter
HIM 271 ICD-10-PCS Coding	5
HIM 242 Health Information Management Applications 2	4
COOP 206 Co-op Ed: Internship Seminar	2
HIM 230 Quality Improvement in Healthcare	4
	Spring
HIM 280 Co-op Ed: Health Information Management	3
BA 278 Leadership & Team Dynamics	4
HIM 273 CPT Coding 1	5

Health Information Management

Offered by the Health Professions Division, 541.463.5617

One-Year Certificate of Completion

Program Coordinator Shelley K. Williams, BA, RN, RHIT, 541.463.5182, *williamSSK@lanecc.edu*

Purpose This certificate can be earned completely online. Prepares graduates for entry level careers in medical records, health information management, and medical billing. Health Information Technicians organize and manage demographic, coded, and billing data by ensuring its quality, accuracy, accessibility, and security. They communicate with physicians and other healthcare professionals to clarify diagnoses or to obtain additional information as needed to meet billing, payment, and regulatory requirements. Health Record Technicians may assist with implementing and supporting electronic health records (EHR) software usability

Learning Outcomes Upon completion of this certificate, the student will:

- demonstrate ability to organize, input, process, analyze, secure, and distribute healthcare information.
- demonstrate the organization, analysis, and evaluation of health record content for completeness and accuracy.
- demonstrate knowledge of abstracting health records and assigning standardized codes to diagnoses and procedures to accurately meet reporting needs and processing claims for insurance reimbursement.
- apply principles of healthcare privacy, confidentiality, legal, ethical issues and data security.
- demonstrate knowledge of healthcare terminology and medical conditions.
- demonstrate knowledge of healthcare delivery systems and regulatory environments.
- demonstrate knowledge of utilizing library and valid internet resources for research, projects, and to maintain a level of expertise in his or her field of study.
- apply critical and creative thinking, problem solving, and effective inter-professional communication skills related to health information management.

Admission Information Consult *lanecc.edu/hp/him*

Advising and Counseling See the Counseling and Advising Center, or e-mail *HIMProgram@lanecc.edu*

Cooperative Education (Co-op) Co-op is required for students to earn their HIM Certificate(s) and /or AAS HIM degree. Students must complete a minimum of 3 credit hours of 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 professional contacts for the future. Work schedules and work sites vary. Students are required to be admitted into the HIM Program, complete a minimum of two thirds of their program coursework and have their coop requirements met, and instructor approval prior to registering. Contact the HIM Cooperative Education Coordinator, Shelley Williams, Room 209, Bldg. 30, 541.463.5182.

Job Openings Projected through 2020

Lane County: 9; Statewide: 130

Lane County hourly average - $20.28; annual average - $42,197

Oregon hourly average - $21.69; annual average - $45,115

Costs Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees. The total of all the differential fees attached to Health Records Technology courses and other course fees may change during the year ' see the online credit class schedule for fees assigned to courses.

Books	$1,400
Certification, Licensure, Exams, Physicals	$250
Differential Fees*	$549
Resident Tuition and General Student Fees	$5,496
Total Estimated Cost	$7,695

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

29-2071.00

Standard Occupational Classification: 29-2071.00 Go to the Department of Labor's O*Net website for a profile of this occupation: Medical Records and Health Information Technicians Onetonline.org/link/summary/29-2071.00 Or check on these O*Net Related Occupations: Insurance Claims Clerks onetonline.org.link/summary/43-9041.00

In academic year 2014-15, 7 students completed this certificate.

The program is designed to take 4 terms, or about 15 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- All BT, CIS, CS, HO, HIM, and HIT courses must be completed no later than five years after HIM program acceptance.
- All BT, CIS, CS, HO, HIM, and HIT courses must be completed no more than five years prior to HIM program acceptance.
- Prerequisites are required for some courses. See course descriptions.
- Completion of BI 231, 232, and 233 with a 'C' or better is an acceptable equivalent for HO 150 and HO152.
- All BT, CIS, CS, HO, HIM, HIT, MTH, COMM, and WR courses must be completed with a letter grade, not P/NP, and must be passed with a grade of 'C' or better to satisfy program requirements. Other courses may be completed with a 'Pass' or
- Completion with a grade of 'C' or better of 3-course series HIM 270, HIM 273, and HIM 275 may be substituted for HIM114 Introduction to Coding.

Prerequisites

Choice of:
CS 120 Concepts of Computing: Information Processing
CIS101 Computer Fundamentals
BT120 MS Word for Business
MTH052 Math for Physical Science, or higher, or
Credit by Exam for MTH060 or higher, or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, or Statistics), or IB (Mathematics, or Math Studies, or Further Mathematics, or Statistics)
HO 110 Health Office Procedures
HO 150 Human Body Systems 1
HO 152 Human Body Systems 2
HO 100 Medical Terminology 1
WR115 Intro to College Composition

	Fall
HIM 101 Introduction to Health Care and Public Health in the US	4
HIM 154 Introduction to Disease Processes	3
HIT 105 EHR for the Provider Office	3
HIM 120 Introduction to Health Information Management	3
HIM 153 Introduction to Pharmacology	3
	Winter
HIT 107 Integrated Electronic Heatlh Records	4
HIM 220 Legal and Ethical Aspects of Healthcare	3
COOP 206 Co-op Ed: Internship Seminar	2
HIM 222 Reimbursement Methodologies	4
HIM 114 Introduction to Medical Coding	4
	Spring
Human Relations (3-4 credits): Students Choice	3 - 4
HIM280 Co-op Ed: Health Information Management 12 Credit(s) Max	3
HIT 111 Implement and Customize Electronic Health Records	4
HIM 183 Introduction to Health Information Systems	4

Basic Health Care

Offered by the Health Professions Division, 541.463.5617

Career Pathway Certificate

Program Coordinator Shelley K. Williams, BA, RN, RHIT, 541.463.5182, *williamssk@lanecc.edu*

Purpose This certificate can be earned completely online. This career pathway certificate teaches the basic skills needed for employment in an entry level position in a health care setting. The outcomes include practice responsible and confidential communications and apply an understanding of health care laws and ethics are required in health care practice , work in a professional manner in the health care environment, understand and apply medical terminology appropriately, describe the anatomy and physiology of the various systems of the body, demonstrate basic computer skills and, recognize the scope of work the student is legally allowed to perform with their level of training. The certificate is fully embedded in the Health Records Technology certificate and multiple other Lane programs. It is designed for positions in health care such as patient transport, medical receptionist, environmental support, food services, and physical therapy aide. There is no application requirement for this certificate.

Learning Outcomes The graduate will:

- understand the requirements to work as a professional in a health care environment.
- demonstrate basic computer skills.
- apply the principles and privacy and security based on laws and professional ethics required in health care practices.
- demonstrate ability to use medical terminology appropriately, including abbreviations, acronyms, spelling, and pronunciation.
- demonstrate knowledge on the basics of human anatomy and physiology.
- demonstrate professional written and verbal communications in a responsible and confidential manner.
- demonstrate intellectually informed, appreciative, and understanding of various cultures, histories, as marked by class, race, gender, ethnicity, religion, nationality, sexual orientation, and other manifestations of difference.

Admission Information There is no application requirement for this certificate.

Advising and Counseling For assistance with requirements, please go to Counseling and Advising in building 1, room 103 or e-mail *HIMProgram@lanecc.edu*

Course Requirements

- Prerequisites may be required for some courses. See course descriptions.
- Completion of BI 231, 232, and 233 with a 'C ' or better is an acceptable equivalent for HO 150 and HO152.
- All courses must be completed with a letter grade, not P/NP, and must be passed with a grade of 'C ' or better to satisfy program requirements.

	Fall
HO 100 Medical Terminology 1	3
HO 110 Health Office Procedures	3
HO 150 Human Body Systems 1	3
HO 152 Human Body Systems 2	3
MTH052 Math for Physical Science, or higher, or - Credit by Exam for MTH060 or higher, or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, or Statistics), or IB (Mathematics, or Math Studies, or Further Mathematics, or Statistics)	4
Choice of: WR115 or higher	4
Choice of: BT120 - MS WORD for Business CIS101 - Computer Fundamentals CS120 - Concepts of Computing: Information Processing	4
	Winter
Choice of: BT120 - MS WORD for Business CIS101 - Computer Fundamentals CS120 - Concepts of Computing: Information Processing	4

Medical Coding

Offered by the Health Professions Division, 541.463.5617

Career Pathway Certificate

Program Coordinator Shelley K. Williams, RN, RHIT, 541.463.5182, *williamSSK@lanecc.edu*

Purpose This certificate can be earned completely online. 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.

Learning Outcomes The student who successfully completes all Medical Coding requirements will:

- identifies career and lifelong learning opportunities.
- applies principles of healthcare privacy, confidentiality, legal, ethical issues, and data security (HIPAA regulatory standards).
- communicates both verbally and written form with others of the health care team in an effective, appropriate, and capable manner.
- demonstrate understanding of the etiology, pathology, symptoms, signs, diagnostic studies, treatment modalities, and prognosis of diseases and procedures to be coded.
- demonstrate knowledge of abstracting health records and

assigning standardized codes to diagnoses and procedures to accurately meet reporting needs and processing claims for insurance reimbursement.

- demonstrate the organization, analysis, and evaluation of health record content for completeness and accuracy.

Licensing & Certification Upon successful completion of this Medical Coding certificate students may choose to sit for AHIMA's coding exams (CCA or CCA-P) or AAPC's coding exams (CPC, COC, or CIC).

Admission Information Application and admission into the Health Information Management Program is required. Admission and Application information is found on the web at: *lanecc.edu/hp/him*

Advising and Counseling For assistance in meeting program or application requirements, please go to Counseling and Advising in building 1, room 103 or e-mail *HIMProgram@lanecc.edu*

Cooperative Education (Co-op) Co-op is required for students to earn their Medical Coding Certificate. Students must complete a minimum of 3 credit hours of 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 professional contacts for the future. Work schedules and work sites vary. Students are required to be admitted into the HIM Program, complete a minimum of two thirds of their program coursework, have their coop requirements met, and have instructor approval prior to registering. Contact the HIM Cooperative Education Coordinator, Shelley Williams, Room 209, Bldg. 30, 541.463.5182.

Job Openings Projected through 2020

Lane County: 9

Oregon: 130

Lane County hourly average - $20.28; annual average - $42,197

Oregon hourly average - $21.69; annual average - $45,115

Costs Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees at *lanecc.edu/esfs/credit-fees-and-expenses*)

Books	$850
Certification, Licensure, Exams, Physicals	$350
Computers/Internet Service	$1,500
Resident Tuition and General Student Fees	$4,495
Total Estimated Cost	$7,195

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All BT, CIS, CS, HO, HIM, and HIT courses must be completed no more than five years prior to HIM program acceptance.
- All BT, CIS, CS, HO, HIM, and HIT courses must be completed no later than five years after HIM program acceptance.
- Prerequisites are required for some courses. See course descriptions.
- All COOP, BA, BT, CIS, COMM, CS, HO, HIM, HIT, MTH, and WR courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C" or better to satisfy program requirements.
- Completion of BI 231, 232, and 233 with a 'C ' or better is an acceptable equivalent for HO 150 and HO152.

Prerequisites

Choice of:
CS 120 Concepts of Computing: Information - Processing
CIS101 Computer Fundamentals
BT120 MS Word for Business
HO110 Health Office Procedures
HO100 Medical Terminology 1
HO 150 Human Body Systems 1
HO 152 Human Body Systems 2
WR115 Intro to College Writing
MTH052 Math for Physical Science, or higher, or - Credit by Exam for MTH060 or higher, or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, or Statistics), or IB (Mathematics, or Math Studies, or Further Mathematics, or Statistics)

Fall	
HIM 120 Introduction to Health Information Management	3
HIM 154 Introduction to Disease Processes	3
HIT 105 EHR for the Provider Office	3
HIM 270 ICD-10-Coding 1	5
Winter	
HIM 153 Introduction to Pharmacology	3
COOP 206 Co-op Ed: Internship Seminar	2
HIM 271 ICD-10-PCS Coding	5
HIM 222 Reimbursement Methodologies	4
Spring	
HIM 220 Legal and Ethical Aspects of Healthcare	3
HIM 280 Co-op Ed: Health Information Management	3
HIM 273 CPT Coding 1	5

Hotel/Restaurant/Tourism Management

Offered by the Culinary Arts & Hotel/Restaurant/Tourism Management, 541.463.3518

Associate of Applied Science Degree

Career Pathway Certificate - Meeting, Convention, and Special Events Manager

Program Coordinator Wendy Milbrat, 541.463.3518, *milbratw@lanecc.edu;*or email: *CulinaryHospPrograms@lanecc.edu*

Purpose Trains graduates for 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 Hotel/Restaurant/Tourism Management, students will have opportunities for challenging and rewarding careers that can take them around the world.

Learning Outcomes The student who successfully completes all Hotel/Restaurant/Tourism Management requirements will:

- describe types and standards of service.
- describe the function of human resources in the hospitality industry.
- display an understanding of hospitality terminology.
- define and categorize hotel/restaurant organization and segmentation.
- identify various career paths within the hospitality industry.
- demonstrate effective communication skills.
- demonstrate the ability to handle guest complaints.
- understand how hospitality organizations provide guest information and concierge services.
- explain fee and pricing categories.
- describe the functions of the marketing department.
- describe the hotel and amenities as products.
- describe the elements of a marketing plan.
- target the market audience.
- describe the concept of supply and demand.
- demonstrate knowledge of safety regulations required in the hospitality industry, including OSHA regulations.
- demonstrate appropriate personal hygiene.
- maintain guest and employee security procedures.

- describe and process financial transactions.
- describe night audit procedures.
- describe and operate POS systems.
- describe room service procedures.
- describe the rights of management, staff and guests.
- describe hospitality industry related legal responsibilities and issues, including ADA.
- describe the positions and responsibilities of restaurant employees.
- plan, prepare, and cost menus.
- understand concepts related to purchasing, receiving, and storing of product.
- select, identify, and describe the correct restaurant equipment for various applications.
- explain procedures for health, safety, and sanitation.
- identify the basic elements of restaurant layout and design.
- calculate payroll and employee schedules.
- provide an overview of the global environmental field as it stands today.
- understand concepts associated with the environmental, social, and cultural impacts of tourism and the hospitality industry.
- have a clear understanding of environmental law, voluntary initiatives and principles, for sustainable development int he tourism and hospitality industry.
- understand the triple bottom-line concept as it relate to the hospitality industry.

Accreditation Hospitality Management, 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 (CHG).

Admission Information A separate application to the program is required. Admission information is available from the Culinary Arts & Hotel/Restaurant/Tourism Management office, Building 19, Room 204 or online at *lanecc.edu/hospitality*. Or email: *CulinaryHospPrograms@lanecc.edu*

Advising and Counseling Program Advisors Claudia Riumallo and Sarah Rick, Building 12

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, Cooperative Education Coordinator, Bldg.19, Rm. 210, 541.463.3516, *mccullyj@lanecc.edu*

Job Openings Projected through 2020

Hotel Front Desk

Lane County openings - 17 annually

Statewide openings - 191 annually

Hotel Managers

Lane County openings - 1 annually

Statewide openings - 15 annually

Meeting and Convention Planners

Lane County openings - 3 annually

Statewide openings - 37 annually

Hotel Front Desk

Lane County average hourly - $11.67 ; average annual - $24,279

Oregon average hourly - $11.78 ; average annual - $24,517

Hotel Managers

Lane County average hourly - $NA ; average annual - $NA

Oregon average hourly - $29.04 ; average annual - $60,415

Meeting and Convention Planners

Lane County average hourly - $17.94 ; average annual - $37,319

Oregon average hourly - $24.01 ; average annual - $49,938

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$980
Program Specific Fees	$736
Resident Tuition and General Student Fees	$11,221
Total Estimated Cost	$12,937

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Must be a credit-level student.
- Prerequisites are required for some courses. See course descriptions.
- Students are strongly advised to enter fall term. A Winter or Spring term start will have limited class offerings available.
- A Lane County Food Handlers Card is required for entry into the program.
- Students may take any MTH 025 or higher class, but it is strongly recommended to take MTH 025C Basic Mathematics Applications.
- General Education Requirements may be completed prior to program entry or any program term. For complete details refer to the college catalog or meet with your academic advisor.
- MS PowerPoint and Excel are used extensively. If students are not familiar with these software programs, they are encouraged to take these classes prior to or during their first year in the program.
- Students interested in transferring to a four-year institution should: ' Complete WR 122 and WR 123 to fulfill the Arts and Letters requirements for the AAS. ' Add MTH 111 and MTH 112 courses.
- Students may take Cooperative Education in any term approved by the coordinator.
- Hotel/Restaurant/Tourism Management, AAS degree requires 12 credits of Directed Electives.
- Directed electives may be met in any term of the two-year program. Check current class schedule for which Directed Electives are offered in a given term.
- All courses must be completed with a letter grade, not P/NP, and must be passed with a grade of 'C-' or better to satisfy program requirements.
- The Dual Degree Option for Culinary Arts Graduates, seeking the 2yr. AAS in Hotel/Restaurant/Tourism Management, can not be reversed. This option can only be obtained by first completing the 2yr. AAS in Culinary Arts.

First Year	**Fall**
HRTM 105 Restaurant Operations	3
HRTM 226 Banquet Operations 1	2
General Education Requirement: MTH 025C Basic Mth. App. or higher	3
CA 175 Foodservice Sanitation and Safety	2
HRTM 110 Hospitality Sales and Marketing	3
	Winter
General Education Requirement: WR115 Introduction to college Writing or higher	4
HRTM 106 Introduction to Hospitality Management	3
HRTM 140 Hospitality Law and Security	3
HRTM 227 Banquet Operations 2	2
HRTM Directed Elective: Choose from list of Directed Electives	3
General Education Requirement: Science/Math /Computer Science (see college catalog for details)	3
	Spring
HRTM 205 Managing the Restaurant Operation	3
HRTM 228 Banquet Operations 3	2

HRTM Directed Electives: Choose from list of Directed Electives	3
General Education Requirement: Physical Education or Health (see college catalog for details)	3
CA 200 Menu Management	3
Second Year	**Fall**
HRTM 260 Hospitality Human Resources and Supervision	3
HRTM 230 Hotel Operations 1	3
HRTM Directed Elective: Choose from the list of Directed Electives	3
General Education Requirement: Human Relations (see college catalog for details)	3
HRTM 265 Hospitality Financials 1	3
	Winter
HRTM 275 Hospitality Financials 2	3
HRTM 290 Hospitality Leadership	3
HRTM 231 Hotel Operations 2	3
CA 159 Kitchen Fundamentals	2
General Education Requirement: Arts and Letters (see college catalog for details)	3
	Spring
HRTM 292 Dining Room and Kitchen Lab	4
HRTM 220 Sustainability in the Hospitality Industry	2
HRTM Directed Elective: Choose from the list of Directed Electives.	3
HRTM 286 Bar and Beverage Management	3
General Education Requirement: Choice of Social Science Science/Math/Computer Science Arts and Letters requirement (see college catalog for details)	3
	Summer
HRTM 280 Co-op Ed: Hospitality Management	7

Directed Electives

BA 101 Introduction to Business	4
BA 223 Marketing	4
BA 224 Human Resource Management	4
BA 278 Leadership & Team Dynamics	4
BT 163 QuickBooks	4
BT 123 MS EXCEL for Business	4
BT 122 MS POWERPOINT for Business	3
BT 120 MS WORD for Business	4
BT 165 Introduction to the Accounting Cycle	4
CA 130 Culinary Adventuring: Oregon Wine Country	2
CA 176 Concepts of Taste and Flavor	3
CS 120 Concepts of Computing: Information Processing	4
FN 105 Nutrition for Foodservice Professionals	3
FN 110 Personal Nutrition	3
HRTM 100 Introduction to Culinary and Hospitality	3
HRTM 104 Introduction to Travel and Tourism	3
HRTM 109 Principles of Meetings and Convention Management	3
HRTM 209 Advanced Principles of Meeting, Convention, and Special Event Management	3
PHL 201 Ethics	4
COMM 115 Introduction to Intercultural Communication	4
COMM 130 Business and Professional Communication	4
SUST 101 Introduction to Sustainability	3
SUST 120 Gardening and Sustainable Food Systems	3
WR 121 Academic Composition	4

Meeting, Convention, and Special Events Manager

Offered by the Culinary Arts & Hotel/Restaurant/Tourism Management, 541.463.3518

Career Pathway Certificate

Program Coordinator Wendy Milbrat, 541.463.3518, *milbratw@lanecc.edu;*or email: *CulinaryHospPrograms@lanecc.edu*

Purpose The Career Pathways Certificate program for a Meeting, Convention, and Special Events Manager is for students that want to learn how to manage meetings, conventions, and special events. All of the classes offered in this program apply directly to an Associate of Applied Science degree in Hotel/Restaurant/Tourism Management.

Learning Outcomes The student who successfully completes all Meeting, Convention, and Special Events Manager requirements will:

- describe types and standards of service.
- describe the function of human resources in the hospitality industry.
- display an understanding of hospitality terminology.
- define and categorize hotel/restaurant organization and segmentation.
- identify various career paths within the hospitality industry.
- demonstrate effective communication skills.
- demonstrate the ability to handle guest complaints.
- understand how hospitality organizations provide guest information and concierge services.
- explain fee and pricing categories.
- describe the functions of the marketing department.
- describe the hotel and amenities as products.
- describe the elements of a marketing plan.
- target the market audience.
- describe the concept of supply and demand.
- demonstrate knowledge of safety regulations required in the hospitality industry, including OSHA regulations.
- demonstrate appropriate personal hygiene.
- maintain guest and employee security procedures.
- describe night audit procedures.
- describe and process financial transactions.
- describe and operate POS systems.
- describe room service procedures.
- describe the rights of management, staff and guests.
- describe hospitality industry related legal responsibilities and issues, including ADA.
- describe the positions and responsibilities of restaurant employees.
- plan, prepare, and cost menus.
- understand concepts related to purchasing, receiving, and storing of product.
- select, identify, and describe the correct restaurant equipment for various applications.
- explain procedures for health, safety, and sanitation.
- identify the basic elements of restaurant layout and design.
- calculate payroll and employee schedules.
- provide an overview of the global environmental field as it stands today.
- understand concepts associated with the environmental, social, and cultural impacts of tourism and the hospitality industry.
- have a clear understanding of environmental law, voluntary initiatives and principles, for sustainable development in the tourism and hospitality industry.
- understand the triple bottom-line concept as it relates to the hospitality industry.

Admission Information A separate application to the program is required. Admission information is available from the Culinary Arts and Hotel/Restaurant/Tourism Management office, Building 19, Room 204 or online at *lanecc.edu/culinary*. Or email: *CulinaryHospPrograms@lanecc.edu*

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$600
Program Specific Fees	$195
Resident Tuition and General Student Fees	$4,267
Total Estimated Cost	$5,062

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Students that are completing both the Hotel/Restaurant/Tourism Management AAS degree and the Meeting, Convention, and Special Event Management certificate need to complete a total of 8 co-op credits.

	Fall
HRTM 109 Principles of Meetings and Convention Management	3
HRTM 230 Hotel Operations 1	3
HRTM 226 Banquet Operations 1	2
HRTM 110 Hospitality Sales and Marketing	3
HRTM 260 Hospitality Human Resources and Supervision	3
	Winter
HRTM 231 Hotel Operations 2	3
HRTM 280 Co-op Ed: Hospitality Management	4
HRTM 227 Banquet Operations 2	2
	Spring
HRTM 209 Advanced Principles of Meeting, Convention, and Special Event Management	3
HRTM 280 Co-op Ed: Hospitality Management	4
HRTM 228 Banquet Operations 3	2
HRTM 106 Introduction to Hospitality Management	3

Human Services

Offered by the Social Science Department, 541.463.5427

Associate of Applied Science Degree

Program Coordinator Susan Shipp, *shipps@lanecc.edu*

Purpose Human service workers 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. The Human Services program prepares students for entry level employment in diverse, public, private, and non-profit settings, serving children, adolescents, families, and adults. For example, human service workers can be found staffing crisis lines; assisting individuals in meeting their health related needs; 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; advocating for victims of domestic or sexual violence; counseling and case managing individuals experiencing addiction. Students seeking employment in addictions counseling field can complete coursework toward becoming a Certified Alcohol and Drug Counselor (CADC) in the state of Oregon. Completion of HS 102 Psychopharmacology, HS 155 Interviewing Theory and Techniques, HS 224 Group Counseling, HS 226 Ethics and Law, HS 228 HIV and Other Infectious Diseases, and HS 266 Case Management fulfill the 150 hours of drug and alcohol education required by the Addictions Counselor Certification Board of Oregon (ACCBO) for a CADC I. Certification also requires successfully completing a written exam, two years of sobriety prior to internship placement or employment in an addictions field, as well as 1000 hours of supervised client contact in an addictions setting. Students can earn over half of these hours through HS 280 Cooperative Education coursework. Individuals who currently hold a CADC I in the state of Oregon can receive up to 15 credits toward the Associate of Applied Science (AAS) degree in Human Services through Laneâ ˜s credit by assessment program. Completion of the AAS degree in Human Services can fulfill the 300 hours of drug and alcohol education and the 90 college credits required by the ACCBO for a CADC II. Additional supervised experience hours are required for the CADCII. Students interested in CADC options should work closely with program advising staff to select appropriate directed electives and cooperative education placements to reach their goals. For information on the certification process visit the ACCBOâ ™s website at www.accbo.com. Working in the human services profession in the stat of Oregon, including an internship, often requires a background check, including criminal history. A conviction does not automatically disqualify a person from obtaining placement or employment. Situations are evaluated on an individual basis and therefore program advisors cannot determine in advance who is employable.

Learning Outcomes Upon completion of all Human Services requirements, students will be able to:

- conduct an assessment.
- communicate effectively with others.
- develop a plan of action using client's strengths, and link people with community resources.
- develop the competency required to work with people from diverse backgrounds.
- formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.
- use appropriate library and information resources to research professional issues and support lifelong learning.
- apply evidence-based practices.

Advising and Counseling Advisement is strongly recommended for academic planning each term. If you intend to transfer to a four year college and earn a bachelor's degree in a Human Services (or related) program, notify the advising team within the first or second term. Contact the advising team: Andi Graham and Ben Fisher at socsci-*llcprograms@lanecc.edu* or 541.463.3800.

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. * Students are required to attend a co-op orientation prior to beginning their field placement. Contact Christina Salter at 541.463.5813 or *salterc@lanecc.edu*

Job Openings Projected through 2020

Social and Human Service Assistants

Lane County openings - 17 annually

Statewide openings - 256

Substance Abuse and Behavioral Disorder Counselors

Lane County openings - 13

Statewide openings - 91

Social and Human Service Assistants

Lane County average hourly - $15.94; average annual - $ 33,145

Oregon average hourly - $17.37; average annual - $36,129

Substance Abuse and Behavioral Disorder Counselors

Lane County average hourly - $18.01; average annual $37,480

Oregon average hourly - $22.57; average annual - $46,956

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$2,500
Program Specific Fees	$200
Resident Tuition and General Student Fees	$11,850
Total Estimated Cost	$14,550

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All required HS courses - including Directed Electives - must be taken for a letter grade, not P/NP, and must be passed with a 'C-' or better to fulfill program requirements.
- 18 credits of HS 280 Cooperative Education which must be taken for a letter grade, not P/NP, and must be passed with a 'C-' or better to fulfill program requirements.
- A total of 9 credits of directed electives must be taken for a letter grade, not P/NP, and must be passed with a 'C-' or better to fulfill program requirements.
- HS 155 Interviewing Theory and Techniques must be completed prior to enrollment in HS 231, 232, 265, and 266.
- HS 150 & HS 226 are recommended prior to beginning Co-op.
- See AAOT degree description for Science, Math, and Computer Science courses.
- Courses with WR, COMM, ANTH, PSY prefixes and all Science/Math, Computer Science courses may be transferable and applicable to an AAOT degree. Up to 12 credits of HS prefix courses and 18 credits of HS 280 can be applied toward AAOT electives.
- Course offerings may change as classes are added or canceled.

First Year	**Fall**
HS 150 Personal Effectiveness for Human Service Workers	3
HS 201 Introduction to Human Services	3
HS 226 Ethics and Law	3
MTH 025 Basic Mathematics Applications or higher	3 - 5
WR121 Academic Composition WR 121_H Academic Composition	4
	Winter
HS 155 Interviewing Theory and Techniques	3
HS 280 Cooperative Education: Human Services	3
HS 102 Psychopharmacology	4
Directed Elective	3
WR122 Argument Research and Multimodal Composition WR122_H Argument Research and Multimodal Composition	4
	Spring
HS 231 Advanced Interviewing and Counseling	3
HS 280 Cooperative Education: Human Services	4
Human Relations course *see catalog for options	3 - 4
HS 266 Case Management	3
Choice of: COMM 100 Basic Communication COMM 111 Fundamentals of Public Speaking COMM 112 Persuasive Speech COMM 130 Business and Professional Speech COMM 218 Interpersonal Communication COMM 219 Small Group Communication	4
Second Year	**Fall**
Directed Elective	3 - 4
HS 280 Cooperative Education: Human Services	3
HS 232 Cognitive-Behavioral Strategies	3
Choice of: HE 152 Drugs, Society, and Behavior HE 209 Human Sexuality HE 250 Personal Health HE 252 First Aid HE 255 Global Health and Sustainability HE 275 Lifetime Health and Fitness	3 - 4
PSY or SOC (Advisors will recommend appropriate options)	3 - 4
	Winter
HS 267 Cultural Competence in Human Services	3
HS 280 Cooperative Education: Human Services	3 - 4
Science/Math/Computer Science requirement	3 - 4
PSY or SOC (Advisors will recommend appropriate options)	3 - 4
HS 265 Casework Interviewing	3
	Spring
HS 224 Group Counseling Skills	3
HS 280 Cooperative Education: Human Services	4
PSY or SOC (Advisors will recommend appropriate options)	3 - 4
Directed Elective	3
Directed Electives	
HS 221 Co-occurring Disorders	3
HS 206 The Criminal Addict: Issues & Interventions	3
HS 228 HIV/AIDS and other Infectious Diseases: Risk Assessment and Intervention	2
HS 151 Issues in Assessing and Treating the Problem Gambler	1
HS 205 Youth Substance Abuse	3
CJA 201 Juvenile Delinquency	3
CJA 232 Correctional Casework	3
HS 158 Trauma: Theory to Practice	2
HS 209 Crisis Intervention and Prevention	3
HS 222 Best Practices in Human Services: Interventions	4
HS 229 Grief and Loss Across Life Span	3
HS 280 Cooperative Education: Human Services	3 - 4
CJA 243 Narcotics and Dangerous Drugs	3
CJA 101 Introduction to Criminology	3
HS 220 Prevention 1: Preventing Substance Abuse & Other Social Problems	3

Community Health Worker

The Community Health Worker Career Pathway Certificate has been discontinued. Students currently enrolled in the program should contact Academic Advising at 541.463.3800 for more information about completing core courses. Non-credit classes may be offered through Continuing Education.

Industrial Mechanics and Maintenance Technology Apprenticeship

Offered by the Advanced Technology Division, 541.463.5380

Associate of Applied Science Degree

One-Year Certificate of Completion - Industrial Mechanics and Maintenance Technology Apprenticeship

Career Pathway Certificate - Trade Worker Apprenticeship Technologies

Program Coordinator Joy Crump, Bldg. 15 Rm. 201, 541.463.5496, *crumpj@lanecc.edu.*

Purpose To provide a structured system of training in millwright trades or occupations, leading to certification and journey-level status, only for apprentices who are sponsored by individual employers, accepted by a Joint Apprenticeship Training Committee, and registered with the State of Oregon Bureau of Labor and Industries.

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.

Licensing & 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. In addition, 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 degree in Operations Management or Bachelor of Applied Science degree in Technology and Management. 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.

Admission Information Admission to the millwright trade is usually conducted as an internal process with the employer. Information is available at the Oregon Bureau of Labor and Industries website: *boli.state.or.us*.

Advising and Counseling *lanecc.edu/advising/advisors*

Job Openings Projected through 2020

Lane County openings - 4 annually

Statewide openings - 39 annually

Lane County average hourly - $23.21; average annual - $48,271

Oregon average hourly - $25.51; average annual - $53,065

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*.

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,500
Resident Tuition and General Student Fees	$10,000
Total Estimated Cost	$11,500

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- WR 115W and MTH 060 must be must be passed with a grade of Pass or 'C-' or better to satisfy program requirements.
- complete 8000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-man 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.

General Education

WR 115W Introduction to College Writing: Workplace Emphasis or higher	3
PE/Health Requirement	3
Arts and Letters requirement	3
Human Relations requirement	3
Science/Math/Computer Science requirement	3
Choice of: Arts and Letters requirement; Human Relations or Social Science requirement; Science/Math/Computer Science requirement	3
MTH 060 Beginning Algebra or higher	4

Journeyman card from Oregon Bureau of Labor and Industries Apprenticeship and Training Division (22 credits)

State of Oregon Apprenticeship Training Journey-man card or BOLI-ATD Certificate of Completion	22

Millwright Core Related Training (43 credits)

APR 150 The Millwright and Shop Safety	5
APR 151 Millwright Machine Theory and Trade Calculations	5
APR 152 Millwright: Power Transmissions and Boilers-Steam	5
APR 250 Millwright: Industrial Print Reading, Schematics, and Estimating	5
APR 251 Millwright: Pneumatics and Lubrications	5
APR 252 Hydraulics for Millwrights	5
APR 253 Millwright Piping Systems	5
MTH 085 Applied Geometry for Technicians	4
APR 185 Shielded Metal Arc Welding 1	2
APR 186 Wire Drive Welding 1	2

Program Electives to complete 90 credits for degree:

Industrial Mechanics and Maintenance Technology Apprenticeship

Offered by the Advanced Technology Division, 541.463.5380

One-Year Certificate of Completion

Program Coordinator Joy Crump, Bldg. 15 Rm. 201, 541.463.5496, *crumpj@lanecc.edu.*

Purpose Students may earn a Certificate of Completion in Industrial Mechanics and Maintenance Technology Apprenticeship by successfully completing 43 core related training credits with a 'C' grade 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.

Licensing & 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. In addition, 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 degree in Operations Management or Bachelor of Applied Science degree in Technology and Management. 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.

Admission Information Admission to the millwright trade is usually conducted as an internal process with the employer. Information is available at the Oregon Bureau of Labor and Industries website: *boli.state.or.us*.

Advising and Counseling *lanecc.edu/advising/advisors*

Job Openings Projected through 2020

Lane County openings - 4 annually

Statewide openings - 39 annually

Lane County average hourly - $23.21; average annual - $48,271

Oregon average hourly - $25.51; average annual - $53,065

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*.

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,075
Resident Tuition and General Student Fees	$7,600
Total Estimated Cost	$8,675

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- Human Relations course choices are listed on the Associate of Applied Science degree page.
- 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, 8000-Hour BOLI-ATD Trade: Industrial Millwright.
- complete related instruction credits (communication, computation, human relations). 10 credits complete core-related training credits. 43 credits Total Credits 53

Journeyman card from Oregon Bureau of Labor and Industries Apprenticeship and Training Division, prior certification

State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion, 8000-hour BOLIT-ATD Trade: Industrial Millwright	22

Related Instruction

WR 115W Introduction to College Writing: Workplace Emphasis or higher	3
Human Relations	3
MTH 060 Beginning Algebra or higher	4

Core-Related Training

APR 150 The Millwright and Shop Safety	5
APR 151 Millwright Machine Theory and Trade Calculations	5
APR 152 Millwright: Power Transmissions and Boilers-Steam	5
APR 250 Millwright: Industrial Print Reading, Schematics, and Estimating	5
APR 251 Millwright: Pneumatics and Lubrications	5
APR 252 Hydraulics for Millwrights	5
APR 253 Millwright Piping Systems	5
MTH 085 Applied Geometry for Technicians	4
APR 185 Shielded Metal Arc Welding 1	2
APR 186 Wire Drive Welding 1	2

Trade Worker Apprenticeship Technologies

Offered by the Advanced Technology

Career Pathway Certificate

Program Coordinator Joy Crump, Bldg. 15 Rm. 201, 541.463.5496, *crumpj@lanecc.edu*

Purpose To provide a structured system of training to prepare students with the foundational skills and knowledge required to enter the maintenance millwright trade.

Learning Outcomes The graduate will:

- complete 4,000 hours State of Oregon-approved on-the-job training.
- successfully complete all required core related-training courses with a grade of â œCâ or better.
- repair, install, and maintain a variety of building construction projects using trade specific tools and techniques in compliance with building codes and OSHA regulations.

Admission Information Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries and accepted by a Joint Apprenticeship Training Committee. Information is available at *boli.state.or.us*.

Advising and Counseling *lanecc.edu/advising/advisors*

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Maintenance Millwright (15 credits)

APR 150 The Millwright and Shop Safety	5
APR 151 Millwright Machine Theory and Trade Calculations	5
APR 152 Millwright: Power Transmissions and Boilers-Steam	5

Manufacturing Technology

Offered by the Advanced Technology Division, 541.463.5380

Associate of Applied Science Degree

Associate of Applied Science Degree Option - Manufacturing Technology Computer Numerical Control Technician Option

Career Pathway Certificate - Manufacturing Technician 1

Career Pathway Certificate - Manufacturing Technician 2

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose The Two Year Associate of Applied Science Degree in Manufacturing Technology provides fundamental training in Manufacturing (machine shop) and related work. A graduate qualifies for entry level positions as a Machinist or CNC Operator in manufacturing shops and related machine tool industries. Machining and CNC manufacturing jobs are some of the fastest growing career options in Oregon and Lane County. Employment opportunities include high tech machine shops, job shops, production machine shops, tool and die shops, machine repair and maintenance shops and other manufacturing industries.

Learning Outcomes Upon completing the training for this degree, the student will know how to operate safely in a manufacturing environment. They will be able to effectively use precision measuring tools, read prints and have mathematical skills to

accomplish shop tasks. They will have experience using most shop machinery and basic knowledge in CNC including programming, setup and operation of CNC lathes and mills as well as basic knowledge in CAD, CAM and verification software used in CNC manufacturing environments.

- have proficiency in the setup 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 to accomplish shop tasks.
- use the internet to access information pertaining to shop techniques and tool use.

Admission Information See *lanecc.edu/advtech/mfg* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Manufacturing Technology Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 13 annually

Statewide openings - 161 annually

Lane County average hourly - $21.41; average annual - $44,524

Oregon average hourly - $23.68; average annual - $49,246

Costs Estimates based on 2017-18 data. Program is going through restructure. Consult Lane's website for updated tuition and fees.

Books	$1,127
Differential Fees*	$2,760
Instruments/Tools	$1,425
Program Specific Fees	$1,040
Resident Tuition and General Student Fees	$12,174
Total Estimated Cost	$18,526

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- PE/Health courses must be completed with a Pass or "C-" or better to meet program requirements.
- Arts and Letters, Human Relations, and Social Science course choices are listed on the Associate of Applied Science degree page.
- All CNC, MFG and MTH courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.
- Minimum placement score of 68 in Reading, or completion of RD080 or RD087 AND EL115 or prior college. MTH020 proficiency or concurrently enrolled in MTH020 with program admittance or Minimum placement score of 75 in Arithmetic. A high school diploma or equivalent is recommended for all applicants to this program.

First Year	**Fall**
MTH 060 Beginning Algebra	4
MFG 102 Shop Measurement and Coordinate System	3
MFG 101 Safety and Basic Shop Practice	3
CNC 101 CNC Concepts	3
MFG 103 Metal Cutting Basics	3
	Winter
WR 115W Introduction to College Writing: Workplace Emphasis	3
MFG 151 Manufacturing 1	6
MFG 152 Manufacturing 2	4
CNC 102 CNC Setup and Operation	3
	Spring
PE/Health Requirement	3
CNC 103 CNC Programming	3
MFG 153 Manufacturing 3	5
MFG 241 Solid Modeling 1	3
CNC 108 CNC Projects	3
Second Year	**Fall**
MFG 254 Manufacturing 4	6
MFG 242 Solid Modeling 2	3
Human Relations Requirement	4
MTH 085 Applied Geometry for Technicians	4
	Winter
MFG 254 Manufacturing 4	6
MFG 255 Manufacturing 5	6
Arts/Letters Requirement	4
	Spring
Choice of: DRF160 Computer-Aided Drafting Design WLD151 Metallurgy: Fundamentals Welding WLD121 Shielded Metal Arc Welding 1	3 - 4
MFG 209 Advanced Manufacturing Processes	6
MFG 255 Manufacturing 5	6

Manufacturing Technology Computer Numerical Control Technician Option

Offered by the Advanced Technology Division, 541.463.5380

Associate of Applied Science Degree Option

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose This degree prepares the student for an entry level skilled CNC manufacturing position. The skills provided will prepare the student for successful advancement through on the job training.

Learning Outcomes Upon completing the training for this degree, the student will know how to operate safely in a manufacturing environment. They will be able to effectively use precision measuring tools, read prints and have the mathematical skills to accomplish shop tasks. They will have experience using most shop machinery including programming, setup and operation of CNC lathes and mills as well as CAD, CAM and verification software used in CNC manufacturing environments.

- have proficiency in the setup 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 to accomplish tasks.
- use the internet to access information pertaining to shop techniques and tool use.
- create and edit g-code programs both manually and with CAM software.
- setup, program and machine parts on 3-axis CNC milling machines and 2 axis CNC lathes.

Admission Information See *lanecc.edu/advtech/mfg* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255*

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 Chuck Fike, Manufacturing Technology Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 14 annually

Statewide openings - 135 annually

Lane County average hourly - $19.35; average annual - $40,238

Oregon average hourly - $19.65; average annual - $40,873

Costs Estimates based on 2017-18 data. Program is going through restructure. Consult Lane's website for updated tuition and fees.

Books	$1,042
Differential Fees*	$2,990
Instruments/Tools	$1,425
Program Specific Fees	$1,326
Resident Tuition and General Student Fees	$12,411
Total Estimated Cost	$19,194

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- PE/Health courses must be completed with a Pass or "C-" or better to meet program requirements.
- Arts and Letters, Human Relations, and Social Science course choices are listed on the Associate of Applied Science degree page.
- All CNC, MFG and MTH courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.
- Prerequistes: Minimum placement score of 68 in Reading, or completion of RD080 or RD087 AND EL115 or prior college. MTH020 proficiency or concurrently enrolled in MTH020 with program admittance or Minimum placement score of 75 in Arithmetic. A high school diploma or equivalent is recommended for all applicants to this program.

First Year	**Fall**
MTH 060 Beginning Algebra	4
MFG 102 Shop Measurement and Coordinate System	3
MFG 101 Safety and Basic Shop Practice	3
MFG 103 Metal Cutting Basics	3
CNC 101 CNC Concepts	3
	Winter
WR 115W Introduction to College Writing: Workplace Emphasis	3
MFG 151 Manufacturing 1	6
MFG 152 Manufacturing 2	4
CNC 102 CNC Setup and Operation	3
	Spring
PE/Health Requirement	3
CNC 103 CNC Programming	3
MFG 153 Manufacturing 3	5
MFG 241 Solid Modeling 1	3
CNC 108 CNC Projects	3

Second Year	**Fall**
MTH 085 Applied Geometry for Technicians	4
CNC 201 CNC Mill	3
MFG 242 Solid Modeling 2	3
MFG 243 CAM 1	6
	Winter
Arts and Letters Requirement	4
Human Relations Requirement	4
CNC 202 CNC Lathe	3
MFG 254 Manufacturing 4	6
	Spring
CNC 208 CNC Advanced Projects	6
MFG 244 CAM 2	6
CNC 209 Advanced CNC Concepts	6

Manufacturing Technician 1

Offered by the Advanced Technology Division, 541.463.5380

Career Pathway Certificate

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose This certificate prepares the student for an entry level manufacturing position. The skills provided will prepare the student for successful advancement through on the job training.

Learning Outcomes Upon completing the training for this certificate, the student will know how to:

- operate safely in a manufacturing environment.
- use precision measuring tools effectively.
- read prints and have mathematical skills to accomplish shop tasks.
- use the bandsaw, mill and lathe, both manual and CNC with entry-level experience.

Admission Information See *lanecc.edu/advtech/mfg* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view.php?id=31255 See* a Counselor or Advisor to learn what entry-level skills are suggested for successful completion of this program.

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 Chuck Fike, Manufacturing Technology Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County: 9 positions

Statewide: 130 positions

Lane County average hourly - $15.31; average annual - $31,860

Oregon average hourly - $15.88; average annual - $33,024

Costs Estimates based on 2017-18 data. Program is going through restructure. Consult Lane's website for updated tuition and fees.

Books	$150
Differential Fees*	$690
Instruments/Tools	$25
Program Specific Fees	$306
Resident Tuition and General Student Fees	$2,291
Total Estimated Cost	$3,462

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- MFG/CNC courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C-" or better to satisfy program requirements.
- Prerequistes: Minimum placement score of 68 in Reading, or completion of RD080 or RD087 AND EL115 or prior college. MTH020 proficiency or concurrently enrolled in MTH020 with program admittance or Minimum placement score of 75 in Arithmetic. A high school diploma or equivalent is recommended for all applicants to this program.

	Fall
MFG 101 Safety and Basic Shop Practice	3
MFG 103 Metal Cutting Basics	3
MFG 151 Manufacturing 1	6
CNC 101 CNC Concepts	3
MFG 102 Shop Measurement and Coordinate System	3

Manufacturing Technician 2

Offered by the Advanced Technology Division, 541.463.5380

Career Pathway Certificate

Program Coordinator Tracy Rea, Bldg 15, Rm. 201, 541.463.5151, *reat@lanecc.edu*

Purpose This certificate prepares the student for a semi-skilled manual or CNC manufacturing position. The skills provided will prepare the student for successful advancement through on the job training.

Learning Outcomes Upon completing the training for this certificate, the student will know how to:

- operate safely in a manufacturing environment.
- use precision measuring tools effectively.
- read prints and have the mathematical skills to accomplish tasks.
- use most manual shop machinery and have been introduced to programming, setup and operation of CNC lathes and mills.

Admission Information See *lanecc.edu/advtech/mfg* or contact the Advanced Technology Division, *AdvTechPrograms@lanecc.edu*

Advising and Counseling *classes.lanecc.edu/course/view/php?id=31255 See*a Counselor or Advisor to learn what entry-level skills are suggested for successful completion of this program.

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 Chuck Fike, Manufacturing Technology Co-op Coordinator, Bldg 19, Rm. 231D or Bldg 12, Rm. 119B. 541.463.5078, *fikec@lanecc.edu*

Job Openings Projected through 2020

Lane County: 23 positions

Statewide: 385 positions

Lane County average hourly - $14.96; average annual - $31,112

Oregon average hourly - $16.32; average annual - $33,926

Costs Estimates based on 2017-18 data. Program is going through restructure. Consult Lane's website for updated tuition and fees.

Books	$225
Differential Fees*	$1,380
Instruments/Tools	$50
Program Specific Fees	$612
Resident Tuition and General Student Fees	$4,680
Total Estimated Cost	$6,947

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- MFG/CNC courses must be completed with a letter grade, not P/NP, and must be passes with a grade of "C-" or better to satisfy program requirements.
- Prerequistes: Minimum placement score of 68 in Reading, or completion of RD080 or RD087 AND EL115 or prior college. MTH020 proficiency or concurrently enrolled in MTH020 with program admittance or Minimum placement score of 75 in Arithmetic. A high school diploma or equivalent is recommended for all applicants to this program.

	Fall
MFG 101 Safety and Basic Shop Practice	3
MFG 103 Metal Cutting Basics	3
CNC 101 CNC Concepts	3
MFG 102 Shop Measurement and Coordinate System	3
	Winter
MFG 151 Manufacturing 1	6
MFG 152 Manufacturing 2	4
CNC 102 CNC Setup and Operation	3
	Spring
CNC 103 CNC Programming	3
CNC 108 CNC Projects	3
MFG 153 Manufacturing 3	5

Medical Assistant

Offered by the Health Professions Division, 541.463.5617

One-Year Certificate of Completion

Program Coordinator Marty Pittman RN, CMA

*(AAMA) 541.463.3177 pittmanm@lanecc.edu Health*Professions Division, 541.463.5617

Purpose To train the graduate for a successful career in the profession of medical assisting, and qualified to become a Certified Medical Assistant. The Certified Medical Assistant is a vital member of the ambulatory health care team.

Learning Outcomes The student who successfully completes all Medical Assistant requirements 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, bookkeeping procedures, and processing insurance claims.
- use library resources for research and written assignments for a variety of purposes.

- perform mathematic equations associated with medication dosages as well as basic mathematics to process medical insurance claims.

Accreditation Medical 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 Medical Assisting Education Review Board of the American Association of Medical Assistants Endowment. Commission on Accreditation of Allied Health Education Programs, 25400 US Highway 19 North, Suite 158, Clearwater, FL 33753; www.caahep.org ; 727.210.2350

Licensing & Certification Certified Medical Assistant: CMA (AAMA) This is a National Certification

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, *lanecc.edu/hp/moa*

Advising and Counseling Contact Counseling and Advising, Student Services Building, or e-mail *MAProgram@lanecc.edu*

Cooperative Education (Co-op) During the required unpaid Co-op work experience in spring term, students rotate through local medical offices and clinics in both clinical and administrative settings. Students 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 WINTER term includes resume writing instruction, interviewing techniques, and other job-search skills. Contact Marty Pittman, Medical Assistant Cooperative Education Coordinator, Bldg. 30, Rm. 210: *pittmanm@lanecc.edu*541.463.3177.

Job Openings Projected through 2020

Lane County openings - 30 annually

Statewide openings - 375 annually

Lane County average hourly - $15.77; average annual - $32,791

Oregon average hourly - $16.42; average annual - $34,162

Costs Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.

Books	$3,858
Certification, Licensure, Exams, Physicals	$125
Differential Fees*	$570
Resident Tuition and General Student Fees	$6,072
Total Estimated Cost	$10,625

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

31-9092.00

Standard Occupational Classification: 31-9092.00 Go to the Department of Labor's O*Net website for a profile of this occupation: Medical Assistants onetonline.org/link/summary/31-9092.00 Or check on these O*Net Related Occupations: Nursing Assistants onetonline.org.link/summary/31-1014.00

In academic year 2014-15, 21 students completed this certificate.

The program is designed to take 4 terms, or about 15 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- The following requirements must meet universal standards order for internships Physical examination Proof of required immunizations Tuberculosis (TB) screen Substance abuse screening (10-panel drug and alcohol screen), and Criminal background check
- These courses may be taken before accepted into the MA program: BT 120, BT 165, HO 110, HIM 220, HO 150, HO 152, HIM 153, PSY 201, HIM 112, HIM 153
- Prerequisites are required for some courses. See course descriptions.
- HO 100, MTH 052 and all courses with BT, HIT, HO, or MA prefixes must be completed with a letter grade of 'C-' or better to satisfy program requirements.
- WR 115W or higher must be completed with a Pass or 'C-' or better to satisfy program requirements.
- To meet AGS degree requirements, take Arts and Letters for 4 credits if CG 103 was completed as prerequisite for MA program admission; take Human Relations for 4 credits if COMM 218 was completed as prerequisite.
- To register for any MA course, a student must be accepted into the program. Other courses may be taken prior to program entry.

Prerequisites

Choice of:
- CG 203 Human Relations at Work
- COMM 218 Interpersonal Communication

HO 100 Medical Terminology 1

WR115W Intro to College Writing:Workplace Emphasis or higher-level writing

MTH 052 Math for Health and Physical Sciences

	Fall
HO 110 Health Office Procedures	3
MA 110 Clinical Assistant 1	3
PSY 201 General Psychology	4
HIT 105 EHR for the Provider Office	3
HO 150 Human Body Systems 1	3
Choice of:	
BT120 MS Word for Business	
CS120 Concepts of Computing Information Processing	4
	Winter
BT 165 Introduction to the Accounting Cycle	4
MA 120 Clinical Assistant 2	3
MA 150 Laboratory Orientation	3
HO 152 Human Body Systems 2	3
MA 119 Introduction to Medical Coding and Scribing	3
MA 206 Co-op Ed: Medical Assistant Seminar	2
HIM 153 Introduction to Pharmacology	3
	Spring
MA 130 Clinical Assistant 3	3
MA 280 Co-op Ed: Medical Assistant	5
HIM 112 Medical Insurance Procedures	3
HIM 220 Legal and Ethical Aspects of Healthcare	3

Multimedia Design

Offered by the Art & Applied Design, 541.463.5409

Associate of Applied Science Degree

One-Year Certificate of Completion - Multimedia Design

One-Year Certificate of Completion - Web Design

Program Coordinator Contact Arts Division, Bldg. 11, Room 101

Purpose To prepare graduates for entry-level positions in media arts industries and careers in multimedia design and production.

Learning Outcomes The student who successfully completes all Multimedia Design requirements will:

- become proficient in developing and applying effective visual design and production strategies for creating multimedia, film/video, animation, games, web sites, and photography for business, education, and entertainment industries.
- produce, manipulate, and process digital content using computer software applications.
- design digital projects incorporating multiple forms of media such as text, graphics, audio, video, and animation.
- have additional skills in one or more elective areas: software, design, or media production.
- understand the concepts, potential and implications of communicating ideas using multimedia technologies.
- use appropriate library and information resources to research media issues, concepts and tools, and support lifelong technical learning.

Cooperative Education (Co-op) Opportunities to work directly in media industries 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, *hughest@lanecc.edu.*

Job Openings Projected through 2020

Lane County Openings- 4 annually

Statewide openings - 37 annually

Lane County average hourly - $36.24; average annual - $64,969

Oregon average hourly - $36.59; average annual - $64,969

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition. Multimedia Design courses fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Books	$1,700
Resident Tuition and General Student Fees	$9,006
Total Estimated Cost	$10,706

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Foundational Skills and Discipline Studies courses can be taken P/NP or for a letter grade of C- or higher: WR 121, MTH 60, CG 203, Science, and Health/PE.
- All major courses must be taken for a letter grade, not P/NP.
- Major courses that serve as a prerequisite in a sequence must be passed with a B- or higher : FA 250, MUL 105, AUD 120, ART 216, VP 151, MUL 212, VP 152, MUL 210, FA 261, and MDP 246. All remaining major courses must be passed with a C- or higher.
- Students must earn a grade of 'B-' or better in all prerequisite (s) and 'C-' or better in major requirements.

First Year	**Fall**
MUL 105 Digital Photography	4
MUL 101 Introduction to Media Arts	3
FA 250 Concepts of Visual Literacy	3
MUL 103 Time-Based Tools	4
Physical Education Activity or Health	3
	Winter
ART 216 Digital Design Tools	3
AUD 120 Audio Production	4
ART 115 Basic Design: Fundamentals	3
ART 245 Drawing for Media	4
MUL 218 Business Practices for Media Arts	3
	Spring
VP 151 Video Production 1: Camera	3
FA 221 Computer Animation	4
WR121 Academic Composition WR121_H Academic Composition	4
MUL 212 Digital Imaging	4
Second Year	**Fall**
ART 288 Introduction to Web Design and Social Media	3
VP 152 Video Production 2: Editing	3
FA 261 Writing and Interactive Design	3
MUL 210 Multimedia Design	3
Directed Elective: Any Media Arts or Studio Arts course not required for the major. Some Computer Information Science, Computer Science, Film and Music courses: See Academic Advisor for a full listing	3 - 4
	Winter
CG 203 Human Relations at Work	3
MDP 246 Multimedia Production 1	4
MDP 280 Co-op Ed: Multimedia	3
Science, Math, Computer Science	4
	Spring
MDP247 Multimedia Production 2	4
MTH 60 Beginning Algebra or Higher Math or higher	4
MDP 280 Co-op Ed: Multimedia	3
Directed Elective: Any Media Arts or Studio Arts course not required for the major. Some Computer Information Science, Computer Science, Film and Music courses: See Academic Advisor for a full listing	3 - 4

Directed Electives

ART116 Basic Design: Color	3
ART119 Typography 1	3
ART151A Media Graphics	3
ART220 Documentary Photography	3
ART225 Digital Illustration	3
ART231 Drawing: Intermediate	3
ART234 Drawing: Figure	3
ART261 Photography 1	3
ART262 Photography 2	3
ART290 Design Concepts for the Web	3
CIS125G Software Tools 1: Game Development	4
CIS195 Web Authoring 1	4
CS120 Concepts of Computing: Information Processing	4
CS133JS Beg. Programming: JavaScript	4
CS161C+ Computer Science 1	4
CS295N Web Development 1: ASP.NET	4
CS295P Web Development 1: PHP	4
FA221 Computer Animation	4
FA222 Computer Animation 2	4
FA254 Fundamentals of Lighting	3
FA255 Understanding Movies: American Cinema	3
FA256 Lighting for Photography	3
J134 Photojournalism	3
J234 Photojournalism 2	4
MDP248 Multimedia Production 3	4
MUL220 Intermediate Typography	3
MUS119 Music Technology MIDI/Audio 2	4

Multimedia Design

Offered by the Art & Applied Design, 541.463.5409

One-Year Certificate of Completion

Program Coordinator Contact Arts Division, Bldg. 11, Rm. 101

Purpose To prepare students for entry-level positions in the media industry and careers in multimedia design and production.

Learning Outcomes The student who successfully completes all Multimedia Design requirements will:

- understand the concepts, potential, and implications of communicating ideas using computer-based media technology.
- become proficient in developing and applying effective visual design strategies for creating interactive multimedia, animation, games, web sites, and photography for business, education, and entertainment industries.
- use appropriate library and information resources to research media issues, concepts and tools, and support lifelong technical learning.
- design digital projects incorporating multiple forms of media such as text, graphics, audio, video, and animation.
- produce, manipulate, and process digital content using computer software applications.

Job Openings Projected through 2020

Lane County Openings- 4 annually

Statewide openings - 37 annually

Lane County average hourly - $31.24; average annual - $64,969

Oregon average hourly - $36.59; average annual - $76,115

Costs (Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Books	$1,700
Resident Tuition and General Student Fees	$6,983
Total Estimated Cost	$8,683

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

27-1014.00

Standard Occupational Classification: 27-1014.00 Go to the Department of Labor's O*Net website for a profile of this occupation: Multimedia Artists and Animators onetonline.org/link/summary/24-1014.00

In academic year 2014-15, 8 students completed this certificate

The program is designed to take 4 terms, or about 15 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- Foundational Skills and Discipline Studies courses can be taken P/NP or for a letter grade of C- or higher: WR 121, WR 121_H, MTH 60, and CG 203.
- All major courses must be taken for a letter grade, not P/NP.
- Major courses that serve as a prerequisite in a sequence must be passed with a B- or higher : CIS 195, ART 216, ART 289, and MUL 212. All remaining major courses must be passed with a C- or higher.

Fall	
MUL 105 Digital Photography	4
FA 250 Concepts of Visual Literacy	3
MUL 103 Time-Based Tools	4
WR 121 Academic Composition WR121_H Academic Composition	4
MUL 101 Introduction to Media Arts	3
Winter	
ART 216 Digital Design Tools	3
AUD 120 Audio Production	4
ART 115 Basic Design: Fundamentals	3
ART 245 Drawing for Media	4
Physical Education Activity or Health	3
Spring	
FA 221 Computer Animation	4
MTH 060 Beginning Algebra or higher	4
CG 203 Human Relations at Work	3
VP 151 Video Production 1: Camera	3
Science, Math, Computer Science course	3 - 4

Web Design

Offered by the Art & Applied Design, 541.463.5409

One-Year Certificate of Completion

Program Coordinator Contact the Arts Division, Bldg. 11, Rm 101.

Purpose The Web Design certificate 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, and online content.

Learning Outcomes The student who successfully completes all Web Design requirements will:

- 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.
- understand the concept, potential and implications of communicating ideas using computer-based interactive media technology.
- understand the concepts of media and its effect on society, and how to use media ethically.
- 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 areas: software, design, or media.
- develop proficiency in multiple forms of media design which includes writing for the web, graphic and web design, online content, working with visual imagery, video, sound and animation.

Job Openings Projected through 2020

Lane County: 4

Statewide: 43

Lane County hourly average - $35.18; annual average - $73,172

Oregon hourly average - $31.18 ; annual average - $ 64,849

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,700
Resident Tuition and General Student Fees	$6,173
Total Estimated Cost	$7,873

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

15-1199.03

Go to the Department of Labor's O*Bet website for a profile of this occupation. Web Administers. Onetonline.org/link/summary/15-1199.03 Manage web environment design, deployment, development and maintenance activities. Perform testing and quality assurance of web sites and web applications.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- Foundational Skills and Discipline Studies courses can be taken pass/no pass or for a letter grade of C- or better.
- All program core courses must be taken for a letter grade and passed with a minimum grade of C-.
- All program core courses that serve as a prerequisite in a sequence must be taken for a grade of B- or higher (with the exception of WR 121.) See course description for prerequisites.

Fall	
ART 216 Digital Design Tools	3
ART 115 Basic Design: Fundamentals	3
CIS 195 Web Authoring 1	3
MTH 60 Beginning Algebra or higher	4
Winter	
ART 245 Drawing for Media	4
ART 289 Web Production	3
CS 133 JS Beginning Programming: Java Script	4
MUL 212 Digital Imaging	4
Spring	
WR 121 Academic Composition or WR 121_H Academic Composition	4
ART 290 Design Concepts for the Web	3
MUL 218 Business Practices for Media Arts	3
MUL 280 Co-op Ed: Web Design	3
CG 203 Human Relations at Work	3

Music Technology and Sound Engineering

Offered by the Music, Dance, and Theatre Arts 541.463.3108

Associate of Applied Science Degree

Career Pathway Certificate - Music Technology and Sound Engineering: MIDI and Audio Production

Career Pathway Certificate - Music Technology and Sound Engineering: MIDI Production

Program Coordinator Matthew Svoboda 541.463.5736 Building 6, Room 138; Hisao Watanabe 541.463.5019, Building 6, Room 142; Seth Mulvihill 541.463.5184, Building 6, Room 137

Purpose The music technology associate of applied science degree is designed to meet the training and experience needs of new college students, current industry professionals and artists who work with recording equipment, recording studios, and music technology equipment. The program also includes a robust emphasis on musicianship, including one year of music theory, lessons and performance experience. This AAS degree covers essential skills used in the audio world and provides hands on experience with state of the art hardware and software. The experience and skills will allow graduates to more easily attain positions in the industry or assist them in starting their own small businesses. The foundation of musicianship and music theory will also allow motivated graduates to further their studies at a number of universities and colleges that offer music technology or electronic music undergraduate degrees, such as University of Oregon and Northwest Christian University.

Learning Outcomes The student who successfully completes all Music Technology and Sound Engineering requirements will:

- demonstrate proficiency using software and hardware for recording, editing and processing music and audio for commercial and artistic purposes.
- identify and use a variety of microphones, preamplifiers, and other outboard signal processors. Demonstrate skill in microphone selection and placement.
- analyze audio recordings in terms of frequency, stereo field, phase cancellation, and dynamic range.
- demonstrate knowledge of MIDI basics including: MIDI networks and MIDI sequencers.
- demonstrate understanding of technical vocabulary associated with audio engineering.
- demonstrate understanding of technical vocabulary associated with MIDI and MIDI software.
- engineer and produce recording sessions for many instruments and styles.
- do creative work under pressures of deadlines and scheduling time with clients.
- create high quality audio mixes for a variety of commercial and creative purposes.
- demonstrate proficiency in keyboards and/or other instrument(s).
- demonstrate knowledge and practical use of various studio file formats (AIFF, MP3).

Advising and Counseling Judith Gates 541.463.3200

Job Openings Projected through 2020

Sound Engineering Technicians

Portland Metro 104 openings

Oregon statewide openings annually 4

Music Directors and Composers

Lane County openings 3

Oregon statewide openings annually 33

Media and Communications Workers

Lane County openings 0

Office and Administrative Support Workers

Lane County openings 29

Sound Engineering Technicians

Lane County average hourly wage $28.44

Music Directors and Composers

Lane County average hourly wage $18.86

Media and Communications Workers

Lane County average hourly wage $18.51

Office and Administrative Support Workers

Lane County average hourly wage $16.69

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,000
Program Specific Fees	$400
Resident Tuition and General Student Fees	$9,743
Total Estimated Cost	$11,143

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Music Theory Placement exam required to get into MUS 111. Contact music office 541.463.3108 for exam information.
- MUS 107, MUS 109, MUS 111, MUS 112, MUS 114, MUS 127 must be passed with a letter grade of C- or better to advance to the next course in the sequence.

First Year	**Fall**
Science	3
WR 115 Introduction to College Composition	4
Choose an ensemble course from the following: - MUS 293 - MUS 295 - MUS 294 - MUS 291 - MUS 297	2
MUP 100 Individual Lessons	1
MUS 101 Music Fundamentals	3
MUS 131 Group Piano	2
	Winter
MUS 118 Music Technology MIDI/Audio 1	4
MTH 060 Beginning Algebra or higher	4
Choose an ensemble course from the following: MUS 293 MUS 295 MUS 294 MUS 291 MUS 297	2
Choose a group class from the following: MUS 137 MUS 138 MUS 134	2
Choose a group class from the following: MUS 103 MUS 264 MUS 265 MUS 266 AUD 120	3 - 4
MUP 100 Individual Lessons	1
	Spring
MUS 119 Music Technology MIDI/Audio 2	4
MUP 100 Individual Lessons	1
PE or Dance	1
Choose an ensemble course from the following: MUS 293 MUS 295 MUS 294 MUS 291 MUS 297	2
Human Relations	4
Choose an elective course from the following: MUS 103 MUS 264 MUS 265 MUS 266 MUS 268 AUD 120	3 - 4
Second Year	**Fall**
MUS 107 Audio Engineering 1	3
MUS 111 Music Theory 1 (First Term)	4
MUS 114 Sight-reading and Ear Training (First Term)	2
MUS 127 Keyboard Skills 1 (First Term)	2
PE or Dance	1
Choose an ensemble course from the following: MUS 293 MUS 295 MUS 294 MUS 291 MUS 297	2
Choose an elective course from the following: MUP 100 MUS 137 MUS 134 MUS 138 MUS 103 MUS 161 MUS 264 MUS 265 MUS 266 MUS 268 AUD 120	1 - 4
	Winter
MUS 109 Audio Engineering 2	4
MUS 112 Music Theory 1 (Second Term)	4
MUS 115 Sight-reading and Ear Training (Second Term)	2
MUS 128 Keyboard Skills 1 (Second Term)	2
Choose an ensemble course from the following: MUS 293 MUS 295 MUS 294 MUS 291 MUS 297	2
Choose an elective course from the following: MUP 100 MUS 137 MUS 134 MUS 138 MUS 103 MUS 161 MUS 264 MUS 265 MUS 266 MUS 268 AUD 120	1 - 4
	Spring
MUS 110 Audio Engineering 3	4
MUS 113 Music Theory 1 (Third Term)	4
PE or Dance	1
Choose an elective course from the following: MUS 137 MUS 134 MUS 138 MUS 161	2
Choose an ensemble course from the following: MUS 293 MUS 295 MUS 294 MUS 291 MUS 297	2
Choose an elective course from the following: MUP100 MUS 137	

MUS 134	
MUS 138	
MUS 103	
MUS 161	
MUS 264	
MUS 265	
MUS 266	
MUS 268	
AUD 120	2 - 4

Directed Electives

MUS 116 Sight-reading and Ear Training (Third Term)	2
MUS 129 Keyboard Skills 1 (Third Term)	2
MUS 205 Introduction to Jazz History	3
MUS 260 History of Hip-Hop and Rap music	3

Music Technology and Sound Engineering: MIDI and Audio Production

Offered by the Music, Dance and Theatre

Career Pathway Certificate

Program Coordinator Matthew Svoboda 541.463.5736 Building 6, Room 138; Hisao Watanabe 541.463.5019, Building 6, Room 142; Seth Mulvihill 541.463.5184, Building 6, Room 137

Purpose Builds upon MIDI Production foundations with training in audio recording and editing software, hardware and techniques, including advanced audio production concepts such as creating audio for video, microphone techniques,

Learning Outcomes The student who successfully completes all Music Technology and Sound Engineering: MIDI and Audio Production requirements will:

- demonstrate proficiency using software and hardware for recording, editing and processing music and audio for commercial and artistic purposes.
- identify and use a variety of microphones, preamplifiers, and other outboard signal processors. Demonstrate skill in microphone selection and placement.
- demonstrate understanding of technical vocabulary associated with MIDI and MIDI software.
- demonstrate understanding of technical vocabulary associated with audio engineering.
- demonstrate knowledge of MIDI basics including: MIDI networks, MIDI synthesizers, and MIDI sequencers.
- engineer and produce recording sessions for many instruments and styles.
- create high quality audio mixes for a variety commercial and creative purposes.
- demonstrate proficiency in keyboards and/or another instrument.
- demonstrate knowledge and practical use of various studio file formats (AIFF, MP3).

Advising and Counseling Judith Gates 541.463.3420

Job Openings Projected through 2020

Sound Engineering Technicians

Portland Metro 104 openings

Oregon statewide openings annually 4

Music Directors and Composers

Lane County openings 3

Oregon statewide openings annually 33

Media and Communications Workers

Lane County openings 0

Office and Administrative Support Workers

Lane County openings 29

Sound Engineering Technicians

Lane County average hourly wage $28.44

Music Directors and Composers

Lane County average hourly wage $18.86

Media and Communications Workers

Lane County average hourly wage $18.51

Office and Administrative Support Workers

Lane County average hourly wage $16.69

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$600
Program Specific Fees	$400
Resident Tuition and General Student Fees	$4,383
Total Estimated Cost	$5,383

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Music Theory Placement exam required to get into MUS 111. Contact music office 541.463.3108 for exam information. " " "
- MUS 107, MUS 109 must be passed with a letter grade of C- or better to advance to the next course in the sequence.

Fall	
MUS 101 Music Fundamentals	3
MUS 131 Group Piano	2
MUS 118 Music Technology MIDI/Audio 1	4
MUS 107 Audio Engineering 1	3
MUS 111 Music Theory 1 (First Term)	4
MUS 114 Sight-reading and Ear Training (First Term)	2
MUS 127 Keyboard Skills 1 (First Term)	2
Winter	
MUS 119 Music Technology MIDI/Audio 2	4
MUS 109 Audio Engineering 2	4
MUP 100 Individual Lessons	1
Spring	
AUD 120 Audio Production	4
MUS 110 Audio Engineering 3	4
Choose a course from the following:	
MUS 295	
MUS 294	
MUS 291	
MUS 297	2

Music Technology and Sound Engineering: MIDI Production

Offered by the Music, Dance, and Theatre Arts

Career Pathway Certificate

Program Coordinator Matthew Svoboda 541.463.5736 Building 6, Room 138; Hisao Watanabe 541.463.5019, Building 6, Room 142; Seth Mulvihill 541.463.5184, Building 6, Room 137

Purpose Develops familiarity with MIDI software, MIDI hardware, and foundations of music production including basic audio production concepts such as file management, mixing, and basic recording

Learning Outcomes The student who successfully completes all Music Technology and Sound Engineering: MIDI Production requirements will:

- demonstrate proficiency using software and hardware for recording, editing and processing MIDI data for commercial and artistic purposes.
- demonstrate knowledge of MIDI basics including: MIDI networks and MIDI sequencers.

- be able to use a variety of synthesizers, virtual instruments, and keyboards with MIDI software.
- demonstrate understanding of technical vocabulary associated with MIDI and MIDI software.
- show at least basic proficiency in keyboards and/or another instrument.
- use basic keyboard skills and music theory knowledge to create MIDI projects and mixes.
- demonstrate knowledge and practical use of various studio file formats (AIFF, MP3).

Advising and Counseling Judith Gates 541.463.3420

Job Openings Projected through 2020

Sound Engineering Technicians
Portland Metro 104 openings
Oregon statewide openings annually 4

Music Directors and Composers
Lane County openings 3
Oregon statewide openings annually 33

Media and Communications Workers
Lane County openings 0

Office and Administrative Support Workers
Lane County openings 29

Sound Engineering Technicians
Lane County average hourly wage $28.44

Music Directors and Composers
Lane County average hourly wage $18.86

Media and Communications Workers
Lane County average hourly wage $18.51

Office and Administrative Support Workers
Lane County average hourly wage $16.69

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$300
Program Specific Fees	$400
Resident Tuition and General Student Fees	$2,200
Total Estimated Cost	$2,900

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Fall	
MUS 101 Music Fundamentals	3
MUS 131 Group Piano	2
Winter	
MUS 118 Music Technology MIDI/Audio 1	4
MUP 100 Individual Lessons	1
Spring	
MUS 119 Music Technology MIDI/Audio 2	4
AUD 120 Audio Production	4
Choose a course from the following:	
MUS 295	
MUS 294	
MUS 291	
MUS 297	2

Nursing

Offered by the Health Professions Division 541.463.5617

Associate of Applied Science Degree

One-Year Certificate of Completion - Practical Nursing

Program Coordinator Associate Dean for Health Professions, Bldg 30, Rm. 110. 541.463.5754

Purpose To prepare the graduate to practice as an associate degree registered nurse, to be eligible to take the National Council Licensure Examination (NCLEX)-RN. Acceptance to the program allows for co-admission to Lane Community College and Oregon Health Sciences University nursing programs.

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 the Lane Nursing curriculum supports the following nursing competencies.

- bases personal and professional actions on a set of shared core nursing values.
- develops insight through reflection, self-analysis and self-care.
- engages in intentional learning.
- demonstrates leadership in nursing and healthcare.
- collaborates as part of a health care team.
- utilizes and contributes to the broader health care system.
- practices relationship-centered care.
- communicates effectively.
- makes sound clinical judgments.
- uses the best available evidence.

Accreditation Nursing, Oregon State Board of Nursing (OSBN) 27938 SW Upper Boones Ferry Rd, Portland, OR, 971.673.0685, oregon.gov/OSBN. Lane is a member of the Oregon Consortium for Nursing Education (OCNE) and offers a competency-based curriculum jointly developed by nursing faculties from nine community colleges and OHSU consortium partners.

Licensing & Certification Successful graduates will be awarded an Associate Degree in Nursing and be eligible to take the National Council Licensure Examination-RN (NCLEX_RN) which confers licensure as a registered nurse.

Admission Information Program website:

- *lanecc.edu/hp/nursing*
- *lanecc.edu/hp/nursing/registered-nursing-application-information*
- *lanecc.edu/hp/nursing/pn-rn-bridge-application-information*

*Information*on criminal background checks and disqualifying crimes can be found at the Oregon Board of Nursing at: *oregon.gov/OSBN/pages/criminal_history.aspx*

Advising and Counseling For assistance with meeting application or program requirements contact Health Professions Advising in Building 30 at the Information Desk or in Building 1, Room 103 or E-mail *NursingProgram@lanecc.edu* with your specific questions.

Cooperative Education (Co-op) Co-op internships may be taken as an optional elective any of the last four terms of the program. Contact Associate Dean of Health Profession, (Cooperative Education Coordinator for Nursing), Bldg. 30, Rm. 110, 541.463.5754.

Job Openings Projected through 2020
Lane County openings - 141 annually
Statewide openings 1,625 annually

Lane County average hourly - $41.00 average annual - $83,630

Oregon average hourly - $41.83 average annual - $85,333

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition. The total of all the differential fees attached to Nursing courses in the 2-yr program and other course fees may change during the year - see the online credit class schedule for fees assigned to courses. As an accepted PN to RN Bridge Student you will not have the 1st Yr RN costs, but will have @ $5,918 for your Patho, Pharm & Bridge courses and costs associated with these courses.

Books	$1,400
Certification, Licensure, Exams, Physicals	$248
Computers/Internet Service	$1,300
Differential Fees*	$11,710
Program Specific Fees	$3,811
Resident Tuition and General Student Fees	$9,642
Total Estimated Cost	$28,111

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- Other immunizations, drug testing , criminal background check required. Information relating to criminal background checks and disqualifying crimes can be found at the Oregon Board of Nursing: www.oregon.gov/OSBN/pages/criminal_history.aspx
- Courses: See Prerequisite Courses for Program Admission.
- WR 123 and 227 are waived if WR 121 and WR 122 are taken as 4 credit courses.
- BI 233 and BI 234 course must have been completed within 7 years prior to start the nursing program
- Students must be enrolled in the Nursing Program to register for any NRS classes.
- NRS115 LPN Transition to OCNE, 6 credits, will be offered in Spring term through LCC and will be limited to space available to those LPN to Bridge students admitted to the program.
- PSY 236 is not offered at Lane, but is available at other colleges in the OCNE consortium.
- WR 121 and 122 (prerequisite to program entry) are waived with completion of previous U.S. Bachelors Degree or higher from U.S. regionally accredited institution.
- All courses except Clinical Labs, Cooperative Education, and Biology with Genetics must be passed with a letter grade of 'C' or better. C- or less not accepted.

Prerequisites

BI 232 Human Anatomy and Physiology 2
BI 231 Human Anatomy and Physiology 1
BI 233 Human Anatomy and Physiology 3
FN 225 Nutrition
PSY 215 Lifespan Developmental Psychology
Choice of: WR121 Academic Composition Honors WR121_H Academic Composition Honors
Choice of: WR122 Composition: Argument, Style & Research-Honors WR122_H Composition: Argument, Style & Research-Honors
Arts and Letters, Social or Natural Science electives (required for BS, not for AAS)
Arts and Letters, Social or Natural Science electives (required for BS, not for AAS)
Arts and Letters, Social or Natural Science electives (required for BS, not for AAS)
College level 100 or 200 level non-studio Arts and Letters, Human Relations, Social Science or Science Electives. You may take any course from the following: Anthropology, Career Guidance (CG), Economics, Ethnic Studies, Geographic Information Science (GIS), Geography, History, Philosophy, Human Development (HD), Human Services (HS), Political Science, Psychology, Religion, Sociology, Women's Studies; CJA 214, HUM 100, SLD 103, SLD 121
BI 234 Introductory Microbiology
MTH095 Intermediate Algebra or higher or credit by exam for MTH 095 or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, Further Mathematics or Statistics.)
Human Relations Requirement

First Year	**Fall**
NRS 110A Foundations of Nursing-Health Promotion	4
NRS 110B Foundations of Nursing-Health Promotion Clinical Lab	5
NRS 232 Pathophysiological Processes 1	3
	Winter
NRS 111A Foundations of Nursing in Chronic Illness 1	2
NRS 111B Foundations of Nursing in Chronic Illness 1-Clinical Lab	4
NRS 230 Clinical Pharmacology 1	3
Choice of: WR123 Composition: Research Writing WR227 Technical Writing 4CR (only required if WR 121 and/or WR 122 was taken for 3 instead of 4 credits).	4
	Spring
NRS 231 Clinical Pharmacology 2	3
NRS 233 Pathophysiological Process 2	3
NRS 280 Co-op Ed: Nursing	2 - 3
Choice of: NRS 112A Foundations of Nursing in Acute Care 1 AND NRS 112B Foundations of Nursing in Acute Care 1 Clinical Lab or NRS 115 LPN Transition to OCNE (only accepted LPN to RN Bridge Students)	6
Biology with Genetics: Choose one of the following: BI 112 (4 credits) BI 112 (3 credits) + BI 233 BI 112 (3 credits) + BI 102G BI 101F + BI 233 BI 211 + BI 233 BI 101K + BI 233 BI 101K + BI 102G	3 - 4
Second Year	**Fall**
NRS 221A Foundations of Nursing in Chronic Illness 2 and End of Life	4
NRS 221B Foundations of Nursing in Chronic Illness 2 and End-of-Life Clinical Lab	5
	Winter
NRS 222A Foundations of Nursing in Acute Care 2 and End-of-Life	4
NRS 222B Foundations of Nursing in Acute Care 2 and End-of-Life Clinical Lab	5
	Spring
NRS 224A Integrative Practicum 1	2
NRS 224B Integrative Practicum 1 Lab	7
Electives as required to complete 90 credits for AAS	22

Additional Electives

	Spring
NRS 280 Co-op Ed: Nursing	2 - 3

Practical Nursing

Offered by the Health Professions Division 541.463.5617

One-Year Certificate of Completion

Program Coordinator Associate Dean of Health Professions 541.463.5754

Purpose Completion of this program gives the student a certificate in Practical Nursing (PN) which meets the educational requirements for the national exam for PN licensure (NCLEX-PN).

Learning Outcomes Completion of this program gives the student a certificate in Practical Nursing (PN) which meets the educational requirements for the national exam for PN licensure (NCLEX-PN).

- identify issues and care for clients in multiple healthcare settings.

- demonstrate understanding of how to develop a nursing care plan and identify the difference between the LPN and RN roles in developing and implementing the plan.
- pathophysiology, medical management and nursing intervention in caring for clients with all conditions to include acute, chronic, obstetrics, psychiatric and terminal illnesses.
- understand the principles of pharmacodynamics and pharmacokinetics.

Accreditation Practical Nursing, accredited by the Oregon State Board of Nursing (OSBN), 17938 SW Upper Boones Ferry Rd., Portland, OR 97163-0685, oregon.gov/OSBN.

Licensing & Certification Completion of this program gives a student a Certificate in Practical Nursing, which meets the educational requirements for the National Exam for PN licensure (NCLEX-PN).

Admission Information Program website: *lanecc.edu/hp/nursing*

Application website: *lanecc.edu/hp/nursing/licensed-practical-nursing-application-information*

Drug testing, criminal back-ground check and immunizations required. Consult *lanecc.edu/hp/nursing/licensed-practical-nursing*

Information*on* criminal background checks and disqualifying crimes can be found at the Oregon Board of Nursing at: *arcweb.sos.state.or.us/pages/rules/oars_800/oar_851/851_045.html*

Advising and Counseling For assistance with meeting application or program requirements contact Health Professions Advising in Building 30 at the Information Desk or in Building 1, Room 103 or E-mail *NursingProgram@lanecc.edu* with your specific questions.

Job Openings Projected through 2020

Lane County - 10 annually

Oregon - 119 annually

Lane County average hourly - $22.76 average annual - $47,336

Oregon average hourly - $23.97 average annual - $49,871

Costs Estimates based on 2017-18 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees. The total of all the differential fees attached to Practical Nursing courses and other course fees may change during the year see the online credit class schedule for fees assigned to courses.

Books	$675
Certification, Licensure, Exams, Physicals	$248
Computers/Internet Service	$850
Differential Fees*	$3,472
Program Specific Fees	$2,727
Resident Tuition and General Student Fees	$5,797
Total Estimated Cost	$13,769

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

29-2061.00

Standard Occupational Classification: 29-2061.00 Go to the Department of Labor's O*Net website for a profile of this occupation: Licensed Practical and Licensed Vocational Nurses onetonline.org/link/summary/29-2061.00 Or check on these O*Net Related Occupations: Psychiatric Aides onetonline.org.link/summary/31-1013.00

In academic year 2014-15, 13 students completed this certificate.

The program is designed to take 4 terms, or about 15 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- The most recent BI 233 course must have been completed within 7 years prior to starting the PN Program.
- PN 101, PN 102, and PN 103 must be completed with a letter grade and passed with 'C' or better (C- are not accepted.) Human Relations course must be completed with a letter grade.

Prerequisites

BI 231 Human Anatomy and Physiology 1
BI 232 Human Anatomy and Physiology 2
BI 233 Human Anatomy and Physiology 3
PSY 215 Lifespan Developmental Psychology
Current Certified Nursing Assistant (CNA)
Human Relations Requirement
HO 100 Medical Terminology 1
MATH: Choice of: MTH 052, MTH 065, MTH 095, MTH 105 or higher. Or Credit by Exam for one of the above math classes or transcripted credits: AP (Calculus), or CLEP (College Algebra, or any Calculus, or Statistics), or IB (Mathematics, or Math Studies, or Further Mathematics, or Statistics)

	Winter
PN 101 Practical Nursing 1	12
Choice of:	
WR121 Academic Composition WR121_H Academic Composition Honors	4
	Spring
PN 102 Practical Nursing 2	12
Choice of:	
WR122 Composition: Style and Argument WR122_H Composition: Style and Argument	4
	Summer
PN 103 Practical Nursing 3	13

Paramedicine

Offered by the Health Professions Division, 541.463.5617

Associate of Applied Science Degree

One-Year Certificate of Completion - Emergency Medical Technician

Program Coordinator J. Cory Miner

Purpose To produce competent, entry level EMT and Paramedics to serve in a career in EMS.

Learning Outcomes The student who successfully completes all Paramedicine requirements will:

- demonstrate personal behaviors consistent with public and employer expectations of professional EMS providers.
- demonstrate technical proficiency in the performance of EMT and/or paramedic skills.
- demonstrate technical proficiency with the operation of EMT and/or paramedic equipment.

- be able to understand, interpret, apply, evaluate and effectively communicate EMS and general medical knowledge necessary to function in a healthcare setting.
- be able to verbally communicate effectively.

Accreditation Paramedicine accredited by the Oregon Department of Education (ODE) or the Oregon State Board of Higher Education. The ODE uses the DHS/EMS administrative rules (OAR 333-265) and must meet the standards established by the ODE in OAR chapter 581, division 49. arcweb.sos.state.or.us/rules/OARS_500/OAR_581/581_049.html

Licensing & Certification Students will be eligible to test for national certification and Oregon State licensure following completion of EMT and/or Paramedic training.

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 EMT website, *lanecc.edu/hp/emt*.

Advising and Counseling For questions about credit coursework contact Counseling and Advising, Student Services Building, or email *EMTParamedicProgram@lanecc.edu* . For information on non-credit offerings in EMS visit the EMT website, *lanecc.edu/hp/emt*. For all EMT specific questions contact *ems@lanecc.edu*.

Cooperative Education (Co-op) Students earning the Paramedicine AAS two-year degree are required to take two Cooperative Education courses. Co-op courses provide opportunities for on-the-job experience to complete Paramedic training.

Job Openings Projected through 2020

Lane County openings - 8 annually

Statewide openings - 137 annually

Lane County Average Hourly for Paramedic/Fire Fighter - $26.78; average annual - $55,703

Costs Estimate based on 2017-18 tuition and fees. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition. The total of all the differential fees attached to Emergency Medical Technology-Paramedicine courses 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.

Books	$2,016
Certification, Licensure, Exams, Physicals	$1,853
Computers/Internet Service	$1,450
Differential Fees*	$1,887
Instruments/Tools	$20
Program Specific Fees	$3,970
Resident Tuition and General Student Fees	$10,050
Uniforms	$275
Total Estimated Cost	$21,521

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- EMT 271 and EMT 273 must be completed with a grade of 'Pass' or 'C-' or better.
- MTH 095, PSY 110, WR 121, HE 275, COMM 111, and Social Science/Human Relations requirement must be completed with a letter grade, not P/NP.
- All other courses must be completed with a letter grade, not P/NP, and must be passed with a grade of 'C-' or better to satisfy program requirements.
- Choices for Social Science/Human Relations requirement are listed on the Associate of Applied Science degree page.
- Students pursuing a bachelor's degree need to complete a college level, transferable math course.
- Prerequisites are required for BI 231. See course descriptions.

First Year	**Fall**
BI 231 Human Anatomy and Physiology 1	4
EMT 151 Emergency Medical Technician Basic Part 1	5
EMT 152 Emergency Medical Technician Basic Part 2	5
EMT 175 Introduction to Emergency Services	4
	Winter
Choice of: WR121 Intro to Academic Composition WR121_H Intro to Academic Composition	4
BI 232 Human Anatomy and Physiology 2	4
EMT 196 Crisis Intervention	3
MTH 095 Intermediate Algebra or higher	5
Human Relations Requiement	3
	Spring
BI 233 Human Anatomy and Physiology 3	4
EMT 169 Emergency Services Rescue	4
EMT 170 Emergency Response Communication /Documentation	2
EMT 171 Emergency Response Patient Transportation	2
PSY 110 Exploring Psychology or higher	3
HO 100 Medical Terminology 1	3
Second Year	**Fall**
EMT 270 Paramedic Part 1	10
EMT 271 Emergency Medical Technology-Paramedic Clinical Part 1	1
COMM 111 Fundamentals of Public Speaking or higher	4
	Winter
EMT 272 Paramedic Part 2	10
EMT 273 Emergency Medical Technology-Paramedic Clinical Part 2	3
HE 275 Lifetime Health and Fitness	3
	Spring
EMT 274 Emergency Medical Technology-Paramedic Part 3	4
EMT 275 Emergency Medical Technology- Paramedic Clinical Part 3	4
EMT 280P1 Co-op Ed: EMT Internship Part 1	3
	Summer
EMT 280P2 Co-op Ed: EMT Internship Part 2	5

Emergency Medical Technician

Offered by the Health Professions Division, 541.463.5617

One-Year Certificate of Completion

Program Coordinator Cory Miner, *minerjc@lanecc.edu*

Purpose 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 of the Paramedicine AAS offered throughout the state. All Community College paramedic programs follow the same curriculum and accept students transferring from community colleges that only provide the first-year courses.

Learning Outcomes The student who successfully completes all Emergency Medical Technician requirements will:

- be able to understand, interpret, apply, evaluate and effectively communicate EMS and general medical knowledge necessary to function in a healthcare setting.
- the graduate will: be able to verbally communicate effectively.
- demonstrate personal behaviors consistent with public and employer expectations of professional EMS providers.
- demonstrate technical proficiency in the performance of EMT and/or paramedic skills.
- demonstrate technical proficiency with the operation of EMT and/or paramedic equipment.

Admission Information Please consult *lanecc.edu/hp/emt*

Advising and Counseling Marleena Pearson *pearsonm@lanecc.edu*

Job Openings Projected through 2020

Lane County openings - 5 annually

Statewide openings - 82 annually

Oregon average hourly - $18.25; average annual - $37,965

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$1,150
Certification, Licensure, Exams, Physicals	$998
Computers/Internet Service	$1,000
Differential Fees*	$506
Program Specific Fees	$1,595
Resident Tuition and General Student Fees	$4,975
Uniforms	$215
Total Estimated Cost	$10,439

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Gainful Employment Disclosure

29-2041.00

Go to the Department of Labor's O*Net website for a profile of this occupation: Emergency Medical Technicians and Paramedics Onetonline.org/link/summary/29-2041.00 Or check on these O*Net Related Occupations: Ambulance Drivers and Attendants, Except Emergency Medical Technicians onetonline.org.link/summary/53-3011.00 Office Clerks, General onetonline.org/link/summary/43-9061.00

In academic year 2014-15, 5 students completed this certificate.

The program is designed to take 4 terms, or about 15 months of study to complete.

Lane Community College is committed to protecting student privacy and does not publish this rate for fewer than 10 graduates. Note: The federally required method for calculating the on time program completion rate assumes students will declare their completion program major immediately upon entering Lane, enroll full-time each term, and remain enrolled at Lane continuously until they complete their program. In reality, many students attend part-time, explore several majors, stop out for a term or more, and brush-up on their academic skills to be better prepared for college-level courses, all of which affect this narrowly defined on time completion rate.

For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than 10 Title IV on-time graduates.

Explanation of costs: *lanecc.edu/esfs/credit-fees-and-expenses*

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- MTH 095, PSY 110, and WR 121 must be completed with a letter grade, not P/NP.
- All other courses must be completed with a letter grade, not P/NP, and must be passed with a grade of 'C-' or better to satisfy program requirements.
- Prerequisites are required for BI 231. See course descriptions.

	Fall
BI 231 Human Anatomy and Physiology 1	4
EMT 151 Emergency Medical Technician Basic Part 1	5
EMT 175 Introduction to Emergency Services	4
EMT 152 Emergency Medical Technician Basic Part 2	5
	Winter
Choice of:	
WR121 | Intro to Academic Composition	
WR121_H Intro to Academic Composition	4
BI 232 Human Anatomy and Physiology 2	4
EMT 196 Crisis Intervention	3
MTH 095 Intermediate Algebra or higher	5
Human Relations Requiement	3
	Spring
BI 233 Human Anatomy and Physiology 3	4
EMT 169 Emergency Services Rescue	4
EMT 170 Emergency Response Communication /Documentation	2
EMT 171 Emergency Response Patient Transportation	2
PSY 110 Exploring Psychology or higher	3
HO 100 Medical Terminology 1	3

Physical Therapist Assistant

Offered by the Health Professions Division, 541.463.5617

Associate of Applied Science Degree

Program Coordinator Christina Howard, PT, MPT, Health Professions, Building 30, Room 124, 541.463.5764, *howardc@lanecc.edu*

Purpose Prepare the graduate to practice as an entry-level, licensed physical therapist assistant (PTA).

Learning Outcomes Physical Therapist Assistant (PTA) program learning outcomes are based on the guidelines of the Commission on Accreditation in Physical Therapy Education (CAPTE). Program graduates must demonstrate broad, integrative and specialized knowledge, technical and communication skills, and behavior and conduct consistent with entry-level PTA practice. Learning outcomes have a strong emphasis on safely and effectively implementing a plan of care under the direction of a supervising physical therapist. PTAs work under the direction of the supervising physical therapist in helping clients (individuals, families or communities) promote health and recovery from acute or chronic neuromuscular, musculoskeletal, cardiovascular, pulmonary, metabolic, and integument injury or disease. The graduate:

- communicates verbally and non-verbally with the patient, the physical therapist, health care delivery personnel, and others in an effective, appropriate, and capable manner.
- recognizes individual and cultural differences and responds appropriately in all aspects of physical therapy services.
- exhibits conduct that reflects a commitment to meet the expectations of the members of the profession of physical therapy and members of society receiving health care services.
- exhibits conduct that reflects safe practice standards that are legal, ethical and safe.
- communicates an understanding of the plan of care developed by the physical therapist to achieve short and long term goals and intended outcomes.
- demonstrates competence in implementing selected components of interventions identified in the plan of care established by the physical therapist, including functional training, infection control, manual therapy, physical and mechanical agents, therapeutic exercise, and wound management.
- demonstrates competency in performing components of data collection skills essential for carrying out the plan of care, including tests and measures for aerobic capacity, pain, cognition, assistive and prosthetic devices, joint motion, muscle performance, neuromotor development, posture, self-care and home/community management, ventilation, respiration, and circulation.
- recognizes and initiates clarifications with the supervising physical therapist when indicated.
- adjusts treatment interventions within the plan of care to optimize patient safety, progress, and comfort; reports outcomes to the supervising physical therapist.

- instructs and educates patients, family members, and caregivers as directed by the supervising physical therapist.
- instructs members of the health care team as directed by the supervising physical therapist, using appropriate instructional materials and approaches.
- demonstrates a commitment to meeting the needs of the patients and consumers.
- interacts with other members of the health care team in patient care and non-patient care activities.
- provides accurate and timely information for billing and reimbursement purposes.
- participates in quality assurance activities.
- demonstrates an awareness of social responsibility, citizenship and advocacy, including participation in community and service organizations and activities.
- identifies career and lifelong learning opportunities.

Accreditation Physical Therapist Assistant, accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, VA 22314); phone: 703.706.3245; email: *accreditation@apta.org*; website: capteonline.org.

Licensing & Certification Graduates meet education eligibility for the National Physical Therapist Assistant Examination administered by the Federation of State Boards of Physical Therapy

Admission Information Students are admitted once a year. Admission is restricted and is based on a program application. Please consult *lanecc.edu/hp/pta/.*

Advising and Counseling Early academic advising is highly recommended. Drop-in advising is available in Building 1, Room 103, 541.463.3800. Online advising is available at *ptaprogram@lanecc.edu*

Cooperative Education (Co-op) Co-op is required for second year students enrolled in the Physical Therapist Assistant Program. Students must complete 18 credits of Co-op a program-designated co-op site. Contact Beth Thorpe, PTA Cooperative Education Coordinator, Bldg. 30, Rm. 108, 541.463.3274, *thorpeb@lanecc.edu.*

Job Openings Projected through 2020

Lane County openings - 3 annually

Statewide openings - 40 annually

Lane County median hourly - $28.40; average annual - $58,972

Oregon median hourly - $27.97; average annual - $57,917

Costs Estimated based on 2017-18 tuition and fees. Consult Lane's website for updated tuition and fees for prerequisite and program courses. Prerequisite costs will vary for transfer students.

Books	$1,100
Certification, Licensure, Exams, Physicals	$3,355
Computers/Internet Service	$1,100
Differential Fees*	$1,610
Program Specific Fees	$938
Resident Tuition and General Student Fees	$12,556
Total Estimated Cost	$20,659

*This is the total of all the differential fees attached to the courses in this program. These fees and other course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- All admitted students must complete either HO 152 or BI 233 no later than year 1 winter term
- Prerequisites are required for some courses. See course descriptions
- No more than 16 credits with a grade of Pass are accepted
- Non-PTA courses must be passed with a grade of Pass or C or better to satisfy program requirements
- All PTA courses must be completed with a letter grade of C or better to satisfy program requirements
- The following requirements must meet universal standards order to begin clinical internships Physical examination Tuberculosis (TB) screen Substance abuse screening (10-panel drug and alcohol screen), and Criminal background check
- PTA 200 meets the Human Relations Requirement for this program

Prerequisites

HO 100 Medical Terminology 1
GS 104 Physical Science
WR121 Introduction to Academic Writing, OR WR121_H Introduction to Academic Writing Honors
WR122 Composition: Argument, Style, and Research
WR122_H Composition: Argument, Style, and Research Honors
WR123 Composition: Research Writing WR227 Technical Writing
WR 227_H Technical Writing Honors
or
prior bachelor's degree, verified by transcript from US accredited institution
HO 150 Human Body Systems 1, or BI 231 Human Anatomy and Physiology 1
PSY 201 General Psychology, OR PSY 202 General Psychology, or PSY 215 Lifespan Developmental Psychology
Documentation of 16 clinical observation/experience hours with a PT or PTA on application

First Year	**Fall**
MTH 065 Elementary Algebra or higher	4
PTA 100 Introduction to Physical Therapy	3
PTA 101 Introduction to Clinical Practice 1	5
PTA 101L Introduction to Clinical Practice 1 Lab	2
HO 152 Human Body Systems 2, or BI 233 Human Anatomy and Physiology 3	3 - 4
	Winter
PTA 103L Introduction to Clinical Practice 2 Lab	2
PTA 103 Introduction to Clinical Practice 2	5
PTA 132L Applied Kinesiology 1 Lab	2
COMM 115 Introduction to Intercultural Communication, or COMM 218 Interpersonal Communication	4
PTA 132 Applied Kinesiology 1	3
	Spring
PTA 104 PT Interventions-Orthopedic Dysfunctions	5
PTA 104L PT Interventions-Orthopedic Dysfunctions Lab	2
PTA 133L Applied Kinesiology 2 Lab	2
COOP 206 Co-op Ed: Internship Seminar	2
HE 262 First Aid 2: Beyond the Basics, OR AHA CPR Basic Life Support for healthcare providers and 3 credits PE, or 3 credits HE	3
PTA 133 Applied Kinesiology 2	3
Second Year	**Fall**
PTA 280A Co-op Ed: First Clinical Internship	6
PTA 204 PT Interventions - Neurological Dysfunctions	5
PTA 204L PT Interventions - Neurological Dysfunctions Lab	2
HIM 153 Introduction to Pharmacology	3
	Winter
PTA 280B Co-op Ed: Second Clinical Internship	6
PTA 201 Physical Therapy and the Older Adult	2
PTA 205 PT Interventions - Complex Medical Dysfunctions	4
PTA 205L PT Interventions - Complex Medical Disfunctions Lab	2
	Spring
PTA 280C Co-op Ed: Third Clinical Internship	6
PTA 203 Contemporary Topics in Physical Therapy	2
PTA 200 Professionalism, Ethics, and Exam Preparation	4

Public Health Education & Promotion Specialist

This program has been discontinued. Students currently enrolled in the program should contact Academic Advising at 541.463.3800 for more information about completing core courses.

Health Educator

This program has been discontinued. Students currently enrolled in the program should contact Academic Advising at 541.463.3800 for more information about completing core courses.

Sustainability Coordinator

Offered by the Institute for Sustainable Practices, 541.463.5569

Associate of Applied Science Degree

Program Coordinator Luis Maggiori, Institute for Sustainable Practices, 541.463.5884

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 The student who successfully completes all Sustainability Coordinator requirements will:

- 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.
- 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 pol- lution 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.

Admission Information To enroll in this major, log into myLane. Click on the myEnrollment tab, in the "Student Status" box, click "View/Change Your Current Major." Select "Associate of Applied Science " Sustainability Coordinator" from the drop down menu. For more information about the program, contact one of the co-coordinators " Susie Cousar, 541.463.5271, Margaret Robertson, 541.463.3143, Claudia Owen, 541.463.5052 " or one of the program advisors " Carolyn Litty, 541.463.5236, Claudia Riumallo, 541.463.5378.

Cooperative Education (Co-op) Co-op internship 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. Please contact the Cooperative Education Coordinator.

Job Openings Projected through 2020

Sustainability Coordinator is an emerging occupation fro which State of Oregon historical data are not yet available. Market surveys of regional and statewide employers indicate job growth is expected to increase. Local, State, or Federal regulations with regard to climate change, resource conservation, and mandatory energy reporting will affect these trends.

Based on Oregon Employment Department wage data for related occupations including environmental science technician, environmental engineering technician, environmental engineering technician, life-physical-social science technician, and public relations specialist predicted average wages: Statewide Hourly - $20-$23, Lane County Hourly $15-$23. Predicted entry-level wages are $11-$16 hourly.

Costs Estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.

Books	$3,000
Resident Tuition and General Student Fees	$10,200
Total Estimated Cost	$13,200

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions
- All BI, DRF ECON, ENVS, IDS and PS courses must be completed with a letter grade of 'C-' or better
- All CG, MTH, WR, and BT must be completed with a 'C-' or better or Pass grade

First Year	**Fall**
ENSC 181 Terrestrial Environment	4
GS 104 Physical Science	4
HE 255 Global Health and Sustainability	4
Choice of: WR121 Intro to Academic Composition / WR 121_H Intro to Academic Composition or higher	4
Winter	
ENSC 183 Aquatic Environment	4
BT 120 MS WORD for Business	4
CH 104 Introduction to General Chemistry	5
CG 203 Human Relations at Work	3
Spring	
BI 103J General Biology: Forest Ecology	4
MTH 095 Intermediate Algebra	5
BI 103M General Biology: Biodiversity and Sustainability	4
Second Year	**Fall**
ENSC 182 Atmospheric Environment and Climate Change	4
BT 123 MS EXCEL for Business	4
WR 227 Technical Writing	4
MTH 105 Math in Society	4

	Winter
PS 297 Environmental Politics	4
ECON 250 Class, Race and Gender in the US Economy	4
CST 201 Sustainable Building Practices	3
WATR 202 Fostering Sustainable Practices	3
IDS 206S Co-op Ed: Sustainabilty Coordinator Seminar	1
	Spring
IDS 201 Sustainability Systems Seminar	3
DRF 211 Sustainable Building Systems	4
ECON 260 Introduction to Environmental and Natural Resource Economics	4
IDS280S Co-op Ed: Sustainability Coordinator	3

Water Conservation Technician

Offered by the Sustainable Practices, 541.463.6160

Associate of Applied Science Degree

Program Coordinator Roger Ebbage, Downtown Campus 404, 541.463.6160, *ebbager@lanecc.edu*

Purpose This degree prepares individuals to evaluate water patterns; develop, implement, market and maintain water conservation programs/ perform public outreach; recommend water efficiency techniques; integrate alternative water sources; and perform systems analysis to solve problems. The graduate will be trained to fill positions such as Water Conservation Program Specialist, Water Resource Specialist, Stormwater Technician, Stewardship Coordinator, Resource Coordinator and many more. Jobs are in the Federal, State, Local, Non-Government and Private Sectors in both profit and non-profit venues.

Learning Outcomes The student who successfully completes all Water Conservation Technician requirements 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 and market water conservation programs to a broad audience.
- 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; basic hydraulics; quality issues; balance and 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.

Admission Information Roger Ebbage, Downtown Campus 404, 541.463.6160, *ebbager@lanecc.edu*

Advising and Counseling Roger Ebbage, Downtown Campus 404, 541.463.6160, *ebbager@lanecc.edu*

Cooperative Education (Co-op) Cooperative Education provides sustainability-related 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. Please contact the Cooperative Education Coordinator

Job Openings Projected through 2020

The annual projected number of openings in Oregon is growing moderately and in the future will grow rapidly along with population growth and water shortage. In addition to openings resulting from growth and awareness of water conservation needs, new positions are being created across the country, providing numerous job openings. Graduates must consider the entire nation and overseas for job placement as those that do will substantially enhance their opportunities.

In Oregon range from $32,000 to $48,500 annually plus benefits.

Costs (estimate based on 2017-18 tuition and fees. Consult Lane's website for updated tuition.) Water Conservation Technician course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses.

Program Specific Fees	$1,000
Resident Tuition and General Student Fees	$9,816
Total Estimated Cost	$10,816

*Course fees may change during the year. See the online credit class schedule for fees assigned to courses.

Course Requirements

- Prerequisites are required for some courses. See course descriptions.
- All WATR courses except WATR 102 require instructor permission.
- See catalog for Health/PE choices in AAS degree requirements.
- MTH 095 must be completed before entering the second year of the program.
- Directed electives, Writing, Health/PE and Human Relation classes can be taken any term.
- All courses must be taken for a letter grade except Human Relations, ENVS183, GIS 151, Health/PE, WATR 102, WATR 206, WATR 222, and WATR 280.
- WATR 280 Co-op Ed may be taken during summer term.

First Year	**Fall**
BT 123 MS EXCEL for Business	4
WATR 102 Water Careers Exploration	4
WST 102 Introduction to Watershed Field Methods	2
GS 101 General Science (Nature of the Northwest)	4
Choice of: WR 121 Academic Composition / WR 121_H Academic Composition	4
	Winter
WATR 101 Introduction to Water Resources	3
GIS 151 Digital Earth	4
MTH 095 Intermediate Algebra	5
Human Relations Requirement	3
	Spring
WATR 105 Water Conservation: Residential	4
ENSC 183 Aquatic Environment	4
WATR 206 Co-op Ed: Water Conservation Seminar	2
GIS 245 GIS 1	4
WST 205 Soils Fields Methods	2
PE/Health requirement	3
Second Year	**Fall**
WATR 150 Water Resource Economics	4
WATR 210 Water Conservation: Industrial / Commercial	4
WATR 261 Regional Water Policy	3
WR 227 Technical Writing	4
	Winter
WATR 202 Fostering Sustainable Practices	3
WATR 220 Water Conservation:Program Development	4
WATR 222 Stormwater Best Management Practices	4
WATR280 Co-op Ed: Water Conservation Technician	3
	Spring
WATR 215 Integrated Water Management	4
WATR 221 Water Mechanical Systems	4
WATR280 Co-op Ed: Water Conservation Technician	3

Course Descriptions

To request this information in an alternate format please contact the Center for Accessible Resources at 541.463.5150 or *accessibleresources@lanecc.edu*.

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
Prerequisites: MTH095 or higher or test, BA 101 and WR 121 or WR 122 or WR 123. Sophomore standing recommended. Students will gain an understanding of basic terms, the accounting model, and the content of financial statements and then focus on understanding and interpreting the information they contain.

BA 213 Managerial Accounting.....4 credits
Prerequisite: BA 211. 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.

BA 280AC Co-op Ed: Accounting.....3-12 credits
Prerequisite: BT 206. In this internship course students will gain accounting-related work experience in area businesses and organizations. Students will integrate theory and practice, develop skills and expand career knowledge while earning credit toward a degree. Meet with Business Co-op Coordinator the term before starting your internship.

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.

BT 170 Payroll Records and Accounting.....4 credits
Prerequisite: BT 165 and BT 163. Recommend BT123 MS EXCEL for Business. 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.

BT 221 Budgeting for Managers.....4 credits
Prerequisite: BT 165 or BA 211. Recommend BT 123 MS EXCEL for Business. Course topics include: budget creation, parts of a budget, gathering information for budgets, creating a product budget, planning and budgeting a project, presenting the budget, budget tracking, HR budgets, small business budgets, and human behavior in relationship to budgets.

BT 272 Tax concepts and Preparation.....4 credits
Prerequisite: BA 101, BT 206 and BT 165. 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.

BT 286 Professional Bookkeeping.....4 credits
Prerequisites: BA 211, BT 170, BT 165, BT 123, BT 163. This course continues to develop skills needed to become a full-cycle bookkeeper. Five primary areas of focus are accounting error correction, adjusting entries, payroll, depreciation and working papers.

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 Professional.....3-12 credits
Prerequisite: BT 206. In this internship course students will gain administrative support work experience in area businesses and organizations. Students will integrate theory and practice, develop skills and expand career knowledge while earning credit toward a degree. Meet with Business Co-op Coordinator the term before starting your internship.

BT 030 Computer ABCs.....3 credits
Strongly recommend ability to type. This is a beginning computer skills course providing a supportive environment to learn basic computer operations. Through guided, hands-on in-class computer exercises and assignments, students will gain increased confidence in operating computers and prepare for entry-level computer courses. Focus is on student success.

BT 108 Business Proofreading and Editing.....4 credits
Review of language skills necessary to succeed in a business career. Practice proofreading and editing business documents. As part of a team and as an individual, the learner will analyze and apply software and reference tools to proofread, edit, and format business documents for mailing.

BT 144 Administrative Procedures.....4 credits
Prerequisite: BT 108, BT 120, and WR 121. Recommend the ability to accurately type at least 35 words per minute. Visit *lanecc.edu/business* for Business Department keyboarding guidelines or contact the instructor for details. 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 work on developing soft skills and technical skills through projects, practice, and discussions. Keyboarding, formatting, and grammar skills will also be reinforced.

BT 230 Sustainable Paperless Office Practices using Adobe Acrobat.....4 credits
Prerequisites: BT 120. Recommend the ability to accurately type approximately 30 words per minute. Visit *lanecc.edu/business* for Business Department keyboarding guidelines or contact the instructor for details. Information and document management in a paperless office; using Adobe Acrobat Professional in the paperless office to create and edit PDF documents, forms, and portfolios. Research and planning of paperless office systems; electronic record keeping; ethical, legal, and technical issues of electronic data; disaster recovery, and data security.

BT 271 Administrative Office Professional Advanced Projects.....4 credits
Prerequisites: BT 228. Recommend the ability to accurately type at least 45 words per minute. Visit *lanecc.edu/business* for Business Department keyboarding guidelines or contact the instructor for details. Students participate in dynamic business simulations while working as team members in a professional environment. Includes professional practice in using integrated software skills, applying office procedures, communicating orally, digitally, and in writing, analyzing information, making decisions, 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 the Science Division, 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. Foundational first course in anatomy/physiology. Topics include human body organization, histology and the integumentary, skeletal, articular, and muscular body systems; nervous system fundamentals and autonomic nervous system. Common clinical applications associated with these topics are presented.

BI 232 Human Anatomy and Physiology 2.....4 credits
Prerequisite: Grade of 'C-' or better in BI 231 Topics include anatomy and physiology of central and peripheral nervous systems, special senses, hematology, cardiovascular, lymphatic and immune systems. Common clinical applications associated with these topics are presented. May be offered online.

BI 233 Human Anatomy and Physiology 3.....4 credits
Prerequisite: Grade of 'C-' or better in BI 232 Topics include respiratory, digestive, urinary, endocrine, and reproductive systems. Also included are concepts of genetics, inheritance patterns and disorders. Common clinical applications associated with the topics above are presented. May be offered online.

BI 234 Introductory Microbiology.....4 credits
Prerequisite: Grade of 'C-' or better in BI 233 or instructor consent A medically oriented survey of pathogens that includes cell biology, host-microbe interactions, body defenses, microbial control, and pathogenesis, prevention and treatment of infectious diseases. Labs emphasize aseptic technique and methods of culturing, staining, isolation and identification.

Anthropology

For information, contact the Social Science Division, 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 online.

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 online.

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 online.

ANTH 227 Prehistory of Mexico ..... 4 credits
First term of a three-term sequence of Anthropology courses which deal with the 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 ..... 4 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 ..... 4 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.

Apprenticeship

For information about course content or other questions, visit *boli.state.or.us* and lanecc.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 individual programs. Students will become familiar with licensing and certification in a chosen trade. General topics include: industry opportunities and basic concepts in basic safety, trade vocabulary, trade calculations, hand and power tool care and use, blueprint reading, rigging, and materials and handling, in addition to basic communication and employability skills. 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 Electrical Wiring for the Trades ..... 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 106 Plumbing Trade Introduction ..... 2 credits
This course is designed to familiarize the student with basic plumbing practices and completion of minor repairs. In this beginning course, basic plumbing concepts and exposure to tools, safety practices, materials, codes, and plumbing opportunities will be explored. This course does not require any previous knowledge or skill in plumbing. For those seeking a career in plumbing, successful class completion may earn points that are recognized by plumbing Joint Apprenticeship and Training Committees in the State of Oregon.

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
Prerequisite of MTH 060 and 065 or MTH 070 within the past two years, or place at MTH 060 or higher on placement test through the Testing Office. Designed for Oregon state recognized apprentices employed in a 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 electrical 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 Devices, Testing Equipment and Code ..... 4 credits
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course focuses on switching devices, wire and cable terminations, and advanced testing equipment used in electronic and information technology disciplines. Emphasis is placed on developing troubleshooting skills and interpreting the National Electrical Code as it applies to installations and maintenance of low voltage systems. Students will gain knowledge of the basic theory, vocabulary and safety practices used in hook ups, testing, computer applications and specialized test equipment common to the Limited Energy Technician trades.

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 Communications ..... 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
Prerequisite: Minimum reading score of 68. Within the past four terms, completed MTH020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office. 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
Prerequisite: Minimum reading score of 68. Within the past four terms, completed MTH020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office. 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 Mic's, 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
Prerequisite: Minimum reading score of 68. Within the past four terms, completed MTH020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office. 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 and 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 and 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 185 Shielded Metal Arc Welding 1 ..... 1-4 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 OR Prior College. Skill development in SMAW, oxy-acetylene cutting, 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.

APR 186 Wire Drive Welding 1 ..... 1-4 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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.

APR 187 Fundamentals of Metallurgy..... 1-3 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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.

APR 189 Shop Practices ..... 2 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 OR Prior College. This first year course in electronics technology addresses the general lab skills and knowledge required to function safely and effectively in an electronics laboratory or shop environment. The student will be introduced to concepts in electronic circuit assembly, wire termination, and soldering. Included is an overview of electrical schematics and diagrams used in the design, assembly, and repair of electrical and electronic systems. The proper use of common lab equipment and hand tools will be covered. This is a hands-on course intended to give the student experience performing tasks that are best taught by practice. Throughout the course the underlying theme is on work site safety and the ability to follow directions.

APR 190 Electrical Theory 1..... 1-4 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 OR Prior College AND MTH060 or higher with a grade of "C-" or better, or pass a placement test through the Testing Office. 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 generators are used to measure electrical signals and troubleshoot basic electrical circuits. May be offered through Distance Learning.

APR 191 Electrical Theory 2..... 1-4 credits
Prerequisite: ET 129, EET 129, or APR 190. 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. May be offered Distance Learning.

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 second 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 240 Audio and Intrusion Systmes.....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 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 Fire Alarm Systems and Nurse Call.....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
Prerequisite: Minimum reading score of 68. Within the past four terms, completed MTH020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office. 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-off's and bid proposals by using various sets of industrial prints to provide cost estimations.

APR 251 Millwright: Pneumatics and Lubrications.....5 credits
Prerequisite: Minimum Reading Score of 68. Within the past four terms, completed MTH020 or higher with a grade of "C-" or better or placed into MTH 075 through the testing office. 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
Prerequisite: Minimum reading score of 68. Within the past four terms, completed MTH020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office. 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
Prerequisite: Minimum reading score of 68. Within the past four terms, completed MTH020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office. 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 263 Plumbing Code and Test Preparation.....2-4 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 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.

APR 285 Motors.....1-4 credits
This class addresses the concepts and principles of electromechanical devices. Emphasis will be placed on the theory and operation of AC and DC motors used in manufacturing and the HVAC industries. Transformers and power distribution systems will be studied along with adjustable frequency AC drives and stepper motors.

APR 286 Motors 2.....1-4 credits
Prerequisite: ET 229 or APR 285. This course is a continuation of Motors 1. It addresses the relationship between electromechanical prime movers and the circuit elements used in their controls. The course progresses from electrical safety to electrical symbols and diagrams to control logic and devices. The focus will be on the operation, servicing, and troubleshooting of electromechanical systems beyond their initial design. Special emphasis is placed on the development of troubleshooting skills throughout the course.

APR 290 Programmable Controllers 1.....1-4 credits
Prerequisite: Second year standing. This 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. The student will also be introduced to a variety of troubleshooting problems at both component and system levels.

APR 291 Programmable Controllers 2.....1-4 credits
Prerequisite: ET234 or APR 290. This class provides an introduction to the robot and its capabilities and explores the various tasks that robots are programmed to perform. DELETE**and Second year standing introduction to the robot and its capabilities and. This class explores the various tasks that robots are programmed to perform**. Interfacing between robots, DELETE(microcontrollers and) PLC's, and field devices are practiced with an emphasis on troubleshooting.

APR 292 Programmable Controllers 3.....4 credits
Prerequisite: ET 235 or APR 291 and 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.

Architecture - See Drafting

Art History

For information, contact the Art and Applied Design Department, Bldg. 11/ Rm. 101, 541.463.5409.

ARH 200 Graphic Design History.....3 credits
A team-taught interdisciplinary approach to graphic design history and its relationship to traditional art. Students 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 and required for graphic design majors.

ARH 202 Survey of Western Art.....3 credits
An introduction and examination of works of art that have come to define the Western visual tradition from the 5th century B.C.E. Ancient Greece and Rome to the 20th century Modern Era. May be offered through Distance Learning.

ARH 203 Survey of American Indian Art and Architecture: North and Central America.....4 credits
A survey of the artistic traditions of the native cultures from the Arctic to South-Central America. Works and sites are used to explore the various cultures of pre-Columbian America and the continuing traditions of ancestral peoples. Cultures explored will include the Mayan, Aztec, Inuit, and major nations of prehistoric and modern Canada and the United States.

ARH 204 History of Western Art 1.....3 credits
A historical survey of the visual arts from prehistory to the fall of the Roman Empire including selected works of ancient pottery, sculpture and architecture. College-level reading and writing skills are strongly recommended for success in this course.

ARH 205 History of Western Art 2.....3 credits
A historical survey of the visual arts from the early Christian era through the High Renaissance in Europe including selected works of early religious art and architecture, medieval art and manuscripts, and Renaissance painting. College-level reading and writing skills are strongly recommended for success in this course.

ARH 206 History of Western Art 3.....3 credits
A historical survey of the visual arts from the High Renaissance to present day. Including selected works of Renaissance and early modern painting, modern architecture, and new art forms including environmental and performance art. College-level reading and writing skills are strongly recommended for success in this course.

ARH 207 History of Indian Art ..... 3 credits
A historical survey of the visuals arts of India from the Indus Valley Civilization to the present day including selected works of Buddhist, Hindu, and Mughal arts, British Colonialism, and contemporary art practices. College-level reading and writing skills are strongly recommended for success in this course.

ARH 208 History of Chinese Art ..... 3 credits
A historical survey of the visuals arts of China from the Neolithic era to the present day. Including, selected works of Confucianism and Buddhism, Imperial Chinese culture, architectural forms, ink painting, and landscape traditions. College-level reading and writing skills are strongly recommended for success in this course.

ARH 209 History of Japanese Art ..... 3 credits
A historical survey of the visual arts of Japan from the prehistoric era to the present day including selected works of pottery, woodblock prints, sculpture, and architecture. College-level reading and writing skills are strongly recommended for success in this course.

ARH 211 Early Modern Art: 1850-1910 ..... 3 credits
Historical survey of the development of early "modern" art from the mid-19th century 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.

ARH 212 Twentieth-Century Art ..... 3 credits
Historical survey of 20th-century art. Examines key artist, styles and movements within a social, philosophical and political context. Course 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.

ARH 214 Arts of the United States ..... 3 credits
A historic study of the artistic traditions of the United States form the Colonial period to the early modern era. Works are used to investigate the cultural traditions of the country as they reflect its growth and development. Major topics will include Colonial portraiture, landscape and place in 19th century art, nationalism and historical moments, the West as a cultural idea, the impact of industrialism and urban culture, and early developments in modernism. May be offered online.

ARH 217 History of Middle Eastern and Islamic Art ..... 3 credits
A historical survey of the visual arts of the Middle East and Islam. Including, selected works of Mesopotamia and Persia, metalwork, Islamic ornament and architecture, miniature paintings and calligraphy. College-level reading and writing skills are strongly recommended.

ARH 218 History of Photography:1700-1910 ..... 3 credits
Explores photography from its origins in 18th century experiments to developments up to the beginning of the 20th century. Course modules examine the development of specific types of photography and how each type influenced worldviews. Photographs are examined in both cultural and critical terms, allowing students to think critically about photographs as well as their place in society. It requires the student to develop information literacy skills, as well as to improve basic research and writing skills. May be offered online.

ARH 219 History of Photography: 1910-1950 ..... 3 credits
An exploration of the origins of photography from 1910 to 1950. Course modules explore the development of specific types of photography, and how they influenced the worldviews. Photographs are examined in cultural and critical terms, allowing students to think critically about photographs as well as their place in a society. The course may be taught via distance learning, and requires the student to develop information literacy skills, as well as to improve basic research and writing skills.

ARH 220 History of Photography: 1950-Present ..... 3 credits
Study of the major commercial and artistic trends in photography from 1960 to the present. Entails critical reviews of the relationship of photography to significant cultural, political, and artistic trends of the recent past.

ART 111 Introduction to Visual Arts ..... 3 credits
Introduction to the spectrum of art from Paleolithic cave paintings to contemporary works through a combination of slide lectures, discussions, gallery/museums/public art visits, and student projects. This course expands your artistic, cultural, and historical references, as well as informs and enhances your own creative endeavors.

Art, Studio

For information, contact the Art and Applied Design Department, Bldg. 11/ Rm. 101, 541.463.5409.

ART 115 Basic Design: Fundamentals ..... 3 credits
Fundamental course in 2D Design. Emphasis on visual elements and principles in Two Dimensional Design media and processes. Student will participate in critiques, discussions and presentations of the historical and contemporary context of design. Student will create and analyze projects that demonstrate critical and creative thinking and knowledge of 2D Design theory and practice. Strongly recommended for first year art majors, taken prior to ART116 and concurrently with ART111 or ART131.

ART 115_H Basic Design: Fundamentals-Honors ..... 3 credits
This honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. WR 121-readiness (score of at least 96 on the sentence-skills placement test) recommended. See *lanecc.edu/honors* for information. 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. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

ART 116 Basic Design: Color ..... 3 credits
Fundamental course in color theory. Emphasis on color theory and 2D design concepts in multiple media and processes. Student will participate in critiques, discussions and presentations of the historical and contemporary context of the use of color. Student will create and analyze projects that demonstrate critical and creative thinking and knowledge of color theory and practice. Recommend students first take ART 115.

ART 117 Basic Design: 3-Dimensional ..... 3 credits
Beginning course on the fundamental principles of three-dimensional design for art and non-art majors. Studio projects explore basic elements such as mass, physical texture, space, delineation of space, and planes in space. A foundation course for students interested in ceramics, sculpture, architecture, and other three-dimensional design fields.

ART 118 Artist Books and Pop-up ..... 4 credits
Students will design and create original artist's books "intentional works of art created in the form of a book" using a variety of basic movable book structures and pop-up techniques. Curriculum will also focus on design process development, conceptual development and typographic layout. Coursework will demonstrate critical and creative thinking and applied learning via the knowledge and techniques of paper engineering and the history and aesthetics of the movable and pop-up books. Recommended for Art and Applied Design majors as well as non-majors. May be repeated up to 9 total credits.

ART 120 Intermediate Artist Books and Pop-up ..... 4 credits
Prerequisite: ART118 An artist book is an intentional work of art created in the form of a book. Students will create basic folded and stitched books and learn pop-up techniques. Topics: design process, conceptual development, typographic layout; history of movable, fine press and artist books.

ART 131 Introduction to Drawing ..... 3 credits
Fundamental course in drawing media. Emphasis on basic concepts of drawing and developing skills in perception, representation, composition and use of traditional drawing materials. Student will engage with critiques, discussions and the historical and contemporary context of drawing as an art form. Student will create and analyze projects that demonstrate critical and creative thinking the knowledge of drawing theory and practice. This course or equivalent ability level is a prerequisite for many 200-level studio courses. Recommend art majors take concurrently with ART 115. May be repeated up to 9 total credits.

ART 231 Drawing: Intermediate ..... 3 credits
Art 131 or instructor permission by portfolio. Emphasis on further development and exploration of drawing skills of observation, representation, composition, thematic development and critical analysis begun in ART131. Student will create and analyze projects that demonstrate critical and creative thinking and which demonstrate individual exploration of process and content. Individual and group critiques, discussions and presentations will expand the students'

perceptions of the artistic process and drawing practice and theory within historical and cultural contexts. This course is recommended before taking any 200 level painting or printmaking course. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 234 Drawing: Figure ..... 3 credits
Prerequisite: ART 131. Fundamental course in figure drawing. Students will develop representation of basic anatomical structure, proportion, foreshortening, and explore complex form relationships in value and space through drawing the human figure. Students will create and analyze projects that demonstrate creative and critical thinking, develop skills in composition, modes of individual expression, and examine the portrayal of the figure through art historical theory and context. May be repeated up to 9 total credits.

ART 240 Natural Science Drawing ..... 3 credits
Natural Science Drawing introduces students to creating representational renderings through close observation of natural subjects including botanical, animal, insect, and aquatic life. Emphasis is on accuracy, form and structure. Suitable for art, science, and general study students. Repeatable 3 times.

ART 245 Drawing for Media ..... 4 credits
From concept to finished project, the ability to develop and communicate ideas visually is an essential skill for media professionals. This course teaches pre-production design and 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. Primary focus will be on graphic development of ideas for visual communication.

ART 248 Stone Sculpture ..... 3 credits
For the beginning student who desires to learn the art of stone carving. Historical and contemporary stone sculpture is studied as a basis for understanding the medium. Students 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 is used to further understand technical and formal considerations in the work. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 250 Ceramics: Hand Building ..... 3 credits
Introduces the materials, methods, and techniques of pottery design and construction. Emphasis on basic hand building skills, simple glaze application, and an understanding of fundamental pottery processes. It also includes the development of basic hand-eye-mind coordination for good form making, an introduction of historical, cultural, and 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Also the development of basic hand-eye-mind coordination for good form making, and an introductory exploration of historical, cultural, and 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 253 Ceramics: Intermediate ..... 3 credits
Prerequisite: ART 250 and ART 251. Enhancement of ceramic wheel-throwing and hand building skills. An introduction to complex thrown and handbuilt forms with attention to good visual resolution, as well as the understanding of glaze formulation, testing, and kiln firing. Students will enhance their pottery decoration techniques,and conduct an in-depth exploration of historical, cultural, and modern trends and ideology in ceramics. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 255 Alchemy of Ceramics: Materiality, Chemistry, and Kiln Firing ..... 3 credits
Prerequisite: ART 250. This class explores the basics of ceramic chemistry, materials and kiln firing practices. This information leads to experimentation, testing for various firing ranges, color, and textural possibilities which enhances student material literacy, personal direction and goals in their studio work.

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: two- and three-dimensional fiber construction; art quilt construction, feltmaking, bookbinding, papermaking, and fabric printing; natural and synthetic dyeing; resist techniques of surface design; and chemical and mechanical techniques to manipulate cloth. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits. May be repeated up to 9 total credits.

ART 270 Printmaking: Traditional and Digital Etching ..... 3 credits
A beginning level course in non-toxic intaglio printmaking involving etching and printing using copper plates as the matrix. Traditional processes such as line etch, aquatint, drypoint, and engraving as well as digital photo etching processes will be explored. Students will design and create original editioned prints and learn perceptual skills, compositional development, and basic thematic awareness. Coursework will demonstrate critical and creative thinking, the knowledge of technical intaglio printmaking and the history and aesthetics of the medium. Recommended for Art and Applied Design majors as well as non-majors. May be repeated for up to 9 total credits.

ART 271 Printmaking; Woodcut and Linocut ..... 3 credits
A beginning level course in relief printing, including woodcut, linoleum cut and wood engraving. Students explore techniques involved in relief printmaking to design and create original edition prints. Single block, multiple block, and reduction block techniques are introduced, as well as the aesthetics and history of printmaking. Students will design and create original editioned prints and learn perceptual skills, compositional development, and basic thematic awareness. Coursework will demonstrate critical and creative thinking, the knowledge of technical relief printmaking and the history and aesthetics of the medium. Recommended for Art and Applied Design majors as well as non-majors. May be repeated for up to 9 total credits.

ART 272 Printmaking: Experimental Processes ..... 3 credits
A beginning level course in monotype and collage plate printmaking. Students explore techniques involved in creating original prints and combining processes. A variety of techniques are introduced as well as the aesthetics and history of printmaking. Students will design and create original editioned prints and learn perceptual skills, compositional development, and basic thematic awareness. Coursework will demonstrate critical and creative thinking, the knowledge of technical collage and monotype printmaking and the history and aesthetics of the medium. Recommended for Art and Applied Design majors as well as non-majors. May be repeated up to 9 total credits.

ART 273 Printmaking: Intermediate Traditional and Digital Etching ..... 3 credits
Prerequisite: ART 270 A course on non-toxic multiple plate and other color intaglio etching techniques. This course explores traditional as well as digital, photo intaglio printmaking. The class is an in-depth study for students wanting to continue with Intaglio printmaking. Students will design and create original editioned prints and learn perceptual skills, compositional development, and basic thematic awareness. Coursework will demonstrate critical and creative thinking, the knowledge of technical intaglio printmaking and the history and aesthetics of the medium. Recommended for Art and Applied Design majors as well as non-majors. May be repeated up to 9 total credits.

ART 274 Printmaking: Intermediate Woodcut and Linocut ..... 3 credits
Prerequisite: ART 271. A course in intermediate level printing techniques. It explores traditional as well as contemporary issues in Relief printmaking. The class is an in-depth study for students wanting to continue with Relief printmaking. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 275 Screen Printing ..... 3 credits
A beginning course in screen printing. Explores traditional and

experimental techniques using water-based and textile inks and emphasizes skill development, personal image making, and the creation and applications of editioned prints. Students explore established and contemporary issues in screen printing. The objective of this course is to provide students with a strong foundation in this medium. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

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, as well as the aesthetics of fabricated metal sculpture. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 278 Sculpture: Wood.....3 credits
A beginning-level course designed to strengthen and develop the student's initial capability in sculpture. Specific emphasis is on exploring wood construction and carving techniques, and their application in making sculpture. Recommended prerequisite: ART 276 or ART 117. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 280A Co-op Ed: Art and Applied Design.....3-12 credits
This course offers career-related work experience in community businesses and organizations. Students integrate theory and practice gleaned in the classroom with practical experience in the professional world. Contact the art co-op coordinator before registering. Course content and expected learning proficiencies vary term to term. Course may be repeated.

ART 281 Painting: Introduction.....3 credits
Fundamental course in painting media (acrylic). Emphasis on basic concepts of painting and developing skills in perception, representation, composition, color, and use of traditional painting materials. Student will create and analyze projects that demonstrate critical and creative thinking. Individual and group critiques, discussions and presentations will expand the students' perceptions of the artistic process and painting practice and theory within historical and cultural contexts. May be repeated up to 9 total credits.

ART 284 Painting: Intermediate.....3 credits
Prerequisite: ART 281. An intermediate-level course in oil painting. Course 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 285 Advanced Screen Printing.....3 credits
Prerequisite: ART 275. Advanced and contemporary screen-printing techniques and theory. The curriculum builds on basic skills by focusing on the continued and enhanced development of traditional and progressive techniques. Students will study application of water-based inks and fabric dyes, emphasizing the development of both skill and personal image making. This course also introduces 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 the medium. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 286 Sculpting for Animators.....3 credits
This course will introduce students to a broad range of sculpting techniques necessary to design and animate their own characters. By utilizing traditional modeling and casting techniques combined with the latest digital printing and scanning technologies, students will get hands on experience in the processes used in today's animation and gaming industries. May be repeated up to 3 total credits.

ART 291 Sculpture: Metal Casting.....5 credits
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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 292 Design Art for Public Places.....4 credits
Prerequisite: ART 115 Students will learn the politics, methods and execution of public art. They will examine case studies of the interface of art and the public, from an historical as well as an aesthetic and socio-political perspective, as well as work on a design project for a pre-determined public space.

ART 293 Sculpture: Figure.....3 credits
Intensive study of the human figure in three dimensions using live models. Emphasis on the study and theory of anatomy, proportion, and gesture. Projects are developed from modeled clay over wire armatures and may be completed in fired terra cotta. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 294 Watercolor: Introduction.....3 credits
Prerequisite: ART 131, drawing experience, or instructor consent. A beginning course in watercolor for art and non-art majors. Emphasis on introducing and understanding the watercolor medium, basic color theory, and compositional development. Students create and analyze projects that demonstrate critical and creative thinking and knowledge of watercolor media, history, and practice. May be repeated up to 9 total credits.

ART 295 Watercolor: Intermediate.....3 credits
Prerequisite: Art 294, previous college watercolor class, or intructor consent. An intermediate level course in watercolor for art and non-art majors. Emphasis on further development and exploration of technical watercolor skills, concept, composition development and critical analysis. Students create and analyze projects that demonstrate critical and creative thinking, knowledge of watercolor media, history, and practice, and which demonstrate individual exploration of process and content. May be repeated up to 9 total credits. 3.000 Credit hours

ART 296 Mural Painting Class.....4 credits
Prerequisites: ART 115 and ART 116 Students will learn hands-on about the execution of a mural, either indoor or outdoor, depending upon available client and space, by painting a mural with the instructor. Location will be determined by available space and client and agreed upon by both the college and any community partners involved.

Astronomy - See Physics

Audio - See Media Arts

Automotive

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380. You must be accepted into the Automotive program to take these classes.

AM 143 Brakes.....1-8 credits
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
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
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
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
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
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
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
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 learning in 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 will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

Aviation Maintenance

Also see Flight

For information, contact Lane Aviation Academy, Airport Road, 541.463.4195. You must be accepted into the Aviation Maintenance program to take these classes.

AV 192 General 101.....6 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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.....6 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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.....6 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 OR Prior College. Basic electricity. Technical information and laboratory projects to apply and understand theories, principles, and concepts.

AV 195 General 104.....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.....6 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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 261 Airframe 1.....6 credits
Prerequisite: MTH 085This course covers technical information and laboratory projects for the practical application and understanding of theories, principles and concepts of airframe strutures, systems and components.

AV 262 Airframe 2.....6 credits
his course covers technical information and laboratory projects for the practical application and understanding of theories, principles and concepts of airframe structures, systems and components.

AV 263 Airframe 3.....6 credits
Prerequisite: MTH 085This course covers technical information and laboratory projects for the practical application and understanding of theories, principles and concepts of airframe structures, systems and components.

AV 264 Airframe 4.....6 credits
Prerequisite: MTH 085This course covers technical information and laboratory projects for the practical application and understanding of theories, principles and concepts of airframe structures , systems and components.

AV 271 Powerplant 1.....6 credits
Prerequisite: MTH 085This course covers technical information and laboratory projects for the practical application and understanding of theories, principles and concepts of airframe structures, systems and components.

AV 272 Powerplant 2.....6 credits
Prerequisite: MTH 085This course covers technical information and laboratory projects for the practical application and understanding of theories, principles and concepts of airframe struct ures, system s and component s.

AV 273 Powerplant 3.....6 credits
Prerequisite: MTH 085This course covers technical information and laboratory projects for the practical application and understanding of theories, principles and concepts of airframe structures, systems and components

AV 274 Powerplant 4.....6 credits
Prerequisite: MTH 085This course covers technical information and laboratory projects for the practical application and understanding of theories, principles and concepts of airframe structures, systems and components.

AV 280 Co-op Ed: Aviation Maintenance.....3-12 credits
This course provides aviation maintenance-related learning in 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 will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

AV 282 Airframe Return to Service.....6 credits
Prerequisite: AV 192, AV 193, AV 194, AV 195, AV 196, MTH 075, and MTH 085. Airframe structures, systems, and components. Technical information and practical application of theories, principles, and concepts.

AV 283 Powerplant Return to Service.....6 credits
Prerequisite: AV 192, AV 193, AV 194, AV 195, AV 196, MTH 075, And MTH 085 Powerplant systems and components. Technical information and practical application of theories, principles, and concepts.

Biology

For information, contact the Science Division, Bldg. 16/Rm. 156, 541.463.5446.

BI 101 General Biology.....4 credits
BI 101 topics: atoms, molecules, cellular processes, genetics, protein synthesis, photosynthesis, respiration. All BI 101 courses are equivalent for AAOT; only one can be used to fulfill the transfer requirement for non-science majors. Additional BI 101 courses may be used as electives.

BI 101E General Biology-Ocean Life Foundations.....4 credits
Basic cellular and organismal processes. Emphasis on how marine organisms demonstrate processes and systems that involve photosynthesis, respiration, cell division, genetics, cell structure and

protein synthesis. Includes influences of physical, chemical, and geological oceanography on ocean life.

BI 101F General Biology-Survey of Biology.....4 credits
Survey course providing an overview of the molecular, genetic and cellular basis of life. Activities: lab, computer activities, lecture, group projects, and discussion. Includes current issues such as genetic testing, cloning, and cancer.

BI 101I General Biology-Botanical Beginnings.....4 credits
Students learn cellular and organism plant biology. Topics: characteristics that distinguish plants from other organisms, plant anatomy, cell structures, chemistry, photosynthesis, respiration, cell division, roles plants play in our lives. Skills: microscopy, extensive lab observations.

BI 101J General Biology-Unseen Life on Earth.....4 credits
An introduction to the cellular biology of the smallest organisms on earth. Microbes are crucial to human health, food supplies and the survival of all life forms. Students explore the diversity and contributions of microbes such as bacteria, fungi, and viruses. Online course with lab activities conducted at home.

BI 101K General Biology: Introduction to Genetics.....4 credits
This course introduces students to the rapidly evolving and increasingly relevant world of genetics. Topics: cell structure and division, DNA structure, protein synthesis, modern genetic technologies and societal applications and implications. Labs include microscope work, problem solving. May be offered online.

BI 101_H General Biology: Honors.....4 credits
This honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. WR 121-readiness (score of at least 96 on the sentence-skills placement test) recommended. See *lanecc.edu/honors* for information. BI 101 topics: atoms, molecules, cellular processes, genetics, protein synthesis, photosynthesis, respiration. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

BI 102 General Biology.....4 credits
BI 102 topics: homeostasis, feedback loops, and body systems. All BI 102 courses are equivalent for AAOT; only one can be used to fulfill the transfer requirement for non-science majors. Additional BI 102 courses may be used as electives.

BI 102C General Biology-Marine Biology.....4 credits
Overview of the structure and function of tissues, organs, and organ systems in marine invertebrate phyla and selected marine vertebrates like fish and sharks. Examines how organisms maintain homeostasis in various conditions. Activities: lab, computer activities, lecture, group projects and discussion.

BI 102D General Biology-Survey of Biology.....4 credits
Survey course providing an overview of structure and function of tissues, organs, and organ systems. Activities: lab, computer activities, lecture, group projects, and discussion. Includes current issues such as diabetes, epidemics.

BI 102E General Biology-Animal Biology.....4 credits
Students learn the physiology and function of vertebrates: fish, amphibians, reptiles, birds, mammals. Topics: evolution of unique adaptations, comparative anatomy. Activities: lab, lecture, discussion, computer/Web use. Relevant issues: endangered species, habitat loss, pollution, conservation.

BI 102G General Biology: Genetics and Society.....4 credits
Students learn human body systems with an emphasis on genetic inheritance patterns, genetic conditions and the systems they affect. Course integrates current issues in genetics and their impact on ethics and values; labs feature problem solving, critical thinking. May be offered online.

BI 102H General Biology-Forest Biology.....4 credits
Students learn the structural and physiological adaptations of Northwest forest inhabitants. Emphasis on nutrition, growth, reproduction, and their place in the forest ecosystems. Community service projects and field trips may be required.

BI 102I General Biology-Human Biology.....4 credits
Students learn human body systems, including circulatory, respiratory, urinary, reproductive, nervous, muscular, skeletal, lymphatic, digestive, and endocrine systems. May be offered online.

BI 102_H General Biology: Genetics and Society-Honors.....4 credits
This honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. WR 121-readiness (score of at least 96 on the sentence-skills placement test) recommended. See *lanecc.edu/honors* for information. Students learn human body systems with an emphasis on genetic inheritance patterns, genetic conditions and the systems they affect. Course integrates current issues in genetics and their impact on ethics and values; labs feature problem solving, critical thinking. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

BI 103 General Biology.....4 credits
BI 103 topics: ecology, evolution and the classification and natural history of organisms. All BI 103 courses are equivalent for AAOT; only one can be used to fulfill the transfer requirement for non-science majors. Additional BI 103 courses may be used as electives.

BI 103A General Biology-Birds of Oregon.....4 credits
Students learn classification, evolution, ecology, and adaptations with emphasis on Oregon birds and their behaviors. Bird identification is practiced on field trips. Current issues: endangered species, climate change and effects of humans on bird populations.

BI 103B General Biology-Field Biology.....4 credits
Students learn the interaction of organisms in various ecosystems. Topics: evolution, ecology, plant-animal relationships, natural history. Current issues: endangered species, climate change, and conservation. Activities: field trips, labs, lecture, discussion, computer/Web use.

BI 103D General Biology: Sea Birds and Mammals.....4 credits
Students learn unique anatomical and physiological adaptations of marine birds and mammals to understand evolutionary processes and ecological interactions. Students identify and classify marine birds and mammals, and examine human¬ís role in the sustainability of these magnificent creatures. Includes field trips.

BI 103E General Biology: Survey of Biology.....4 credits
Survey course providing an overview of animal and plant diversity, evolution, and ecology. Activities: field trips, lab, lecture, discussion, and group projects. Includes current issues such as human impacts on the natural world.

BI 103F General Biology-Wildflowers of Oregon.....4 credits
Students investigate plant diversity, ecological and evolutionary processes, and conservation efforts with emphasis on learning flower characteristics for plant identification. Students practice describing habitats and identifying plants on local field trips to different ecosystems.

BI 103G General Biology: Global Ecology.....4 credits
Students learn how different cultures relate to ecological and environmental changes using Oregon as a case study. Emphasis on how the values of American Indians relate to ecological regions and natural environments in Oregon. Activities: field trips, lab, lecture, discussion, and group projects.

BI 103H General Biology-Mushrooms.....4 credits
Through field, classroom, and laboratory work 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.

BI 103J General Biology: Forest Ecology.....4 credits
Students learn ecological and evolutionary processes and interrelationships in our local forest ecosystems. Students practice identification of major trees, shrubs and wildlife through extensive field work. Explores importance of forests to humans. Required field trips.

BI 103K General Biology: Animal Behavior.....4 credits
Students learn evolution and ecology through study of animal behavior with emphasis on the development, evolution, physiology and ecology of behaviors like foraging, migration, communication, mating strategies, parental care, and sociality. Activities: discussions, labs, and field trips.

BI 103L General Biology: Evolution and Diversity.....4 credits
Students learn evolutionary theory, speciation, molecular inheritance, adaptive radiation, Earth history, and origin of life. Explores diversity of life forms and advances in medical and agricultural sciences. Activities: lecture, lab, discussion, and group projects. May be offered online.

BI 103M General Biology: Biodiversity and Sustainability.....4 credits
Survey course providing an overview of animal and plant diversity, evolution, and ecology. Activities: field trips, lab lecture, discussion,

and group projects. Includes current issues such as human impacts on the natural world.

BI 103_H General Biology-Honors.....4 credits
This honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. 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. BI 101A, BI 101B, BI 101C, BI 101D, 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 taken for credit.

BI 112 Cell Biology for Health Occupations.....4 credits
Corequisite: CH 112 Introduction to human cell structure, function, respiration and division. Includes genetic concepts of DNA replication, protein synthesis, genes and inheritance. Laboratory skills: use of microscopes, identification of cell structures. With CH 112, prerequisite for Anatomy and Physiology BI 231.

BI 211 Principles of Biology.....4 credits
Prerequisite: MTH 095 with grade of 'C-' or better or place into MTH 111 or higher on math placement test. College-level writing strongly encouraged. Designed for Life Science major transfer students. Topics: cell structures and evolution, membranes, biochemical pathways, bioinformatics, and molecular genetics. Skills: microscopy, modeling, scientific paper analysis, experimental design.

BI 212 Principles of Biology.....4 credits
Prerequisites: BI 211 with grade of 'C-' or better or BI 101F or BI 112 with grade of 'A-' or better or instructor consent. College-level writing strongly encouraged. Designed for Life Science major transfer students. Topics: comparative anatomy and physiology, multicellular evolution, and diversity of Plants and Animals. Skills: experimental design, data management, descriptive statistics and cladogram construction.

BI 280 Co-op Ed: Biology.....3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of biology. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit.

BOT 213 Principles of Botany.....4 credits
Prerequisite: Grade of 'C-' or better in BI 211 and BI 212 or instructor consent. Designed for Life Science majors. Topics: evolutionary trends of flowering plants, diagnostic characteristics of plant families, species distribution and community ecology interactions. Skills: explain phylogenetic relationship between plant groups, describe plant associations and species interaction in a variety of ecosystems, proficient use of botanical keys; ecological research that includes data documentation and analysis.

GS 101 General Science (Nature of the Northwest).....4 credits
Introduction to the geology, plants and animals in Central Oregon and along the Pacific coast. Students identify rocks, flora and fauna and look at the biodiversity between habitats on required field trips. Includes environmental issues and a scientific inquiry project.

Z 213 Principles of Zoology.....4 credits
Prerequisite: Grade of 'C-' or better in BI 211 and BI 212 or instructor consent. Survey of comparative vertebrate anatomy, vertebrate evolution, cladistics, and ecology. Skills: dissection, digital documentation, cladogram construction, and mathematical models in biology. Designed for Life Science Majors. College-level writing and math skills strongly encouraged.

Botany - See Biology

Broadcasting - See Media Arts

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 course will provide you with an overview of business. We will cover basic concepts in accounting, finance, economics, management and marketing. This course will help you to choose in which field of business you will later specialize.

BA 206 Management Fundamentals.....4 credits
Prerequisites: BA 101. This course is a survey of management and what makes a successful manager. Content includes planning, decision making, organizing, leadership, motivation, communication, control, and a thorough overview of the field of management. The course 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.

BA 214 Business Communications.....4 credits
Prerequisites: BT 108 and WR 121. Introduction to communication theory with emphasis in writing direct, indirect, and persuasive letters, and a formal researched report. Introduction to appropriate formatting of business documents using proper grammar, formatting, tone, and effectiveness. Business-related presentations that inform, recommend, and train will be given.

BA 222 Financial Management.....4 credits
Prerequisite: MTH 105 or higher, BT 123, BA 211 This course concerns how companies make financial decisions. A large company may have hundreds of thousands of shareholders each of which has a different amount of wealth, tolerance for risk and time horizon in which to invest. How should a financial manager decide in what to invest, and how to pay for those investments? In this course, you will learn how to value financial assets. You will also learn how risk affects these valuations and apply techniques to manage such risk. You will learn some of the advantages and disadvantages of financing investments with borrowed money.

BA 223 Marketing.....4 credits
Prerequisites: BA 101. Marketing is misunderstood, even by business leaders. Most people think that marketing is just sales, but marketing is much more than sales. In order to be successful, businesses must create products that consumers want, price them competitively, distribute them to where they are demanded, and promote their value. Marketing involves all of these things, and this course will give you practice making decisions related to all areas of marketing.

BA 224 Human Resource Management.....4 credits
Prerequisites: BA 101. This course is an introduction to Human Resource Management . The cour se is designed to explore the functions, roles, and value of Human Resources. Discussion topics include aspects of planning, talent acquisition , performance management, employment laws, motivation, employee relations, and workforce development. May be offered online.

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.

BA 238 Sales.....3 credits
Prerequisite: BA 101. A beginning class in the basic techniques of selling. Course content includes: prospecting, pre-approach, presentation, demonstration, objections and closing. Selling as a career is throughly expored. Some emphasis will be placed on selling in the retail environment. The course is specifically designed to look at the marketing and psychology of relationship selling.

BA 249 Retailing.....4 credits
Prerequisites: BA 223. 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.

BA 250 Small Business Management.....4 credits
Prerequisites: BT 123 and BA 223. This course is a 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.

BA 278 Leadership and Team Dynamics.....4 credits
This course focuses on developing the leadership potential of emerging leaders, and it also enhances students' understanding of teams, thereby increasing their effectiveness as team members. Leadership philosophies, ethical issues, articulating visions, and ways to empower others will be explored through readings, activities, and discussions.

BA 280 Co-op Ed: Business Management .....3-12 credits
Prerequisite: BT 206. In this internship course students will gain work experience in area businesses related to supervision, management, and business operations. Students will integrate theory and practice, develop skills, and expand career knowledge while earning credit toward a degree. Meet with Business Co-op Coordinator the term before starting your internship.

BA 280CS Co-op Ed: Customer Service .....3-12 credits
Completion of BT 206 is highly recommended. In this internship course students will gain customer service work experience in area businesses and organizations. Students will integrate theory and practice, develop skills and expand career knowledge while earning college credit. Meet with Business Co-op Coordinator the term before starting your internship.

BA 281 Personal Finance.....4 credits
As a comprehensive introduction to personal finance, the course covers budgets, personal banking, consumer credit, credit institutions, insurance, investing, stocks, bonds, retirement planning, and paying for college. Analytical tools are applied to optimize personal decision making.

BT 181 Customer Service.....4 credits
Learn basic concepts of high-quality customer service and practice applying these concepts to real life situations. This course focuses on developing an attitude of superior customer service which is critical to success in all organizations. Students will have the opportunity to become certified Guest Service Gold Professional through the Oregon Restaurant and Lodging Association.

BT 206 Co-op Ed: Business Seminar.....2 credits
Prerequisite: BA 101 and BT 120. Students will increase their understanding of industry expectations as well as develop job search tools and skills. Course 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.

BT 253 Digital Marketing .....4 credits
This course will demonstrate how the web enables market research on prospects' needs and wants. It will identify which tools can be used to collect data about customers and illustrate how digital marketing resources bring into focus the profiles and behaviors of market segments. The course will focus on digital marketing tools and how to evaluate their effectiveness.

BT 291 Operations Management.....4 credits
Prerequisite: BA 101 and BT 123. This course addresses the design and control of processes of production for both goods and services. The course covers business operations for improvements in efficiencies and effectiveness in terms of meeting customer requirements. It addresses managing the process that converts inputs (raw materials, labor, and energy) into outputs of goods and/or services.

PPPM 281 Introduction to the Nonprofit Sector.....4 credits
This course provides a multidisciplinary overview and survey of the nonprofit sector. We will look at the development, evolution, and future of the nonprofit sector; compare and contrast nonprofits with the private and public sector; and explore issues specific to nonprofit success and development.

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 140 Career and Life Planning .....1-3 credits
This course focuses on self-assessment, career exploration, and goal setting, using a variety of activities and resources. You will gain insight into your interests, strengths, skills, values, and life roles; research majors and career fields; and create a vision and next steps for your future.

Chemistry

For information, contact the Science Division, Bldg. 16/Rm. 156, 541.463.5446.

CH 104 Introduction to General Chemistry .....5 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. The first term of the standard General, Organic and Biological Chemistry sequence. Designed for students needing a laboratory based introduction to chemistry. Includes measurement, atomic structure, states of matter, bonding, reactions, stoichiometry, gases, solutions, equilibrium, and acid/base chemistry. Lecture and laboratory.

CH 106 Introduction to Organic and Biological Chemistry .....5 credits
Prerequisite: Grade of C- or better in CH 104 or instructor consent. The second term of the standard General, Organic and Biological Chemistry sequence. This introduction to organic and biological chemistry includes hydrocarbons, alcohols, aldehydes, carboxylic acids, carbohydrates, lipids, proteins and an introduction to metabolic pathways. Lecture and lab.

CH 112 Chemistry for Health Occupations.....4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Corequisite: BI 112. Introduction to atoms, bonding, acid/base chemistry and chemical reactions relevant to biological systems. Topics include metabolic pathways and function and structure of carbohydrates, lipids, proteins and nucleic acids. Lecture/Recitation. With BI 112, the prerequisite for Anatomy and Physiology BI 231.

CH 114 Introduction to Forensic Chemistry .....4 credits
Prerequisite: MTH 020 or above with grade of "C-" or better or pass placement test. An introduction to chemistry in a forensic context. Topics may include measurement, density, soil chemistry, chromatography, the chemistry of fire, DNA, and organic and inorganic data collection and analysis. Relationships between scientific disciplines are explored. Lecture and laboratory.

CH 150 Preparatory Chemistry.....3 credits
Prerequisite: MTH 065 or above with grade of "C-" or better or pass placement test. Designed to prepare students with minimal chemistry experience to take CH221. Topics include measurement, significant figures, dimensional analysis, density, nomenclature, atoms, stoichiometry, gases, solutions and heat; includes problem solving methods and calculations. Lecture/Recitation.

CH 221 General Chemistry 1.....6 credits
Prerequisite: MTH 095 with grade of 'C-' or better or place into MTH 111 or higher on math placement test. First course of the traditional general chemistry sequence designed for science, engineering and health science majors. Introduces measurement, atoms, stoichiometry, gases, thermochemistry and electronic structure and periodicity. Lecture and laboratory with online lecture for Laboratory. Lab emphasizes green chemistry.

CH 222 General Chemistry 2.....6 credits
Prerequisite: Grade of 'C-' or better in CH 221. Second course of the traditional general chemistry sequence designed for science, engineering and health science majors. Introduces bonding, condensed phases, solutions, kinetics and concepts of equilibrium. Lecture and laboratory with hybrid lab lecture; lab emphasizes green chemistry and real world applications.

CH 223 General Chemistry 3.....6 credits
Prerequisite: Grade of 'C-' or better in CH 222. Third course of the traditional general chemistry sequence designed for science, engineering and health science majors. Builds on previous topics and includes applications of equilibrium, acid/base chemistry, redox/electrochemistry, thermodynamics, nuclear chemistry and introductory organic chemistry. Lecture and laboratory with hybrid lab lecture. Lab emphasizes real world applications.

CH 241 Organic Chemistry.....6 credits
Prerequisite: Grade of 'C-' or better in CH 222 First course of organic chemistry sequence for science and health science majors, with a green chemistry emphasis. Introduces organic functional groups, emphasizing hydrocarbons, with bonding theory, nomenclature, and reaction mechanisms. Lecture and laboratory.

CH 242 Organic Chemistry.....6 credits
Prerequisite: Grade of 'C-' or better in CH 241. Organic chemistry for science and health science majors, with a green chemistry emphasis. Topics include alcohols, ethers, aromatics, conjugated systems, aldehydes, and ketones. Lecture and laboratory.

CH 243 Organic Chemistry.....6 credits
Prerequisite: Grade of 'C-' or better in CH 242 Organic chemistry for science and health science majors, with a green chemistry emphasis. Topics include carbonyl systems, nitrogen containing organic compounds, conjugated/aromatic systems, and organic compounds of biochemical significance. Lecture and laboratory.

CH 280 Co-op Ed: Physics-Chemistry.....3-12 credits
This internship course offers a work experience that integrates theory and practice in the fields of physics or chemistry. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit.

GS 105 Physical Science.....4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. GS105 is a basic introduction to chemistry for non-science majors, including the periodic table of the elements, chemical formulas, simple reactions, gas laws, energy, and simple organic structures. Includes laboratory practice.

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 emphasizes practice and active learning of skills and strategies that help create greater academic, professional and personal success. College Success strategies empower students to make wise choices that lead to improved experiences and outcomes in college and beyond. May be offered as a telecourse.

CG 100BC College Success-Back on Course.....1 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 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. May be offered as a telecourse.

Communication

For information, contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.

COMM 100 Basic Communications.....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 diverse 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 online.

COMM 105 Listening and Critical Thinking.....4 credits
This course is designed to develop understanding and appreciation for listening as a vital element in the communication process. We expect students to improve proficiency through practice in a variety of settings and through exercises with diverse speakers and subjects.

COMM 111 Fundamentals of Public Speaking.....4 credits
This course is designed to help students learn to express their ideas to an audience with confidence and clarity. The aim of this course is to teach students to speak in a public setting by preparing presentations on a number of diverse topics for use on a variety of occasions. This course provides students with opportunities to learn how to analyze an audience and tailor their messages to that audience. In addition, students will learn to become critical listeners by analyzing and critiquing other students' presentations.

COMM 111_H Fundamentals of Public Speaking.....4 credits
This honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. See *lanecc.edu/honors* for information. This course is designed to help students learn to express their ideas to an audience with confidence and clarity. The aim of this course is to teach students to speak in a public setting by preparing presentations on a number of diverse topics for use on a variety of occasions. This course provides students with opportunities to learn how to analyze an audience and tailor their messages to that audience. In addition, students will learn to become critical listeners by analyzing and critiquing other students' presentations.

COMM 112 Persuasive Speech.....4 credits
This course is designed help students understand the persuasive communication process so that they can prepare effective persuasive presentations and evaluate persuasive messages. Students will develop their proficiency through speech preparation and presentation, written analyses, and argumentation practice.

COMM 115 Introduction to Intercultural Communication.....4 credits
This course addresses how work, study or travel influences intercultural interactions. A variety of topics will illustrate how differing values, beliefs, attitudes, and social systems effect verbal and nonverbal human communication behaviors. Students will develop awareness, understanding, and sensitivity to cultural diversity of cocultures as well as different nations. May be offered online.

COMM 130 Business and Professional Communication.....4 credits
Business and Professional Communication is designed to increase student understanding and implementation of effective communication behaviors and skills. Throughout the term students will learn to recognize, understand, and perform communication in settings common to business and the professions. Instruction includes interpersonal communication, small group communication, interviewing, proposal presentation and more. In addition, attention will be given to presentational aids, both traditional and computer generated. May be offered online.

COMM 218 Interpersonal Communication.....4 credits
This course is designed to increase a student's understanding and use of effective interpersonal communication behaviors 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 to verbal and nonverbal communication, self-concept, effective listening, and relationship development. May be offered online.

COMM 219 Small Group Communication.....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 both in and out of the workplace. Students will consider the unique challenges found only in group communication setting. Students will have the opportunity to participate in a variety of small groups activities as well as an on-going group that presents a solution to a problem.

COMM 220 Communication, Gender and Culture.....4 credits
This course is intended for people who are interested in increasing their knowledge and awareness of differences in feminine and masculine communication styles. We will explore how communication, gender, and culture interact to influence perceptions and expectations of gender roles. May be offered online.

COMM 221 Advanced Public Communication.....1-2 credits
This class is designed to give you experience in the practice of researching, preparing, analyzing, and delivering public presentations. You will learn how to develop and deliver messages that are appropriate and effective for the audience, purpose, and cont ext . In this class you will improve skills in composition and delivery of speeches representative of common public communication situations. Great for those wishing to enhance communication skills that are sought after in a competitive job market. This class is perfect for

all careers especially teaching , sales, law, management, public service, journalism, marketing, and public relations.

COMM 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, speech pathology majors, and English Language Learners, as well as others who want to improve the sound of their speech.

Computer Hardware Repair - See Electronics

Computers: Introduction/Information Systems/Computer Science

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, (541) 463-5221.

CIS 100 Computing Careers Exploration ..... 1 credits
This course provides an orientation for students who are considering programs of study and careers in computer information technology. 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, professional development, and ethical issues that confront computer information professionals.

CIS 101 Computer Fundamentals ..... 4 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, database, and Internet software. May also be offered through Distance Learning.

CIS 125D Software Tools 1: Databases ..... 4 credits
Prerequisite: Basic computer literacy skills. Fundamental relational database concepts, vocabulary, functionality and skills are covered. Students will apply those skills in a series of hands-on case problems where they design, implement, test, debug and document relational database solutions to case problems.

CIS 125G Software Tools 1: Game Development ..... 4 credits
Prerequisite: Basic computer literacy. 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 design and 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 125M Software Tools: Mobile Development ..... 4 credits
Prerequisite: Basic computer literacy. This course provides students with no programming background with an introduction to mobile application development. Students will use a visual, drag and drop tool to build applications for the Android and will be introduced to fundamental programming concepts and skills in the process.

CIS 126 Game Design: Principles and Practices ..... 4 credits
In this course, students will learn and apply game design principles in order to turn their ideas into interesting and engaging games. Students will develop and refine these ideas through prototyping and testing throughout the course. No prior programming background is required for this course.

CIS 135G Software Tools 2: Game Development ..... 4 credits
Prerequisite: CIS 125G and one of CS 162J, CS 162C+, or CS 233N or instructor's permission. 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 engine and will design and create several games.

CIS 140U Introduction to Unix/Linux ..... 4 credits
Introduces the Unix/Linux operating system. Topics: Fundamental Unix/Linux command set, editors, shell scripts, file system security, and installation of the operating system. Provides experience using the graphical user interface as well as the command line to perform end-user operations and basic system administration.

CIS 140W Introduction to Operating Systems: Windows Clients ..... 4 credits
Prerequisite: Digital Literacy. Introduction to operating system and components using Windows. This course provides theory and hands-on experience using and configuring Windows. Covered topics include: user interfaces, accounts, processes and scheduling memory, file systems and file permissions, multimedia codecs, networking, and basic security.

CIS 195 Web Authoring 1 ..... 4 credits
Prerequisite: Basic computer literacy and file management. This course provides students with little computer experience the concepts and skills necessary to create static web pages using the current versions of HyperText Markup Language (HTML) and Cascading Style Sheets (CSS). Through hands-on practice students will master the concepts, tools and skills needed to construct web pages and publish pages to the internet. May be offered online.

CIS 225 Computer End-User Support ..... 4 credits
Prerequisite: CIS 125D, and CS 179, or instructor consent. Prepares students to support end-users in a variety of organizational settings. Topics: End-user support functions, techniques for developing/delivery training, help-desk operations, troubleshooting/problem solving, and end-user interaction. Taught in a lab environment.

CIS 244 Systems Analysis ..... 4 credits
Prerequisite: CIS 125D and CS133N or CS 161C+ or CS 133P or instructor consent. This course provides foundational principles in systems analysis and development using an object oriented approach. Topics include: requirements gathering, iterative development, documenting work-flows, domain modeling with Unified Modeling Language (UML), database, agile techniques and use cases. Current issues of communication and connectedness via end of chapter case studies will take you through many aspects of system analysis. Students will use graphical and/or drawing software for modeling diagrams.

CIS 245 Project Management ..... 4 credits
Prerequisites: Basic computer literacy and software application skills. This course covers essential skills needed to manage small-scale projects. The course features the phases of the project life cycle including 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 276R Data Integration, Analytics and Reporting ..... 4 credits
Prerequisite: CS275 This course covers database connectivity, data analytics, database design, and data mining and warehousing methodologies including star schemas and online analytical processing. It utilizes tools and hands-on activities to perform data integration, reporting, and data extraction and migration.

CIS 287 Microcomputer Hardware ..... 1-4 credits
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.

CS 120 Concepts of Computing: Information Processing ..... 4 credits
This course provides a wide range of topics in the Computer Information Technology 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 information technology on individuals and society. NOTE: For the Associate of Arts Oregon Transfer degree (AAOT), CS 120 is now counted as an open elective. Offered as hybrid and online.

CS 133JS Beg. Programming: JavaScript ..... 4 credits
Prerequisite: MTH 060 or higher and CIS 195 Web Authoring I (formerly CS 195) or instructor consent. This course provides students with the concepts and skills required to create dynamic, interactive Web pages using client side JavaScript. May be offered online.

CS 133N Beginning Programming: C# ..... 4 credits
Prerequisite: MTH 060 or higher. This is the first in a sequence of 3 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 development environment. May be offered online.

CS 133P Beginning Programming: Python ..... 4 credits
Pre-requisite: MTH060 or higher. This course provides students with little or no programming experience with an introduction to

fundamental programming concepts and skills as well as the syntax and semantics of the Python programming language.

CS 160 Orientation to Computer Science.....4 credits
Prerequisite: MTH 095, or MTH 111, or MTH 241, or placement test into MTH 111. This course explores the discipline and profession of computer science. It provides an overview of computer hardware architecture, the study of algorithms, software design and development,programming languages, data representation and organization, computer networks and security, ethics and the history of computing and its influences on society. May be offered online.

CS 161C+ Computer Science 1.....4 credits
Prerequisites: CS 161J (formerly CS 161) or CIS 125G or CS 160 or MTH 095 or higher (with the exception of MTH 098) or instructor consent. This course is an introduction to software design, development and testing. It covers basic syntax and semantics of C++, data types, and algorithm and program design. Development tools and object-oriented programming are introduced. May be offered online.

CS 162C+ Computer Science 2.....4 credits
Prerequisite: CS 161C+ or instructor consent. This course is a continuation of Beginning C++ programming. 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. May be offered online.

CS 179 Introduction to Computer Networks .....4 credits
Prerequisite: Basic computer literacy. 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 online.

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).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 206 Co-op Ed: Computer Information Technology Seminar.....2 credits
Prequisite: CIS 100. Students will increase their understanding of industry expectations as well as job search tools and skills. Course 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, their professional careers.

CS 233JS Intermediate Programming: JavaScript.....4 credits
Prerequisite: CS 133JS and CS 233NThis is the second in a sequence of two JavaScript programming courses. The sequence teaches students to develop client-side or front-end code for browser-based applications. The course introduces intermediate-level programming concepts and skills as well as JavaScript.syntax, tools, and frameworks required for modern front-end development.

CS 233N Intermediate Programming C#.....4 credits
Prerequisites: CS 133N or CS 161C+. This is the second in a sequence of 3 courses that teaches students to develop desktop applications in *the .NET* environment. The course introduces intermediate level programming concepts and skills and C# syntax and allows students to develop object oriented applications.

CS 233P Intermediate Programming: Python .....4 credits
Prerequisite: CS133P. The course introduces intermediate level programming concepts and skills and Python syntax. Topics will include: list processing, interacting with the file system, file processing, regular expressions, and reporting.

CS 234N Advanced Programming: C#.....4 credits
Prerequisite: CS233 This is the third in a sequence of 3 courses that teaches students to develop desktop applications in *the .NET* environment. The course introduces advanced level programming concepts and skills and C# syntax. It allows students to develop more sophisticated object oriented, data driven desktop applications.

CS 235AM Intermediate Mobile Application Development: Android.....4 credits
Prerequisite: CS 233N or CS 162J or CS 162C+. This course introduces students to applying object oriented programming to mobile application development and the Android System Devlopment Kit. Cross-platform mobile app developpment will be done using the Mono framework and the MonoDevelop IDE. May be offered online.

CS 235IM Introduction to Mobile Applications Development: IOS.....4 credits
Prerequisites: CS 233N or CS 162J or CS 162C+. This course introduces students to the application of object oriented programming to mobile application development for devices running IOS.

CS 240U Advanced Unix/Linux: Server Management.....4 credits
Prerequisite: CIS 140U and CS 179, or instructor consent. Covers network administration of Unix/Linux. Topics: Operating system installation, configuration, troubleshooting, and network server configuration (for example: DHCP, DNS, NFS, Samba, Apache, databases, and security). The course has a hands-on focus.

CS 240W Advanced Windows: Server Management.....4 credits
Prerequisite: CIS140W or CS 179 or instructor consent. This course covers advanced Windows Server operating system and networking concepts. Topics covered include: installation, configuration, virtualization, Active Directory, scripts, DNS, file systems, group policy, networking, web servers, and DHCP. May be offered online.

CS 246 System Design.....4 credits
Prerequisites: CS 260 or CIS 135G or CS 295N (formerly CS 295A). In this course, students will learn to design and plan software systems. Topics covered will include requirements gathering, design evaluation and documentation, testing, and object-oriented program design. By the end of the course, students will have produced a design for a significant software project in a team environment.

CS 260 Data Structures 1.....4 credits
Prerequisite:CS162C+ or CS 162J or CS 233N 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 273 Introduction to Virtualization and Cloud Computing.....4 credits
Prequisite: CS 279, CS 240W. This course introduces the student to virtualization technologies and the fundamentals of cloud computing, to include essential characteristics of a cloud environment, various cloud services and deployment models, the role of virtualization in cloud computing, and major cloud providers. Students will also explore some of the challenges of cloud deployment, with emphasis in the areas of security and business continuity.

CS 275 Database Systems and Modeling.....4 credits
Prerequisites: CS133N or CS 161C+ or CS 133P and CIS 125D or instructor consent. This is an introduction to production-scale, relational database environments. Included in the course are discussion and application of database models, entity relationship design, normalization, and an introduction to SQL query usage and development.

CS 276 Database SQL Programming.....4 credits
Prerequisite: CS 275. Focuses on design, development, and implementation of SQL programming in an enterprise database environment. Covers creating and maintaining database objects and writing complex interactive and embedded SQL statements for data retrieval and manipulation.

CS 279 Essentials of Network Administration.....4 credits
Prerequisite: CS 179. Provides students with an in-depth understanding of key networking concepts and tools enabling them to be successful in the more advanced networking courses and as networking professionals. Example topics: Network design/mapping, TCP/IP protocols, IP addressing, port numbers, routing protocols, and protocol analysis software.

CS 280CN Co-op Ed: Computer Network Operations.....3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of computer networking. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 280GD Co-op Ed: Computer Simulation and Game Development.....3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of computer simulation and game development. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 280HI Coop Ed: Health Informatics.....3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of health informatics. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 280IS Co-op Ed: Computer Information Systems.....3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of computer information systems. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 280PR Co-op Ed: Computer Programming.....3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of computer programming. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 284 Network Security Fundamentals.....4 credits
Prerequisite: MTH 082 or higher or instructor consent. This course covers fundamental computer and network security concepts. It emphasizes securing the operating system, applications, media, network devices, web pages, 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. May be offered online.

CS 285 Operating System Hardening.....4 credits
Prerequisite: CS 240W and CS 284, or instructor consent. Corequisite: CS 240U. 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 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 288 Network Monitoring and Management.....4 credits
Prerequisite: CS 240U, CS240W and CS 289 or instructor consent. Covers network monitoring and management for network administrators. Topics: Analyzing network traffic, monitoring servers and internetworking devices, configuration management solutions, and tools/skills for maintaining acceptable network performance. Functions as a capstone course for the network degree.

CS 289 Cisco Router and Switch Administration.....4 credits
Prerequisite: CS 279 or instructor consent. Covers configuration of Cisco routers and switches. Deals with modern networking processes and protocols used by internetworking devices with particular emphasis on routers. Routing protocols, NAT, and Access lists are also covered. Course has a hands-on focus.

CS 295N Web Development 1: ASP.NET.....4 credits
Prerequisite: CS 133JS and CS 234N (may be taken same term as CS 295N), 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.....4 credits
Prerequisite: CS 133JS or instructor consent. This course provides students who have working knowledge of HTML 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 online.

CS 296N Web Development 2: ASP.NET.....4 credits
Prerequisite: CS295N 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. Note: CS 296N was formerly numbered CS 296A. A student who has taken this class under the previous number may not take it again under this new number and receive duplicate credit.

CS 296P Web Development 2: PHP.....4 credits
Prerequisite: CS 295P or instructor consent. This is the second course in the (server-side) PHP 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.

CS 297 Programming Capstone.....4 credits
Prerequisite: CS 246 or instructor consent. This is the final course for both the Computer Programming and Computer Simulation and Game Development programs. This course ties together the topics covered in the Ô¨Årst and second year courses. It emphasizes practical application and problem solving and is project oriented. Students will work in teams to create a working, non-trivial software application using current technologies and methodologies. Note: CS 297 was formerly numbered CS 297P. A student who has taken this class under a previous number may not take it again under this new number and receive duplicate credit.

HI 209 Networking, Interoperability and Health Information Exchange.....3 credits
Prerequisite: CS179, HI 107, HI 111 and HI 208 or instructor consent. In-depth analysis of data mobility including the hardware infrastructure (wires, wireless, and devices supporting them), the ISO stack, standards, Internet protocols, federations and grids, the NHIN and other nationwide approaches. May be offered online.

Computers: Keyboarding

For information about classes with course numbers that begin with:

BT - Contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.
SKD - Contact Academic Learning Skills, Center Bldg./Rm. 218, 541.463.5439.

BT 015 Keyboard Skillbuilding.....3 credits
Students will diagnose and correct keying deficiencies through prescribed drills leading to improved speed and accuracy while keying by touch. Students will also create and correctly format business documents.

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.

Computers: Software Application

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

BT 120 MS WORD for Business.....4 credits
Prerequisite: Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute. As an introduction to word processing, students apply MS WORD to create business documents. Focus is on reviewing Windows; editing and formatting documents; applying document refinements to enhance written communication; working efficiently using mail merge and macros; working with shared documents; and managing documents. This course will also explore Google docs and their business application.

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. Visit *lanecc.edu/business* for Business Department keyboarding guidelines or contact the instructor for details. Using current PowerPoint software, students create, modify, customize and preview slide show presentations. Students manage documents and work with text, visual elements, and program features that enhance slide shows. Design principles are applied to create professional looking presentations. This course will also explore Google slides and their business application.

BT 123 MS EXCEL for Business.....4 credits
Prerequisite: CIS101 or CS120 or BT120 and MTH 065 or higher or equivalent math placement test. Recommend the ability to accurately type 30 words per minute and key 130-132 strokes per minute on an electronic calculator (or numeric keypad). Visit *lanecc.edu/business* for Business Department keyboarding guidelines or contact the instructor for details. 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. This course will also explore Google sheets and their business application.

BT 150 Business Web Pages with WordPress.....3 credits
Introduction to web concepts, HTML5, CSS3, and incorporating graphics into a business web page with an emphasis on creating and maintaining business web page maintenances, including business web concepts, use of HTML5, CSS3, and incorporating business graphics into a business web page. Focus will be on project completion of a major web site update for a local business, not-for-profit agency, or a web project for the school.

BT 163 QuickBooks.....4 credits
Prerequisites: BT165. 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.

BT 220 MS WORD for Business - Expert.....3 credits
Prerequisite: BT 120. Recommend the ability to accurately type at least 35 words per minute. Visit *lanecc.edu/business* for Business Department keyboarding guidelines or contact the instructor for details. A review and extension of MS WORD for Business; application of advanced formatting features in the development of professional business documents. Using workgroup collaboration and file sharing features and formatting lengthy business documents.

BT 223 MS EXCEL for Business-Expert.....4 credits
Prerequisites: BT 123 and MTH 095 or higher, or instructor consent. Recommend the ability to type 30 words per minute. Visit *lanecc.edu/business* for Business Department keyboarding guidelines or contact the instructor for details. Advanced Excel functions for business problem solving. Focus on creation of effective business spreadsheets to assist managers in decision making.

BT 228 Integrated Office Applications.....4 credits
Prerequisites: BT 123, BT 144, BT 220. Recommend the ability to accurately type at least 40 words per minute. Visit *lanecc.edu/business* for Business Department keyboarding guidelines or contact the instructor for details. Advanced software applications course to review, apply, and expand skills. Students need a strong background in MS Word and MS Excel and familiarity with PowerPoint and Access. New skills include practice with other applications and current Web technologies. Emphasis on problem solving and creativity. Continued development of keyboarding skills.

Construction

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

CST 110 Blueprint Reading 1.....3 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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 RD 087 And EL115 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 RD 087 And EL115 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 201 Sustainable Building Practices.....3 credits
Overview of sustainable construction practices currently applied in the industry. Following the "Leadership in Energy and Environmental Design" (LEED) standards, students will explore site and land use, water, materials, energy, atmosphere, and indoor environmental quality.

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 construction-related learning in 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 will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

Cooperative Education/Internships

For information, contact the Cooperative Education Division, Bldg. 19/Rm. 265, 541.463.5203.

AM 280 Co-op Ed: Automotive ..... See page 159
ART 280A Co-op Ed: Art and Applied Design..... See page 158
ART 280GD Co-op Ed: Graphic Design..... See page 187
AV 280 Co-op Ed: Aviation Maintenance..... See page 159
BA 280 Co-op Ed: Business Management ..... See page 162
BA 280AA Co-op Ed: Administrative Professional..... See page 150
BA 280AC Co-op Ed: Accounting ..... See page 150
BA 280CS Co-op Ed: Customer Service ..... See page 162
BI 280 Co-op Ed: Biology..... See page 161
BT 206 Co-op Ed: Business Seminar..... See page 162
CA 280 Co-op Ed: Culinary Arts, Second Year..... See page 169
CH 280 Co-op Ed: Physics-Chemistry ..... See page 163
CJA 280 Co-op Ed: Criminal Justice .....See page 169

COOP 206 Co-op Ed: Internship Seminar.....1-2 credits
Students will increase their understanding of industry expectations while developing job search tools and skills. Students will learn and practice presenting themselves to employers in a competent and professional manner in preparation for a cooperative education internship and, ultimately, a professional career. Coursework is delivered online.

COOP 280 Co-op Ed.....1-2 credits
See department for topics.

COOP 280SL Co-op Ed: Service Learning ..... 1-12 credits
Gain work experience with community partners in addressing real community needs. Through this internship students practice critical thinking, citizenship and civic responsibility, develop skills, explore career options, and network with professionals while earning college credit. Students set learning objectives and engage in faculty-led guided reflection activities.

COOP 280SV Service Learning: Food for All ..... 1-3 credits
Work with community partners addressing hunger and the need for food by people in Lane County. Through this internship students practice critical thinking, citizenship and civic responsibility, develop skills, explore career options, and network with professionals while earning college credit. Students set learning objectives. (This course may be part of the "What the World Eats" learning community.)

COOP 280_H Co-op Ed: Service Learning-Honors ..... 3-12 credits
This honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. WR 121-readiness (score of at least 96 on the sentence-skills placement test) recommended. See *lanecc.edu/honors* for information. Prerequisite: Instructor approval. Gain experience with community partners in addressing real community needs. Practice critical thinking, citizenship and civic responsibility, explore career options, and network with professionals while earning college credit. In this Honors section students will actively engage, investigate and reflect on topics leading to enhanced knowledge and skills.

CS 206 Co-op Ed: Computer Information Technology Seminar ..... See page 165
CS 280CN Co-op Ed: Computer Network Operations ..... See page 165
CS 280GD Co-op Ed: Computer Simulation and Game Development ..... See page 166
CS 280HI Coop Ed: Health Informatics ..... See page 166
CS 280IS Co-op Ed: Computer Information Systems ..... See page 166
CS 280PR Co-op Ed: Computer Programming ..... See page 166
CST 280 Co-op Ed: Construction ..... See page 167
DA 206 Co-op Ed: Dental Assisting Seminar ..... See page 171
DA 280 Co-op Ed: Dental Assisting ..... See page 171
DH 280 Co-op Ed: Dental Hygiene ..... See page 173
DRF 206 Co-op Ed: Drafting Seminar ..... See page 174
DS 280 Co-op Ed: Diesel ..... See page 174
ED 280 Co-op Ed: Education ..... See page 177
ED 280EC Co-op Ed: Early Childhood Education ..... See page 177
EMT 280P1 Co-op Ed: EMT Internship Part 1 ..... See page 179
EMT 280P2 Co-op Ed: EMT Internship Part 2 ..... See page 179
ENGR 280 Co-op Ed: Engineering ..... See page 180
ENGR 280D Co-op Ed: Drafting ..... See page 174
ENGR 280M Co-op Ed: Manufacturing Technology ..... See page 198
ENGR 280W Co-op Ed: Welding ..... See page 181
FL 280IW Co-op Ed: International Work Experience ..... See page 193
FT 280 Co-op Ed: Flight Tech ..... See page 185
G 280 Co-op Ed: Geology ..... See page 176
G 280ES Co-op Ed: Environmental Science ..... See page 176
GIS 280 Co-op Ed: Geographic Information Science ..... See page 186
HE 280 Co-op Ed: Health Occupations ..... See page187
HE 280PH Co-op Ed: Public Health ..... See page 213
HIM 206 Co-op Ed: Employment in Healthcare: HIM Seminar ..... See page 188
HIM 280 Co-op Ed: Health Information Management ..... See page 188
HRTM 280 Co-op Ed: Hospitality Management ..... See page 190
HS 280 Cooperative Education: Human Services ..... See page 192
IDS 280S Co-op Ed: Sustainability Coordinator ..... See page 223
J 280 Co-op Ed: Journalism ..... See page 192
MA 206 Co-op Ed: Medical Assistant Seminar ..... See page 206
MA 280 Co-op Ed: Medical Assistant ..... See page 206
MDP 280 Co-op Ed: Multimedia ..... See page 205
MTH 280 Co-op Ed: Mathematics ..... See page 203
MUL 280 Co-op Ed: Web Design ..... See page 206
MUS 280 Co-op Ed: Music ..... See page 209
NRG 206 Co-op Ed: Energy Management Seminar ..... See page 180
NRG 280 Co-op Ed: Energy Management ..... See page 180
NRS 280 Co-op Ed: Nursing ..... See page 212
PE 280C Co-op Ed: Coaching ..... See page 181
PE 280F Co-op Ed: Fitness ..... See page 181
PS 280 Co-op Ed: Political Science ..... See page 219
PS 280LW Co-op Ed: Pre Law ..... See page 219
PSY 280 Co-op Ed: Psychology ..... See page 220
PTA 280 Co-op Ed: Clinical Internship ..... See page 218
SLD 280 Co-op Ed: ASLCC ..... See page 221
SOC 280 Co-op Ed: Sociology ..... See page 221
TA 280 Co-op Ed: Performing Arts ..... See page 223
WATR 206 Co-op Ed: Water Conservation Seminar ..... See page 223
WATR 280 Co-op Ed: Water Conservation Technician ..... See page 223
WST 280 Co-op Ed: Watershed Science Technician ..... See page 224

Criminal Justice

For information, contact the Social Science Division, 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 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 placed on the interpretation of analytical test results as the 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

correction officers, in one-to-one contacts with clients. To prepare the student for practice in the public safety fields, for both juvenile and adult clients.

CJA 280 Co-op Ed: Criminal Justice .....3-12 credits
Prerequisite: CJ 100 and CJ 110 or instructor permission. This course provides the student with criminal justice-related work experience in public safety agencies and related community organizations. The student will have the opportunity to integrate theory 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

For information, contact the Culinary Arts and Hospitality Management Department, Bldg. 19/Rm. 202, 541.463.3503.

CA 110 Culinary Adventuring: Local Guest Chef Series.....2 credits
Open to the Public. 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.

CA 120 Culinary Adventuring: Seasonal Baking and Pastry.....2 credits
Prerequisite: CPC/CAHM Majors only. Course may be repeated for credit for up to six credits. It is designed to apply classical baking and pastry techniques with the use of seasonal produce. Students will learn about local produce availability as well as Oregon's agricultural organic and sustainable values.

CA 121 Culinary Adventuring: The Composition of Cake.....2 credits
Prerequisite: CPC/CAHM Majors only. This course is designed to teach classical techniques of baking and decorating cake production. All components of making and decorating cakes will be covered. Students will also be introduced to working with specialty cake ingredients.

CA 122 Artisan Breads.....2 credits
This class is desig ned to introduce the theories of artisan style breads from theory and lecture to practical application. This will include topics such as; fermentation, the science of gluten development, and basic entremet construction.

CA 123 Culinary Adventuring: International Baking and Pastry.....2 credits
Prerequisite: CPC/CAHM Majors only. This course is designed to apply classical baking and pastry techniques from across the Globe to create authentic and traditional recipes, both sweet and savory. With guided, hands-on instruction, students will learn cooking and baking preparation styles used in different countries.

CA 130 Culinary Adventuring: Oregon Wine Country.....2 credits
Open to the public 21 years or older. This course introduces students to the process of wine making as it relates to Oregon, especially the Willamette Valley. Each week winemakers from the Willamette Valley will discuss their wines and demonstrate how they complement foods.

CA 159 Kitchen Fundamentals.....2 credits
Prerequisite: CA 175 This course will give hospitality students a hands-on experience in the professional kitchen; including the fundamentals of food safety, sanitation, mastering tools and equipment, basic cooking techniques, and basic skills that are found in kitchen operations.

CA 160 Introduction to Cooking Theories 1 .....7 credits
Prerequisite/Corequisite: CA 175 Culinary Arts majors only. This class will introduce students to tools and equipment, culinary history, terminology and culinary concepts. Focus is on basic culinary theory, introduction to cooking techniques and fundamentals, and practical application of safety and sanitation concepts.

CA 162 Introduction to Cooking Theories 2 .....7 credits
Prerequisite: CA 160 This class continues to build the culinary theory, techniques and principles introduced in CA 160, Cooking Theories 1. Focus is on further developing students culinary understanding and skills through meat fabrication

CA 163 Introduction to Cooking Theories 3 .....7 credits
Prerequisite: CA 162. This class focuses on baking and pastry for cooks; an introduction to the tools and equipment of the bakeshop, baking history, terminology and baking concepts. Focus is on basic baking and pastry theory and introduction to baking and pastry techniques.

CA 163A Beginning Baking and Pastry .....3 credits
Co- or prerequisite: CA 175, CPC/CAHM majors only. Students are introduced to the fundamentals of baking and pastry production, including food safety and sanitation and culinary math in relation to recipe comprehension, conversion and costing from the point of view of bakers percentages. Focus is on classical baking and pastry techniques.

CA 163B Intermediate Baking and Pastry.....2 credits
Prerequisites: CA 163A. This course is a continuation of CA 163A. Students will continue to practice fundamentals of baking and pastry production, including food safety and sanitation and fundamental culinary math in relation to recipe comprehension, conversion and costing from the point of view of bakers¬í percentages.

CA 163C Advanced Baking and Pastry.....2 credits
Prerequisite: CA 163B. This course is a continuation of CA 163B. Students will practice all fundamentals of baking and pastry skills learned in the entire course sequence, and expected of a working baker/pastry chef in the industry. This course will focus on specialty dessert techniques and ingredients.

CA 175 Foodservice Sanitation and Safety .....2 credits
Open to the Public. This course presents the basics of food service sanitation. The text examines a systematic approach to sanitation management by the use of control points and effective use of multiple resources. The NRAEF ServSafe Certificate will be issued upon successful completion of the NRAEF Exam. May be offered online.

CA 176 Concepts of Taste and Flavor.....2 credits
Prerequisite: CA 163, CA 175, CA 200, HRTM 105, HRTM 106, MTH025 or higher. This class will introduce students to the vocabulary and concepts of what we term "flavour". Students will explore how these concepts interplay between food items and between food and beverages.

CA 200 Menu Management.....3 credits
Prerequisite: CA/HRTM majors only, HRTM 105, MTH025 or higher. This course will enable the student to apply menu planning principles as an indispensable management tool for a variety of food service operations.

CA 280 Co-op Ed: Culinary Arts, Second Year.....1-7 credits
Prerequisite: CA majors only. This course provides the student with culinary arts-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.

CA 292 Advanced Cooking Theories 1 .....7 credits
Prerequisite: CA 163, CA175, CA 200, HRTM 105, HRTM 106. Contemporary and advanced food preparation emphasizing the cold kitchen, garde manger. Students practice and serve dishes to the public in the student-run dining room, rotating through restaurant and kitchen positions, developing, planning and serving a garde manger-themed dinner menu.

CA 293 Advanced Cooking Theories 2 .....7 credits
Prerequisite: CA 292. Contemporary and advanced food preparation, emphasizing international cuisine. Students practice and serve traditional dishes from many countries to the public in the student-run dining room, rotating through restaurant and kitchen positions, developing, planning and serving an International-themed dinner menu.

CA 294 Advanced Cooking Theories 3 .....7 credits
Prerequisite: CA 293. Contemporary and advanced food preparation, emphasizing American regional cuisine. Students practice and serve traditional dishes from many American regional cultures to the public in the student-run dining room, rotating through restaurant and kitchen positions, developing, planning and serving an American regional-themed dinner menu.

Dance

For information, contact the Music, Dance and Theatre Arts Department, Bldg. 6/Rm. 204, 541.463.5209.

D 152 Dance Basics.....2 credits
This course introduces basic dance techniques and provides a strong foundation where students can proceed in their training in ballet, modern or jazz. The course presents alignment principles, weight shifts, level changes, and elements of movement such as: use of rhythm, shape and dynamics. Contents and expected learning

proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 153 Pilates Workout.....2 credits
This course explores the Pilates Method of body conditioning, a unique system of stretching and strengthening exercises. Students gain strength, flexibility, and balance through specific exercises, which emphasize uniting the body and mind. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. Class will focus on either mat work or barre. See schedule notes.

D 160 Dance Composition .....3 credits
Prerequisite: D 257. Composition techniques are learned and applied with specific emphasis on form, quality, spatial relationships, and rhythmic manipulation. This is a required course for dance majors, and meets the Arts and Letters requirement for the AAOT degree. Students in this course may present their work in the annual production of "The Works" Student Dance Concert. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. Offered winter term only.

D 161 Strength, Stretch and Tone: Gyro.....2 credits
Gyrokinesis (Gyro) exercises work the entire body through use of fluid spinal movement. Joints and muscles gently work through rhythmic spiraling and undulating movements, which invigorate the body. Gyro uses smooth, connected, fluid postures to unite movement and breath. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 172 Dancing the Fluid Body .....2 credits
This course explores the concepts of Continuum Movement through specific breath and sound techniques, 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 175 Tap Dance Beginning.....2 credits
This course covers the basics of rhythm, including tempo, beat, meter, accent, syncopation, and musical structures of beginning Tap. Improvisational skills are developed as students integrate their understanding of tap with a sense of musicality and performance. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 176 Fluid Yoga.....2 credits
This course explores traditional yoga postures and practices with emphasis on breath and fluidity. Students develop a yoga practice that encourages creativity, exploration, and expression. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 177 Modern Dance 1 .....2 credits
For dancers with little or no previous dance experience, this beginning level class 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 will advance to Modern 2 after one term. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 178 Modern Dance 2 .....2 credits
This intermediate level class accommodates the pre-major and non-major student. Students further develop their awareness of modern dance technique and vocabulary. Training continues with movements that incorporate: three-dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Given realistic progressive development, students will repeat this level for a full year. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 179 Modern Dance 3 .....2 credits
This intermediate-advanced level class accommodates the dance-major and non-major student. Modern dance technique is presented with more complex movement phrases that incorporate three-dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Students at this level are encouraged to explore their artistry and personal expressivity. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 183 Meditation in Motion.....2 credits
This course explores awareness of movement, breath, and alignment from a variety of practices and modalities. Students develop ease, flexibility, and mental clarity while calming the nervous system and de-stressing. Contents and expected learning proficiencies of this course may vary from term-to-term. May be repeated up to 12 credits.

D 184 Hip Hop 1.....2 credits
This introductory course explores Hip-Hop dance vocabulary and style. Students learn isolations, rhythmic patterns, and dance combinations. Students should be in good condition without chronic injuries. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 185 Ballet 1.....2 credits
For dancers with little or no previous dance experience, this beginning level course accommodates the pre-major and non-major student. This course presents the fundamental principles and vocabulary of classical ballet with focus on correct body alignment and musicality. Given realistic progressive development, students repeat this level twice before advancing to Ballet 2. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 186 Ballet 2.....2 credits
This intermediate level course accommodates the pre-major and non-major student. This course develops the student's alignment, coordination and musicality. Students are introduced to 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 187 Ballet 3.....2 credits
This intermediate-advanced level class accommodates the dance major and non-major student. Focus is on technical execution, musicality, and line. Class work builds on the student's ballet vocabulary through more advanced center floor phrases, adagios, petit allegros and grande allegros. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 188 Jazz Dance 1 .....2 credits
This beginning level class accommodates the pre-major and non-major student. Jazz movements are introduced which incorporate isolations, spatial awareness, and rhythmic variations. Students are encouraged to take ballet and modern to augment their jazz training. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 189 Jazz Dance 2 .....2 credits
This beginning-intermediate level class accommodates the pre-major and non-major student. 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 194 Hip Hop 2.....2 credits
This intermediate level course explores Hip-Hop dance vocabulary and style. With emphasis on athleticism in dance, isolations, intricate rhythmic patterns, and complex dance combinations, students are expected to be in good condition free of chronic injuries. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 195 Pointe.....1 credits
Prerequisite: Intermediate Ballet. Pointe focuses on building strength, coordination, and stability en pointe. Work at the barre includes leve, releve, and bouree. Center work includes some pointe work, and variations where students work in soft ballet shoes. This Pointe class focuses on the ability to articulate quarter, half, three-quarter and full pointe; cleanly execute 5th position, and consistent control of turn out. Students attending this beginning through intermediate course must be at an intermediate level in Ballet, and be taking a regular Ballet class concurrently with Pointe. May be repeated for up to 12 credits.,

D 196 Balinese Dance ..... 2 credits
This course explores Balinese Dance in relation to art, spirituality, and daily life. Students learn traditional dances, their cultural and historical significance, and their importance in contemporary Balinese life. Globalization and Western cultural influences will be addressed. No prior dance experience necessary. Contents and expected learning proficiences of this course vary from term to term. May be repeated up to 12 total credits.

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 to World dance, students explore dance as an art form in its expressive, communicative, and aesthetic aspects. A required course for dance majors, students develop an understanding and appreciation for dance as a performing art. Meets Arts and Letters requirement for the AAOT degree. Writing 121 recommended. Offered winter term only.

D 256 Anatomy of the Moving Body ..... 4 credits
Introduction to body systems, muscular, skeleton, organ, fluid, nervous, fascial and endocrine system. Re-patterning movement is introduced through various somatic disciplines. Value is placed on embodiment of anatomy through movement, touch and imagination to explore 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 pre-requisite. Required for Dance majors. Offered once a year.

D 257 Dance Improvisation..... 2 credits
This course focuses on exploring and creating new movement through dance improvisation in a fun inviting atmosphere. Students work in solos, duets, and groups, to develop spontaneity, confidence, and awareness as they experience dance as a creative process. This course is a pre-requisite for D160 and D260. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. Offered fall term only.

D 260 Group Choreography..... 3 credits
Prerequisite: D 257 and D 160. Group Choreography tools and techniques are learned and applied. Emphasis is placed on dynamics, spatial relationship, clarity and form. Students learn to articulate personal responses to choreographic projects while exploring individual creativity. May be used to meet Arts and Letters requirement for the AAOT degree. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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 students in our annual dance concert performances. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

Dental Assisting

For information, contact the Health Professions Division, 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
Must be enrolled in the Dental Assisting Program. Knowledge and skills taught throughout the program are utilized as students apply a variety of expanded function chairside assisting and client care skills.

DA 103 Dentistry Law and Ethics ..... 2 credits
Must be enrolled in the Dental Assisting Program. 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 and comparison of other states, roles of the dental health team, and an introduction to the dental office environment are also included in this course. Taught online.

DA 105 Infection Control..... 2 credits
This course covers methods and techniques to avoid cross contamination in a dental setting. Students will learn infection control terminology and practices essential for patient and operator safety, including microbiology, disease transmission, asepsis, infection control, and legalities of regulatory agencies.

DA 107 Dental Health Education 1..... 1 credits
Must be 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. May be taught online.

DA 108 Dental Health Education 2..... 3 credits
Must be enrolled in Dental Assisting program. This course covers the practical application of preventive dentistry concepts and case presentation tools. Includes alginate impressions, patient motivation, coronal polishing, fluoride application, nutritional counseling, the recognition of normal and abnormal oral conditions and community service programs.

DA 110 Demtal Health Sciences..... 3 credits
This course covers the structure and function of cells, tissues, organs, and systems of the human body, as well as bacteriology, microbiology, physiology, and the importance of these as related to dentistry.

DA 115 Dental Anatomy ..... 3 credits
Must be enrolled in the Dental Assisting Program. This course covers the study of head and neck anatomy with emphasis on oral structures, individual teeth and tooth surfaces using the universal numbering system. This is a hybrid course, with a portion of the class taught online.

DA 192 Dental Materials ..... 3 credits
Must be 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
Must be enrolled in the Dental Assisting Program. Course covers completion of laboratory procedures from DA 192 associated with dentistry, such as amalgam and composite, die construction, retainers, bleaching trays, denture relines, temporary crowns and restorations, sealants and custom trays.

DA 194 Dental Office Procedures..... 3 credits
Must be enrolled in the Dental Assisting Program. Principles of appointment planning, telephone techniques, case presentation, communications and marketing, and management of client accounts using Eaglesoft dental software. Teaching is done both online and in a computer lab to support computerized instruction.

DA 195 Chairside Procedures 1 ..... 5 credits
Must be enrolled in the Dental Assisting Program. Course covers chairside assisting procedures, such as preparation of client, oral evacuation techniques, instrument exchange, dental examinations, charting, and operative dentistry.

DA 196 Chairside Procedures 2 ..... 7 credits
Must be enrolled in the Dental Assisting Program. Course covers signs and symptoms of medical emergencies that may occur in the dental office. Specialties of dentistry, principle procedures, instrument set-ups, and clinical experience in 4-handed dentistry are also included.

DA 206 Co-op Ed: Dental Assisting Seminar..... 1 credits
Must be enrolled in the Dental Assisting program. This class must be co-enrolled with DA 280. Students will increase their understanding of industry expectations while developing job search tools and skills. Students will learn and practice presenting themselves to employers in a competent and professional manner in preparation for a professional career in dental assisting.

DA 210 Dental Radiology 1..... 4 credits
Must be enrolled in the Dental Assisting Program. Course covers background, terminology, and physics associated with exposing intra-oral radiographs and digital images. Health, safety measures and legalities are included. Exposing technique, processing, mounting and critiquing are covered in lecture and lab.

DA 211 Dental Radiology 2..... 3 credits
Must be enrolled in the Dental Assisting Program. Continuation of DA 210. Provides basis for occlusal film projections, digital radiology, 3D imaging and extra-oral radiographs. Students apply all skills learned in Fall term, and progress to exposure of dental images on clinical patients.

DA 280 Co-op Ed: Dental Assisting..... 6-12 credits
Must be enrolled in the Dental Assisting Program. Course must be co-enrolled with DA 206. Course provides dental assisting work experience in community businesses. Includes opportunity to integrate theory and practice. Students can develop skills and explore career options.

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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Course work requires college-level reading skills.

Dental Hygiene

For information, contact the Health Professions Division, 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 online.

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 online.

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 online.

DH 118B Clinical Dental Hygiene 1 Lab.....2 credits
Clinical lab required for DH 118A.

DH 119A Clinical Dental Hygiene 2.....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 online.

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: DH120A and DH120B 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 online.

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 online.

DH 139 Special Needs Patient and Dental Emergencies.....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 critcal thinking and problem solving skills in the care of patients with special needs, prevention of emergencies and selection of treatment. May be offered online.

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 online.

DH 220B Clinical Dental Hygiene 4 Lab.....5 credits
Clinical lab required for DH 220A.

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 online.

DH 221B Clinical Dental Hygiene 5 Lab.....6 credits
Clinical Lab required for DH 221A.

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 online.

DH 222B Clinical Dental Hygiene 6 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 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 online.

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 online.

DH 233 Anesthesia/Analgesia for Dental Hygiene Therapy...3 credits
Prerequisites: Admin. in DH Program or instructor Permission. Current science, theories and implementation 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. Foundational skill development in 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 online.

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 online.

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 online.

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 online.

DH 243A Oral Roentgenology 1.....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 online.

DH 243B Oral roentgenology 1 Lab ..... 1 credits
Clinical Lab. Lab required for DH 243A.

DH 244A Oral Roentgenology 2 ..... 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 online. Lab required for DH 244A.

DH 244B Oral Roentgenology 2 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 pharmacological compounds. May be offered online.

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 online.

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 nonsurgical procedures and maintenance. Periodontal and restorative considerations, occlusion and TMD, periodontal surgeries, gingival curettage, implants, periodontal emergencies. Review of evidence based periodontal research and newer treatment modalities to include lasers. May be offered online.

DH 275 Restorative Dentistry 1 ..... 3 credits
Introduction to restorative techniques with emphasis on posterior tooth anatomy, placement of amalgam restorations, rubber dam isolation, matrix and wedge placement. Includes etiology of the decay process, cavity classification, cavity preparation, properties of amalgam and maintenance of proper occlusal relationships with restorative treatment. May be offered online.

DH 276 Restorative Dentistry 2 ..... 3 credits
Prerequisites: Admission in Dental Hygiene Program or Instructor Permission. Continuation of study of restorative techniques with emphasis on anterior tooth anatomy. Introduction of composite restorations in restorative dentistry for anterior and posterior teeth. Bonding materials, bases and liners will be introduced. Bur identification for restorative prep and finishing. Lecture, lab and clinical practice in expanded functions as allowed by the Oregon Board of Dentistry Restorative Endorsement. May be offered online with onsite lab.

DH 277 Restorative Dentistry 3 ..... 1 credits
Continuation of study of restorative techniques. Clinical and laboratory practice in restorative expanded duties as allowed by the Oregon Board of Dentistry for dental hygiene restorative practice. This will include amalgam and composite placement in typodont and clinical patients, restorative treatment planning and case presentation, restorative care and anesthesia for children. The student will become increasingly skilled in typodont and patient treatment. May be offered online with onsite lab.

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.

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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Course work requires college-level reading skills.

Design - See Art, Studio and Graphic Design

Diesel and Heavy Equipment

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

DS 154 Heavy Duty Braking Systems ..... 1-12 credits
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the 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.

DS 155 Heavy Equipment Hydraulics ..... 1-12 credits
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, diagnosis, testing, failure analysis, and repair of mobile and stationary hydraulic systems. This includes the following; technical information and shop projects to apply and understand theories, principles and applications: introduction to hydraulics; system components; reservoirs, seals, filters, pumps, accumulators, oil coolers, pressure, flow and directional control valves, linear and rotary actuators, connectors, conductors, circuits, ANSI and ISO symbols and schematics, manually controlled hydraulic systems, pilot controlled hydraulic systems and electronically controlled hydraulic systems.

DS 158 Heavy Equipment Chassis and Power Trains ..... 1-12 credits
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation of on and off highway automatic transmissions, diagnosing, testing fluid couplings and torque converters, 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
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the 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
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, diagnosing, testing, and repair of diesel electrical systems. This includes: Electrical fundamentals as they pertain to diesel electrical systems; operation and testing of batteries and battery banks; operation and testing of alternators and charging systems; operation and testing of starters and starting systems; heavy duty electrical circuits and schematics; maintenance and repair of OEM and aftermarket electrical connectors and conductors; safety; operation and testing of electronic control systems and components; operation and testing of air conditioning systems as they are used on highway trucks, off highway trucks, agriculture equipment and construction equipment.

DS 259 Diesel Engines and Engine Overhaul ..... 1-12 credits
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, diagnosing, testing, and repair of diesel engines and engine overhaul. This includes: development

of the diesel engine; diesel engine operating principles; combustion chamber design and function; the cylinder block; cylinder head and components; crankshaft, main bearings, vibration damper and flywheel; pistons, rings, and connecting rod assembly; camshaft and timing gear train; lubrication systems and lube oil; cooling systems and coolant; air intake systems; exhaust systems and emissions; hand tools used in the disassembly, reassembly and overhead adjustment, precision measuring tools and shop equipment; engine disassembly, reassembly, diagnosis; and troubleshooting diesel engines as they apply to "on" and "off" the highway diesel equipment.

DS 260 Lift Truck/Material Handling Equipment .....1-12 credits
Prerequisite: Instructor Consent. This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, diagnosing, testing, and repair of lift trucks and other material handling equipment. This includes the mast/upright, transmission, diesel engine, gas engine, propane engine and electric powered lift trucks, electric controller, periodic maintenance, and schematics.

DS 280 Co-op Ed: Diesel.....3-12 credits
This course provides diesel-related learning in 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 will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

Drafting

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

DRF 121 Mechanical Drafting .....4 credits
Prerequisite: DRF 160. An introduction to the ASME Y14.5 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 Plans .....4 credits
Prerequisite: DRF 160. Fundamentals of building materials, construction techniques, construction documents, and processes used in residential structures

DRF 160 Computer-Aided Drafting and Design .....4 credits
In this course students use AutoCAD or equivalent computer-aided drafting software to create drawings. Students will learn to draw, modify, apply text and dimensioning, create and use hatch patterns, set up drawing layouts, plot, create and use blocks and attributes, and insert external references.

DRF 205 Drafting: Structures.....4 credits
Prerequisite: DRF 160, MTH 075 and MTH 085 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 160. Students will increase their understanding of industry expectations as well as develop job search tools and skills. Course 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 075, MTH 085, 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 210 Commercial Buildings.....4 credits
Prerequisite: DRF 137 and DRF 160. Fundamentals of building materials, construction techniques, construction documents, and processes used in commercial structures.

DRF 211 Sustainable Building Systems.....4 credits
Prerequisite: WR 121. Fundamental principles of mechanical systems used in high-performance or green buildings, including energy, water, lighting, heating, ventilation, and air conditioning.

DRF 220 Building Information Modeling.....4 credits
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 235 Mechanical Design Skills .....4 credits
Prerequisite:DRF 121. In this class students develop skills used to create mechanical working drawings including applying tolerances, creating assembly drawings, understanding manufacturing methods, finding technical information, and solving problems.

DRF 236 Machine Elements.....4 credits
Prerequisite: DRF 121. A study of components used in machine design including materials, weldments, fasteners, keys, linkages, gears, roller chain, and V-belt drives.

DRF 245 Solid Modeling.....4 credits
Prerequisite: DRF 160. In this course students use solid modeling software to create and edit part and assembly models. Students will create sketched features, add placed features to parts, learn basic assembly modeling, work with advanced design tools, and create parts lists.

ENGR 280D Co-op Ed: Drafting .....3-12 credits
Gain on-the-job learning experience as a drafter in local business, industry and governmental sites. Develop skills, explore career options, and network with professionals and employers while earning college credit. Meet with the co-op coordinator the term before (if possible) to set up the internship.

Drama - See Theatre Arts

Early Childhood Education

For information, contact the Child and Family Education Department, Bldg. 24, 541.463.5619.

ECE 105 Health and Safety Issues in Early Childhood Education .....2 credits
Introduction to health and safety practices in early childhood education environments for children 6 weeks through 6 years. Students will learn to guide children's understanding of healthy and safety through developmentally appropriate practices. Recognizing/Reporting Child Abuse/Neglect required to pass. May be offered online.

ECE 110 Observing Young Children's Behavior.....1 credits
Study of objective techniques for observing and recording children's behavior. Beginning connections between observing, curriculum planning and assessment will be introduced. Observations of preschool age children are assigned as homework. This course is required for Early Childhood Education majors. This course may be offered online. Writing 115 is recommended.

ECE 120 Introduction to Early Childhood .....2 credits
Course is designed to give an overview of 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 Guidance of Young Children.....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 positive guidance techniques will be given through lectures, visual presentations, and classroom discussions. May be offered online.

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 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 study types and benefits of play as the basis of curriculum planning. Offered online.

ECE 170 Infants and Toddlers Development ..... 4 credits
The course is designed to examine the growth and development of infants and toddlers. Practical areas of care will include: safety, health, nutrition, sleep, and toilet learning. Lectures, in-class discussions, and visual media offer a varied presentation. This class may be offered online.

ECE 210 Applying Early Childhood Curriculum..... 4 credits
Study of best practices and a Reggio-inspired approach to Early Childhood Education. There is an emphasis on the design of the environment as the "third teacher", science and math, and the outdoor environment.

ECE 230 Family, School, Community Relations..... 3 credits
Designed to help the student understand and develop methods and procedures for fostering effective family, school and community relations. Topics include: 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. May be offered online.

ECE 240 Supervised Student Teaching-LCC Child-Care Center..... 4 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. Students learn to demonstrate consistent appropriate guidance and plan and carry out developmentally appropriate curriculum. Includes one hour weekly seminar and nine hours student teaching.

ECE 250 Infant and Toddler Environments..... 3 credits
Course topics include: a) how suitable materials and a carefully planned physical environment can enhance optimum development; b) how to staff a center appropriately; c) brief review of infant-toddler development ; d) basic care giving techniques; e) how to plan curriculum; 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, language, race, and family experiences as they affect the development of the young child and his or her family. Students will evaluate and develop appropriate materials and methods to increase children's awareness and appreciation of diversity.

ECE 260 Administration of Child Care Programs..... 3 credits
Prerequisite: ECE 140. An overview of administrative management issues in the establishment and operation of child care programs. Overall program planning, organizational structure, budgeting, personnel management and legal aspects of child care, including Oregon state licensing rules. May be offered online.

ED 280EC Co-op Ed: Early Childhood Education.....3-12 credits
This course offers ECE majors (seeking an AAS degree) internship opportunities in a variety of early childhood settings. ECE majors 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 ECE faculty and qualified staff at the site, and may include a weekly seminar.

HDFS 226 Child Development..... 3 credits
Study of children's physical, social-emotional, and intellectual development. Topics include, prenatal development and 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. May be offered online.

HDFS 227 Children Under Stress..... 3 credits
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 attachment theory, the development of self-esteem and trauma informed care.

HDFS 228 Young Children with Special Needs..... 3 credits
The development, needs, and behavior of preschool aged children with special needs. General 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.

Earth and Environmental Science

For information, contact the Science Division, Bldg. 16/Rm. 156, 541.463.5446.

ENSC 181 Terrestrial Environment..... 4 credits
Interactions among humans and natural land-based systems and their environmental consequences. Topics and labs include terrestrial ecology, biodiversity, biomes, forests, agriculture, rangelands, soils, groundwater, geologic mineral and energy resources, mining, waste management, recycling, environmental justice, ecological economics, conservation, and sustainable production. Take ENSC 181-183 in any order.

ENSC 182 Atmospheric Environment and Climate Change... 4 credits
Causes, consequences, geologic history and science of climate change and atmosphere. Topics and labs include weather, sun-Earth cycles, air pollution, ozone layer, greenhouse effect, ocean/atmosphere/ice systems, climate models and data, predictions, feedbacks, tipping points, carbon sequestration, energy options. Advise G102, or GEOG141 first.

ENSC 183 Aquatic Environment..... 4 credits
Students learn about freshwater and marine systems including their biology, geology, chemistry, circulation, climate and interactions with humans. Topics and labs include aquatic biodiversity, streams, water pollution, ocean currents, fisheries, sustaining aquatic systems and water resources. Take ENSC 181-183 in any order.

G 101 Earths Dynamic Interior..... 4 credits
Introduces the geology of Earth's structure, formation of rocks, how plate interactions cause earthquakes and create volcanoes and mountains. Labs include problem solving, minerals, rocks, volcanology, seismology, resources, and simple geologic maps and structures. Take either G 101 or G 102 first.

G 102 Earths Dynamic Surface..... 4 credits
Introduces the geology of Earth's surface and related hazards. Topics include erosion, deposition, weathering, soils, landslides, streams, groundwater, oceans, coasts, glaciers, deserts, climate, problem solving, topographic maps and remote sensing of landforms. Take either G101 or G102 first.

G 103 Evolving Earth..... 4 credits
Surveys geologic history of Earth and life. Topics include sedimentary environments, strata, plant and animal evolution, and how plate tectonic actions built continents. Labs include problem solving, fossils, relative ages of rock layers, geologic maps and cross-sections. Advise G101 or G102 first.

G 146 Rocks and Minerals..... 4 credits
Examines rocks, minerals, economic geology, resources, mining, environmental impacts, energy alternatives, resource conservation and problem solving. Labs explore how rocks, minerals and gems form, are classified, their symmetry, textures and structures, and how to decipher their geologic histories.

G 147 National Parks Geology..... 4 credits
Introduces geologic history, plate tectonics, and landform formation in national parks and monuments, including western parks, among others. Topics: volcanoes, mountains, stream and glacial erosion, rocks, rock layers and structures, topographic and geologic maps. Advise another geology class first.

G 148 Geologic Hazards..... 4 credits
Students learn the science, processes, causes and effects of geologic hazards, analyze the energy of earthquakes, volcanic eruptions, and meteorite impacts, the forces of landslides floods, and coastal erosion, the recurrence of these hazards, and study examples of local and global events.

G 201 Earth Materials and Plate Tectonics..... 4 credits
G 201, 202, 203-for science majors (take G201 or G202 before G203). Global plate tectonic influences on Earth's internal structure, mountains, deformation, magnetism, earthquakes, volcanism, minerals and rocks. Labs explore rocks and minerals, geologic maps, structures and resources.

G 202 Earth's Surface Systems..... 4 credits
Surface geologic processes. Includes landforms and hazardous geological systems, rocks and minerals, geologic and topographic maps, remote sensing, erosion, deposition, weathering, soils, mass

wasting, streams, groundwater, coasts, glaciers, deserts, climate and plate tectonics. Take this course or G 201 before G 203.

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 explores how plate motions, climate change and other factors influence the distribution and evolution of continents and organisms through geologic time. Labs examine fossils, age relationship, stratigraphy and analysis of complex regions using geologic maps and cross-sections.

G 280 Co-op Ed: Geology ..... 3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of geology. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit.

G 280ES Co-op Ed: Environmental Science ..... 3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of environmental studies. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit.

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. GS106 surveys Earth and space sciences for non-science majors. Topics include geologic processes, time, hazards, atmosphere, and cosmology from asteroids, planets, stars, to galaxies and beyond. Labs include basic scientific techniques, minerals, rocks, maps, and space imagery. Take GS 104, GS 105, GS 106 in any order.

GS 142 Earth Science: Earth Revealed ..... 3-4 credits
Introduces geology and integrates topics of Earth's history, plate tectonics, minerals, rocks, volcanism, earthquake activity, weathering, rivers, groundwater, glaciers, and coasts. Optional 4th credit requires labs exercises completed at home. Offered through distance learning.

GS 147 Oceanography ..... 3-4 credits
Surveys basic geological, physical, chemical, and biological processes of oceans, including geology, plate tectonics, seawater properties, waves, currents, tides, ocean life, biodiversity, marine resources and pollution. Optional 4th credit requires lab exercises. Offered through distance learning.

GS 201 Scientific Skepticism - Someone is Wrong on the Internet! ..... 4 credits
The goal of this course is to explore scientific skepticism from a variety of angles. We will examine controversial scientific topics such as evolution, climate change, vaccine safety, GMOs and alternative medicine. The foundations of scientific skepticism including psychology, social science, logical fallacies, philosophy of science, media, statistics,criticism of science and the history of science and skepticism will provide a framework. Information literacy, science communication and debate skills will be developed throughout.

SOIL 205 Introduction to Soil Science ..... 4 credits
Introduction to th e chemical, physical, and biological nature of soils. Examines how soils function and develop over time in terms of landscapes, ecological habitat, nutrient cycles water cycles, and with human interventions. Project-based learning projects provide hands-on experience with fundamental soil science principles and the impact of human activities on soil quality and sustainability. Laboratory activities provide classic soil science techniques.

WST 230 Watersheds and Hydrology ..... 4 credits
Prerequisite: ENVS 181 or ENVS 183 with grade of "C-" or better. Physical hydrology of watersheds including the water cycle, water budgets, water yields and peak flows. Effects of surface erosion, stream temperatures, nutrient levels and human activities upon watershed health.

Economics

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

ECON 200 Principles of Economics: Introduction to Economics ..... 3 credits
MTH 111 College Algebra and sophomore standing recommended. 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. May be offered through Distance Learning.

ECON 201 Principles of Economics: Introduction to Microeconomics ..... 3 credits
Prerequisite: ECON 200 or ECON 202. MTH 111 College Algebra and sophomore standing recommended. 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. May be offered online.

ECON 202 Principles of Economics: Introduction to Macroeconomics ..... 3 credits
Prerequisite: ECON 200 or ECON 201. MTH 111 College Algebra and sophomore standing recommended. 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. May be offered online.

ECON 204 Introduction to International Economics ..... 4 credits
Introduces principles of international development, trade, and finance. Topics include: history of international development, comparative advantage, free trade, international 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 '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 ..... 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.

Education

Also see Early Childhood Education

For information, contact the Cooperative Education Division, Bldg. 19/Rm. 231, 541.463.5203.

ED 100 Introduction to Education ..... 3 credits
This course provides an overview of the Education field for those considering a career in teaching. Students will explore the classroom community, human development as a basis for the acquisition of knowledge, culturally responsive teaching practices, and engage in a research project studying a current issue in education. Course also includes an in-class observation. No prerequisite required.

ED 200 Foundations of Education Seminar ..... 3 credits
Learn about classroom management and curriculum design. Each student creates a fiction or nonfiction picture book and learns about project learning as a teaching strategy. Usually taken at the same time as a practicum in an elementary, middle, or high school classroom.

ED 230 Language and Literacy ..... 3 credits
Literacy is essential to learning. Understanding the process of literacy development in middle and high school prepares teachers to become better equipped at helping to improve literacy skills of students of all backgrounds. Students will review influential, popular and diverse works for adolescence. The culminating assignment includes the creation of a personal narrative, written to encompass components of story and theory behind the integration and use of first person voice.

ED 233 Adolescent Learning and Development.....3 credits
Investigate the biological, theoretical and socioemotional underpinnings of adolescent development through theoretical perspectives. Gender, racial, cross-cultural, sexual orientation differences and commonalities as well as social class perspectives will be explored. These theories will be used as a lens to frame the issues faced by adolescents currently. This course is offered for those considering teaching in secondary education classrooms or those who intend to work with adolescents in other settings.

ED 258 Multicultural Education.....3 credits
This course addresses the background, philosophy, methods, and curriculum that develop a culturally responsive educational setting. This course will enable students to meet the needs of all students and families from a variety of diverse backgrounds. Areas of study include equity, diversity, and social justice as related to various aspects and to all levels of education.

ED 280 Co-op Ed: Education.....3-12 credits
Work as an intern in an elementary, middle, or high school classroom to explore teaching as a career. Put up bulletin boards, grade papers, prepare art projects, tutor one-on-one and work with small groups. Course may be repeated to work with different age groups in different schools.

ED 280EC Co-op Ed: Early Childhood Education.....3-12 credits
This course offers ECE majors (seeking an AAS degree) internship opportunities in a variety of early childhood settings. ECE majors 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 ECE faculty and qualified staff at the site, and may include a weekly seminar.

Electronics

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

ET 121 Shop Practices.....2 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 OR Prior College. This first year course in electronics technology addresses the general lab skills and knowledge required to function safely and effectively in an electronics laboratory or shop environment. The student will be introduced to concepts in electronic circuit assembly, wire termination, and soldering. Included is an overview of electrical schematics and diagrams used in the design, assembly, and repair of electrical and electronic systems. The proper use of common lab equipment and hand tools will be covered. This is a hands-on course intended to give the student experience performing tasks that are best taught by practice. Throughout the course the underlying theme is on work site safety and the ability to follow directions.

ET 129 Electrical Theory 1.....1-4 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 OR Prior College AND MTH060 or higher with a grade of "C-" or better, or pass a placement test through the Testing Office. First course of a two-term sequence in electrical theory. This first term defines basic electrical units and laws of electrical theory as they apply to DC series, parallel, and combination circuits. AC waveforms and AC circuit components are introduced. Digital multimeters, oscilloscopes and function generators are used to measure electrical signals and troubleshoot basic circuits.

ET 130 Electrical Theory 2.....1-4 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. In the lab students will build and troubleshoot basic AC circuits using the oscilloscope, function generator, and DMM. .

ET 131 Electrical Theory 3.....4 credits
Prerequisite: ET 129, ET 130. This is the third course of a three-term sequence in electrical theory. Electrical Theory 3 combines electrical theory and electrical drafting. It uses and adds to the concepts learned in electrical theory, digital, and semiconductor classes. Students study and interpret electrical circuits, then draw the circuits using schematic capture software. Using powerful computer analysis tools such as PSPICE, students are able to simulate and analyze circuits. Troubleshooting, analysis and circuit performance with changing parameters and conditions are studied.

ET 145 Semiconductor Devices 1.....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.....1-4 credits
Prerequisite: ET 145. Second course of 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.....1-4 credits
Prerequisite: ET 129 and MTH 060 or higher. This course is an introduction to the field of digital electronics. It includes a study of number systems, binary arithmetic, basic logic functions, the analysis and synthesis of combinational logic circuits and the implementation of logic circuits using MSI building blocks. The last part of the course introduces latches and flip-flops. The various flip-flops and their characteristics are studied and clocked sequential circuits, such as simple counters are built.

ET 152 Digital Electronics 2.....1-4 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 229 Motors 1.....1-4 credits
This class addresses the concepts and principles of electromechanical devices. Emphasis will be placed on the theory and operation of AC and DC motors used in manufacturing and the HVAC industries. Transformers and power distribution systems will be studied along with adjustable frequency AC drives and stepper motors.

ET 230 Motors 2.....1-4 credits
Prerequisite: ET 229. This course is a continuation of ET229 Motors 1. It addresses the relationship between electromechanical prime movers and the circuit elements used in their controls. The course progresses from electrical safety to electrical symbols and diagrams to control logic and devices. The focus will be on the operation, servicing, and troubleshooting of electromechanical systems beyond their initial design. Special emphasis is placed on the development of troubleshooting skills throughout the course.

ET 234 Programmable Controllers 1.....1-4 credits
Prerequisite: Second year standing. This 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. The student will also be introduced to a variety of troubleshooting problems at both component and system levels.

ET 235 Programmable Controllers 2.....1-4 credits
Prerequisite: ET234. This class provides an introduction to the robot and its capabilities and explores the various tasks that robots are programmed to perform. Interfacing between robots, PLC's, and field devices are practiced with an emphasis on troubleshooting.

ET 236 Programmable Controllers 3.....4 credits
Prerequisite: ET 235 and 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 239 Microprocessor Applications.....1-4 credits
Prerequisite: Second year standing. This is a study of microcontrollers and their programming. These small circuits are self contained computers, often found on a single chip and commonly embedded in consumer and industrial products where they control various processes. They are used by electronic engineers as well as by experimenters designing gadgets. A programming language such as BASIC or C is introduced. The course explores how microcontrollers can accept inputs, measure external quantities, perform

math functions, light displays, control motors, produce sound and measure and react to light.

ET 247 Linear Circuits.....4 credits
This course is an extension of the two course series that covers the theory of solid-state semiconductor devices. The focus will be on the integrated circuit operational amplifier and the circuits that include these integrated circuits as functional devices. A detailed overview will include common linear op-amp circuits, active filters, comparator circuits, oscillators and timers, data converters, and voltage regulator circuits. The course will cover the application of integrated devices and as such the analysis of internal transistor circuitry will be brief.

ET 281 Radio Communications.....1-4 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.

Emergency Medical/Paramedic

For information, contact the Health Professions Division, 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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Course work requires college-level reading skills.

EMT 151 Emergency Medical Technician Basic Part 1.....5 credits
This course is part 1 of a 2 part course in Emergency Medical Technician. Successful completion of this two part course qualifies candidate to sit for state and national practical and written licensing exams administered locally. This course provides instruction in a variety of medical and trauma related emergencies. This is a demanding course designed for those who will respond to 911 emergencies in an ambulance or fire rescue and will function within an emergency medical services system, often as a volunteer with a local rural fire department. 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 required for application into the second year of the AAS degree in Paramedicine.

EMT 152 Emergency Medical Technician Basic Part 2.....5 credits
Corequisite: EMT 151. This course is part 2 of a 2 part course in Emergency Medical Technician. Successful completion of this two part course qualifies candidate to sit for state and national practical and written licensing exams administered locally. This course provides instruction in a variety of medical and trauma related emergencies. This is a demanding course designed for those who will respond to 911 emergencies in an ambulance or fire rescue and will function within an emergency medical services system, often as a volunteer with a local rural fire department. 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 required for application into the second year of the AAS degree in Paramedicine.

EMT 169 Emergency Services Rescue.....4 credits
Prerequisite: EMT 152 or Oregon EMT License. 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. This course is required for application into the second year of the AAS degree in Paramedicine.

EMT 170 Emergency Response Communication/Documentation.....2 credits
Prerequisite: EMT 152 or Oregon EMT License This course provides information on the following topics: proper documentation, including patient care report forms and charting, general communication systems both written and verbal, radio systems, the Hospital Emergency Ambulance Radio system, radio codes, verbal transfer of care reports and radio reports to hospital emergency departments. This course is required for application into the second year of the AAS degree in Paramedicine.

EMT 171 Emergency Response Patient Transportation.....2 credits
Prerequisite: EMT 152 or Oregon EMT license. This is an emergency vehicle operations course (EVOC) that provides students with driving skills required to operate an ambulance. Additional topics include: ambulance operation, laws pertaining to emergency ambulance driving and parking; vehicle maintenance and safety check; emergency response driving and route planning. This course is required for application into the second year of the AAS degree in Paramedicine.

EMT 175 Introduction to Emergency Services.....4 credits
Explores the role and responsibilities of a paramedic, to include, different kinds of emergency services systems, applicable Oregon law, relationship with governmental regulatory agencies, exposure risk to infectious disease and exposure to critical incident stress. This course is required for application into the second year of the AAS degree in Paramedicine.

EMT 196 Crisis Intervention.....3 credits
Designed to provide students pursuing a degree in Paramedicine with the knowledge to effectively manage psychological emergencies. Included in this course: physiology of stress 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 This course is required for application into the second year of the AAS degree in Paramedicine.

EMT 270 Paramedic Part 1.....10 credits
Prerequisite: Application Co-requisite: EMT 271. Course is part 1 of a 3 part course in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic. Course subjects include pathophysiology, pharmacology, history taking and patient assessment, advanced airway management, geriatrics, psychiatric emergencies, respiratory emergencies and cardiovascular emergencies. Cognitive and psychomotor domains are measured for competency by a combination of written exams and skill demonstration. The affective domain is measured for competency using published professional standards. A grade of C- or better is required to continue to the next course in the series. Program graduates are eligible to take the Oregon/National 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 necessary for completion of program objectives. 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 Paramedic Part 2.....10 credits
Prerequisite: EMT 270 Co-requiste: EMT 273, EMT 280 Part 2 Course is part 2 of a 3 part course in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic. Course subjects include trauma, environmental emergencies, labor and delivery, newborn care, neonatology, pediatrics, diabetic emergencies, severe allergic reaction, strokes, seizures, gastrointestinal emergencies, renal emergencies, overdose emergencies, and toxicological emergencies. Cognitive and psychomotor domains are measured for competency by a combination of written exams and skill demonstration. The affective domain is measured for competency using published professional standards. A grade of C- or better is required to continue to the next course in the series. Program graduates are eligible to take the Oregon/National Paramedic exam.

EMT 273 Emergency Medical Technology-Paramedic Clinical Part 2.....3 credits
Prerequisite: 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. 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
Prerequisite: EMT 272, 273 Co-requisite EMT 275, EMT280Part 1 Course is part 3 of a 3 part course in paramedic education. This course provides the knowledge, skill and behaviors required of a paramedic. Course subjects include immunology, abuse and assault,

social issues, musculoskeletal disorders, endocrinology, hematology, skin disorders, patients with special challenges, patients with chronic illness, and head, ears, eyes, nose and throat disorders. The cognitive and psychomotor domains are measured for competency using written exams and skill demonstration. Scenario labs stage emergencies for training and evaluation of required student competencies. The affective domain is measured for competency using published professional standards. Graduates are eligible to take the Oregon/National Paramedic exam.

EMT 275 Emergency Medical Technology-Paramedic Clinical Part 3 .....4 credits
Prerequisites: 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. 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 .....3-12 credits
Prerequisite: EMT 272, EMT 273 Corequisite EMT 274. First term of a two-term course where paramedic students continue their learning by interning on an advance life support ambulance that responds to 911 emergencies. Students are paired with highly skilled local paramedics for their learning experience.

EMT 280P2 Co-op Ed: EMT Internship Part 2 .....5 credits
Prerequisite: EMT 280P1, EMT 275. Second term of a two-term course. A continuation of EMT 280. Designed for students to complete required hours on an advance life support ambulance that responds to 911 emergencies. Students will manage a variety of ambulance calls while being shadowed by their paramedic preceptor. The student completes the course when all requirements have been met, including consistent competency in providing paramedic-level care within the 911 EMS system.

Energy Management

For information, contact the Science Division, Bldg. 16/Rm. 253, 541.463.3997.

NRG 101 Introduction to Energy Management .....3 credits
This course defines the need for energy management as an integral part of society at all levels. The course presents the various employment opportunities available to energy management students through lectures, video and guest speakers. Technical information includes basic energy accounting and analysis protocol.

NRG 103 Sustainability in The Built Environment.....3 credits
Introduces the relationship between sustainability and buildings. Addresses the "Three Es of Sustainability" in the built environment by exploring the ENVIRONMENTAL influences of buildings, ECONOMIC benefits of conservation and efficiency and social EQUALITY. The course explores the Leadership in Energy and Environmental (LEED) Design framework. May be offered online.

NRG 105 Green Careers Exploration .....3 credits
This course is an introduction to a wide range of technical careers related to sustainability, energy management, water resources and alternative transportation. Students will make connections between green career options and a more sustainable economy, environment and society. They will identify personal career goals and skill sets needed for green jobs.

NRG 110 Energy Efficiency Industry Software Applications..4 credits
Students will be exposed to several of the most commonly used software applications within the Energy Efficiency industry. This course covers basic features of each software application as well as how to use the software to solve common problems and/or basic tasks.

NRG 111 Residential/Light Commercial Energy Analysis .....3 credits
Prerequisite: PH 101 or Department Approval. Topics include 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 or Department Approval. Emphasis is on the analysis of energy use in commercial buildings. Topics include utility bill analysis, identifying energy consumption sources and related efficiency measures, use of micro-dataloggers, energy savings and investment calculations, audit report writing. Students complete a supervised field audit.

NRG 121 Air Conditioning System Analysis .....3 credits
Prerequisite: PH 101 or Department Approval. Students investigate the physical principles of HVAC systems. Topics include related HVAC system equations, refrigeration, psychrometrics, central forced air furnaces, ground couple heat pumps, 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 or Department Approval. Students learn to identify commercial HVAC system types and the energy impact of each type. Calculations will be used to determine HVAC system efficiency. Students will investigate HVAC delivery systems including fans pumps dampers, control valves, and ducting. The course includes field work.

NRG 123 Energy Control Strategies.....4 credits
Prerequisite: NRG 122 and NRG 124 or Department Approval. Topics include building system control theory and devices, including electric, pneumatic, and digital controls. An emphasis is placed on identifying and understanding control strategies to estimate energy savings. Hands on labs reinforce device identification. Students complete an energy efficiency controls calculation project.

NRG 124 Energy Efficiency Methods.....4 credits
Prerequisite: PH 102. Corequisite: NRG 121 or Department Approval. Students learn analysus of energy systems with a focus on efficiencies of energy conversion devices. Students will gain proficiency in some common units and formulas required to work with energy and power and analyze the energy or cost savings associated with efficiency strategies.

NRG 131 Lighting Fundamentals.....3 credits
Prerequisite: PH 101 and PH 102 or Department Approval. 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. Requires a directly supervised lighting audit project.

NRG 141 Energy Investment Analysis .....3 credits
Prerequisite: NRG 111 or Department Approval. Analysis of energy investments using spreadsheets to consider total cost-benefits over the life of the investment. Topics: interest, simple payback and life-cycle cost analysis, time value of money, cost-benefit analysis, effects of tax credits, inflation, escalation, and cost estimating procedures.

NRG 142 Energy Accounting.....3 credits
Prerequisite: BT 123. 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 renewable 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 Photovoltaic System Design and Installation 1.....4 credits
Prerequisite: PH 101 and PH 102 and MTH 095 or Math Placement Test. Corequisite: NRG 157 or Department Approval. 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 181 Direct Digital Controls 1 .....4 credits
Hands-on training using control system management software. Configuring alarms and user access, trend control points, generating reports, adjusting control loops, experiencing a functioning building control system. Dashboard and metering systems, with an emphasis on future smart grid functionality.

NRG 182 Commercial HVAC Controls.....4 credits
Controls perspective on commercial HVAC systems, ranging from older pneumatically controlled systems to newer digitally controlled systems. Comparing the benefits of different mechanical

room systems and control systems. Retrofit opportunities and other energy conservation measures.

NRG 183 Controls Retuning and Troubleshooting .....4 credits
Prerequisite: NRG 181 Diagnostics and troubleshooting building control systems. Use occupant comfort complaints or other alerts, determine causes, use trend logging and visual inspection of equipment, and determine problem solutions; set point changes, modify control loops, return control loops or schedule maintenance.

NRG 184 Direct Digital Controls 2 .....4 credits
Prerequisite: NRG181 Hands-on training modules and electronics used to implement building automation; control loop logic, schematics, and sequences of operation with applications for desired system behaviors. Controls design process, implementation, and commissioning using industry software and equipment.

NRG 185 Lighting Controls.....4 credits
Students will gain functional knowledge of a variety of commercial building lighting control systems ranging from simple manual on/off switching to complex automatically-controlled systems to newer digitally controlled systems. Students will identify and describe lighting systems/types/technology, including control systems with emphasis on comparing the benefits of one system versus another. Students will modify control system parameters based on original design or new control sequences.

NRG 206 Co-op Ed: Energy Management Seminar.....2 credits
Students will increase their understanding of industry expectations as well as job search tools and skills. Course 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, their professional careers.

NRG 280 Co-op Ed: Energy Management.....3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of energy management. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

WATR 150 Water Resource Economics.....4 credits
Prerequisite: MTH 095 Applies economic and financial fundamentals to water issues such as, efficient allocation; utility rate structures; benefit-cost analysis; water pricing; supply and demand; policy relationships; and scarcity links to pricing. This is an introduction to performing analysis of water projects.

Engineering Transfer

Also see Drafting, Electronics and Physics

For information, contact the Mathematics Division, Bldg. 16/Rm. 166, 541.463.5392.

ENGR 101 Engineering Orientation.....3 credits
Prerequisite or Corequisite: MTH 251 completed with a "C-" or better within the past eight terms. An introduction to engineering, its evolution, methods, and ethics. 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 102 Engineering Orientation 2.....4 credits
Prerequisite: ENGR 101 or Co-Requisite of MTH 251 completed with a grade of "C-" or better within the past eight terms. This course is an introduction to the use of computing language in engineering. Students will use a standard problem-solving methodology through the course.

ENGR 115 Engineering Graphics .....3 credits
Prerequisite or Corequisite: MTH 112 or higher completed with a grade of "C-" or better within the past eight terms. 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 211 Statics.....4 credits
Prerequisite: MTH 252 and PH 211 completed with a grade of "C-" or better within the past eight terms. 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.

ENGR 212 Dynamics.....4 credits
Prerequisite: ENGR 211 and MTH 254, all completed with a grade of "C-" or better within the past eight terms. 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 252, both completed with a minimum grade of "C-" or better within the past eight terms. 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.

ENGR 221 Electrical Fundamentals 1 .....4 credits
Prerequisite: PH 212 completed with a grade of "C-" or better within the past eight terms. 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 internship course offers a work experience that integrates theory and practice in the field of engineering. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit.

English - See Literature, Writing

English as a Second Language - See Study Skills

Environmental Science - See Earth and Environmental Science

Ethnic Studies

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

ES 101 Historical Racial and 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 and 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 212 Chicano/Latino Studies: 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 Studies: 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 Studies: Down from the Pyramids, Up from Slavery ..... 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 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.

ES 223 African American Studies: A Luta Continua: The Struggle Continues ..... 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 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.

ES 241 Native American Studies: Consequences of Native American and 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 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. 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.

Exercise and Movement Science

For information, contact the Health and PE Division, Bldg. 5/Rm. 205, 541.463.5545.

EXMS 120 Research Methods in Exercise Science ..... 2 credits
Prerequisite: EXMS 194S, EXMS 194X and EXMS 196 Corequisites: EXMS 194T and EXMS 295 This class focuses on the scientific process that shapes the field of exercise science. We will use quantitative data to address questions in exercise epidemiology. Students will gain experience working with primary research, evaluating information quality, and developing evidence- based conclusions.

EXMS 194A Fitness Assessment ..... 3 credits
Prerequisite: EXMS 120 and EXMS 194P. Students learn field and laboratory fitness assessment procedures. Students collect data according to standardize protocols, interpret results and identify appropriate exercise progressions for clients. Students learn to identify effects of common pharmacological agents, disease status, and other conditions on exercise response and capacity.

EXMS 194P Exercise Prescription ..... 3 credits
Introduces students to exercise prescription principles and exercise program design. Students learn to prescribe exercise for healthy populations or populations with medically controlled disease. Exercise type, volume, progression, client motivation, goals, safety, and enjoyment are emphasized.

EXMS 214 Physiology of Exercise and Healthy Aging ..... 3 credits
Teaches the physiological changes that occur during the aging process and the positive effects of exercise on disease risk, longevity and quality of life. Aging theories, structural and functional changes, and exercise programming for elderly populations will be discussed. May be offered online.

PE 280C Co-op Ed: Coaching ..... 3-12 credits
Prerequisite: Instructor approval for site and credit load. Supervised internship in a coaching site off campus. Students will gain knowledge, develop skills, get coaching experience and explore career options while earning credit toward a degree or certificate. Journals and other written assignments required.

PE 280F Co-op Ed: Fitness ..... 3-12 credits
Prerequisite: Instructor approval for site and credit load. Supervised internship in a professional fitness program off campus. Students will gain knowledge, develop skills, get experience and explore career options while earning credit toward a degree or certificate. Journals and other written assignments required.

PTA 206 Cardiopulmonary Pathology and Management with Lab ..... 3 credits
This course covers the pathology and management and therapeutic interventions, including practical application interventions for the disorders of the cardiovascular, pulmonary and integument systems commonly seen in physical therapy. Students will explore strategies to address impairments, functional limitations and disabilities for these conditions.

Fabrication and Welding

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

ENGR 280W Co-op Ed: Welding ..... 3-12 credits
This course provides welding-related learning in 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 will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

WLD 111 Blueprint Reading for Welders ..... 3 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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, welding symbols and steel nomenclature.

WLD 112 Fabrication/Welding 1 ..... 12 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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, GMAW, and gas tungsten arc welding processes. These skills are learned in

the context of assigned and graded practice projects and written tests.

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, FCAW-G, and gas tungsten arc welding is provided. Safe lift truck operation training is also provided in this 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, FCAW-S, gas tungsten arc welding, and SMAW. Safe overhead crane operation is also provided in this course.

WLD 121 Shielded Metal Arc Welding 1 ..... 1-4 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 OR Prior College. Skill development in SMAW, oxy-acetylene cutting, 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. The student will be instructed in safe work habits and the optimum use of materials and equipment.

WLD 139 Welding Lab ..... 1-3 credits
Prerequisite: Instructor consent and Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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 Processes ..... 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. Course includes AWS D1.1 Welder Qualification Test.

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 includes AWS D1.1 Welder Qualification Test.

WLD 142 Pipe Welding Lab: Carbon Steel ..... 3 credits
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 RD 087 And EL115 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 RD 087 And EL115 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 process using gas shielded cored wire is taught. Preparing weld test specimens and performing weld tests is included in this course.

WLD 159 Wire Drive Welding 3 ..... 1-4 credits
Prerequisite: WLD 143 or instructor consent. Technology and application of the wire drive process using self shielded cored wire is taught. Preparing weld test specimens and performing weld tests is included in this course.

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, 2 and 3. Instruction in material preparation and testing of weld samples will also be provided.

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, assembly and final finishing. Also studied are concepts in ferrous metallurgy and their applications.

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 metallurgy and their applications especially pertaining to welding of carbon and stainless steel.

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 aluminum metallurgy concepts in wear analysis, selection and application of wear or corrosion resisting surface treatments in addition to applied aluminum metallurgy. This course includes practice and testing for AWS D1.1 Welder Qualification Exams.

WLD 242 Gas Tungsten Arc Welding 1 ..... 3 credits
Prerequisite: Minimum reading score of 68 OR RD 080 OR RD 087 And EL115 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 samples is included in this course.

WLD 256 Gas Tungsten Arc Welding 2 ..... 3 credits
Prerequisite: WLD 242 or Instructor consent. This coure provides continuing training in the technology and practice of the gas tungsten arc welding (GTAW) of carbon and stainless steel sheet. Testing of weld samples 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 Arts

Fitness and Life Style

For information, contact the Health and PE Division, Bldg. 5/Rm. 205, 541.463.5545.

FLS 110 Coaching Healthy Eating ..... 2 credits
Students will learn how to provide scientifically supported, practical and relevant nutrition and weight management advice to their clients while staying within their scope of practice. They will learn the skills to navigate a landscape of quick-fix solutions, poor food choices, and a multi-billion dollar diet industry while providing their knowledge of nutrition and weight management into actionable lifestyle change for clients and patients.

FLS 120 Fitness Assessment & Exercise Prescription – Field Techniques..... 3 credits
Prerequisite: Program Admission. This course introduces students to exercise prescription principles and exercise program design. Students learn to prescribe exercise for healthy populations or populations with medically controlled disease. Exercise type, volume, progression, client motivation, goals, safety, and enjoyment are emphasized.

FLS 130 Principles of Strength Training and Conditioning Instruction..... 2 credits
Prerequisite: Program Admission. This course introduces students to fundamental principles and techniques of resistance training, and programs/systems of conditioning. Includes development of exercises for flexibility, balance, strength, and aerobic conditioning. Provides students with foundational skills for fitness-based careers.

FLS 140 Applied Exercise Physiology 1..... 3 credits
Prerequisite: Program Admission. This course introduces FLSEXMS Program students to the neuromuscular, cardiovascular and respiratory responses to acute exercise, and long-term physical training. Exercise metabolism, physiological fuel systems and hormonal control will also be discussed.

FLS 150 Techniques of Group Exercise Leadership..... 2 credits
Prerequisite: FLS120, FLS130, FLS140. Students are introduced to group exercise leadership methods including safety, motivation, communication, organization and class/activity planning. Students experience leading/teaching in a variety of group fitness activities/genres for a variety of skill levels.

FLS 160 Applied Anatomy and Kinesiology..... 3 credits
Prerequisite: FLS120, FLS130, FLS140. Introduces students to basic anatomy and kinesiology principles of movement and exercise. Topics include identification and movement of major muscle groups and joints, skeletal structure, and planes/axes of movement. Course work focuses on practical application for the fitness professional.

FLS 170 Mental Dynamics of Exercise and Sport..... 3 credits
Course introduces students to the mental dynamics of exercise and sport. Designed for exercise professionals to explore and apply the concepts of motivation, adherence, anxiety, over training and behavior modification in an exercise and sport setting. May be offered online.

FLS 185 Career Preparation..... 3 credits
Prerequisite: FLS150, FLS160, FLS170.Pre-requisite: Program Admission. Introduction to career and management topics specific to the fitness industry including: fitness program administration, personnel management, risk management, legal liability, scope of practice, equipment acquisition, facility planning and maintenance. Guidance in job search practices, interviewing techniques and resume development.

FLS 190 Injury Prevention and Management..... 3 credits
Prerequisite: FLS150, FLS160, FLS170.EXMS 194F, EXMS 194S, EXMS 196. Assists students in developing and progressing exercise prescriptions for individuals with the goal of preventing or managing common athletic/exercise related injuries. Students learn how to work within their scope of practice in this framework and collaborate with other healthcare professionals.

FLS 195 Interdisciplinary Practicum..... 1-3 credits
Prerequisite: FLS 120 Supervised practicum ina professional fitness, physical education, aerobic fitness, athletic training, athletics, coaching, corrective fitness, fitness management, recreation, wellness, or other similar program, on campus. Weekly logs and other written assignments may be required. The work-site supervisor will orient, direct, instruct and evaluate the student's performance. The instructor will meet on-site with the student's supervisor, discuss student performance, and do a final evaluation at the end of the term. Students will evaluate their progress at the end of the experience. Instructor approval required for practicum site and credit load.

Flight

Also see Aviation Maintenance

For information, contact Lane Aviation Academy, 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: Summer Academy..... 1 credits
This course is designed to provide a hands-on opportunity for the participants in multiple major career specialities 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.

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 Safety Development..... 4 credits
Views aviation safety development through analysis of landmark accidents, their investigation, and aftermath to include technology development, procedural improvements, crew interaction (CRM and ORM), and regulatory developments that have improved flight safety. Student exits course able to apply safety lessons to flight operations.

FT 115 Aircraft Structures and Systems..... 3 credits
Designed to give a pilot a thorough understanding of airplane systems and structural design.

FT 121 UA Platforms and Systems.....4 credits
This course gives students an overview of the platforms and systems used in small unmanned aircraft. It will encompass both fixed wing and multi-rotor aircraft and look at the subsystems of these aircraft. There will be simulator and hands-on training provided in the lab portion of the class.

FT 122 UA Ground Control Systems.....4 credits
This course gives students an overview of the Ground Control Station (GCS) used in unmanned aircraft. It will encompass both mobile and permanent GCS's and encompass multiple launch and recovery systems. There will be simulator and hands-on training provided in the lab portion of the class.

FT 123 Commercial UAS Ground School.....1 credits
This course is designed to help students prepare to take the FAA UAS written examination in order to get their Remote Pilot Airman's Certificate. It will be divided into five parts: Aircraft Operation, Regulations, National Airspace System, Weather, and Performance.

FT 124 UAS Flight Lab.....1-6 credits
This course will act as the hands on portion of all elective UAS courses in the form of multiple TCO's. This course will emphasize safety of flight through the use of UAS and FAA regulations. Students will learn to operate fixed wing and multi-copter UA's.

FT 124A UAS Flight Lab.....1 credits
This course will act as the hands on portion of all elective UAS courses in the form of multiple TCO's. This course will emphasize safety of flight through the use of UAS and FAA regulations. Students will learn to operate fixed wing and multi-copter UA's.

FT 124B UAS Flight Lab.....1 credits
Prerequisite: FT 124 A. This course will act as the hands on portion of all elective UAS courses in the form of multiple TCO's. This course will emphasize safety of flight through the use of UAS and FAA regulations. Students will learn to operate fixed wing and multi-copter UA's.

FT 124C UAS Flight Lab.....1 credits
Prerequisites: FT 124A, FT 124B This course will act as the hands on portion of all elective UAS courses in the form of multiple TCO's. This course will emphasize safety of flight through the use of UAS and FAA regulations. Students will learn to operate fixed wing and multi-copter UA's.

FT 124D UAS Flight Lab.....1 credits
Prerequisite: FT 124a, FT 124B, FT 124C. This course will act as the hands on portion of all elective UAS courses in the form of multiple TCO's. This course will emphasize safety of flight through the use of UAS and FAA regulations. Students will learn to operate fixed wing and multi-copter UA's.

FT 124E UAS Flight Lab.....1 credits
Prerequisite: FT 124A, FT 124B, FT124C, FT 124D. This course will act as the hands on portion of all elective UAS courses in the form of multiple TCO's. This course will emphasize safety of flight through the use of UAS and FAA regulations. Students will learn to operate fixed wing and multi-copter UA's.

FT 124F UAS Flight Lab.....1 credits
Prerequisite: FT 124A, FT 124B, FT124C, FT 124D, FT 124E. This course will act as the hands on portion of all elective UAS courses in the form of multiple TCO's. This course will emphasize safety of flight through the use of UAS and FAA regulations. Students will learn to operate fixed wing and multi-copter UA's.

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. May be offered online with instructor approval.

FT 141 Pt 141 Private Pilot Stage 1 Pre-solo Flight and Ground Lecture.....6 credits
Students will develop aeronautical knowledge and flight proficiency for all FAA pre-solo requirements through ground and airborne lecture, culminating with the initial solo flight. This course is intended for standard sized students: Maximum weight is 220 lbs, maximum height less than 6'2 inches with sitting height of less than 39 inches. These limits are dependent on currently available LCC two-seat aircraft. If those aircraft are removed or replaced, these limits may be altered as well.

FT 141W Pt 141 Private Pilot Stage 1 Pre-solo Flight and Ground Lecture.....6 credits
Students will develop aeronautical knowledge and flight proficiency for all FAA pre-solo requirements through ground and airborne lecture, culminating with the initial solo flight. This course is intended for standard sized students: Minimum weight is above 220 lbs. Minimum height is above 6'3 inches.

FT 142 FT 142 Private Pilot Stage 2 Post-solo Flight and Ground Lecture.....3 credits
Prerequisite: FT 141 Student will develop basic navigation skills and develop the ability to fly precision short and soft field patterns and landings, with skills developed by direct instruction on the ground and in the aircraft. This course is intended for standard sized students: Maximum weight is 220 lbs, maximum height less than 6'2 with sitting height of Jess than 39 inches. These limits are dependent on currently available LCC two-seat aircraft. If those aircraft are removed or replaced, these limits may be altered as well.

FT 142W FT 142 Private Pilot Stage 2 Post-solo Flight and Ground Lecture.....3 credits
Prerequisite: FT141W Student will develop basic navigation skills and develop the ability to fly precision short and soft field patterns and landings, with skills developed by direct instruction on the ground and in the aircraft. This course is intended for Non Standard size students. Minimum weight is above 220 lbs. Minimum height is above 6'3 inches.

FT 143 FT 143 Private Pilot Stage 3 Cross-country and Certification prep Flight and Ground Lecture.....3 credits
Prerequisite: FT 141 Student will practice cross-country navigation, practice flying by reference to instruments, fly and navigate at night, and be fully trained to fly all required tasks on the FAA Private Pilot Certification to Airmen Certification Standards. This course is intended for standard sized students: Maximum weight is 220 lbs, maximum height less than 6'2 inches with sitting height of less than 39 inches. These limits are dependent on currently available LCC two-seat aircraft. If those aircraft are removed or replaced, these limits may be altered as well.

FT 143W FT 143 Private Pilot Stage 3 Cross-country and Certification prep Flight and Ground Lecture.....3 credits
Prerequisite: FT 141 Student will practice cross-country navigation, practice flying by reference to instruments, fly and navigate at night, and be fully trained to fly all required tasks on the FAA Private Pilot Certification to Airmen Certification Standards. Intended for Non-standard sized students. Minimum weight is above 220 lbs. Minimum height is above 6'3 inches.

FT 201 FT201 Instrument Rating Stage 1 Altitude Instrument Flying and Basic Instrument Navigation.....4 credits
Prerequisite: FT 143 Student will learn precise airplane attitude control solely by reference to flight instruments, including instrument flight theory forboth thecontrol and performance method of instrument flight and the primary/supporting method of instrument flight. Student will navigate using VOR, GPS, and NDB for intercepting and tracking courses.

FT 202 FT 202 Instrument Rating Stage 2 Holding and Instrument Approaches.....5 credits
Prerequisite: FT 201Student will learn procedures for holding and application of attitude instrument flying to VOR, GPS, and /LS instrument approaches, including partial-panel approaches.

FT 203 PT 203 Instrument Rating Stage 3 Instrument Cross-country and Certification Prep.....3 credits
Prerequisite: FT 201 Student will learn instrument cross-country flight planning and practice all required FAA Instrument Rating tasks until they meet or exceed Airmen Certification Standards.

FT 221 FT 221 Commercial Pilot Stage 1 Ground and Airborne Lecture with solo lab.....3 credits
Prerequisite: FT 143 Student will transition to four-seat aircraft and perfect precision takeoff and landing skills, both dual and then solo, with flights to nearby local airports including night flights. Student will also fly solo cross-country navigation.

FT 222 FT 222 Commercial Pilot Stage 2 Ground and Airborne Lecture with solo lab......3 credits
Prerequisite: FT 143 Student will transition to complex aircraft (retractable gear, controllable propeller, flaps}, fly analysis missions to broaden knowledge of aerodynamics and aircraft performance, and accomplish long cross-country FAA solo flight requirement.

FT 223 FT 223 Commercial Pilot Stage 3 Ground and Airborne Lecture.....2 credits
Prerequisite: FT 143 Student will develop/maintain a high level of proficiency in attitude instrument flying.

FT 224 FT 224 Commercial Pilot Stage 4 Ground and Airborne Lecture.....4 credits
Prerequisite: FT 143 Emphasis on /FR Navigation using VOR, GPS, and /LS systems, as well as VOR and GPS holding procedures. Student will become proficient in the performance of instrument approaches to published minimums using the VOR, GPS, and /LS systems.

FT 225 FT 225 Commercial Pilot Stage 5 Ground and Airborne Lecture with Solo Lab .....5 credits
Prerequisite courses: FT 221, FT 222, FT 223, and FT 224 Course will complete all FAA commercial pilot training requirements including becoming proficient in commercial maneuvers, day and night cross-country navigation {VFR and /FR), and completion of solo night cross-country VFR .

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 230 UAS Data Acquisition and Analysis.....3 credits
Prerequisite: FT 123 and FT 124B Co-requisite: GIS 151 This course establishes an advanced understanding of the data link, radio communications, and autopilot associated with commercial UAS flight. Emphasis will be placed on enhancing mission safety and autonomous flight.

FT 231 UAS Advanced Sensor .....4 credits
This course furthers a UA operator's knowledge in aerial photography and tmfcfata collection. It emphasizes the use of advanced image technology for data collection and analysis. Students gain skills in basic photography, Crew resource management, aerial photography techniques, and data interpretation presentation.

FT 235 UAS Capstone Project .....4 credits
Prerequisite courses: FT 124C, FT124E, FT 230, FT231 This course is designed to have students compile and showcase their UAS work from their time at LCC. The course would also connect students with organizations in the community to allow them to showcase a real world project that would demonstrate their knowledge and skills.

FT 239 Part 141 Professional Pilot Flight Lab .....1-7 credits
Prerequisites: Admission to the program requires completion of a Flight Technology Entrance Application, and obtaining a Student Pilot Certificate with an Airman's Medical (1st or 2nd Class). The Professional Pilot Course includes certification training for Private Pilot, Commercial Pilot, and Instrument Rating, in single-engine or multi-engine airplanes, and helicopter, when helicopter training becomes available. 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 Part 61 Pilot Flight Lab.....1-7 credits
Prerequisites: Admission to the program requires completion of a Flight Technology Entrance Application, and obtaining a Student Pilot Certificate with an Airman's Medical (1st or 2nd Class). The Part 61 Pilot Flight Lab includes certification training for Private Pilot, Commercial Pilot and Instrument Rating in single-engine, or multi-engine airplanes and helicopters, when helicopter training becomes available. It may also be used for Flight Instructor, Instrument Flight Instructor, and Multi-engine Instructor certification. Emphasis throughout the Part 61 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 an alternative to FT 239 which is for Part 141 students, and is an option for those students who would prefer to train under Part 61. This course is repeatable.

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 and/or Helicopter. Topics include FARs, airplane structures, aerodynamics, meteorology, navigation, accessing and using performance data and numerous other industry information resources. May be offered online with instructor approval.

FT 251 Commercial Pilot Ground School.....4 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. NOTE: FT 251 and FT 262 are co-requisites and must be taken concurrently.

FT 252 Instrument Ground School .....4 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. NOTE: FT 252 and FT 262 are co-requisites and must be taken concurrently.

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 of Instruction and Human Factors.....3 credits
Psychological principles of the human learning process with methods to improve instructor effectiveness. Human factors including hazardous attitudes, fatigue, human error, decision making, cockpit design and ergonomics of the man/machine interface are covered. Studies CRM to improve crew coordination and situational awareness.

FT 256 Flight Instructor-Airplane and Instrument Flight Instructor-Airplane Ground School .....3 credits
Details of airplane flight operations and maneuver analysis, FAA regulations, and recommended procedures for CFIs. CFI-I prep includes a concise review of airspace, regulations, radio navigation, and meteorology specific to IFR flight. Prepares students for the FAA Flight Instructor-Airplane and Instrument Flight Instructor written exams.

FT 261 Air Traffic Control and Airspace.....1 credits
A review of Air Traffic Control (ATC) procedures and communications, radar and non-radar operations, navigational aids, and airspace classifications to include operational requirements for various airspace classifications. At completion of this course the student should be able to understand and apply critical elements of ATC within the National Airspace System. NOTE: FT 251 and FT 261 are co-requisites and must be taken concurrently.

FT 262 Aviation Law and Regulations.....1 credits
A review of regulations and enforcement actions primarily referencing 14 CFR but also including international (ICAO) regulations. Aircraft and pilot certification, rule-making legislation and implementation, and an analysis of aviation regulatory environments and processes will be reviewed, including legal decisions resulting from specific incidents. At completion of this course the student should be able to understand and apply pertinent regulations from 14 CFR to instrument and commercial flight operations. NOTE: FT 252 and FT 262 are co-requisites and must be taken concurrently.

FT 280 Co-op Ed: Flight Tech .....3-12 credits
This course provides flight-related learning in 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 will 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.

Foreign Languages - See Language Studies

French - See Language Studies

Geography

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

GEOG 141 Natural Environment.....4 credits
This course is designed to introduce geographic concepts of

location, pattern, movement, and region used to understand the physical environment. Students will apply geographic principles, theories, and methods to understand the physical environment and identify key processes shaping the Earth's surface. Students will use, graphs, maps and GIS technologies to acquire, process, and report information from spatial perspectives as they explore the causes and impacts of natural disasters: extreme weather, earthquakes, landslides, floods, and volcanic eruptions. This course is strongly recommended as a prerequisite for ENVS 184, Global Climate Change. This course meets the AAOT science or social science requirement. This course may be offered online.

GEOG 142 Introduction to Human Geography ..... 4 credits
This course is an introduction to the field of human geography. Students will explore the relationships between people and the places and spaces in which live. The course focuses on various sub-themes of human geography such as: demographics, religion, economics, food, migration, ethnicity, political systems, and globalization. Students will use maps, graphs, and mapping technology to collect, organize and display geographic information related to the patterns of human geography. This course fulfills the race, gender, and ethnicity requirement. This course may be offered online.

GEOG 151 Digital Earth ..... 4 credits
Prerequisite: MTH 060 or above. CIS 101 is strongly recommended. Digital Earth is an introduction to geospatial concepts and includes both lectures and hands-on computer applications. Students will use several geospatial technologies as they learn fundamental concepts of data analysis, data capture, and mapping. Students will learn how technologies such as GPS, Google Earth, ArcGIS Online, and ArcGIS desktop can used to solve real-world problems and aid critical decision making. This course may be offered online. Students who take this class online must have a computer with a windows operation systems (PC or a MAC with a windows boot option) OR be able to attend the GIS open lab hours.

GIS 151 Digital Earth ..... 4 credits
Prerequisite: MTH 060 or above. CIS 101 is strongly recommended. Digital Earth is an introduction to geospatial concepts and includes both lectures and hands-on computer applications. Students will use several geospatial technologies as they learn fundamental concepts of data analysis, data capture, and mapping. Students will learn how technologies such as GPS, Google Earth, ArcGIS Online, and ArcGIS desktop can used to solve real-world problems and aid critical decision making. This course may be offered online. Students who take this class online must have a computer with a windows operation systems (PC or a MAC with a windows boot option) OR be able to attend the GIS open lab hours.

GIS 245 GIS 1 ..... 4 credits
Prerequisite: GIS 151 or GEOG 151, or consent of the instructor. GIS 1 is the second in the series of Geographic Information Science and Technology courses. The course will build on the foundations of geospatial technology introduced in GIS/GEOG 151. Students will use ArcInfo software to explore cartographic principles, projections, data capture, data structures, and data analysis. Access to a current computer outside of class (new within last 3 years) is strongly recommended. If using a Mac, you will need to be able to run windows applications. Students who do not have access to a computer may be at a disadvantage. This course may be offered online. Student who take this class online must have a computer with a windows operation systems (PC or a MAC with a windows boot option) OR be able to attend the GIS open lab hours.

GIS 246 GIS 2 ..... 4 credits
Prerequisite: GIS 245 GIS 2 is the third in a series of Geographic Information Science and Technology courses. The course will focus on advanced 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 and project management, digitizing, editing, address matching, geo-referencing, overlay analysis, spatial analysis, problem solving (related to spatial concepts and software), and visual design. Access to a current computer outside of class (new within last 3 years) is strongly recommended. Students who do not have access to a computer may be at a disadvantage. This course may be offered online. Student who take this class online must have a computer with a windows operation systems (PC or a MAC with a windows boot option) OR be able to attend the GIS open lab hours.

GIS 280 Co-op Ed: Geographic Information Science ..... 3-12 credits
Cooperative Education is a work experience opportunity for students that have completed two GIS classes: (GIS 151 and GIS 245) and have the instructors approval.

Geology - See Earth and Environmental Science

Graphic Design

For information, contact the Art and Applied Design Department, Bldg. 11/ Rm. 101, 541.463.5409.

ART 115GD Basic Design: Fundamentals for Graphic Designers ..... 4 credits
A beginning course in two-dimensional design covering fundamental visual elements, concepts, and principles with an emphasis on how those fundamentals apply to the field of Graphic Design. Recommended for Art and Applied Design majors as well as non-majors. Emphasis on visual elements and principles in two dimensional design media and processes. Student will create and analyze projects that demonstrate critical and creative thinking and knowledge of 2D Design theory and practice. The course also includes in-depth career information about Graphic Design including an investigation into job opportunities, the design process, required skills, education, and work conditions. Coursework includes necessary competencies for graduation from the Graphic Design program. Recommended for Art and Applied Design majors as well as non-majors.

ART 119 Typography 1 ..... 3 credits
Prerequisite: ART 115 or ART 131. Explores the use and design of letterforms and typographic design. Basic typographic history and classification of typefaces is covered, while essential craftsmanship and technical skills are stressed. Coursework includes necessary competencies for the Graphic Design program.

ART 216 Digital Design Tools ..... 3 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. Graphic Design and/or Multimedia and Design Students must take this course as a graded option and earn a B- or better for the course to count in the core sequence of courses

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. An Exploration of advanced graphic design problems as well as portfolio preparation. Students are exposed to professional and business issues in the field. Coursework includes necessary competencies for the Graphic Design program.

ART 225 Digital Illustration ..... 3 credits
Prerequisite: ART 216. Students gain experience in using vector software to create technical and creative illustrations. Coursework includes necessary competencies for the Graphic Design program.

ART 227 Graphic Design Production 1 ..... 3 credits
Prerequisite: Art 216 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. 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. An advanced course in digital production where students produce projects in a studio setting under professional conditions and standards.

ART 237 Illustration 1 ..... 3 credits
Prerequisite: ART 131. An introduction to the field of illustration. Emphasis on developing skills in various illustration media, perceptual skills, compositional development, and basic thematic awareness, solving visual, conceptual problems and developing a

personal style. Student will create and analyze projects that demonstrate critical and creative thinking and knowledge of drawing media and theory. This course satisfies the Intermediate Drawing level credit. Recommended for Graphic Design and Media Arts majors. This course is for Art and Applied Design majors and for non-art majors. May be repeated for up to 9 total credits.

ART 280GD Co-op Ed: Graphic Design.....3-12 credits
Prerequisite: Instructor approval. This course provides on-the-job experience in professional graphic design sites in the community. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students develop skills, explore career options and network with professionals and employers while earning credit toward a degree. Contact the graphic design co-op coordinator before registering. Course content and expected learning proficiencies vary term to term. Course may be repeated.

ART 289 Web Production.....3 credits
Prerequisite: ART 216 or MUL 212. An intermediate web development course emphasizing web production best practices and strategies. Topics include site building and management, navigation and usability, web typography, and imagery for the web. Students will gain hands-on experience with modern tools and technologies including use of web-based tools and web authoring software. This course may be offered through Distance Learning, traditional classroom instruction, or as a hybrid course.

GD 110 Introduction to Graphic Design.....1 credits
An introductory course that presents in-depth information about a career in Graphic Design. Includes an investigation into 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 the Health and PE Division, Bldg. 5/Rm. 205, 541.463.5545.

HE 152 Drugs, Society and Behavior.....3 credits
This course provides current information concerning the impact of drugs on society and personal behavior. Students will examine a variety of issues related to health and drug use. Topics include: pharmacology, stimulants, depressants, opiates, psychedelics, as well as drug history and control issues. May be offered online.

HE 161 Cardiopulmonary Resuscitation.....1 credits
This American Red Cross /CPR/AED course helps participants recognize and respond appropriately to cardiac, breathing and emergencies. The courses in this program teach the knowledge and skills needed to give immediate care to an injured or ill person and to decide whether advanced medical care is needed.

HE 209 Human Sexuality.....3 credits
This course increases knowledge and awareness of current sexual health issues to help students make informed, responsible sexual health decisions. Physiological, psychological, and sociological factors that contribute to the development and expression of sexuality will be explored and discussed. May be offered online.

HE 212 Women's Health.....3 credits
Examines current issues in women's health and wellness, with an emphasis on disease prevent ion, empowerment and optimal well-being. Topics include biological, cultural, socio logical , global, psychological, historical, and political influences that shape and define women's health and healthcare choices.

HE 222 Consumer Health.....3 credits
Helping students make healthy decisions while managing ever-changing health information. Hot topics include: health conditions and diseases, self-care, evaluating fitness choices, ads and quackery, alternative health, health insurance, death and dying, budgeting, consumer laws, and preventative health. May be offered online.

HE 240 Holistic Health.....3 credits
This class will explore the field of holistic health by learning about a variety of alternative healing practices and methods. We will examine how complementary and alternative medicine (CAM) contrasts with conventional western medicine so that students can make informed health care choices. May be offered online.

HE 250 Personal Health.....3 credits
This course is designed to empower students to make informed personal health decisions. Students will explore the connection between personal behavior and health outcomes. Topics will include behavior change strategies, disease prevention, health promotion, psychological health, and communication. May be offered online.

HE 251 Wilderness First Aid.....3 credits
This course includes fundamental first aid care and emergency procedures in an outdoor environment. Techniques of assessing and handling the sick and injured in a remote location are included. Assessing injured and/or ill victims in a variety of emergency situations will be studied and practiced.

HE 252 First Aid.....3 credits
This course will focus on emergency first aid response, health assessment, care, prevention and promotion. Students will learn and be certified in life-saving skills for all ages, in airway obstruction, CPR, shock, soft tissue and skeletal injuries, sudden illness, and a variety of other emergencies.

HE 255 Global Health and Sustainability.....4 credits
Students will discover how current global systems of power and privilege can affect our health by exploring the connections between; economy, social stratification, poverty, violence, hunger, disease, ecological decline, consumption, pollution, exploitation, alternatives and social change.

HE 262 First Aid 2: Beyond the Basics.....3 credits
This course provides the knowledge and skills to earn American Heart Association's Basic Life Support (BLS) for Healthcare Providers certification. Patient assessment, breathing and cardiac emergencies, prevention of chronic disease and factors in emergency or trauma care are explored and practiced.

HE 275 Lifetime Health and Fitness.....3 credits
This course provides an overview of current and evidence based fitness research and its relationship to achieving optimal health. Students will explore the components of fitness, best practices in nutrition, weight management guidelines, stress management, and chronic disease prevention. May be offered online.

HE 280 Co-op Ed: Health Occupations.....3-12 credits
This internship course provides on-the-job learning experiences in the health occupations field. Students earn college credit while working under the supervision of a health care professional. Internship sites are selected to support each student's career goals, contributing to the student's education and future employability.

Health Information Management

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Health Information Management 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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Course work requires college-level reading skills.

HIM 101 Introduction to Health Care and Public Health in the US.....4 credits
This course surveys health care and public health organization and the delivery of health services in the U.S. Included in the survey are relevant organizations and their interrelationships, professional roles, legal and regulatory issues, payment systems, public health policies and the importance of health reform initiatives. Offered online.

HIM 112 Medical Insurance Procedures.....3 credits
Completion of MTH 025 is strongly recommended but not required. This course includes a computation component. 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-9/1CM coding. Introduction to the CMS provider office billing form. May be offered online.

HIM 114 Introduction to Medical Coding.....4 credits
Prerequisites: HO100, corequisites: HO150 (or BI231 with grade of C or higher); or work experience and instructor consent. A coding survey course for those involved in health care delivery,part icularly dealing with insurance and/or Medicare and government regulat ions. Included in this course is the process and pr actice of ICD-10- CM diagnosis coding as well as CPT procedure coding. May be offered online.

HIM 120 Introduction to Health Information Management ..... 3 credits
Survey class to introduce the student to the historical development of health information management. Focuses on the work and responsibilities of health information professionals and their relationship with other health care providers, content and structure of patient records; quantitative and qualitative analyses of the documentation of patient care; storage methods; and retrieving patient data elements will be explored. Offered online.¬†

HIM 153 Introduction to Pharmacology ..... 3 credits
An overview of pharmacology for the health professions student with a framework to understand medications and their administration. Part I is a review of pharmacologic principles, introducing students to the subject of drugs, their sources, and their uses. Part II examines drug classifications through descriptions and characteristics of common drugs, their purposes, side effects, precautions or contraindications, side effects, and interactions. Patient education is highlighted for each classification of drug. Offered online.

HIM 154 Introduction to Disease Processes ..... 3 credits
Prerequisites: HO150 and HO152 with a C or higher, or BI231, BI232, and BI233 (all three with grades of C or higher); 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. Offered online.

HIM 183 Introduction to Health Information Systems ..... 4 credits
This course examines the foundations of health information technology used by health care entities. Students will explore the use of information systems and their application through literature review and hands-on experiences. Topics include clinical and administrative applications used in the role of HIM professionals. Offered online.

HIM 200 Healthcare Statistics ..... 3 credits
Prerequisite: MTH 052 or higher, or test into MTH060 or higher. Healthcare statistics presents the collection and integration of given data. Computations of various formulas are used in analyzing and converting this data to useful information. Students learn appropriate methods to analyze, interpret, and present various types of data applicable to a variety of health care needs, i.e. patient care, management of a facility, and mandatory reporting requirements. Offered online.

HIM 206 Co-op Ed: Employment in Healthcare: HIM Seminar ..... 2 credits
Acceptance to HRT or HIM program, or instructor consent. Students will develop job search tools and skills in preparation for internships and employment in health care including job research, resume writing, applications, and interviewing. Students will learn how to start and keep a job, leave a job with grace, and secure references.

HIM 220 Legal and Ethical Aspects of Healthcare ..... 3 credits
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 information management and medical assisting. Offered online.

HIM 222 Reimbursement Methodologies ..... 4 credits
This course will provide the student with a comprehensive overview of billing for facility services using the ICD-10-CM, CPT and HCPCS codes to complete UB-04 claim forms . The course will familiarize the student with health records and how documentation translates to the basics of medical coding, billing, insurance, and proper reimbursement. The course also discusses the various reimbursement methodologies affecting facilities and provides an introduction to coding classification systems and the payer and healthcare system in the United States.

HIM 230 Quality Improvement in Healthcare ..... 4 credits
This course investigates the components of quality and performance improvement, and explores the functions of risk management, utilization management, and case management. Quality performance improvement components, along with regulatory requirements will be investigated. Students will learn skills in data analysis, performance improvement tools, and data presentation. Offered online.

HIM 241 Health Information Management Applications 1 ..... 4 credits
Prerequisites: HIM120, HIM183, HIM101, HIT105, HIM222, and HIM114 with minimum grade of C, or instructors consent. This course examines the foundations of health information technology used in the collection and management of clinical information. Topics covered: the function, content, and structure of the health record. Data sets and healthcare information requirements and standards will also be covered. Offered online.¬†

HIM 242 Health Information Management Applications 2 ..... 4 credits
Prerequisite: HIM241 passed with a C or higher or instructors consent. This course covers the history and use of clinical vocabularies, reimbursement methodologies, principles and supervisory management; including resources management responsibilities, such as job position descriptions, performance/practice standards, and policies and procedures. Students will study topics on Human Resources, RHIOs, PHRs, and medical identity theft. Offered online.

HIM 270 ICD-10-Coding 1 ..... 5 credits
Prerequisite: HO100, HO150 (or BI 232 with a C or better) Co-requisites: HO152 (or BI233 with a C or better). Students gain a working knowledge of ICD-10-CM diagnosis coding with exposure in abstracting and identifying correct diagnosis codes per guidelines and utilize Encoder programs. This is an online course.

HIM 271 ICD-10-PCS Coding ..... 5 credits
Prerequisite: HO100, HO150 and HO152 (or BI231 and BI233 with a C or better) and corequisite HIM154. Students gain a working knowledge of ICD-10-PCS coding. This course concentrates on inpatient procedure coding and is designed to provide thorough training in building codes in ICD-10-PCS. A comprehensive review of the structure and conventions of the system is included, as well as an in-depth discussion of the anatomy and code structure and will utilize Encoder programs. This is an online course.

HIM 273 CPT Coding 1 ..... 5 credits
Prerequisite: HO100, HO150 and HO152 (or BI231 and BI233 with a C or better) and corequisite HIM154. Students gain a working knowledge of CPT and HCPCS coding with exposure in abstracting and identifying co rrect outpatient procedure (C PT) codes and HCPCS codes per guidelines and will utilize Encoder programs . This is an online course.

HIM 275 CPT Coding 2 ..... 4 credits
Prerequisites: HIM 273. This is Part 2 of a 2 Part series. This course continues to explore the CPT coding system with the remaining body systems, along with HCPC coding which is essential to healthcare reimbursement and data collection schemes. Additional coding and billing systems may be explored, such as DRG, as applicable. Offered online.

HIM 280 Co-op Ed: Health Information Management ..... 3-12 credits
Prerequisites: COOP206 with a "C" or better, admission to the Health Information Management (HIM) program, and instructor approval. This course gives the student professional practice experience in either a healthcare setting. The student will complete a project for his/her practicum site and may be allowed and required to work on the project off-site. The practicum allows the student to gain experience as a health information professional in an actual healthcare work setting, and is essential to training and certification.

HIT 105 EHR for the Provider Office ..... 3 credits
This course provides students the opportunity to establish proficiency in creating patient charts, complete electronic progress notes for a variety of practice patients, and will complete electronic history forms, lab requisition forms, electronic prescriptions, electronic telephone notes, proof of appointment letters and electronic forms, and enter coding and billing information. This course utilizes an applied approach using simulation EHR software. Offered online.¬†

HIT 107 Integrated Electronic Heatlh Records ..... 4 credits
Students will learn to work with simulated Electronic Health Record (EHR) systems or real EHR systems with simulated data. As they play the role of practitioners using these systems, they will learn what is happening regarding functionality of software. Within this environment, they will experience threats to security and appreciate the need for standards, high levels of usability, and sources of errors. Offered online.

HIT 111 Implement and Customize Electronic Health Records ..... 4 credits
Pre-requisite: HIT107 or HI107 with a grade of C or higher, or instructor consent. Through this course the student will learn basic methods for working with an Electronic Health Record system that satisfies ONC/CMS meaningful use criteria in a health care setting. Students will develop skills at customizing an EHR to meet the information needs and practices of various users in clinical settings. Offered online.¬†

HIT 160 Practice Management ..... 3 credits
Introduces medical practice management software. Students learn to create and maintain electronic patient appointment and billing records, including data entry and storage of treatment information, matching CPT-4 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. Creation of patient statements, dunning letters, and insurance appeals. Offered online.

HO 100 Medical Terminology 1 ..... 3 credits
A programmed learning course covering basic medical terminology, derivation, pronunciation, and meaning. This course presents a study of basic medical terminology. Prefixes, suffixes, word roots, combining forms, special endings, plural forms, and abbreviations are included in the content. This course if taught both on campus and online.

HO 110 Health Office Procedures ..... 3 credits
Principles of healthcare office procedures, including HIPAA compliance, filing and records management, legal and ethical concerns of confidentiality and privacy, fundamentals of client reception, appointment scheduling, telephone techniques, and letter composition. May be offered online.

HO 150 Human Body Systems 1 ..... 3 credits
Prerequisite or corequisite: HO 100. Part 1 of a 2 part series. This course introduces the fundamental concepts of the anatomy and physiology of the cell and skin, musculoskeletal, nervous, sensory, endocrine, and circulatory-lymphatic systems. May be offered online.

HO 152 Human Body Systems 2 ..... 3 credits
Prerequisites: HO 150 Human Body Systems 1. Part 2 of a 2 part series. This course introduces the fundamental concepts of the anatomy and physiology of the respiratory, digestive, urinary, and reproductive systems. A basic introduction to microbiomes is included. May be offered online.

History

For information, contact the Social Science Division, 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. May be offered online.

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. May be offered online.

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. May be offered online.

HST 105 World History ..... 4 credits
A survey of diverse peoples using the theme of "movement" to highlight cultural contact during the emergence of new world patterns beginning in approximately 1400 to 1815: It will include 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 online.

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 online.

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 designed to shed light on the reasons for U.S. involvement and the factors behind the failure of military and political policies. Offered as an online class only.

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 online.

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 offered online.

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, 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 online.

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. Offered as an online class only.

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.

Hospitality Management

For information, contact the Culinary Arts and Hospitality Management Department, Bldg. 19/Rm. 202, 541.463.3503.

HRTM 100 Introduction to Culinary and Hospitality ..... 3 credits
This is an introductory course designed to provide a broad overview of the hospitality management and culinary arts industry and the various segments that comprise the industry. Emphasis in this course is given to understanding the scope and complexity of this industry, the career opportunities available, and the training and skills necessary to achieve a successful career. Open to the public.

HRTM 104 Introduction to Travel and Tourism ..... 3 credits
Open to the Public. This course is designed to provide students with a basic knowledge of tourism-related concepts. There will be an emphasis on community-based sustainable tourism development.

HRTM 105 Restaurant Operations ..... 3 credits
Open to the public winter and spring terms. 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
Open to the Public. This course explores the hospitality industry touching upon topics such as hotel management, food and beverage management, event management, and the cruise 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
This course is intended to serve as an overview of the Meeting, Convention, and Special Event Management industry. Students will have a general understanding of the principles, practices, operations and management of the industry.

HRTM 110 Hospitality Sales and Marketing ..... 3 credits
Open to the Public. This course is the study of marketing concepts, methods, and techniques used in the hospitality industry with a focus on consumer behavior as it relates to sustainable products and services.

HRTM 140 Hospitality Law and Security ..... 3 credits
Open to the Public. A basic study of hotel and restaurant law emphasizing in: safety and security, risk management, food and liquor service liability, employment law, civil rights and discrimination law, and how they apply to public accommodations and employment, internal security for asset protection and OSHA regulations.

HRTM 205 Managing the Restaurant Operation ..... 3 credits
Prerequisite: HRTM 105This course examines all aspects of a full-service restaurant operation. Students will be introduced to menu planning, beverage management, service, culinary arts, food safety, and sanitation principles. Current industry trends, such as organic food, buying local and environmental management will also be covered.

HRTM 209 Advanced Principles of Meeting, Convention, and Special Event Management ..... 3 credits
Prerequisite: HRTM 109. The purpose of this course is to acquire an in-depth knowledge about the meeting, convention, and special event management field and to become familiar with management techniques and strategies required for successful planning, promotion, implementation, and evaluation of those events. Focus will be placed on sustainable standard operating procedures for such events.

HRTM 220 Sustainability in the Hospitality Industry ..... 2 credits
Prerequisite: CA/HRTM majors only. A multi-dimensional course introducing global sustainability and environmental movements, their impact on the hospitality industry, and responses to and opportunities associated with sustainability within the industry.

HRTM 225 Banquet Operations ..... 2 credits
Prerequisite: CAHM majors only. This course offers student learning experiences involving the running of a full-service conference center operation, using the Center for Meeting and Learning as the laboratory. Students are required to complete 30 lab hours in the Center for Meeting and Learning in addition to weekly in ¬ñclass meetings covering all aspects of managing banquets and events.

HRTM 226 Banquet Operations 1 ..... 2 credits
Prerequisite: CAHM majors only. This course offers student learning experiences involving the running of a full-service conference center operation, using the Center for Meeting and Learning as the laboratory. Students are required to complete 30 lab hours in the Center for Meeting and Learning in addition to weekly in-class meetings covering all aspects of managing banquets and events.

HRTM 227 Banquet Operations 2 ..... 2 credits
Prerequisite: CAHM majors only. This course offers student learning experiences involving the running of a full-service conference center operation, using the Center for Meeting and Learning as the laboratory. Students are required to complete 30 lab hours in the Center for Meeting and Learning in addition to weekly in-class meetings covering all aspects of managing banquets and events.

HRTM 228 Banquet Operations 3 ..... 2 credits
Prerequisite: CAHM majors only. This course offers student learning experiences involving the running of a full-service conference center operation, using the Center for Meeting and Learning as the laboratory. Students are required to complete 30 lab hours in the Center for Meeting and Learning in addition to weekly in-class meetings covering all aspects of managing banquets and events.

HRTM 230 Hotel Operations 1 ..... 3 credits
Prerequisite: CA/HRTM majors only. This course is an introduction to the hotel industry. General principles of hotel management including the basic working knowledge of 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 to build on the fundamentals covered in HRTM 230 with a more in depth look at the management structure and functions of the executive committee. This course will focus on case studies as well as roundtable discussions with hotel executives.

HRTM 260 Hospitality Human Resources and Supervision .... 3 credits
Prerequisite: CAHM majors only. Examines the fundamentals of supervision that include planning, basic management functions, and customer relations and service. Focus is on building relationships with diverse employees through communication, motivation, supervision and leadership, and the human resources environment.

HRTM 265 Hospitality Financials 1 ..... 3 credits
Prerequisite: CAHM majors only, HRTM 105, HRTM 106, CA 200, MTH025 or higher. This course presents an overview of cost-control procedures including purchasing, storage, issuing, security, production, and financial topics for food and beverage, labor, and other expense areas in the hospitality industry.

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 labor and menu pricing, will be discussed. The curriculum will include the completion of a business plan.

HRTM 280 Co-op Ed: Hospitality Management ..... 1-7 credits
Prerequisite: HM majors only. 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.

HRTM 286 Bar and Beverage Management ..... 3 credits
Open to the Public. This course is an introduction to the fundamental areas of beverage operations. Includes planning of the bar, bar staffing and training, legal regulations, standardized recipes, drink costing and pricing, and beverage production methods and mixology. Other topics will be included.

HRTM 290 Hospitality Leadership ..... 3 credits
Co- or Prerequisite: HRTM 265. This course is the hospitality management capstone for second-year students. The course will explore the leadership qualities of successful operators in the hospitality industry.

HRTM 292 Dining Room and Kitchen Lab ..... 4 credits
Prerequisite: CA 159. Students will learn food preparation skills, food theory, management responsibilities, and a progressive attitude toward food preparation and service. Students will be exposed

to all aspects of restaurant work by rotating through a variety of different job positions.

Human Relations

For information, contact the Counseling Department, Bldg. 1/103, 541.463.5299.

CG 203 Human Relations at Work ..... 1-3 credits
This course presents the interpersonal 'people skills' that are important in the modern workplace. Topics are varied. Focus includes awareness of individual work styles and how to work effectively with people with different styles in a diverse workplace. May be offered online.

CG 213 Improving Parent Child Relations ..... 3 credits
View real life in-home parent-child interactions with a focus on building creditability as a parent, encouragement, effective communication and stimulating children's healthy development. Typical parent/child problems are illustrated in a variety of family types and children. May be offered online.

Human Services

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

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 and 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 explore human service careers, and issues relevant to being an effective human service professional: setting boundaries, stress management, and burnout prevention as well as other field-oriented skills. Students will be introduced to strategies for providing trauma informed services from a strength-based perspective. It is strongly recommended that students complete this course before enrolling in HS 280 Human Services Co-operative Education.

HS 151 Issues in Assessing and Treating the Problem Gambler..... 1 credits
Assessing and treating the problem gambler: DSM critieria for problem and pathologial gambling, cognitive distortions related to problem gamblers, updated research on problem gambling and the brain, working with families of problem gamblers, and issues related to special populations and gambling.

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 settings. Students will learn the basic processes used for information gathering, problem solving, and for sharing information. 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 158 Trauma: Theory to Practice ..... 2 credits
This class introduces students to the sources and prevalence of trauma (including physical, cognitive, emotional, social and behavioral responses to traumatic experiences), how trauma impacts individuals who seek assistance from human service organizations. Best practices for both trauma specific and trauma-informed services.

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 Substance Abuse..... 3 credits
This course will present a basic overview of concepts to facilitate an understanding of substance abusing adolescents and their families. The student will develop a working knowledge of adolescent development, as well as socio-economic, educational, gender, familial, societal and cultural factors as related to substance abuse. Interventions will be examined from a variety of treatment settings including juvenile corrections. Cultural diversity considerations are included throughout the course. Instructional methods will include lecture, discussion, films, small group activities, and guest speakers.

HS 206 The Criminal Addict: Issues and Interventions ..... 3 credits
An overview of the complex relationship between drug abuse, dependency and criminality will be discussed. Socio-economic, gender, familial, societal and cultural factors will be examined and current best practice interventions with this population will be presented. The general function of the criminal justice and corrections systems will be studied. Instructional methods will include lecture, discussion, films, small group activities and guest speakers.

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 220 Prevention 1: Preventing Substance Abuse and Other Social Problems ..... 3 credits
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 221 Co-occurring Disorders ..... 3 credits
An introduction to best practices in working with individuals with dual diagnoses and their families. Emphasizes integrated services to individuals with both mental health diagnosis and substance use diagnosis. Supports students to meet entry-level requirements of social service agencies in Oregon. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors.

HS 222 Best Practices in Human Services: Interventions..... 4 credits
An overview of Best Practices currently implemented for substance abuse, mental health, case management and a variety of other challenges facing adults and families will be examined with an emphasis on the impact of environmental/societal factors, gender and multicultural issues.

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 health and 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
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 resilence 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 Individuals make behavioral changes by encouraging them to explore and resolve their ambivalence about engaging in a change process. 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 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. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors. Instructional methods will include lecture, discussion, films, small group activities, and guest speakers.

HS 267 Cultural Competence in Human Services.....3 credits
This course will focus on developing the cultural competency of beginning human services practitioner. Major ethnic and cultural groups will be studied, as well as cultural philosophies, assumptions and patterns, and their impact on identity and mental health.

HS 280 Cooperative Education: Human Services.....3-12 credits
For information about this course, contact Cooperative Education Division, Bldg. 19/Rm. 231, 541.463.5203.

Humanities

For information, contact the Social Science Division, 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. Online mediums are used to enrich and enhance the topics covered. Offered online only.

Internet - See Business and Computers: Introduction/ Information Systems/Computer Science

Internships/Work Experiences - See Cooperative Education

Journalism

Also see Photography

For information, contact the Art and Applied Design Department, Bldg. 11/ Rm. 101, 541.463.5409.

J 134 Photojournalism.....3 credits
This course is designed to work within the field of content. Content is not only the first step in good photojournalism, but also the first step in good art-making. The course will explore how you see an image, choose to share that image, and the message your images carry. Other topics include the history of photojournalism and the crossover from documentary photography to the world of art.

J 216 Newswriting 1.....3 credits
The study and practice of newsgathering and writing objective news stories. Discussions center on concept of news and news values, ethics, interviewing and traditional journalism methods, and standards as practiced by established American newspapers.

J 234 Photojournalism 2.....4 credits
A continuation of Photojournalism with the continued discussion of content and ethics of the field. Students learn how to create editorials, identify the differences between news and human interest, develop funding for non-mainstream stories, and self-promote in the competitive field of photojournalism. Students prepare their work through editorial processing and presentation.

J 280 Co-op Ed: Journalism.....3-12 credits
This course provides work experience in reporting, design and photography. Students will have the opportunity to integrate classroom theory with practical experience. Students may develop skills, explore career options and network with professionals and employers while earning credit toward a degree. Contact the journalism cop-op coordinator before registering. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

Landscaping - See Construction

Language Studies

For information, contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.

CW 101 Chinuk Wawa.....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 stuctures 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.

CW 102 Chinuk Wawa.....4 credits
Prerequisite: AIL101 or CW 101 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.

CW 103 Chinuk Wawa.....4 credits
Prerequisite: AIL 102 or CW 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.

CW 201 Chinuk Wawa.....4 credits
Prerequisite: AIL 103 or CW 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 and discuss the culture and history of the Grand Ronde and other Chinuk Wawa speaking 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 emplasis) 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.

CW 202 Chinuk Wawa.....4 credits
Prerequisite: AIL 201 or CW 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 and other Chinuk Wawa speaking people; (2) converse in a variety of settings; (3) learn to use more advanced verb structures; (4) learn to work (with a linguistic emplasis) 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.

CW 203 Chinuk Wawa.....4 credits
Prerequisite: AIL 202 or CW 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 and other Chinuk Wawa speaking people; (2) converse in a variety settings; (3) learn to use more advanced grammatical structures; (4) work (a linguistic emplasis) 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.

FL 280IW Co-op Ed: International Work Experience.....1-12 credits
Prerequisite: Instructor approval. This is a structured program for international work experience through LCC and IE3 Global Internships. Living and working in another country, students gain career and intercultural skills essential in a global society. Application and other details are on the web at ie3global.org.

FR 101 First-Year French.....5 credits
First course of a three-term sequence designed for students with no prior language study. Introduction to French in the context of French-speaking cultures, with an emphasis on oral communication (listening and speaking) and some reading and writing practice. Students learn basic grammar structures, vocabulary, and cultural information. Computer lab work is required.

FR 102 First-Year French.....5 credits
Prerequisite: FR 101 with a passing grade of C- or above, or equivalent. Second course of a three-term sequence designed for students with no prior language study. Continuation of beginning French in the context of French-speaking cultures, with emphasis on oral communication (listening and speaking) and some reading and writing. Students continue to learn basic grammar structures, vocabulary, and cultural information. Computer lab work is required.

FR 103 First-Year French.....5 credits
Prerequisite: FR 102 with a passing grade of C- or above, or equivalent. Third course of a three-term sequence designed for students with no prior language study. Continuation of beginning French in the context of French-speaking cultures, with an emphasis on oral communication (listening and speaking) and some reading and writing. Students learn basic grammar structures, vocabulary, and cultural information. Computer lab work required.

FR 107 Beginning French Conversation.....1 credits
Prerequisite: FR101 Corequisite: FR 102 This course offers conversational practice in French at the beginning level of vocabulary and grammar structures that students have already studied or are currently learning. Offered P/NP, winter term only.

FR 188 Study Abroad: French Language and Culture in Normandy.....6 credits
Prerequisite: FR 101 or equivalent. This course is a study abroad experience encompassing intensive language study with an emphasis on oral communication, and French history and culture in the Normandy and Paris regions. The course is designed to provide students with the necessary language tools to communicate successfully in a full immersion learning environment, to encourage them to reflect on cultural values and develop an awareness and sensitivity to cultural differences, and to inspire them to engage in further French language studies. Fulfills requirement for AAOT Cultural Literacy option.

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 in a three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication (listening comprehension and speaking). Students continue to develop their writing and reading skills, review and learn new vocabulary and grammatical structures, and deepen their understanding of French-speaking cultures. Computer lab work is required. Fulfills requirement for AAOT Arts and Letters and Cultural Literacy.

FR 202 Second-Year French.....5 credits
Prerequisite: FR 201 with a passing grade of C- or above, or equivalent. Second course in a three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication (listening comprehension and speaking). Students continue to develop their writing and reading skills, review and learn new vocabulary and grammatical structures, and deepen their understanding of French-speaking cultures. Computer lab work is required. Fulfills requirement for AAOT Arts and Letters and Cultural Literacy.

FR 203 Second-Year French.....5 credits
Prerequisite: FR 202 with a passing grade of C- or above, or equivalent. Third course in a three-term sequence of Intermediate French. French 201, 202, 203 are intermediate five-skills courses with an emphasis on oral communication (listening comprehension and speaking). Students continue to develop their writing and reading skills, review and learn new vocabulary and grammatical structures, and deepen their understanding of French-speaking cultures. Computer lab work is required. Fulfills requirement for AAOT Arts and Letters and Cultural Literacy.

FR 207 Intermediate French Conversation.....1 credits
Prerequisite: FR 201 This course offers conversational practice in French at the intermediate level of vocabulary and grammar structures that students have already studied or are currently learning. Offered P/NP, winter term only.

FR 211 Conversational French.....2 credits
Prerequisite: FR 103, FR 151, or equivalent. This is an intensive weekend conversation class designed to give students the opportunity to improve their oral communication skills and intercultural competence. Students speak and hear only French while participating in cultural activities and games, discussions following guest speaker presentations, and French and Francophone-themed meals. A film viewing in French introduces and expands on vocabulary and expressions in authentic cultural contexts. Students have the opportunity to share experiences and opinions, exchange ideas, and practice using various forms and functions of the target language.

FR 213 Conversational French Through Film.....2 credits
Prerequisite: FR 102 or equivalent. A film-based conversation class

wherein students focus on improving their oral communication skills (listening comprehension, speaking, and intercultural competence). We use French and Francophone films to introduce and expand on vocabulary in authentic cultural contexts, with a focus on functional language. Students also share opinions and exchange ideas as they explore different Francophone cultures and social contexts.

FR 288 Study Abroad: French Language and Culture in Normandy.....6 credits
Prerequisite: FR 101 This course is a study abroad experience encompassing intensive language study with an emphasis on oral communication, and French history and culture in the Normandy and Paris regions. The course is designed to provide students with the necessary language tools to communicate successfully in a full immersion learning environment, to encourage them to reflect on cultural values and develop an awareness and sensitivity to cultural differences, and to inspire them to engage in further French language studies. Fulfills requirement for the AAOT Cultural Literacy option.

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. These courses 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 writing, reading, listening, and learning about Hispanic cultures. Tests are administered in class. ourse content is conducted entirely in Spanish.

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. These courses 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 as well as those covered in Spanish 101. Emphasis is also placed on writing, reading, listening, and learning about Hispanic cultures. Tests are administered in class. Course content is conducted entirely in Spanish.

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 as well as those covered in Spanish 101 and 102. Emphasis is also placed on writing, reading, listening, and learning about Hispanic cultures. Tests are administered in class. Course content is conducted entirely in Spanish.

SPAN 201 Spanish, Second-Year.....5 credits
Prerequisite: Credit level SPAN 103 minimum grade of C-, or an equivalent or placement by instructor. SPAN 201 is the first course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college level transfer courses at the intermediate (second year) level. These courses 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 reading, writing, listening and speaking of Spanish, and on learning about Spanish-speaking cultures. Tests are administered in class. The text for this course includes an online workbook component. Course content is conducted entirely in Spanish.

SPAN 202 Spanish, Second-Year.....5 credits
Prerequisite: Credit level SPAN 201 minimum grade of C-, or an equivalent or placement by instructor. SPAN 202 is the second course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college level transfer courses at the intermediate (second year) level. These courses 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 reading, writing, listening, and speaking of Spanish, and on learning about Spanish-speaking cultures. Tests are administered in class. The text for this course includes an online workbook component. Course content is conducted entirely in Spanish.

SPAN 203 Spanish, Second-Year.....5 credits
Prerequisite: Credit level SPAN 202 minimum grade of C-, or an equivalent, or placement by instructor. SPAN 203 is the third course of a three-term sequence (SPAN 201-202-203) designed to provide one full year of college level transfer courses at the intermediate (second year) level. These courses must be taken in sequence. SPAN 203 continues the development of and expands upon the five language skills practiced through emphasis on reading, writing, listening, and speaking of Spanish, and on learning about Spanish-speaking cultures. Tests are administered in class. The text for this course includes an online workbook component. Course content is conducted entirely in Spanish.

Legal Assistant

For information, contact the Business and Computer Information Technology Division, Bldg. 19/Rm. 137, 541.463.5221.

LA 100 Legal Procedures.....4 credits
Co-requisite: LA102. Pre-requisites: Working knowledge of MS Word, accurate keyboarding speed of 45 wpm, and placement test scores into WR121 or WR115 or instructor permission. 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. May be offered online. Offered through Umpqua Community College. A host-provider fee may apply.

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 online. Offered through Umpqua Community College. A host-provider fee may apply.

LA 102 Legal Terminology.....3 credits
In-depth course covering legal terminology used in a typical law office. Students will read and understand legal terminology, and they will correctly spell, define, pronounce, and apply legal terms. Practice in use of legal dictionary and thesaurus. May be offered online. Offered through Umpqua Community College. A host-provider fee may apply.

LA 105 Civil Litigation.....3 credits
Prerequisite: LA 101 and LA 128 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 online. Offered through Umpqua Community College. A host-provider fee may apply.

LA 128 Legal Procedures 2.....4 credits
Prerequisite: LA 100, BT 108, and LA 102, 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 online. Offered through Umpqua Community College. A host-provider fee may apply.

LA 132 Ethics for the Legal Professional.....3 credits
Prerequisite: LA 101 and LA 128, or instructor consent. Covers the study of ethics as it relates to the legal profession. Study the concept of "ethics" and "being ethical." 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 online. Offered through Umpqua Community College. A host-provider fee may apply.

Library/Information Research

For information, contact the Library, Center Bldg./2nd Floor, 541.463.5770.

LIB 127 Research Skills and Information Literacy.....1 credits
Students will develop critical thinking skills needed to locate, evaluate and cite information relevant 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 online.

Literature

For information, contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.

CINE 265 Film History 1-The Silent Era to Early Sound.....4 credits
Suggested prerequisite: placement into WR 115 or above (college-level reading and writing skills). This is the first course in a three-part survey of film history (aesthetic, economic, technological, and cultural). This course explores the evolution of film language from the silent era to WWII, and the various cinematic and artistic movements, as well as the economic context that led to the development of the US Studio System and Classical Hollywood Style. Students will be introduced to the basic elements of film language and tasked with using this vocabulary to analyze cinematic texts. The primary goals of the survey are twofold: to help students recognize and identify particular historical approaches to understanding film; to help students develop a sufficient cinematic vocabulary to identify and analyze cinematic style in and across film texts and within and between film movements. Weekly campus screenings are required, and clips of films are used in class for close analysis and are an integral part of the course.

CINE 266 Film History 2-The Sound Era through the 1960s.....4 credits
Suggested prerequisite: placement into WR 115 or above (college-level reading and writing skills). This is the second course in a three-part survey of film history: aesthetic, economic, technological, and cultural. This course explores the maturation and decline of the studio system in postwar U.S., as well as key international film movements that were informed by, but also challenged, the Hollywood model. Students will be introduced to the basic visual and aural elements of film language and tasked with using this vocabulary to analyze cinematic texts. The primary goals of the survey are twofold: to help students recognize and identify particular historical approaches to understanding film; to enable students to apply a cinematic vocabulary to identify and analyze cinematic style in and across film texts and within and between film movements. Weekly campus screenings are required, and clips of films are used in class for close analysis and are an integral part of the course.

CINE 267 Film History 3-1960s-the present.....4 credits
Suggested prerequisite: placement into WR 115 or above (college-level reading and writing skills). This is the third course in a three-part survey of film history (aesthetic, economic, technological, and cultural). This course focuses on contemporary world cinema beginning with various counter-cinemas of the 1960s, "new cinemas" of the 1970s, the rise of the entertainment economy in the 1980s, and concludes with a focus on present-day digital cinemas within a global and trans-media market. Students will be introduced to the basic visual and aural elements of film language and tasked with using this vocabulary to analyze cinematic texts. The primary goals of the survey are twofold: to help students recognize and identify particular historical approaches to understanding film; to enable students to apply a cinematic vocabulary to identify and analyze cinematic style in and across film texts and within and between film movements. Weekly campus screenings are required, and clips of films are used in class for close analysis and are an integral part of the course.

ENG 100 Children's Literature.....4 credits
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 chidren 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
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 and the novel or novella. May be offered online.

ENG 105 Introduction to Literature: Drama.....4 credits
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 online.

ENG 105_H Introduction to Literature: Drama-Honors.....4 credits
This honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. See *lanecc.edu/honors* for information. This course is a reading, writing, and discussion course that features critical analysis and appreciation of a wide variety of world plays beginning with the classical Greek period and ending with works of today.

ENG 106 Introduction to Literature: Poetry.....4 credits
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 online.

ENG 107 Survey of World Literature.....4 credits
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 coves the ancient and medieval eras.

ENG 108 Survey of World Literature.....4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) 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 covers the early modern era.

ENG 109 Survey of World Literature.....4 credits
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 covers the nineteenth century until the present day.

ENG 151 Black American Literature ..... 4 credits
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 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
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 201 Shakespeare ..... 4 credits
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 may include Romeo and Juliet.

ENG 203 Shakespeare ..... 4 credits
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 may include Hamlet and/or King Lear.

ENG 204 Survey of British Literature ..... 4 credits
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
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 215 Latino/a Literature ..... 4 credits
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 217 Reading, Writing and Digital Culture ..... 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) strongly recommended for success. This course combines research into the impact of 21st century technologies and new media on the study of literature and culture with the use of digital humanities methods to analyze texts and create new knowledge and new theoretical and ethical considerations and other developments in the field.

ENG 218 Literature of the Islamic World ..... 4 credits
College-level reading and writing skills (a passing grade in WR 115 or placement into WR 121) strongly recommended for success. This course introduces students to historic and contemporary literature, comprised of poetry, fiction, essays, and drama, from nations and regions that are, or have been, strongly associated with the Islamic faith.

ENG 222 Literature and Gender ..... 4 credits
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, Myth and Folklore ..... 4 credits
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 world view 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
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
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
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
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
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
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
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, students can 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
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
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
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
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.

FA 264 Women Make Movies.....4 credits
Suggested Prerequisite: placement into WR115 (college-level reading and writing skills). 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, including the basic visual and aural elements of film language. 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: a passing score (C-/P or better) in WR 95 or its equivalent, placement into WR 115 (a score of 76RD and 76WR on the placement test), or instructor permission. 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 movie making. 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 complicating African Americans' full, rigorous admittance and participation into the Hollywood system. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements.

FA 276 Gender, Race, and Class in U.S. Cinema.....4 credits
Suggested prerequisite: placement into WR 115 (college-level reading and writing skills). FA 276 is a cinema course focused on the exploration of representations of gender, race, and class in U.S. Cinema. The course explores the impact of Classical Hollywood Style— the predominate form of storytelling in U.S. Cinema during much of the 20th Century—as it relates to both the creation of cinematic texts and the presentation of race/ethnicity, gender, sexuality, and class. Students will be introduced to a cinematic language, the history of cinematic representation, and theoretical discussions of meaning-making, reception, production, and distribution of cinematic texts. Culminating projects will involve the application of cinematic theory in an analysis of the construction of race, gender, sexuality, and class in particular cinematic texts. Weekly campus screenings are required, and clips of films are used in class for close analysis and are an integral part of the course.

Machine Shop, Machine Tools - See Manufacturing

Management - See Business and Hospitality Management

Manufacturing

For information, contact the Advanced Technology Division, Bldg. 15/Rm. 201, 541.463.5380.

CNC 101 CNC Concepts ..... 3 credits
Prerequisite: MFG 151 This course is an introduction to computer Numerical Control (CNC) machinery and processes. It teaches basic concepts necessary for further study in CNC manufacturing.

CNC 102 CNC Setup and Operation ..... 3 credits
Prerequisite: CNC101 and CS 120 or assessment This course introduces basic Computer Numerical Control (CNC) setup and operation including part setup and tool offsets on Haas Mills and Lathes using CNC simulators and machinery.

CNC 103 CNC Programming ..... 3 credits
Prerequisite/Co-requisite: CNC 102 This course teaches basic 2 1/2 axis CNC Mill and 2 axis CNC Lathe programming with G-code

CNC 108 CNC Projects ..... 3 credits
Prerequisite /Co-requisite: CNC102 and CNC 103 This course gives students a chance to demonstrate and reinforce their Computer Numerical Control (CNC) machining skills through the completion of projects on the CNC mill and lathe.

CNC 201 CNC Mill ..... 3 credits
Prerequisite: CNC 103 and CNC 108 This course continues Computer Numerical Control (CNC) machining instruction. It covers more advanced topics specific to the CNC mill such as part fixturing, multi-operation setups and 3 axis milling.

CNC 202 CNC Lathe ..... 3 credits
Prerequiste: CNC201 and MFG 243 This course continues Computer Numerical Control (CNC) machining instruction. It covers more advanced topics specific to the CNC lathe such as canned cycles and use of a wider range of cutting tools and setups.

CNC 208 CNC Advanced Projects ..... 6 credits
Prerequisite/Corequisite: CNC 202 Prerequisite: MFG 244 This course gives students a chance to demonstrate and reinforce their Computer Numerical Control (CNC) machining skills through the completion of projects on the CNC mill and lathe.

CNC 209 Advanced CNC Concepts ..... 6 credits
Prerequisite: CNC 201 and CNC 202 This course covers advanced Computer Numerical Control (CNC) concepts including use of 4 axis lathes and 5 axis mills

ENGR 280M Co-op Ed: Manufacturing Technology ..... 3-12 credits
This course provides manufacturing-related learning in 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 will develop skills, explore career options and network with professionals and employers while earning credit toward a degree.

MFG 101 Safety and Basic Shop Practice ..... 3 credits
Prerequisite: MTH 020 or assessment This fundamental course introduces students to safe and efficient shop practices necessary to be successful in a manufacturing environment. Concepts are presented through a series of lectures and online activities. Skills are reinforced through demonstrations introducing basic shop equipment.

MFG 102 Shop Measurement and Coordinate System ..... 3 credits
Prerequisite/Co-requisite: MFG 101 This course teaches basic measurement, print reading and concepts necessary to be successful in a shop environment. Topics covered include: Mixing ratios, Cartesian coordinate systems, speed and feeds, basic trigonometry for technicians.

MFG 103 Metal Cutting Basics ..... 3 credits
Prerequisite/Corequisite: MFG 102 This course teaches the basics of metal cutting. Topics covered include: Shop Metallurgy, tool geometry, order of operations and machining strategies.

MFG 124 Shop Measurement and Coordinate Systems ..... 3 credits
Prerequisite/Co-requisite: MFG 101 This course teaches basic measurement, print reading and math concepts necessary to be successful in a shop environment. Topics covered include: Mixing ratios, Cartesian coordinate systems, speed and feeds, basic trigonometry for technicians.

MFG 151 Manufacturing 1 ..... 6 credits
Prerequisite/Co-requisite: MFG 103 This course consists of a series of projects demonstrating and strengthening manual shop skills. Students are provided with drawings and instructions which they will use to create a series of projects of increasing complexity.

MFG 152 Manufacturing 2 ..... 4 credits
Prerequisite: MFG 151 This course consists of a series of projects demonstrating and strengthening manual shop skills. Students are provided with drawings and instructions which they will use to create a series of projects of increasing complexity.

MFG 153 Manufacturing 3 ..... 5 credits
Prerequisite: MFG152 This course consists of a series of projects demonstrating and strengthening manual shop skills. Students are provided with drawings and instructions which they will use to create a series of projects of increasing complexity.

MFG 201 CNC Mill ..... 1-6 credits
Prerequisite: Must have completed 24 credits of MFG 197 or instructor consent. Development of the skills required to program, operate, and produce parts on the computer numerical control (CNC) 3 axis mill. Topics include: history of CNC, computer to machine interface including feedback and different control systems, 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. A basic proficiency in math and computer use is necessary for success in this class. CS120 and Mth085 are recommended prior to taking this course.

MFG 202 CNC Lathe ..... 1-6 credits
Prerequisite: Must have completed 24 credits of MFG 197 or instructor consent. 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 different control systems, 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 209 Advanced Manufacturing Processes ..... 6 credits
Prerequisite: MFG 254 and MFG 255 Corequisite: MFG 254 This course covers advanced machining and shop support concepts including surface grinding, dividing head use, tool and cutter grinding and machinery maintenance and repair

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 which will be further developed in MFG 212. 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 241 Solid Modeling 1 ..... 3 credits
Prerequisite: MFG 102 Solid modeling is the precise modeling of parts in 3 dimensions. In manufacturing, 3D models can be used both for design and to create manufacturing instructions and processes. This course introduces solid modeling using Solidworks, the most popular solid modeling software for machining.

MFG 242 Solid Modeling 2 ..... 3 credits
Prerequisite: MFG 241This course continues solid modeling instruction with Solidworks including more advanced topics such as assemblies and basic engineering analysis.

MFG 243 CAM 1 ..... 6 credits
Prerequisite: CNC 103 Computer Aided Manufacturing (CAM) uses computer models to automatically generate gcode for the control of CNC mills and lathes. This course teaches CAM for 2D mills and lathes using Mastercam, the most popular CAM software used in the manufacturing industry.

MFG 244 CAM 2 ..... 6 credits
Prerequisite: CNC 103 Computer Aided Manufacturing (CAM) uses computer models to automatically generate gcode for the control of CNC mills and lathes. This course teaches CAM for 2D mills and lathes using Mastercam, the most popular CAM software used in the manufacturing industry.

MFG 254 Manufacturing 4 ..... 6 credits
Prerequisite: MFG 153 This course consists of a series of projects demonstrating and strengthening manual shop skills. Students are provided with drawings which they will use to create a series of projects of increasing complexity.

MFG 255 Manufacturing 5 ..... 6 credits
Prerequisite: MFG 254 This course consists of a series of projects demonstrating and strengthening manual shop skills. Students are provided with drawings and instructions which they will use to create a series of projects of increasing complexity. In addition this course introduces manual machine maintenance and repair.

Mathematics

For information, contact the Mathematics Division, Bldg. 16/Rm. 166, 541.463.5392.

MTH 010 Whole Numbers, Fractions, 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. Concepts, problem solving, and applications 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. MTH010 is intended for students who need to strengthen their basic math skills before moving on to MTH020. May be offered online.

MTH 020 Math Renewal..... 4 credits
Within the past four terms completed MTH 010 or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. 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 requirementsThis 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.

MTH 020A Math Renewal: Part A ..... 1 credits
Prerequisite: Within the past four terms completed MTH 010, MTH 010A, MTH 010T or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. If you have taken a higher level math course than MTH 020 and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course is a review of operations with whole numbers and fractions including rounding, estimation, order of operations and problem solving. It also incorporates proper fraction notation and exponential notation. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part A of a four part, individual credit, sequence of courses that when completed are equivalent to MTH 020.

MTH 020B Math Renewl: Part B..... 1 credits
Prerequisite: Within the past four terms completed MTH 020A or equivalent course with a grade of "C-" or better. 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 operations with decimals including rounding, estimation, order of operations and problem solving. This review is followed by an introduction to ratios, proportions and percent notation. Each new topic incorporates review of previously learned skills and application problems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part B of a four part, individual credit, sequence of courses that when completed are equivalent to MTH 020.

MTH 020C Math Renewal: Part C..... 1 credits
Prerequisite: Within the past four terms completed MTH 020A and MTH 020B or equivalent courses with a grade of "C-" or better. 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 an introduction to data and statistics including averages and reading graphs. It then focuses on measurement and unit conversions and finishes with basic geometry in a problem-solving context. Each new topic incorporates review of previously learned skills and application problems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part C of a four part, individual credit, sequence of courses that when completed are equivalent to MTH 020.

MTH 020D Math Renewal: Part D ..... 1 credits
Prerequisite: Within the past four terms completed MTH 020A and MTH 020B and MTH 020C or equivalent courses with a grade of "C-" or better. 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 an introduction to data and statistics including averages and reading graphs. It then focuses on measurement and unit conversions and finishes with basic geometry in a problem-solving context. Each new topic incorporates review of previously learned skills and application problems. The last exam for this credit will be comprehensive over the material in the entire MTH 020 course. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part D of a four part, individual credit, sequence of courses that when completed are equivalent to MTH 020.

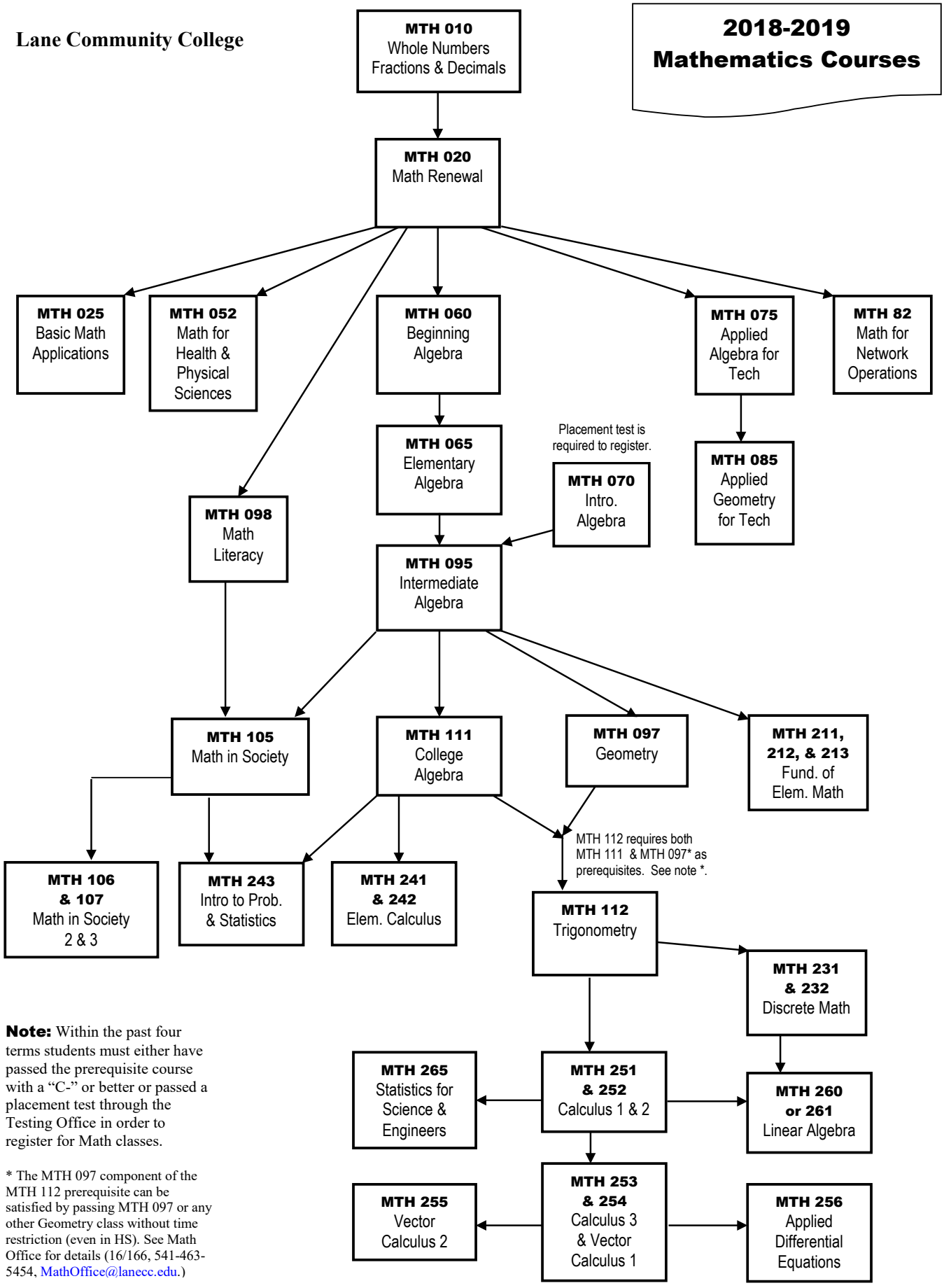
MTH 025 Basic Mathematics Applications ..... 3 credits
Prerequisite: Within the past four terms completed MTH 020 or equivalent course with a grade of "C-" or better or pass a placement test through the Testing Office. Basic skills in fractions, decimals, percents and ratios will be assumed. MTH 025 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. This course will include skill maintenance and explorations, and may involve group work and projects.

MTH 025C Basic Mathematics Applications..... 3 credits
Prerequisite: Within the past four terms completed MTH 020 or equivalent course with a grade of "C-" or better or pass a placement test through the Testing Office. Basic skills in fractions, decimals, percents and ratios will be assumed. MTH 025C is a course in the application of basic mathematics to everyday situations in culinary practice. Topics include applications involving budget, food preparation, measurement systems, yield percents, recipe conversions, nutritional labels, payroll, and discounts. The course will focus on group work, skill maintenance, investigations.

MTH 052 Math for Health and Physical Sciences ..... 4 credits
Prerequisite: Within the past four terms completed MTH 020 or equivalent course with a grade of "C-"or better or passed a placement test through the Testing Office. 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.

Lane Community College

2018-2019 Mathematics Courses



Note: Within the past four terms students must either have passed the prerequisite course with a "C-" or better or passed a placement test through the Testing Office in order to register for Math classes.

* The MTH 097 component of the MTH 112 prerequisite can be satisfied by passing MTH 097 or any other Geometry class without time restriction (even in HS). See Math Office for details (16/166, 541-463-5454, MathOffice@lanecc.edu.)

MTH 060 Beginning Algebra.....4 credits
Prerequisite: Within the past four terms completed MTH 020 or equivalent course with a grade of "C-" or better or pass a placement test through the Testing Office. 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, linear inequalities, 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.

MTH 060A Beginning Algebra: Part A.....1 credits
Prerequisite: Within the past four terms completed MTH 020 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. This course begins with an introduction to using variables and mathematical models in algebra. It then covers operations with real numbers and using exponents and order of operations. Each new topic incorporates review of previously learned skills and application problems. MTH 060 is the first term of a two-term sequence in introductory algebra which prepares students for Elementary Algebra, MTH 065. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part A of a four part, individual credit sequence of courses that when completed are equivalent to MTH 060.

MTH 060B Beginning Algebra: Part B.....1 credits
Prerequisite: Within the past four terms completed MTH 060A or equivalent course with a grade of "C-" or better. This course covers solving linear equations in one variable. It also includes solving formulas and an introduction to problem solving with linear equations. Each new topic incorporates review of previously learned skills and application problems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part B of a four part, individual credit sequence of courses that when completed are equivalent to MTH 060.

MTH 060C Beginning Algebra: Part C.....1 credits
Prerequisite: Within the past four terms completed MTH 060A and MTH 060B (or equivalent course) with a grade of "C-" or better. This course covers problem solving in geometry, linear inequalities in one variable, and graphing linear equations. Each new topic incorporates review of previously learned skills and application problems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part C of a four part, individual credit sequence of courses that when completed are equivalent to MTH 060.

MTH 060D Beginning Algebra: Part D.....1 credits
Prerequisite: Within the past four terms completed MTH 060A, MTH 060B, and MTH 060C (or equivalent course) with a grade of "C-" or better. This course covers linear equations in two variables, including graphing, slope, and writing linear equations from given information. Each new topic incorporates review of previously learned skills and application problems. The last exam for this credit will be comprehensive over the material in the entire MTH 060 course. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part D of a four part, individual credit sequence of courses that when completed are equivalent to MTH 060.

MTH 065 Elementary Algebra.....4 credits
Prerequisite: Within the past four terms completed MTH 060 or equivalent course with a grade of C- or better or pass a placement test through the Testing Office. 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, exponents, polynomials, factoring, quadratic equations, and rational expressions.

MTH 065A Elementary Algebra: Part A.....1 credits
Prerequisite: Within the past four terms completed MTH 060 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. MTH 065 is the second term of a two-term sequence in introductory algebra which prepares students to take Intermediate Algebra (MTH 095). This course reviews graphing linear equations and using them to solve problems. It also covers solving systems of linear equations. Each new topic incorporates review of previously learned skills and application problems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part A of a four part, individual credit, sequence of courses that when completed are equivalent to MTH 065.

MTH 065B Elementary Algebra: Part B.....1 credits
Prerequisite: Within the past four terms completed MTH 065A or equivalent course with a grade of "C-" or better. This course covers rules of exponents and operations with polynomials. It also covers an introduction to factoring and scientific notation. Each new topic incorporates review of previously learned skills and application problems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part B of a four part, individual credit, sequence of courses that when completed are equivalent to MTH 065.

MTH 065C Elementary Algebra: Part C.....1 credits
Prerequisite: Within the past four terms completed MTH 065A and MTH 065B (or equivalent courses) with a grade of "C-" or better. This course covers factoring polynomials and solving equations using factoring. It also covers rational expressions. Each new topic incorporates review of previously learned skills and application problems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part C of a four part, individual credit, sequence of courses that when completed are equivalent to MTH 065.

MTH 065D Elementary Algebra: Part D.....1 credits
Prerequisite: Within the past four terms completed MTH 065A, MTH 065B, and MTH 065C (or equivalent courses) with a grade of "C-" or better. This course covers radical expressions and an introduction to the Pythagorean Theorem. Each new topic incorporates review of previously learned skills and application problems. The last exam for this credit will be comprehensive over the material in the entire MTH 065 course. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part D of a four part, individual credit, sequence of courses that when completed are equivalent to MTH 065.

MTH 070 Introductory Algebra.....5 credits
Prerequisite: Within the past four terms placed into MTH 070 through the Testing Office. 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. (Qualified 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, linear inequalities, ratio and proportion, unit analysis, systems of linear equations, polynomials, factoring, quadratic equations, rational expressions, and exponents.

MTH 075 Applied Algebra for Technicians.....4 credits
Prerequisite: Within the past four terms completed MTH 020 with a grade of "C-" or better or passed a placement test through the Testing Office. MTH 075 Applied Algebra is a first course in algebra skills needed for technical mathematics, which includes the following: signed numbers, positive and negative exponents, scientific notation, forming expressions and equations from real situations, ratio and proportion, the Cartesian coordinate systems, rates of change, slope, linear equations, linear systems, quadratic equations, graphs, tables, charts, data analysis and problem solving. The course will emphasize clear communication of mathematical results. Application problems are realistic with some data to be collected, analyzed and discussed in group setting with results submitted in written form.

MTH 082 Math for Network Operations.....4 credits
Prerequisite: Withing the past four terms, completed MTH 020 with a grade of "C-" or better or passed a placement test through the Testing Office. This course satisfies math requirements for students in the Computer Networking program. Topics include understanding different number bases, binary math and logical operators, hexadecimal color representations, basic internet protocol math, hashing and checksum algorithms, and basic cryptography.

MTH 085 Applied Geometry for Technicians.....4 credits
Prerequisite: Within the past four terms completed MTH 075 with a grade of "C-" or better or passed a placement test through the Testing Office. MTH 085 Applied Geometry includes the following: linear, square, and cubic units, dimensional analysis in metric and US customary measures, problem solving, angle measure, properties of pairs of angles formed by system of parallel, perpendicular, and transversal lines; perimeter and area of polygons, sectors, arcs and

circles; surface area and volume of solid figures such as prisms and pyramids; similarity, ratio and proportion, right triangle trigonometry. Oblique triangle trigonometry is an optional topic. Algebra topics from MTH 075 will be applied throughout. The course will emphasize clear communication of mathematical results. Application problems are realistic with some data to be collected, analyzed and discussed in group setting with results submitted in written form.

MTH 095 Intermediate Algebra.....5 credits
Prerequisite: Within the past four terms completed MTH 065, MTH 070 or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. Topics include equations, function notation, polynomials, coordinate graphing, rational equations, radical equations, exponents, quadratic functions, exponential and logarithmic functions, inequalities and problem solving methods. This course provides a foundation for MTH 097, MTH 105, MTH 111, or MTH 211 or MTH 213.

MTH 095A Intermediate Algebra: Part A.....1 credits
Prerequisite: Within the past four terms completed MTH 065 or MTH 070 or equivalent courses with a grade of "C-" or better, or pass a placement test through the Testing Office. If you have taken a higher level math course than MTH 095 and passed the course with a "C-" or better, you may not use this course for your degree/certificate requirements. This course reviews the topics of polynomials and factoring and extends the topics to cover several variables. Each new topic incorporates review of previously learned skills and application problems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* MTH 095 provides a foundation for MTH 097, MTH 105, MTH 111, or MTH 211 or MTH 213. This is Part A of a five part, individual credit sequence of courses that when completed are equivalent to MTH 095.

MTH 095B Intermediate Algebra: Part B.....1 credits
Prerequisite: Within the past four terms completed MTH 095A or equivalent course with a grade of "C-" or better. This course covers rational expressions and solving rational equations. Each new topic incorporates review of previously learned skills and application problems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part B of a five part, individual credit sequence of courses that when completed are equivalent to MTH 095.

MTH 095C Intermediate Algebra: Part C.....1 credits
Prerequisite: Within the past four terms completed MTH 095A and MTH 095B (or equivalent courses) with a grade of "C-" or better. This course covers an introduction to functions and compound linear inequalities. It also covers radical expressions and rational exponents. Each new topic incorporates review of previously learned skills and application problems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part C of a five part, individual credit sequence of courses that when completed are equivalent to MTH 095.

MTH 095D Intermediate Algebra: Part D.....1 credits
Prerequisite: Within the past four terms completed MTH 095A, MTH 095B, and MTH 095C (or equivalent courses) with a grade of "C-" or better. This course covers radical equations and complex numbers. It also covers solving quadratic equations. Each new topic incorporates review of previously learned skills and application problems. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part D of a five part, individual credit sequence of courses that when completed are equivalent to MTH 095.

MTH 095E Intermediate Algebra: Part E.....1 credits
Prerequisite: Within the past four terms completed MTH 095A, MTH 095B, MTH 095C, and MTH 095D (or equivalent courses) with a grade of "C-" or better. This course is an introduction to exponential and logarithmic functions. Each new topic incorporates review of previously learned skills and application problems. The exam for this credit will be comprehensive over the material in the entire MTH 095 course. Scientific Calculator is required. Please refer to the Calculator Recommendation Chart on *lanecc.edu/math.* This is Part E of a five part, individual credit sequence of courses that when completed are equivalent to MTH 095.

MTH 097 Geometry.....4 credits
Prerequisite: Within the past four terms completed MTH 095, MTH 111, or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. 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. MTH 097 is strongly recommended for MTH 111.

MTH 098 Math Literacy.....5 credits
Prerequisite: Within the past four terms completed with a "C-" or better MTH 020 or equivalent course, a higher MTH course, or passed a placement test through the Testing Office. This course provides algebra, quantitative reasoning, and problem solving skills needed in Math 105 and in other college courses in programs not requiring calculus. For students who do not need calculus, Math 098 is an alternative to Math 060/065/095 as a pathway to MTH 105.

MTH 105 Math in Society.....4 credits
Prerequisite: Within the past four terms completed MTH 095, MTH 098, or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. A survey of mathematical topics and applications of those topics for non-science majors including probability, statistics, finance and exponential modeling problem solving.

MTH 106 Math in Society 2.....4 credits
Prerequisite: MTH 105 completed with a grade of "C-" or better within the past four terms. The second of a two term sequence involving problem solving with a variety of applications of mathematics. These applications include 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, fair division, scheduling, or other topics approved by the Mathematics Division.

MTH 107 Math in Society 3.....4 credits
Prerequisite: MTH 095 or MTH 098 The third of a three term sequence involving problem solving with a variety of applications of mathematics. The sequence may be taken in any order. These applications include at least three of the following topics: voting systems, methods of fair division, apportionment, networks, graph theory, or other topics approved by the Mathematics Division.

MTH 111 College Algebra.....5 credits
Prerequisite: Within the past for terms completed MTH 095 or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. 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.

MTH 112 Trigonometry.....5 credits
Prerequisite is fulfilled by meeting two requirements: A) Within the past four terms competed MTH 111 or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office; and, B) (without time restriction) completed MTH 097 or equivalent course with a "C-" or better or passed a placement test through the Math Resource Center. 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.

MTH 211 Fundamentals of Elementary Mathematics 1.....4 credits
Prerequisite: Within the past four terms completed MTH 095 or equivalent course with a grade of "C-" or better, or pass a placement test through the Testing Office. Course includes a survey of mathematical topics for those interested in the presentation of mathematics at the K-9 levels. A variety of manipulative and heuristic problem solving strategies are used. Emphasis is on problem solving, patterns, sequences, set theory, an introduction to logic, numeration systems, number bases, arithmetic operations with whole numbers and integers, and number theory.

MTH 212 Fundamentals of Elementary Mathematics 2.....4 credits
Prerequisite: MTH 211 with a grade of "C-" or better completed within the past four terms. Surveys mathematical topics for those interested in the presentation of mathematics at the K-9 levels. A variety

of manipulative and heuristic problem solving strategies are used. Emphasis is on problem solving, rational numbers (as fractions and decimals), irrational and real numbers, proportional reasoning, percent, using elementary algebra (use of variables, equation solving, relations and functions), and an introduction to probability.

MTH 213 Fundamentals of Elementary Mathematics 3.....4 credits
Prerequisite: MTH 211 or MTH 212 with a grade of "C-" or better completed within the past four terms. A survey of mathematical topics for those interested in the presentation of mathematics at the K-9 levels. A variety of manipulative and heuristic problem solving strategies are used. Emphasis is on problem solving, elementary statistics, introductory geometry (basic definitions, vocabulary, polygons, angles, 2-3 dimensional geometry, congruence, constructions, similarity), transformational geometry, and measurement systems.

MTH 231 Discrete Mathematics 1.....4 credits
Prerequisite: Within the past four terms completed MTH 112 or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. First course in a two-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, recursion and mathematical induction. The order of the topics may vary with instructor and text.

MTH 232 Discrete Mathematics 2.....4 credits
Prerequisite: MTH 231 completed with a grade of "C-" or better 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, counting techniques, functions, relations and probability. The order of the topics may vary with instructor and text.

MTH 241 Elementary Calculus 1.....4 credits
Prerequisite: Within the past four terms completed MTH 111 or equivalent course with a grade of "C-" or better or passed a placement test through the Testing Office. Differential calculus (without Trigonometry) for business and social sciences. Some review of algebraic techniques. Major emphasis is on limits; continuity; derivatives with applications; and exponential and logarithmic functions, their derivatives and applications.

MTH 242 Elementary Calculus 2.....4 credits
Prerequisite: MTH 241 completed with a grade of "C-" or better 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.

MTH 243 Introduction to Probability and Statistics.....4 credits
Prerequisite: Within the past four terms completed either MTH 105, MTH 111, or equivalent courses with a grade of "C-" or better or passed a placement test through the Testing Office. Discrete and continuous probability, data description and analysis, measures of central tendency and variability, sampling distributions, and basic concepts of statistical inference, including confidence intervals, hypothesis testing, correlation, and regression.

MTH 251 Calculus 1 (Differential Calculus).....5 credits
Prerequisite: Within the past four terms completed MTH 112 or equivalent course with a grade of "C-" or better or passed placement tests through the Testing Office. MTH 251 is a first-term calculus course that includes a selective review of precalculus 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.

MTH 252 Calculus 2 (Integral Calculus).....5 credits
Prerequisite: MTH 251 or equivalent course completed with a grade of "C-" or better 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.

MTH 253 Calculus 3 (Infinite Series and Sequences).....5 credits
Prerequisite: MTH 252 completed with a grade of "C-" or better within the past four terms. This is the third term of a six-term sequence. Topics include: Indeterminate forms and improper integrals. Parametric and polar equations and conics. Sequences and series. Investigation of the convergence of series. Taylor series and power series.

MTH 254 Vector Calculus 1 (Introduction to Vectors and Multidimensions).....4 credits
Prerequisite: MTH 253 completed with a grade of "C-" or better 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.

MTH 255 Vector Calculus 2 (Introduction to Vector Analysis)4 credits
Prerequisite: MTH 254 completed with a grade of "C-" or better 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.

MTH 256 Applied Differential Equations.....4 credits
Prerequisite: MTH 254 with a grade of "C-" or better 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.

MTH 260 Linear Algebra.....4 credits
Prerequisite: Within the past four terms completed MTH 232 or 252 with a grade of "C-" or better. This course provides a foundation of linear algebra computation, terminology and theory. Topics include systems of linear equations, vector spaces, matrices, determinants, theory of linear transformations, dot and cross products, eigenvalues, eigenvectors, and complex numbers.

MTH 261 Introduction to Linear Algebra.....2 credits
Prerequisite: MTH 252. Prerequisites must be completed with a "C-" or better within the past eight terms. The course covers systems of linear equations, vectors, matrices, determinants, linear transformations, dot product and cross product, and eigenvalues and eigenvectors. Intended for engineering majors where MTH 261 and MTH 253 satisfy the MTH 306 requirement at OSU.

MTH 265 Statistics for Scientists and Engineers.....4 credits
Prerequisite: MTH 252 completed with a grade of "C-" or better within the past eight terms. A calculus-based introduction to probability and statistics with applications to science and engineering disciplines. Topics include: data description and analysis, random variables, expectation, discrete and continuous probability theory, common probability distributions, sampling distributions, estimation, confidence intervals, hypothesis testing, control charts, regression analysis, and experimental design.

MTH 280 Co-op Ed: Mathematics.....3-12 credits
This internship course offers a work experience as a math tutor on a Lane campus or in an area K-12 school. Students devote a prearranged number of hours each week to classroom observation and possible assistance to the instructor, as well as direct student contact in a one-to-one or group situation.

Mechanics - See Automotive, Aviation, Diesel

Media Arts

For information about classes with course numbers that begin with:

CINE and FA - Contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.

ART, AUD, FA, MDP, MUL, VP - Contact the Art and Applied Design Department, Bldg. 11/Rm. 101, 541.463.5409.

ART 151A Media Graphics.....3 credits
Introduces and provides a foundation in the essential skills needed to use Flash software. Flash is used to create all kinds of content such

as website front-ends, interactive games, animated cartoons, movie trailers, and PDA interfaces. 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.

ART 288 Introduction to Web Design and Social Media.....3 credits
Introduction to design and communication principles as they apply to web design. Students also investigate the unique challenges involved in web site design including an introduction to social media marketing.

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. May be offered as traditional classroom instruction, fully online, or as a hybrid course.

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.

CINE 265 Film History 1-The Silent Era to Early Sound.....4 credits
Suggested prerequisite: placement into WR 115 or above (college-level reading and writing skills). This is the first course in a three-part survey of film history (aesthetic, economic, technological, and cultural). This course explores the evolution of film language from the silent era to WWII, and the various cinematic and artistic movements, as well as the economic context that led to the development of the US Studio System and Classical Hollywood Style. Students will be introduced to the basic elements of film language and tasked with using this vocabulary to analyze cinematic texts. The primary goals of the survey are twofold: to help students recognize and identify particular historical approaches to understanding film; to help students develop a sufficient cinematic vocabulary to identify and analyze cinematic style in and across film texts and within and between film movements. Weekly campus screenings are required, and clips of films are used in class for close analysis and are an integral part of the course.

CINE 266 Film History 2-The Sound Era through the 1960s.....4 credits
Suggested prerequisite: placement into WR 115 or above (college-level reading and writing skills). This is the second course in a three-part survey of film history: aesthetic, economic, technological, and cultural. This course explores the maturation and decline of the studio system in postwar U.S., as well as key international film movements that were informed by, but also challenged, the Hollywood model. Students will be introduced to the basic visual and aural elements of film language and tasked with using this vocabulary to analyze cinematic texts. The primary goals of the survey are twofold: to help students recognize and identify particular historical approaches to understanding film; to enable students to apply a cinematic vocabulary to identify and analyze cinematic style in and across film texts and within and between film movements. Weekly campus screenings are required, and clips of films are used in class for close analysis and are an integral part of the course.

CINE 267 Film History 3-1960s-the present.....4 credits
Suggested prerequisite: placement into WR 115 or above (college-level reading and writing skills). This is the third course in a three-part survey of film history (aesthetic, economic, technological, and cultural). This course focuses on contemporary world cinema beginning with various counter-cinemas of the 1960s, "new cinemas" of the 1970s, the rise of the entertainment economy in the 1980s, and concludes with a focus on present-day digital cinemas within a global and trans-media market. Students will be introduced to the basic visual and aural elements of film language and tasked with using this vocabulary to analyze cinematic texts. The primary goals of the survey are twofold: to help students recognize and identify particular historical approaches to understanding film; to enable students to apply a cinematic vocabulary to identify and analyze cinematic style in and across film texts and within and between film movements. Weekly campus screenings are required, and clips of films are used in class for close analysis and are an integral part of the course.

FA 221 Computer Animation.....4 credits
This course covers the historical beginnings of animation from flipbooks to film. It allows students an opportunity to explore the application of animation from business presentations to entertainment. This is a projected oriented, hands-on course, which gives students an opportunity to design and produce 3D computer animation projects. The course will emphasize 2D animation tools and techniques and introduce 3D modeling and animation tools techniques.

FA 222 Computer Animation 2.....4 credits
Prerequisite: FA 221. A comprehensive exploration of three-dimensional computer animation arts: Three-dimensional space and form, model creation, texturing, lighting, scene composition, animation and rendering strategies.

FA 250 Concepts of Visual Literacy.....3 credits
Introduction 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 learn to incorporate these design elements into visual projects and learn how to critically evaluate visually mediated messages.

FA 254 Fundamentals of Lighting.....3 credits
Exploration of a comprehensive mix of lighting techniques, tools and theory that can be applied to media production including video, photography, and production design. Students 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 gain an understanding of image manipulation through demonstrations, practical hands-on exercises, and design assignments.

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, economic force, and a system of representation and communication. It explores how Hollywood films work technically, artistically, and culturally. Students probe the deeper meaning of American movies, the hidden messages of genres, the social and psychological effects of Hollywood film styles, and the mutual influence of society and popular culture through encounters with the work of directors such as John Ford, Howard Hawks, and Martin Scorsese. May be offered as a telecourse.

FA 261 Writing and Interactive Design.....3 credits
Prerequisite: WR 121. An introduction to basic principles in scripting for interactive media. Focuses on writing techniques which foster interactivity, and explores the role of authoring tools in the design of multimedia projects. It defines the stages involved in the development of multimedia projects and addresses 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 online.

FA 264 Women Make Movies.....4 credits
Suggested Prerequisite: placement into WR115 (college-level reading and writing skills). 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, including the basic visual and aural elements of film language. 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: a passing score (C-/P or better) in WR 95 or its equivalent, placement into WR 115 (a score of 76RD and 76WR on the placement test), or instructor permission. 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 movie making. 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 complicating African Americans' full, rigorous admittance and participation into the Hollywood system. Weekly campus screenings are required, and clips of films are used in class for close analysis of aural and visual elements.

FA 270 Film Genres.....4 credits
Suggested prerequisite: placement into WR 115 or above (college-level reading and writing skills). FA 270: Film Genres is a course focused on the theoretical, historic, and aesthetic investigation of a chosen genre-including but not limited to film noir, film comedy,

and horror film" Students will be introduced to debates within genre theory, various theoretical approaches to a given genre , as well as representative cinematic texts within their historical and cultural context, as they relate to issues of gender, sexuality, race, ethnicity, class, and nationality. The course will focus on analyzing, historicizing, and exploring the chosen genre and its cycles. Film Genre N: Film Noir; Film Genre H: Horror; Film Genre C: Comedy. The course fulfills an Arts and Letters requirement for the AA/OT. Students should see an advisor about the possibility of repeating the course as the genre focuses changes.

FA 270C Film Genres: Comedy.....4 credits
Suggested prerequisite: placement into WR 115 or above (college-level reading and writing skills). FA 270: Film Genres is a course focused on the theoretical, historic, and aesthetic investigation of a chosen genre-including but not limited to film noir, film comedy, and horror film" Students will be introduced to debates within genre theory, various theoretical approaches to a given genre , as well as representative cinematic texts within their historical and cultural context, as they relate to issues of gender, sexuality, race, ethnicity, class, and nationality. The course will focus on analyzing, historicizing, and exploring the chosen genre and its cycles. Film Genre N: Film Noir; Film Genre H: Horror; Film Genre C: Comedy. The course fulfills an Arts and Letters requirement for the AA/OT. Students should see an advisor about the possibility of repeating the course as the genre focuses changes.

FA 270H Film Genres: Horror.....4 credits
Suggested prerequisite: placement into WR 115 or above (college-level reading and writing skills). FA 270: Film Genres is a course focused on the theoretical, historic, and aesthetic investigation of a chosen genre-including but not limited to film noir, film comedy, and horror film" Students will be introduced to debates within genre theory, various theoretical approaches to a given genre , as well as representative cinematic texts within their historical and cultural context, as they relate to issues of gender, sexuality, race, ethnicity, class, and nationality. The course will focus on analyzing, historicizing, and exploring the chosen genre and its cycles. Film Genre N: Film Noir; Film Genre H: Horror; Film Genre C: Comedy. The course fulfills an Arts and Letters requirement for the AA/OT. Students should see an advisor about the possibility of repeating the course as the genre focuses changes.

FA 270N Film Genres: Noir.....4 credits
Suggested prerequisite: placement into WR 115 or above (college-level reading and writing skills). FA 270: Film Genres is a course focused on the theoretical, historic, and aesthetic investigation of a chosen genre-including but not limited to film noir, film comedy, and horror film" Students will be introduced to debates within genre theory, various theoretical approaches to a given genre , as well as representative cinematic texts within their historical and cultural context, as they relate to issues of gender, sexuality, race, ethnicity, class, and nationality. The course will focus on analyzing, historicizing, and exploring the chosen genre and its cycles. Film Genre N: Film Noir; Film Genre H: Horror; Film Genre C: Comedy. The course fulfills an Arts and Letters requirement for the AA/OT. Students should see an advisor about the possibility of repeating the course as the genre focuses changes.

FA 276 Gender, Race, and Class in U.S. Cinema.....4 credits
Suggested prerequisite: placement into WR 115 (college-level reading and writing skills). FA 276 is a cinema course focused on the exploration of representations of gender, race, and class in U.S. Cinema. The course explores the impact of Classical Hollywood Style-the predominate form of storytelling in U.S. Cinema during much of the 20th Century-as it relates to both the creation of cinematic texts and the presentation of race/ethnicity, gender, sexuality, and class. Students will be introduced to a cinematic language, the history of cinematic representation, and theoretical discussions of meaning-making, reception, production, and distribution of cinematic texts. Culminating projects will involve the application of cinematic theory in an analysis of the construction of race, gender, sexuality, and class in particular cinematic texts. Weekly campus screenings are required, and clips of films are used in class for close analysis and are an integral part of the course.

MDP 246 Multimedia Production 1.....4 credits
Prerequisite: FA 250, VP 151, AUD 120 and MUL 210 A practicum course giving students the opportunity to apply technical knowledge and skills learned in the first year classes to actual basic production situations with an emphasis in multimedia productions. Students can 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 giving 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 can volunteer for production positions based on their own career interests and experience. Introduces 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. Co-op offers work experience in a professional multimedia-related business. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students develop skills, explore career options and network with professionals and employers while earning credit toward a degree. Contact the multimedia design co-op coordinator before registering. Course may be repeated.

MUL 101 Introduction to Media Arts.....3 credits
Introduction to Media Arts provides an overview of the Media Arts program as well as insight into what careers the program can lead to. Students willlearn the expectations of the program and courses and what resources are available to afford them a greater chance of success in the program and the field. This course may be offered as a traditional, hybrid or online course.

MUL 103 Time-Based Tools.....4 credits
A introductory course in digital time-based tools, covering foundational timeline-based software and hardware tools, skills, and theories used in video, audio, animation, interactive, live, and other time-based productions.

MUL 105 Digital Photography.....4 credits
A foundational course on Digital Single-Lens Reflex (DSLR) cameras and lenses, sensors, data capture, processing, pixels, resolution, asset managment, tagging, frames, depth of field, lighting, outputting, distribution, construction, image-making strategies, and emerging and experimental forms.

MUL 119 Introduction to Animation.....3 credits
This class introduces the principles of animation and its history. Students will explore fundamental techniques for creating the illusion of movement, learn the terminology of animation and investigate the art of visual narrative. Coursework will include flipbooks, storyboard animatics, and stop-motion, and the analysis of animated films.

MUL 205 Design Studio.....3 credits
Prerequisite: ART 222, ART 228 and ART 289 Co-requisite: ART 223, ART 229, ART 290 Design Studio is a class for qualified second year graphic design students. This class operates as a real design studio and takes real jobs from both the college as well as non-profit organizations from the community. Students also team-produce a 52-page magazine.

MUL 208 Motion Capture for Animation.....4 credits
Prerequisite: FA 221 An introduction to the motion capture process for animation. Students learn the techniques and workflow of capturing and converting live action movement into a 3D model, storyboarding for motion capture, and assembling and rendering composed scenes into completed animation sequence.

MUL 210 Multimedia Design.....3 credits
Prerequisite: MUL 105 Students design and produce computer multimedia programs using digital production techniques in imaging, sound, and animation. Emphasis is on design implementation and human factors, user analysis, interface and interaction considerations, project management, and understanding client needs.

MUL 212 Digital Imaging.....4 credits
Prerequisite: Art 216. Instruction in various aspects of digital imaging with an emphasis on bitmap (photographic) image design and processing using Adobe Photoshop.

MUL 218 Business Practices for Media Arts.....3 credits
This course covers standard business practices relating specifically to the media industry. Develop the basic skills and resources for job searching, including writing a resume and proper business communication practices. Create a plan for developing your portfolio. Establish and organize an efficient workflow for a freelance business. Demonstrate an understanding of project management skills. This course is geared for Media Arts majors. It is recommended that you have completed at least one term of multimedia design, graphic design or web design coursework prior to taking this course. May be offered as a traditional, fully online or hybrid course.

MUL 220 Intermediate Typography.....3 credits
Prequisite: ART 119 This course provides students with an in depth understanding of how typography is used to communicate content both visually as image as well as through the invisibility of well chosen body type. Type hierarchy and grid systems will be explored in order to provide graphic design students with organizational layout skills commensurate with what is needed as a design professional. Communication of other information, i.e., data, graphs and tables will also be considered. The etiquette of whole page and multi-page document layout will also be taught. Students will perform a series of projects to demonstrate skill in these areas.

MUL 223 Digital Sculpting and Texture.....3 credits
This course will provide an introduction to the industry standard techniques involved in digital sculpting and texturing on 3d models. Students will learn how to use sculpt and paint layers to elevate the realism of computer generated objects ranging from environment props to organic characters.

MUL 280 Co-op Ed: Web Design.....3-12 credits
Prerequisite: Instructor Approval. This course offers career-related work experience in professional web design sites in community business and organizations. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students develop skills, explore career options and network with professionals and employers while earning credit toward a 1-year certificate. Contact the Multimedia Design Co-op coordinator before registering. Course may be repeated.

VP 151 Video Production 1: Camera.....3 credits
Prerequisite: MUL 105 or ART 261, and AUD 120 and FA 250. Introduces elementary concepts of video production including digital video camera operation, digital non-linear editing, and pre-production planning. Students are taught basic camera techniques, preproduction, and production practices through hands-on learning to develop basic field video production skills. Focus is on individual creativity, as well as the importance of teamwork and deadlines. Projects are 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. 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 opportunities to learn advanced camera techniques, pre-production, and production practices, combined with individual creativity and the importance of teamwork and deadlines. Projects are produced in the context of learning the theory and practice of video production and computerized video editing combined with the application of multimedia programs.

Medical Assisting

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Medical Office Assisting program to take some these classes.

MA 110 Clinical Assistant 1.....3 credits
Prerequisite: Admission to the Medical Assistant program and Mth 052 with a grade of C or higher and previous completion of or concurrent enrollment in all fall term Medical Office Assistant courses. 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 119 Introduction to Medical Coding and Scribing.....3 credits
Prerequisite: Successful completion of all Fall MA courses; completion of HO 150 or HO 152 with a grade of C or higher. This course introduces students to basic ICD-10 and CPT-4 coding procedures. This includes abstracting from healthcare documentation/records and assigning alphanumeric codes to diagnoses and procedures. The course also introduces students to basics of Medical scribing in outpatient healthcare providers' offices.

MA 120 Clinical Assistant 2.....3 credits
Prerequisites: HO150, HO110, MTH 052. 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 130 Clinical Assistant 3.....3 credits
Prerequisites: Successful completion of MA 120, MA 150, HO 150, HO 152, 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 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.

MA 206 Co-op Ed: Medical Assistant Seminar.....2 credits
Prequisite: Credit level MA 110 minimum grade of C and credit level HO 112 minimum grade of C. Students will increase their understanding of the medical profession, learn effective resume writing, interviewing techniques and job search skills. Students will learn and practice presenting themselves professionally to employers in preparation for a cooperative education internship.

MA 280 Co-op Ed: Medical Assistant.....5-12 credits
Prerequisite: MA120, MA150, HO152, and HO220 with grade of C or higher. In this required internship course students gain on-the-job work experience in local medical facilities in both clinical and administrative office settings. Students learn to identify and use additional medical equipment as well as have opportunities to integrate theory and practice introduced in the classroom with practical experiences in the professional field.

Microbiology - See Anatomy/Physiology/Microbiology

Multimedia Design - See Media Arts

Music

For information, contact the Music, Dance and Theatre Arts Department, Bldg. 6/Rm. 204, 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 or MUS 137 concurrently. This course prepares one for Music Theory MUS 111. May be offered online.

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 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 with MUS 114 and MUS 127 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 with MUS 115 and MUS 128 concurrently.

MUS 113 Music Theory 1 (Third Term) ..... 4 credits
Prerequisites: MUS 112. Must be taken in sequence. Emphasis of MUS 113 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 with MUS 116 and MUS 129 concurrently.

MUS 114 Sight-reading and Ear Training (First Term) ..... 2 credits
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 with MUS 111 and MUS 127 concurrently.

MUS 115 Sight-reading and Ear Training (Second Term) ..... 2 credits
Prerequisites: 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. Designed to be taken with MUS 112 and MUS 128 concurrently.

MUS 116 Sight-reading and Ear Training (Third Term) ..... 2 credits
Prerequisites: 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, This course is designed to be taken with MUS 113 and MUS 129 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 per week 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 videos. Students will also have the opportunity to work with many audio formats such as AIFF, WAV, MP3, and surround sound as they work on their sound event projects. Students will work in the studio a minimum of 3 hours per week outside of class.

MUS 127 Keyboard Skills 1 (First Term) ..... 2 credits
Theory placement test required. This course is the first of a three-term sequence. It is designed to develop piano skills essential for all music majors: performance of rhythmic patterns, scales and 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 taken with MUS111 and MUS114 concurrently.

MUS 128 Keyboard Skills 1 (Second Term) ..... 2 credits
Prerequisites: MUS 127. This course is the second of a three-term sequence. It is designed to develop piano skills essential for all music majors: performance of rhythmic patterns, scales and 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 with MUS 112 and MUS 115 concurrently.

MUS 129 Keyboard Skills 1 (Third Term) ..... 2 credits
Prerequisites: MUS 128. This course is the third of a three-term sequence. It is designed to develop piano skills essential for all music majors: performance of rhythmic patterns, scales and 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 with MUS 113 and MUS 116 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 6 total credits. May be applied to transfer associate's degrees.

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 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 6 total credits. May be applied to transfer associate's degrees.

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. May be repeated up to 6 total credits.

MUS 138 Group Guitar 2 ..... 2 credits
Group Guitar will involve an intermediate level orientation to guitar techniques, including reading the whole neck above the fourth fret, that will encompass accompaniment and solo skills in a variety of styles. Intermediate level standard music reading will be covered. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 6 total credits.

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. May be repeated up to 12 total credits.

MUS 185 Instrumental Performance ..... 1 credits
Instrumental vocal performance is designed for vocal/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. Contents and expected learning proficiencies of this course vary from term to

term. May be repeated up to 6 total credits. May be applied to transfer associate's degrees.

MUS 201 Exploring Music: Introduction to Music and Its Literature ..... 3 credits
This class covers the development of Western Music from its beginnings through modern times. It is an overview of styles and practices with a focus on what to listen for in music. A brief opening section on ethnomusicology helps define the thread that connects the music of world cultures. The focus of this class is on the Medieval, Renaissance, Baroque, and Classical Eras. First course in sequence. Course can be taken out of sequence. No prerequisite. Course fulfills Arts and Letters requirement for AAOT. May be offered online.

MUS 202 Exploring Music: Introduction to Music and Its Literature ..... 3 credits
This class covers the development of Western Music from its beginnings through modern times. It is an overview of styles and practices with a focus on what to listen for in music. A brief opening section on ethnomusicology helps define the thread that connects the music of world cultures. The course looks briefly at some music in the Eighteenth Century; however the main focus of this class is on the Romantic Era and the origins and rise of Opera through the Romantic Era. Second course in sequence. Course can be taken out of sequence. No prerequisite. Course fulfills Arts and Letters requirement for AAOT. May be offered online.

MUS 203 Exploring Music: Introduction to Music and Its Literature ..... 3 credits
This class covers the development of Western Music from its beginnings through modern times. It is an overview of styles and practices with a focus on what to listen for in music. A brief opening section on ethnomusicology helps define the thread that connects the music of world cultures. Enjoyment of music through understanding is the primary emphasis. The class looks at some music at the end of the Nineteenth Century' however the main focus of this class is on music of the Twentieth and Twenty-first Centuries. Third course in sequence. Course can be taken out of sequence. No prerequisite. Course fulfills Arts and Letters requirement for AAOT.

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, MUS116, and MUS 129. This three-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 mixture and diatonic modulation. Designed to be taken with MUS 214 and MUS 224 concurrently.

MUS 212 Music Theory 2 (Second Term) ..... 3 credits
Prerequisites: 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. Designed to be taken with MUS 215 and MUS 225 concurrently.

MUS 213 Music Theory 2 (Third Term) ..... 3 credits
Prerequisites: MUS 212. Emphasis is on musical language of the 20th century, including modes, atonality, serialism, set theory, new forms and new organizations of rhythm and meter. Designed to be taken with MUS 216 and MUS 226 concurrently.

MUS 214 Keyboard Skills 2 (First Term) ..... 2 credits
Prerequisite: MUS 113, MUS 116, and MUS 129. This course is the first of a three-term sequence. It is designed to develop piano skills essential for all music majors. Keyboard Skills 2 focuses on chromatic harmony. Skills include the performance of scales and arpeggios, chord progressions with modulations (including altered chords) with corrective voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of two-part piano texture. Designed to be taken with MUS 211 and 224 concurrently.

MUS 215 Keyboard Skills 2 (Second Term) ..... 2 credits
Prerequisite: MUS 214. This course is part of a six-term sequence. It is designed to develop piano skills essential for all music majors. Keyboard Skills 2 focuses on chromatic harmony. Skills include the performance of scales and arpeggios, chord progressions with modulations (including altered chords) with corrective voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of two-part piano texture. Designed to be taken with MUS 212 and MUS 225 concurrently.

MUS 216 Keyboard Skills 2 (Third Term) ..... 2 credits
Prerequisite: MUS 215. This course is the third in a three-term sequence. It is designed to develop piano skills essential for all music majors. Keyboard Skills 2 focuses on chromatic harmony. Skills include the performance of scales and arpeggios, chord progressions with chromatic and enharmonic modulations (including altered chords) with corrective voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of two-part piano texture. Designed to be taken with MUS 213 and 226.

MUS 224 Sight-reading and Ear Training (First Term) ..... 2 credits
Pre-reqs: MUS 113, MUS 116, MUS 129. This is the first of a three-term sequence. 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 with MUS 211 and MUS 214 concurrently.

MUS 225 Sight-reading and Ear Training (Second Term) ..... 2 credits
Prerequisites: MUS 224. This is the second of a three-term sequence. Continues development of student's perception, knowledge, and skills needed to read and write music. This course is designed to be taken with MUS 212 and MUS 215 concurrently.

MUS 226 Sight-reading and Ear Training (Third Term) ..... 2 credits
Prerequisites: MUS 225. This is the third of a three-term sequence. Continues development of student's perception, knowledge, and skills needed to read and write music. This course is designed to be taken with MUS 213 and MUS 216 concurrently.

MUS 260 History of Hip-Hop and Rap music ..... 3 credits
This course is designed to provide the student with an opportunity to explore the musical, social and cultural aspects of hip-hop and rap music from its birth in the 1970's to its development through today, while learning about important artists in this style. We will identify and analyze complex practices, values and beliefs and the cultural and historically defined meanings of difference in the hip-hop world and explore how culturally-based assumptions influence perceptions related to hip-hop culture and rap music. We will explore how these culturally-based assumptions influence perceptions and stigmas relating to hip-hop culture and compare/contrast attitudes and values of specific eras of this culture. We will analyze pertinent artists, events and landmark recordings in this process.

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 era (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 1964-1975, 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 268 History of Electronic Music..... 3 credits
This course will provide a survey of electronic music history: the origin of electronic music, early musical instruments, tape music, musique concrete, computer music, digital synthesis, birth of MIDI, sampling, synth pop, disco, sound art, the EDM (Electronic Dance Music) era, and live electronics. We will identify and analyze electronic music works by major composers, groups, and bands. We will explore fundamental ideas and practices applied throughout the history of electronic music, such as tape music editing, synthesis techniques, sampling techniques and the development of the DAW system.We will also explore how electronic music is placed in other media, such as: video games, film scoring, television, theatrical productions, orchestral scores, multi-media performances, and liveperformance. We will also discuss the impact of electronic music in the United States and in other countries globally.

MUS 280 Co-op Ed: Music..... 3-12 credits
Co-op offers students on-the-job work experience in a music-related site. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students develop skills, explore career options and network with professionals and employers while earning credit toward a degree. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. Please contact music cooperative education coordinator before attempting to register.

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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. May be transferred.

MUS 293 Jazz Combos..... 2 credits
Music reading or concurrent enrollment in MUS 101 and MUS 161 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. No audition required. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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. This course blends the talents of experienced community instrumentalists with student musicians creating an excellent orchestra experience for all. 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). Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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. This course blends the talents of experienced community instrumentalists with student musicians creating an excellent orchestra experience for all. The Lane Symphonic band performs at least one formal concert at the end of fall, winter and spring term. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total 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 necessary, but ability to match pitch 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits. May be transferred.

Music Lessons

For information, contact the Music, Dance and Theatre Arts Department, Bldg. 6/Rm. 204, 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 50-min lessons each term in their major instrument. Instruction is offered in the following: baritone horn, bassoon, cello, clarinet, classical guitar, electric bass guitar, flute, french horn, harp, jazz guitar, oboe, percussion, piano, saxophone, string bass, trombone, trumpet, tuba, viola, violin, voice. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

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 50-minute lesson each week. Regular practice outside of lessons is expected. Consult with instructor regarding expectations. A term jury is required. Individual instruction in technical and stylistic aspects of solo performance for pre- and non-majors. Students receive 10 50-min lessons each term in their major instrument. Instruction is offered in the following: baritone horn, bassoon, cello, clarinet, classical guitar, electric bass guitar, flute, French horn, harp, jazz guitar, oboe, percussion, piano, saxophone, string bass, trombone, trumpet, tuba, viola, violin, voice. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 174 Individual Lessons: Voice (First-year level)..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 175 Individual Lessons: Violin (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits

MUP 176 Individual Lessons: Viola (First-year level)..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. May be repeated up to 12 total credits.

MUP 177 Individual Lessons: Cello (First-year level)..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. May be repeated up to 12 total credits.

MUP 178 Individual Lessons: Bass (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 181 Individual Lessons: Flute (First-year level)..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits

MUP 182 Individual Lessons: Oboe (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. May be repeated up to 12 total credits.

MUP 183 Individual Lessons: Clarinet (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 184 Individual Lessons: Saxophone (First-year level) .... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 185 Individual Lessons: Bassoon (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. May be repeated up to 12 total credits.

MUP 186 Individual Lessons: Trumpet (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 187 Individual Lessons: French Horn (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 188 Individual Lessons: Trombone (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 189 Individual Lessons: Baritone Horn (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 190 Individual Lessons: Tuba (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 191 Individual Lessons: Percussion (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 192 Individual Lessons: Electric Bass (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 194 Individual Lessons: Guitar (First-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course desctiption for MUP 171. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

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 50-minute lesson each week. Regular practice outside of lessons is expected. Consult with instructor regarding expectations. Contents and expected learning proficiencies of this course vary from term to term. Individual instruction in technical and stylistic aspects of solo performance for pre- and non-majors. Students receive 10 50-min lessons each term in their major instrument. Instruction is offered in the following: baritone horn, bassoon, cello, clarinet, classical guitar, electric bass guitar, flute, French horn, harp, jazz guitar, oboe, percussion, piano, saxophone, string bass, trombone, trumpet, tuba, viola, violin, voice. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 274 Individual Lessons: Voice (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 275 Individual Lessons: Violin (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 281 Individual Lessons: Flute (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 283 Individual Lessons: Clarinet (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 284 Individual Lessons: Saxophone (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 286 Individual Lessons: Trumpet (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 287 Individual Lessons: French Horn (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits

MUP 288 Individual Lessons: Trombone (Second-year level) 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 289 Individual Lessons: Baritone Horn (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 290 Individual Lessons: Tuba (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. May be repeated up to 12 total credits.

MUP 291 Individual Lessons: Percussion (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 292 Individual Lessons: Electric Bass (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

MUP 294 Individual Lessons: Guitar (Second-year level) ..... 2 credits
Prerequisite: Jury required to enter this level. See course description for MUP 271. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

Nursing

For information, contact the Health Professions Division, 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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Course work requires college-level reading skills.

NRS 110A Foundations of Nursing-Health Promotion ..... 4 credits
Prerequisite: Admission in Nursing Program. Corequisite: NRS 110B. This course introduces the learner to framework of the OCNE curriculum. The emphasis is 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.

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
Corequisite: NRS 111A. Clinical Lab required for NRS111A.

NRS 112A Foundations of Nursing in Acute Care 1 ..... 2 credits
Prerequisite: NRS 111A and NRS 111B and WR 123 or WR 227 and admission in the Nursing Program. Corequisite: NRS 112B. This course introduces the learner to assessment and common interventions (including relevant technical procedures) for care of patients across the life span who require acute care, including normal childbirth. (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. Includes classroom and clinical learning experiences.

NRS 112B Foundations of Nursing in Acute Care 1 Clinical Lab ..... 4 credits
Corequisite: NRS 112A Clinical Lab required for NRS112A.

NRS 115 LPN Transition to OCNE ..... 6 credits
Prerequisite: NRS 230 and NRS 232. This course introduces the learner to framework of the OCNE curriculum including the OCNE competencies and benchmarks and the clinical judgment model. The student is introduced to the role and practice of the registered nurse. Concepts and applicability of the ANA Code of Ethics will be emphasized. Students will be introduced to evidenced-based care including levels of evidence. Concepts of health promotion, chronicity and acuity as applied to nursing practice will be explored. Case studies will be used to provide students opportunities to demonstrate critical thinking in the provision of patient care. The student is introduced to and will practice intentional learning and reflection related to the role and practice of the person preparing to be a registered nurse. The course includes classroom, simulation and lab learning experiences including evaluation of certain clinical skills.

NRS 221A Foundations of Nursing in Chronic Illness 2 and End of Life ..... 4 credits
Prerequisite: NRS 112A and NRS 112B and admission in the Nursing Program. Corequisite: NRS 221B. This course builds on Foundations of Nursing in Chronic Illness I. 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 is explored. Complex skills associated with symptom management, negotiating in interdisciplinary teams, and the impact of individual and family development 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.

NRS 221B Foundations of Nursing in Chronic Illness 2 and End-of-Life Clinical Lab ..... 5 credits
Corequisite: NRS 221A. Clinical Lab required for NRS221A.

NRS 222A Foundations of Nursing in Acute Care 2 and End-of-Life ..... 4 credits
Prerequisite: Admission in Nursing Program. This course builds on Nursing in Acute Care I, focusing on more complex and/or unstable patient care situations, some of which require strong recognitional 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 and developmental 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 and patient teaching for discharge planning or end-of-life care. Exemplars include acute psychiatric disorders, pregnancy-related complications, as well as acute conditions affecting multiple body systems.

NRS 222B Foundations of Nursing in Acute Care 2 and End-of-Life Clinical Lab ..... 5 credits
Corequisite: NRS 222A. Clinical Lab required for NRS222A.

NRS 224A Integrative Practicum 1 ..... 2 credits
Prerequisite: NRS 222A and NRS 222B and admission in the Nursing Program. Corequisite: NRS 224B. This course is designed to formalize the clinical judgments, knowledge and skills necessary in safe, registered nurse practice. The preceptor 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. Required for AAS and eligibility for RN licensure. May be offered online.

NRS 224B Integrative Practicum 1 Lab ..... 7 credits
Corequisite: NRS 224A. Clinical Lab required for NRS224A.

NRS 230 Clinical Pharmacology 1 ..... 3 credits
Prerequisite: Admission in the Nursing Program. 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
Prerequisite: NRS 230 and admission in the Nursing Program. 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 1.

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; and BI 234. Admission in Nursing Program. 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 sequience; Microbiology.

NRS 233 Pathophysiological Process 2.....3 credits
Prerequsitie: NRS 232 and admission in the Nursing Program. 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 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. The course addresses additional pathophysiological processes not contained in Pathophysiological Processes I.

NRS 280 Co-op Ed: Nursing.....2-12 credits
Prerequisite: Admission in Nursing Program. This is a voluntary learning experience in a professional medical setting where students gain additional nursing skills under the guidance of working nursing professionals, explore career options, and integrate theory and practice. This course in not required for the Nursing Program AAS degree

PN 101 Practical Nursing 1.....12 credits
Prerequisite: WR 115; HO 100; BI 233; PSY 201 Admission in the Practical Nursing program. This course is the first of three terms in the Practical Nursing Program. Content covered in the classroom and lab will include: nursing and the health care delivery system, complementary and alternative care; legal and ethical issues, including scope of practice; communication; nursing process, critical thinking, physical assessment; documentation, abbreviations, HIPAA; development across the life span; health promotion; cultural diversity; nutrition and therapeutic diets; medical asepsis and infection control; pharmacology and medication administration; and pain assessment. Skills taught during this course will include communication techniques, physical assessment, ambulatory care skills; focused assessments (Braden, falls risk, mini cognition and pain), nursing process, documentation, and oral, topical, drops, ointments, sublingual medication administration, dosage calculation. Clinical application of content and skills will take place in the nursing lab and in outpatient and ambulatory care settings. May be offered in a format with some online instruction.

PN 102 Practical Nursing 2.....12 credits
Prerequisite: PN 101 Classroom content continues the application of the nursing process and the practical nursing scope of practice in selected medical-surgical areas including care of patients with cardiovascular, endocrine, respiratory, gastrointestinal, and renal disorders,and care of the patient having surgery. Pain management and an introduction to mental health disorders are also included in this course. Skills taught this term include care of ostomies and nasogastric and small -bore feeding tubes, urinary catheter insertion, capillary blood sugar measurement, injectable and enteral medication administration, application of antithromboembolic devices, intravenous therapy (maintenance IVs- - hanging and programming rates), care of surgical drains, and suture removal. Clinical application of theory content will take place in the Simulation lab and in the acute care setting.

PN 103 Practical Nursing 3.....13 credits
Prerequisites: PN 102 Care of persons with cancer, other hematological, immune, mental health, and reproductive disorders; pediatric and obstetrical patients; end-of-life care. Trends in practical nursing; intravenous medications. Clinical applications in the simulation lab and in the acute-care and clinic settings. May be offered through Distance Learning.

PTA 280A Co-op Ed: First Clinical Internship.....4-8 credits
Prerequisite: PTA 104, PTA 104L, PTA 133 and PTA 133L Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward advanced beginner and intermediate PTA practice by demonstrating communication and critical thinking for the workplace. This is the first of three off-campus clinical learning experiences.

PTA 280B Co-op Ed: Second Clinical Internship.....4-8 credits
Prerequisite: PTA 280A Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward intermediate and advanced intermediate PTA practice by demonstrating communication and critical thinking for the workplace. This is the second of three off-campus clinical learning experiences.

PTA 280C Co-op Ed: Third Clinical Internship.....4-8 credits
Prerequisite: PTA 280B Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward entry-level PTA practice by demonstrating communication and critical thinking for the workplace. This is the third and final of three off-campus clinical learning experiences.

Nutrition

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617.

FN 105 Nutrition for Foodservice Professionals.....3 credits
Nutrient functions, food sources and guidelines are discussed as well as 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. May be offered through online.

FN 110 Personal Nutrition.....3 credits
Introductory class to develop skills for improving healthy eating choices. Students will evaluate media messages, food products and their own diet. They will learn healthy cooking techniques and share budget friendly recipes. Does NOT satisfy the nutrition requirement for health profession programs. May be offered online.

FN 130 Family Food and Nutrition.....3 credits
This course focuses on how to prepare and offer a variety of nutrient dense foods to families in an environment that helps family members develop a positive approach to eating. Nutritional guidelines are discussed for infants and the younger and older child. Ideas for menu planning and recipes are given. May be offered online.

FN 190 Sports Nutrition.....2 credits
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 to create an eating and hydration plan to support athletic performance and to stay well-nourished. May be offered online.

FN 225 Nutrition.....4 credits
Food sources, functions, and requirements of the major nutrients are discussed. Nutrient utilization, deficiencies, toxicities and their relationship to disease prevention will be covered. This course is designed for health profession majors. No chemistry prerequisite is required. May be offered online.

FN 245 Medical Nutrition Therapy folr Dietary Managers.....3 credits
Prerequisite: FN 105 or FN 225This course focuses on Medical Nutrition Therapy concepts within the scope of a dietary manager working within a skilled nursing facility. The content is designed to prepare students for their cooperative education experience, the dietary manager credentialing examination, and their professional careers

FN 255 Medical Nutrition Therapy.....3 credits
Prerequisite: FN 225 or FN 105. This course covers the fundamental principles of medical nutrition therapy for diseases including heart disease, diabetes, cancer, renal disease, and more. Class activities will discuss the purposes and procedures for culturally competent nutrition screening, documentation, education, and verbal communication. May be offered online.

Office Assistant - See Administrative Support

Paramedic - See Emergency Medical/Paramedic

Parent Education - See Early Childhood Education

Philosophy and Religion

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

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 online.

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 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 online.

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 as a live interactive or online course.

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.

Photography

For information, contact the Art and Applied Design Department, Bldg. 11/ Rm. 101, 541.463.5409.

ART 220 Documentary Photography.....3 credits
Explore the creation and historical impact of documentary photography. Lecture and discussion is based on the impact of images through history and how images of historical, cultural, and social significance are helping to shape our contemporary history and viewpoints. Students will create a still-photo documentary story during the term. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 261 Photography 1.....3 credits
An introduction to the history and fundamentals of photography. Emphasis on camera handling, manual and semi-automatic exposure control, composition, and basic color theory. Includes a demonstration on the theory of black-and-white print making. Note: Students should have access to a camera with adjustable exposure controls.

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.

ART 282 Landscape and Architectural Photography.....4 credits
Combines the formal issues of photography with the specific subjects of photographing landscape and architecture. Through weekly assignments photographing in the field, students apply fundamental concepts and gain a critical understanding of the role of photography in architecture and landscape architecture. All camera types and skill levels appropriate for this course.

FA 256 Lighting for Photography.....3 credits
An introduction to the basics in lighting for photography. Students learn how to work within a studio environment and on location. All students work with professional lighting equipment and learn the basics in setting up, metering, and shooting portraits and basic commercial products. Students also learn the basics in camera and lens variations, film stock, digital output, and editing. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

J 134 Photojournalism.....3 credits
This course is designed to work within the field of content. Content is not only the first step in good photojournalism, but also the first step in good art-making. The course will explore how you see an image, choose to share that image, and the message your images carry. Other topics include the history of photojournalism and the crossover from documentary photography to the world of art.

J 234 Photojournalism 2.....4 credits
A continuation of Photojournalism with the continued discussion of content and ethics of the field. Students learn how to create editorials, identify the differences between news and human interest, develop funding for non-mainstream stories, and self-promote in the competitive field of photojournalism. Students prepare their work through editorial processing and presentation.

Physical Education

Also see Dance, Exercise and Movement, and Fitness and Life Style

For information, contact the Health and PE Division, Bldg. 5/Rm. 205, 541.463.5545.

HE 280PH Co-op Ed: Public Health.....3-12 credits
This internship course provides on-the-job learning experiences in the Health Education, Promotion and Public health field. Students earn college credit while working under the supervision of a health professional. Internship sites are selected to support each student's career goals, contributing to the student's education and future employability.

PE 101 Cardio Core Conditioning.....1 credits
Designed to improve daily functioning, this class integrates rhythmic cardiovascular and resistance exercises with core conditioning techniques. Steps, hand weights and elastic bands are utilized to maximize exercise benefits. This class format is suitable for students of various fitness levels.

PE 102 Combination Aerobics.....1 credits
This rhythmic aerobics class is designed to increase cardiovascular fitness and muscular endurance through a variety of exercise formats. Students participate in a variety of formats such as step aerobics, dance aerobics, circuit training, interval training and kickboxing aerobics.

PE 103 Cardio Kickboxing.....1 credits
Inspired by various forms of martial arts, Cardio Kickboxing incorporates rhythmic combinations and drills to improve cardiorespiratory endurance. Students learn wellness-related concepts and apply exercise principles to enhance overall health.

PE 104 body Sculpt.....1 credits
Rhythmic class incorporates resistance and aerobic exercises to increase muscular endurance and cardiorespiratory fitness. Weights, resistance bands and other equipment are utilized to develop muscle firmness and definition. Fitness principles, stress management, and nutrition concepts are examined.

PE 106 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 to improve coordination, confidence, body awareness and body appreciation.

PE 107 Zumba Fitness.....1 credits
Ditch the Workout, Join the Party." Zumba will have you grooving to the beats of Salsa, Merengue, Reggaton and Cumbia to name a few. This Latin inspired dance workout is fun and full of energy. You don't need to be a great dancer, to feel welcome in Zumba class, have a good time no rhythm required.

PE 108 Conditioning.....1 credits
Various instructor-led activities utilize fitness equipment to enhance overall fitness. This progressive, cross-training approach is designed to improve strength, endurance, flexibility, and core stability. Nutrition and stress management concepts will be introduced.

PE 109 Exercise and Weight Control.....1 credits
Designed for individuals who would like to alter their body composition and control their weight. Class offers instructor-led activities to gain benefits related to regular exercise, including enhanced fitness

and improved confidence. Nutrition and stress management concepts will be introduced.

PE 110 Walk Jog.....1 credits
Emphasis is on a progressive walking program to develop, maintain and assess cardiovascular fitness, and muscle endurance. Instruction will include: joint flexibility, proper technique, training principles, injury prevention and nutrition. Health, Wellness, and Fitness concepts will be addressed.

PE 111 Group Cycling.....1 credits
Instructor lead class using stationary cycles designed to improve cardiovascular endurance, enhance cycling skills and body mechanics. The class uses a variety of cycling specific body positions while providing lower level options for participants. Supplemental strength will also be introduced.

PE 113 Fitness Education: Introduction.....1 credits
Students are guided in creating a balanced, personal fitness program in a supportive and noncompetitive environment. Students attend exercise sessions to fulfill course requirements and meet personal fitness goals. All fitness levels welcome.

PE 114 Fitness Education: Continuing/Returning.....1 credits
For students who have completed PE 183F and wish to continue their fitness program. Course opportunities include: personal training, fitness and health seminars, and fitness assessments. Students attend exercise sessions to fulfill course requirements and meet personal fitness goals.

PE 115 Jogging.....1 credits
Emphasis is on a progressive jogging program to develop, maintain and assess cardiovascular fitness, and muscle endurance. Instruction will include: joint flexibility, proper technique, training principles, injury prevention and nutrition. Health, Wellness and Fitness concepts will be addressed.

PE 116 Stability Ball Fitness.....1 credits
Students perform exercises with a stability ball focusing on increasing core stability muscular strength, endurance, flexibility, balance, and coordination. Light weights, resistance bands and weighted balls will be used during workouts. Nutrition and stress management concepts will be introduced.

PE 117 Strength Training.....1 credits
Emphasis on progressive resistance training using a variety of exercise modalities including barbells, dumbbells, resistance bands, body weight, and machines. Develop strength, muscular size, toning, and improve general physical condition. Proper technique and lifting programs will be discussed.

PE 118 Power Conditioning.....1 credits
Prerequisites: Any of the sports classesThis progressive, cross-training approach is designed to improve strength, flexibility and core stability. Resistance training using dumbbells, bands, body weight and machines will be introduced. Develop and assess strength, muscle and improved mental wellbeing.

PE 119 Strength Training for women.....1 credits
Emphasis on resistance training using a variety of exercise modalities. Develop and assess strength, muscular size, muscle definition, toning and improve general physical condition. Safe and proper technique, routines, programs, nutrition and stress management concepts will be addressed.

PE 120 Archery.....1 credits
Beginning and experienced students will learn safety, use of equipment, basic rules, etiquette, terminology and skill techniques to shoot at different size targets at various distances. All equipment provided. If you have your own equipment, ask instructor if it is suitable for our range.

PE 122 Badminton.....1 credits
Learn badminton and improve fitness through skill drills and game play. Footwork, grip, forehand and backhand shots, scoring, terminology, etiquette, singles and double play, game strategy and rules will be covered. Designed for all skill levels. Equipment provided, but may bring own racquet.

PE 124 Bowling.....1 credits
Instruction and practice in the fundamentals skills and techniques used for both straight and hook deliveries will be covered. Rules, scoring and etiquette will be addressed. This course is designed for beginning bowlers and is held off campus.

PE 125 Fencing Beginning.....1 credits
Instruction in basic foil fencing skills, including offensive and defensive skills, rules, etiquette, judging, and bout experience. Class includes warm-up and stretching skills.

PE 126 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 133 Meditation.....1 credits
A survey of diverse meditation techniques to enable students to find the appropriate methods for use themselves. Includes discussion and practice. Learn how movement, breathing, inner focus and nutrition contribute to stress reduction and improved weill-being.

PE 134 Tai Chi Chuan.....1 credits
Beginning concepts of Yang style Tai Chi Chuan. Develop flexibility, relaxation and concentration. Improve balance, energy flow, breathing and coordination of body movement. Learn how nutrition contributes to improved wellbeing and stress reduction.

PE 136 Yoga.....1 credits
Basic knowledge of asanas (postures), pranayama (breathing techniques), relaxation and yogic philosophy will be introduced. Includes both discussion and practice. Learn how movement, breathing and nutrition contribute to stress reduction and improved well-being.

PE 137 Gentle Yoga.....1 credits
Learn gentle yoga postures, breathing and relaxation techniques. Designed for students who need modification of classical practice due to limited mobility or other special needs. Includes discussion and practice. Learn how movement, breathing and nutrition contribute to stress reduction.

PE 138 Ballroom Dancing.....1 credits
Introductory course in basic ballroom dance forms Waltz, Foxtrot, Swing, and Rumba. Students will learn basic steps and proper technique, posture, balance and coordination. Students will learn how social dance contributes to an active lifestyle, improves confidence and well-being and reduces stress.

PE 141 Swing Dancing.....1 credits
Introductory course in single and triple-time East Coast swing. Students will learn basic steps and proper technique, posture, balance and coordination. Students will learn how social dance contributes to an active lifestyle, improves confidence and well-being and reduces stress.

PE 142 Basketball.....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.

PE 143 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. Defensive strategies and techniques will be covered.

PE 144 Soccer.....1 credits
Instruction and practice in the fundamental soccer techniques, position play, offensive and defensive tactics, team formation and rules of the game. Individual skills and ball handling will be addressed. Team play may include 11 on 11 or mini-game play.

PE 146 Ultimate Frisbee.....1 credits
This co-ed game combines the passing and scoring of football, the cutting and guarding of basketball, and the non-stop movement of soccer. Students will learn basic frisbee handling skills utilized in game play. Discussion of rules, strategy, and terminology will be included.

PE 147 Volleyball.....1 credits
Includes the fundamentals, rules, and strategy of volleyball. Develops specific skills necessary for successful recreational and/or competitive experience in volleyball.

PE 182A Scuba Diving.....1 credits
Initial course covering necessary skills and knowledge for students not yet certified in scuba diving. Diving skills like buoyancy control, equipment usage and diver safety will be covered, resulting in a

PADI Open Water certification. Students are required to supply personal SCUBA mask and snorkel.

PE 182B Scuba Diving Advanced.....1 credits
Students must already be SCUBA certified. Further develops scuba diving skills including night diving, navigation, and deep diving, resulting in a PADI Advanced certification. Students may opt for a single specialty training instead. Students are required to supply personal SCUBA mask and snorkel.

PE 182C Rescue Diver.....1 credits
Students must already be Advanced SCUBA certified. The course covers self-rescue, diver stress, first aid equipment, and diver tows among other subjects. Students must be CPR certified. This course results in a PADI Rescue Diver. Students are required to supply personal SCUBA mask and snorkel.

PE 183W Progressive Integrative Exercise .....1 credits
Students perform personalized corrective exercise programs to improve fitness in both the injured and individuals with controlled diseases. Flexibility, strength, cardiovascular endurance, nutrition and stress management principles will be covered. Must be able to exercise with minimal supervision.

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. Previous playing experience recommended.

PE 185Z Yoga Intermediate.....1 credits
Designed for continuing students who have a basic knowledge of asanas (postures), pranayama (breathing techniques), relaxation and philosophy. Includes discussion and practice. Learn how movement, breathing and nutrition contribute to stress reduction and improved well-being.

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. Meets Oregon and Utah qualifications for concealed carry weapons permit.

PE 188B Basketball .....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.

PE 191D Cross Country Skills 2.....1 credits
Prerequisite: PE191B or similar cross country running experience highly recommended. Theory, analysis, advanced skills and techniques for skilled performers and individuals preparing for a competitive cross country experience at the elite level. Course covers terminology, regulations, and healthy lifestyle choices. Ability level evaluated first week with 5k endurance test.

PE 225 Fencing Intermediate.....1 credits
Prerequisite: PE 184F with a grade of C- or instructor approval. Students will review the skills from Fencing and develop new technical and tactical skills. Expanded instruction in the rules and sportsmanship of fencing, tournament play will be included. Class includes warm-up and stretching skills.

PE 234 Tai Chi Chuan Intermediate.....1 credits
Prerequisite: PE 185T with a C- or better or instructor approval. Intermediate concepts of Yang Style Tai Chi Chuan. Use of body strength, flexibility and mental control skills. Coordination of eyes, movement, breathing and internal energy. Relaxation, nutrition improved health and concentration, increased energy, flexibility and clarity of mind.

PE 237 Yoga Intermediate.....1 credits
Designed for continuing students who have a basic knowledge of asanas (postures), pranayama (breathing techniques), relaxation and philosophy. Includes discussion and practice. Learn how movement, breathing and nutrition contribute to stress reduction and improved well-being.

PE 242 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 247 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. Previous competitive playing experience recommended.

PEAT 100 Cross Country Womens Conditioning 1 .....1 credits
A conditioning class designed for students interested in participating in competitive cross-country running. Emphasis on conditioning and endurance. Previous cross country experience recommended. Ability level evaluated first week with 5k endurance test.

PEAT 101 Cross Country Women's 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, and healthy lifestyle choices. Previous cross country experience recommended. Ability level evaluated first week with 5k endurance test.

PEAT 105 Cross Country - Men's Conditioning 1 .....1 credits
A conditioning class designed for students interested in participating in competitive cross-country running. Emphasis on conditioning and endurance. Previous cross country experience recommended.

PEAT 106 Cross Country - Men's 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, and healthy lifestyle choices. Previous cross country experience recommended.

PEAT 110 Volleyball - Women's Conditioning 1 .....1 credits
A conditioning class designed for students with an interest in participating in competitive Volleyball. Strong emphasis on individual conditioning, endurance, exercise principles, and the development of fundamentals. Previous competitive playing experience recommended.

PEAT 111 Volleyball - Womens's Skills 1.....1 credits
conditioning class designed for students with an interest in participating in competitive Volleyball. Strong emphasis on individual conditioning, endurance, exercise principles, and the development of fundamentals. Previous competitive playing experience recommended.

PEAT 115 Soccer - Women's 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. Previous competitive playing experience recommended.

PEAT 116 Soccer - Women's Skills 1.....1 credits
Theory, analysis, skills and techniques for students preparing for a competitive soccer experience. Course covers terminology, rules, strategy, conduct, sportsmanship and healthy lifestyle choices. Previous competitive playing experience recommended.

PEAT 120 Soccer - Men's 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. Previous competitive playing experience recommended.

PEAT 121 Soccer - Men's Skills 1 .....1 credits
Theory, analysis, skills and techniques for male students preparing for a competitive soccer experience. Course covers terminology, rules, strategy, conduct, sportsmanship and healthy lifestyle choices. Previous competitive playing experience recommended.competitive playing experience recommended.

PEAT 125 Basketball - Mens Conditioning 1.....1 credits
A conditioning class designed for students interested in participating in competitive basketball. Strong emphasis on conditioning, endurance and fundamentals. Previous competitive playing experience recommended.

PEAT 126 Basketball - Men's Skills 1 .....1 credits
Theory, analysis, skills and techniques for students preparing for a competitive basketball experience. Covers terminology, rules, strategy, conduct, sportsmanship and healthy lifestyle choices. Men's ball and Men's NCAA rules. Previous competitive playing experience highly recommended.

PEAT 130 Basketball - Women's Conditioning 1.....1 credits
A conditioning class designed for students interested in participating in competitive basketball. Strong emphasis on conditioning, endurance and fundamentals. Previous competitive playing experience recommended.

PEAT 131 Basketball Women's Skills 1 .....1 credits
Theory, analysis, skills and techniques for students preparing for a

competitive basketball experience. Covers terminology, rules, strategy, conduct, sportsmanship and healthy lifestyle choices. Women's ball and Women's NCAA rules will be used. Previous competitive playing experience recommended.

PEAT 135 Track and Field - Women's 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. Previous competitive track and field experience recommended.

PEAT 136 Track and Field - Women's Skills 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, and healthy lifestyle choices. Previous competitive track and field experience recommended.

PEAT 140 Track and Field - Men's Conditioning 1 ..... 1 credits
A conditioning class designed for male students interested in participating in competitive track and field. Emphasis on conditioning, development of fundamentals and skills. Previous competitive track and field experience recommended.

PEAT 141 Track and Field - Men's Skills 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, and healthy lifestyle choices. Previous competitive track and field experience recommended.

PEAT 145 Baseball - Men's Conditioning 1 ..... 1 credits
A conditioning class designed for students interested in participating in competitive baseball. Emphasis on conditioning and development of fundamentals. Previous competitive playing experience recommended.

PEAT 146 Baseball - Men's 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. Previous competitive playing experience recommended.

PEAT 200 Cross Country Women'sConditioning 2 ..... 1 credits
An advanced conditioning class that is designed for students interested in competitive cross-country running at the elite level. Strong emphasis on conditioning and endurance. Previous competitive cross country running experience highly recommended. Ability level evaluated first week with 5k endurance test.

PEAT 201 Cross Country Women's Skills 2 ..... 1 credits
Prerequisite: PE191B or similar cross country running experience highly recommended. Theory, analysis, advanced skills and techniques for skilled performers and individuals preparing for a competitive cross country experience at the elite level. Course covers terminology, regulations, and healthy lifestyle choices. Ability level evaluated first week with 5k endurance test.

PEAT 205 Cross Country - Men's Conditioning 2 ..... 1 credits
Prerequisite: PEAT 105 An advanced conditioning class that is designed for students interested in competitive cross-country running at the elite level. Strong emphasis on conditioning and endurance. Previous competitive cross country running experience highly recommended.

PEAT 206 Cross Country- Men's Skills 2 ..... 1 credits
Prerequisite: PEAT 106 A highly advanced conditioning class that is designed for students interested in competitive cross country at the elite level. Strong emphasis on conditioning, exercise principles, and the development of fundamentals. Previous competitive cross country experience highly recommended.

PEAT 210 Volleyball - Women's Conditioning 2 ..... 1 credits
Prerequisite: PEAT 110 A highly advanced conditioning class that is designed for students interested in competitive volleyball at the elite level. Strong emphasis on conditioning, exercise principles, and the development of fundamentals. Previous competitive playing experience highly recommended.

PEAT 211 Volleyball - Women's Skills 2 ..... 1 credits
Prerequisite: PEAT 111 Theory, advanced skills and techniques for students preparing for a competitive volleyball experience at an elite level. Course covers terminology, rules, strategies, conduct, sportsmanship and healthy lifestyle choices. Previous competitive playing experience at the varsity highly recommended.

PEAT 215 Soccer - Women's Conditioning 2 ..... 1 credits
Prerequisite: PE192I or similar experience. A highly advanced conditioning class that is designed for students interested in competitive soccer at the elite level. Strong emphasis on conditioning, exercise principles, and the development of fundamentals. Previous competitive playing experience highly recommended.

PEAT 216 Soccer - Women's Skills 2 ..... 1 credits
Prerequisite: PEAT 116 or similar experience. Theory, advanced skills and techniques for students preparing for a competitive soccer experience at an elite level. Course covers terminology, rules, strategies, conduct, sportsmanship and healthy lifestyle choices. Previous competitive playing experience highly recommended.

PEAT 220 Soccer - Men's Conditioning 2 ..... 1 credits
Prerequisite: PEAT 120 A highly advanced conditioning class that is designed for students interested in competitive soccer at the elite level. Strong emphasis on conditioning, exercise principles, and the development of fundamentals. Previous competitive playing experience highly recommended.

PEAT 221 Soccer-men's Skills 2 ..... 1 credits
Prerequisite: PEAT 121 Theory, advanced skills and techniques for male students preparing for a competitive soccer experience at an elite level. Course covers terminology, rules, strategies, conduct, sportsmanship and healthy lifestyle choices. Previous competitive playing experience highly recommended.

PEAT 225 Basketball - Men's Conditioning 2 ..... 1 credits
Prerequisite: PEAT 125 or similar experience. Advanced conditioning class designed for students interested in participating in competitive basketball at an elite level. Strong emphasis on conditioning, endurance and fundamentals. Previous competitive playing experience highly recommended.

PEAT 226 Basketball - Men's Skills 2 ..... 1 credits
Prerequisite: PEAT 126 or similar experience. Theory, advanced skills and techniques for students preparing for a competitive basketball experience at an elite level. Covers terminology, rules, strategies, conduct, sportsmanship and healthy lifestyle choices. Men's ball and NCAA rules. Competitive playing experience highly recommended.

PEAT 230 Basketball Women's Conditioning 2 ..... 1 credits
Prerequisite: PEAT 130 or similar experience. Advanced conditioning class designed for students interested in participating in competitive basketball at an elite level. Strong emphasis on conditioning, endurance and fundamentals. Previous competitive playing experience highly recommended.

PEAT 231 Basketball Women's Skills 2 ..... 1 credits
Prerequisite: PPEAT131 or similar experience. Theory, advanced skills and techniques for students preparing for a competitive basketball experience at an elite level. Covers terminology, rules, strategies, conduct, sportsmanship and healthy lifestyle choices. Women's ball and NCAA rules. Competitive playing experience highly recommended.

PEAT 235 Track and Field - Women's Conditioning 2 ..... 1 credits
Prerequisite: PEAT 135 or similar experience. Advanced conditioning class designed for students interested in participating in competitive track and field at an elite level. Emphasis on conditioning, development of fundamentals and skills. Previous competitive track and field experience highly recommended.

PEAT 236 Track and Field - Women's Skills 2 ..... 1 credits
Prerequisite: PEAT136 or similar experience. Advanced course that covers theory, analysis, skills and techniques for individuals who are preparing for a competitive track and field experience at an elite level. Covers terminology, regulations, and healthy lifestyle choices. Previous competitive track and field experience highly recommended.

PEAT 240 Track and Field - Men's Conditioning 2 ..... 1 credits
Prerequisite: PEAT 141 Advanced conditioning class designed for students interested in participating in competitive track and field at an elite level. Emphasis on conditioning, development of fundamentals and skills. Previous competitive track and field experience highly recommended.

PEAT 241 Track and Field - Men's Skills 2 ..... 1 credits
Prerequisite: PEAT 141 Advanced course that covers theory, analysis, skills and techniques for individuals who are preparing for a competitive track and field experience at an elite level. Covers terminology, regulations, and healthy lifestyle choices. Previous competitive track and field experience highly recommended.

PEAT 245 Baseball - Men's Conditioning 2 ..... 1 credits
Prerequisite: PEAT 145 or similar experience. An advanced conditioning class designed for students interested in participating in competitive baseball at an elite level. Emphasis on conditioning and development of fundamentals. Previous competitive playing experience highly recommended.

PEAT 246 Baseball - Men's Skills 2..... 1 credits
Prerequisite: PEAT 146 or similar experience. Advanced course in theory, analysis, skills and techniques for individuals who are preparing for a competitive baseball experience at an elite level. Covers terminology, regulations, strategy, conduct, sportsmanship and healthy lifestyle choices. Competitive playing experience highly recommended.

PEO 101 Downhill Skiing/Snowboarding Beg.-Int.-Adv. ..... 1 credits
Instruction and practice in fundamental skills of snowboarding and downhill skiing. Instruction provided for beginner through advanced skill level. Classes held at an Oregon ski area. Fees cover transportation, lift ticket, and lessons. Equipments rentals not included.

Physical Science - See Chemistry, Earth and Environmental Science, Physics

Physical Therapist Assistant

For information, contact the Health Professions Division, Bldg. 4/Rm. 222, 541.463.5617. You must be accepted into the Physical Therapist Assistant program to take these classes.

PTA 100 Introduction to Physical Therapy..... 3 credits
Prerequisite: Admission into the PTA program. This course introduces the roles and responsibilities of physical therapy providers. Topics include history, practice patterns, laws, professionalism, communication, and information literacy. May be offered online.

PTA 101 Introduction to Clinical Practice 1..... 5 credits
Prerequisite: Admission into the PTA program. This course introduces physical therapy practice patterns for acute and chronic soft tissue injuries. Students are introduced to principles of body mechanics, gross mobility training, positioning, physical agents, and aquatic therapy. May be offered online.

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 pain and soft tissue injuries. Topics and skills include safe application of physical agents, exercise, gross mobility training, positioning, and effective communication/documentation. May be offered in a format with some online instruction.

PTA 103 Introduction to Clinical Practice 2..... 5 credits
Prerequisites: PTA 101, PTA 101L, HO 152 or BI 233 Corequisite: PTA 103L The course is designed to assist PTA students in gaining a greater understanding of single organ dysfunction and subsequent effects on patient function. Anatomy, physiology, etiology, and theory are integrated with clinical considerations for effective physical therapy treatment. May be offered online.

PTA 103L Introduction to Clinical Practice 2 Lab ..... 2 credits
Prerequisite: PTA 101, PTA 101L Corequisite: PTA 103 This co-requisite lab to PTA 103 allows for students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with dysfunction. Students practice effective communication and treatment skills for multiple practice settings. May be offered in a format with some online instruction.

PTA 104 PT Interventions-Orthopedic Dysfunctions..... 5 credits
Prerequisite: PTA 103, PTA 132 Corequisite: PTA 104L This course designed to assist students in gaining a greater understanding of bone tissue disease and disorders, and their effects on function across the lifespan. Anatomy, physiology, etiology, and theory are integrated with clinical considerations for effective physical therapy treatment. May be offered online.

PTA 104L PT Interventions-Orthopedic Dysfunctions Lab..... 2 credits
Prerequisites: PTA 132, and PTA 132L. Corequisite: PTA 104. This co-requisite lab for PTA 104 allows students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with orthopedic conditions. May be offered in a format with some online instruction.

PTA 132 Applied Kinesiology 1..... 3 credits
Prerequisites: PTA 101, PTA 101L Corequisite: PTA 132L Students apply understanding of lower quarter structures and functions to clinical situations. Emphases on current evidence and clinical reasoning for safe and effective selection of therapeutic exercises and interventions to improve peripheral joint motion and function as indicated within the physical therapy plan of care. May be offered online.

PTA 132L Applied Kinesiology 1 Lab ..... 2 credits
Prerequisite: PTA 101, PTA 101L 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 documentation, palpation, goniometry, therapeutic exercise, manual muscle testing, gait and stretching. May be in a format with some online instruction.

PTA 133 Applied Kinesiology 2..... 3 credits
Prerequisite: PTA 132, PTA 132L Co-requisite: PTA 133L Students apply understanding of upper body structures and functions to clinical situations. Emphases on current evidence and clinical reasoning for safe and effective selection of therapeutic exercises and interventions to improve peripheral joint motion and function as indicated within the physical therapy plan of care. May be offered online.

PTA 133L Applied Kinesiology 2 Lab ..... 2 credits
Prerequisite: PTA 132 and PTA 132L Corequisite: PTA 133 The co-requisite lab to PTA 133 allows for physical therapy skills practice and data collection based on principles of kinesiology for the upper quarter. Skills include palpation, goniometry, therapeutic exercise, manual muscle testing, posture analysis, and documentation. May be offered in a format with some online instruction.

PTA 200 Professionalism, Ethics, and Exam Preparation ..... 4 credits
Prerequisite: Admission into PTA Program, second year student. Corequisite: PTA 203. This course is designed to prepare the student physical therapist assistant (SPTA) for ethical situations that are common in the clinical setting. The course prepares the SPTA for the licensing exam and further professional development for entry into the workplace. May be offered online.

PTA 201 Physical Therapy and the Older Adult ..... 2 credits
Prerequisite: admission into PTA Program, second year student. This course is designed to facilitate understanding of older adults and their needs and to promote concepts of successful aging based on the physical therapy interventions. Dementia, pharmacology, fall prevention, and the PTA's role in the team approach to providing quality care for the older adult will be examined. May be offered in a format with some online instruction.

PTA 203 Contemporary Topics in Physical Therapy ..... 2 credits
Prerequisite: Admission into PTA Program, second year student. Corequisite: PTA 200. This course explores contemporary issues affecting clinical and professional physical therapy practice and impacts on the PTA. Course culminates with a public class presentation of service learning projects to the PTA Advisory Committee. May be offered online.

PTA 204 PT Interventions - Neurological Dysfunctions ..... 5 credits
Prerequisite: PTA 104, PTA 104L, PTA 133, and PTA 133L. Corequisite: PTA 204L. This course is designed to assist PTA students in gaining a greater understanding of the various neurological challenges, including mental health, that affect clients in the PT environment. May be offered online.

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 students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with neurological conditions. May be offered in a format with some online instruction.

PTA 205 PT Interventions - Complex Medical Dysfunctions .. 4 credits
Prerequisite: PTA 104, PTA 104L, PTA 133, and PTA 133L. This course investigates physiological anomalies, clinical presentation and physical therapy treatment approaches for patients with complex medical conditions. Students advance clinical decision-making using case studies, treatment models, and evidence-based literature. May be offered online.

PTA 205L PT Interventions - Complex Medical Disfunctions Lab ..... 2 credits
Prerequisite: PTA 104, PTA 104L, PTA 133, and PTA 133L. This co-requisite lab for PTA 205 allows students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with complex medical/integument conditions. May be offered in a format with some online instruction.

PTA 280A Co-op Ed: First Clinical Internship.....4-8 credits
Prerequisite: PTA 104, PTA 104L, PTA 133 and PTA 133L Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward advanced beginner and intermediate PTA practice by demonstrating communication and critical thinking for the workplace. This is the first of three off-campus clinical learning experiences.

PTA 280B Co-op Ed: Second Clinical Internship.....4-8 credits
Prerequisite: PTA 280A Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward intermediate and advanced intermediate PTA practice by demonstrating communication and critical thinking for the workplace. This is the second of three off-campus clinical learning experiences.

PTA 280C Co-op Ed: Third Clinical Internship.....4-8 credits
Prerequisite: PTA 280B Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward entry-level PTA practice by demonstrating communication and critical thinking for the workplace. This is the third and final of three off-campus clinical learning experiences.

Physics

For information, contact the Science Division, Bldg. 16/Rm. 156, 541.463.5446.

ASTR 121 Astronomy of the Solar System.....4 credits
Prerequisite: MTH 052 ir higher. ASTR 121, 122 and 123, may be taken out of sequence. This sequence provides an in-depth and comprehensive introduction to the science of astronomy. These courses are designed to serve non-science majors, but also offer a good introduction for prospective science majors interested in Astrophysics or Space Science. These courses have a significant lab component. ASTR 121 focuses on naked-eye astronomy and the science of astronomy focused primarily on our solar system and comparative planetology, the Earth and its Moon, detailed consideration of the individual planets, solar system debris including comets and asteroids, and modeling the origin of our solar system.

ASTR 122 Stellar Astronomy.....4 credits
Prerequisite: MTH 052 or higher ASTR 122 focuses on the fundamental physic concepts underlying our understanding of stars. How we observe light from stars and our Sun and its place in our Milky Way 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. ASTR 123 focuses on the search for understanding of the nature of the Milky Way galaxy, Normal Galaxies, Active Galaxies and Quasars, Life in the Universe, and Cosmology including the Big Bang, the geometry of space-time, the cosmic background radiation, Dark Matter and Dark Energy.

GS 104 Physical Science.....4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Some or all of the GS 104,5,6 sequence can be taken in any order. The GS 104,5,6 sequence is designed for non-science majors, providing a broad exploration and overview of basic principles that tie the physical sciences together. The focus of each term of GS 104,5,6 focuses on topics and lab experience from physics, chemistry, and geology plus astronomy, respectively. GS104 concerns selected topics in Newtonian mechanics, thermodynamics, electricity and magnetism, waves, light, and modern physics. The class environment includes labs, demonstrations, discussion, and individual and group activities.

PH 101 Fundamentals of Physics.....4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Some or all of the PH 101,2,3 sequence can be taken in any order. The 'Fundamentals of Physics' courses provide an introduction to a broad range of fundamental physics concepts. PH 101,2,3 are 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 career-technical students, and provides physics transfer credit if needed. Emphasis is on everyday phenomena and conceptual understanding more than calculations. PH 101 focuses on the nature of science, data analysis, Newton'¬ís explanation of motion, momentum, energy, gravity, the atomic nature of matter, and properties of solids, liquids, gases, and plasmas. The class environment includes labs, demonstrations, discussion, and individual and group activities.

PH 102 Fundamentals of Physics.....4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Some or all of the PH 101,2,3 sequence can be taken in any order. PH 102 focuses on the science of heat and thermodynamics, waves and sound, and electricity and magnetism. See information about the Fundamentals of Physics sequence in the PH 101 course description. The class environment includes labs, demonstrations, discussion, and individual and group activities.

PH 103 Fundamentals of Physics.....4 credits
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test. Some or all of the PH 101,2,3 sequence can be taken in any order. PH 103 focuses on the science of light and color and many aspects of modern physics, including atomic physics, quantum mechanics, nuclear physics, special and general relativity, and astrophysics. See information about the Fundamentals of Physics sequence in the PH 101 course description. The class environment includes labs, demonstrations, discussion, and individual and group activities.

PH 201 General Physics.....5 credits
Prerequisite: MTH 112 with grade of 'C-' or better or pass placement test. Algebra/trig-based General Physics sequence for science majors. Concepts include force, acceleration, work, energy and momentum of objects with mass in various kinds of motion. Emphasizes conceptual understanding, mathematical representations, problem solving, applications and science skills.

PH 202 General Physics.....5 credits
Prerequisite: PH 201 with grade of 'C-' or better. Algebra/trig-based General Physics sequence for science majors. Concepts include rotational motion, sound, wave phenomena and optics. Emphasizes conceptual understanding, mathematical representations, problem solving, applications and science skills.

PH 203 General Physics.....5 credits
Prerequisite: PH 202 with grade of 'C-' or better. Algebra/trig-based General Physics sequence for science majors. Concepts include electricity, magnetism, and selected topics from modern physics. Emphasizes conceptual understanding, mathematical representations, problem solving, applications and science skills.

PH 211 General Physics with Calculus.....5 credits
Corequisite: MTH 251. PH 211,2,3 is a calculus-based, three-term sequence providing an introduction to fundamental physics concepts, analysis, exploration, calculation and problem-solving that are required for engineering and physics majors, and also readily meets any General Physics requirements for other health, mathematics and science majors. PH 211,2,3 require a concurrent study of calculus in Math 251,2,3, if calculus hasn't been 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 and exploration, visual and mathematical representation, calculation, and problem solving. PH 211 introduces the nature of science, Classical Newtonian Mechanics, energy, and momentum. The class environment includes labs, demonstrations, discussion, and individual and group activities.

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 Bernouli's equation, oscillatory motion, and fundamentals of waves and optics. See information about the General Physics with Calculus sequence in the PH 211 course description. The class environment includes labs, demonstrations, discussion, and individual and group activities.

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 the General Physics with Calculus sequence in the PH 211 course description. The class environment includes labs, demonstrations, discussion, and individual and group activities.

Political Science

For information, contact the Social Science Division, Center Bldg./Rm. 403, 541.463.5427.

PS 101 Modern World Governments ..... 4 credits
Modern World Governments is an introductory class to the study of politics, intended to familiarize students with the history, political systems, practices, cultures, and institutions of various countries. By examining and comparing these countries the course will introduce the basic ideas, terminology, and debates in political science. The fundamental goals of the class are to expose students to the diversity of political systems in the modern world, teach students how to analyze politics in other countries, teach students to think critically, and through reflection gain a better understanding of their own political system. In an increasingly global world advancing our understanding of the politics, histories, and cultures outside out borders is crucial. This course will serve as foundation for those who want to study international relations or comparative politics.

PS 201 U.S. Government and Politics ..... 3 credits
An introduction to U.S. Government and politics that includes consideration of the debates surrounding the formation of the Constitution, 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. May be offered online.

PS 202 U.S. Government and Politics ..... 3 credits
A continuation of U.S. 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; the theory and practice of American Federalism, and the formation and implementation of U.S. economic and foreign policy. May be offered online.

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 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 classical and modern political theory, starting with the ancient Greek theorists, we next explore Renaissance theorists, then the social contract theorists. The first part of 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. We move on to explore Marx, Mill, 20th Century theorists, covering contemporary debates through the lens of their theories. 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, multiculturalism, 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
Intern with governmental and political professionals. Work on political campaigns, assist federal/state/local legislators or work with grass roots organizations. Enhance your academic and career resumes, develop workplace skills and earn academic credit. No prior experience required; a one term commitment is required, but course can be repeated.

PS 280LW Co-op Ed: Pre Law ..... 2-12 credits
This internship is for students anticipating a legal career. Learn and work with lawyers, legal assistants and other legal professionals in areas of legal administration, research, working with clients and the courts. A one term commitment is required, but course can be repeated.

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 the Social Science Division, 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. May be offered as a telecourse.

PSY 201 General Psychology ..... 4 credits
Prerequisite: Sophomore standing recommended. Scientific principles of psychology and psychological research; an introduction to statistical methodology, developmental and structural aspects,

neurobiology and neurochemistry, and brain anatomy; senses and perceptual processes; states of consciousness. Basic principles and theories of behavior. May be offered online.

PSY 202 General Psychology.....4 credits
The study of behavior as it is influenced by learning, remembering, forgetting, higher brain functions, motivation and emotions. May be offered online.

PSY 203 General Psychology.....4 credits
Individual differences and methods of measurement, personality dynamics, stress, abnormal, social, and applied psychology. Previous PSY 201 and PSY 202 recommended. May be offered online.

PSY 212 Learning and Memory.....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 215 Lifespan Developmental Psychology.....4 credits
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. May be offered online.

PSY 231 Human Sexual Behavior.....4 credits
Prerequisite: PSY 201 or instructor consent. Explores the behavioral, psychological and biological components of human sexual behavior. Topics include cross-cultural comparisons, learned and developmental origins, biological systems, variations in sexual behavior, gender issues and sexual difficulties. Course emphasizes behavioral rather than health issues in human sexuality.

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.

PSY 280 Co-op Ed: Psychology.....3-12 credits
In this internship course students will gain psychology-related work experience in community organizations. Students may integrate theory and practice, develop skills, explore career options, and network with professional while earning college credit.

Radio - See Media Arts

Reading - See Study Skills and College Prep

Religion - See Philosophy and Religion

Respiratory Care

For information, contact the Health Professions Division, 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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Course work requires college-level reading skills.

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) or consent of instructor. Emphasis is on the function of mechanical ventilation equipment. Content includes current indications, contraindications and hazards of modes of continuous mechanical ventilation. Advanced ventilator monitoring techniques, analysis of ventilator wave-forms, and problem-solving algorithms presented. May be offered online.

Robotics - See Electronics

Sales and Marketing - See Business

Science - See Anatomy/Physiology/Microbiology, Biology, Chemistry, Earth and Environmental Science, Energy Management, Engineering, Physics

Semiconductor Manufacturing - See Electronics

Social Science - See Anthropology, Criminal Justice, Economics, Geography, Ethnic Studies, History, Human Services, Humanities, Philosophy and Religion, Political Science, Psychology, Sociology, Women's Studies

Sociology

For information, contact the Social Science Division, 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.....4 credits
Introduction to fundamental concepts in sociology, such as culture, social structure, organizations, socialization, deviance, and stratification, as well as theoretical traditions and research methodology. Development and application of the sociological imagination. May be offered online or as a telecourse.

SOC 205 Social Stratification and Social Systems.....4 credits
Explores patterns of social inequality, or stratification, using sociological research and theory. Focuses on race, class, and gender inequality. May be offered as a telecourse.

SOC 206 Institutions and Social Change.....4 credits
Sociological analysis of fundamental social institutions, such as family, education, the economy, and the state; connections among institutions, and the forces and dynamics of social change. May be offered online or as a telecourse.

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.....4 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.....4 credits
Examines family, parenting, reproduction, intimate relationships, sexuality, and family disruptions in a social context. Utilizes sociological approach to develop insights into personal experiences and inform perspectives on social policies that affect families and intimate relationships.

SOC 211 Social Deviance ..... 3 credits
This course examines the dynamic social, economic, and cultural processes through which identities and behaviors are constructed as deviant. Topics include, but are not limited to the relationships between race, class, gender, sexuality, disability and the social construction of deviance. Utilizing sociological theories we will move away from understanding deviant behavior as a personal and individual phenomenon and rather focus on deviance as a social construction that is negotiated and contested. Emphasis will be placed on the role of the state, as well as historical, political, cultural and economic dimensions of deviance and social control. May be offered in distance learning format.

SOC 213 Race and Ethnicity ..... 4 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 218 Sociology of Gender ..... 4 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 ..... 4 credits
Analyzes contemporary social problems, including topics such as social inequality, environmental degradation, impacts of globalization, and criminalization. Examines how social conditions come to be labeled as "problems," the causes and consequences of those conditions, and how social activists and policymakers respond to social problems.

SOC 228 Introduction to Environmental Sociology ..... 4 credits
This course explores the social causes, consequences, and potential solutions to environmental problems. Students survey diverse environmental philosophies and sociological perspectives to examine society's relation with the environment.

SOC 280 Co-op Ed: Sociology ..... 3-12 credits
In this internship course students will gain sociology-related work experience in community organizations. Students may integrate theory and practice, develop skills, explore career options, and network with professional while earning college credit.

Spanish - See Language Studies

Spelling - See Study Skills

Student Leadership Development

For information, contact the Student Life and Leadership Department, Bldg. 1/Rm. 206, 541.463.5337.

SLD 103 Post-Racial America: Challenges & Opportunities ..... 4 credits
This course is designed to examine the current state of race relations and discourse on race in America in a "Post Civil Rights Era" environment. The course will examine the societal issues facing African Americans, Latinos/Latinas, Native Americans and other underrepresented minority populations.

SLD 111 Chicano/Latino Leadership 1: Quien Soy? Quienes ..... 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.

SLD 112 Chicano/Latino Leadership 2: Cultural Heroes ..... 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.

SLD 113 Chicano/Latino Leadership 3: Affirmative & Resistance ..... 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.

SLD 121 African American Leadership: History, Philosophy, & Practice ..... 4 credits
African American Leadership: History, Philosophy, & Practice is a course designed to examine the history, philosophy, key leadership strategies and practices of African American leaders. This course focused on Leadership Theory, Foundations of AA Leadership and AA Leadership in Practice.

SLD 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.

SLD 280 Co-op Ed: ASLCC ..... 1-2 credits
Intern with governmental and political professionals. Work on political campaigns, assist federal/state/local legislators or work with grass roots organizations. Explore potential career options, enhance your academic and career resumes, develop workplace skills and earn academic credit. No prior experience required; a one term commitment is required, but course can be repeated.

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:

CG - Contact the Counseling Department, Bldg. 1/Rm. 103, 541.463.5299.

EL and RD - Contact Academic Learning Skills, Center Bldg./Rm. 218, 541.463.5439.

CG 100 College Success ..... 1-3 credits
This course emphasizes practice and active learning of skills and strategies that help create greater academic, professional and personal success. College Success strategies empower students to make wise choices that lead to improved experiences and outcomes in college and beyond. May be offered as a telecourse.

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. May be offered as a telecourse.

EL 113 Connections: Specific Study Skills ..... 3 credits
Corequisite: WR 093. Students will develop and strengthen their

critical reading, thinking, and writing skills. Together, EL113 and WR093 integrate these skills to prepare students for college-level writing.

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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Coursework requires college-level reading skills. May be offered online.

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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Course work requires college-level reading skills.

EL 115R Critical Thinking for College Reading.....3 credits
Corequisite: RD087.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, use their preferred learning styles, study for tests, improve memory, read and study from textbooks, manage time effectively, use the library, and make visual study tools. Coursework requires college-level reading skills.

EL 116 Critical Thinking for Paragraph Writing.....3 credits
Prequisite: RD 080 or RD 087, Corequisite: WR 087 EL116 is a corequisite for students in WR087. Students will develop and strengthen their critical reading, thinking, and writing skills.Together, EL116 and WR087 integrate these skills to prepare students for essay writing

EL 117 Critical Thinking for Essay Writing.....3 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 (EL113 and the content-area course) are either linked with extensive instructor collaboration or team-taught. Students will optimize note taking, test preparation, memory, reading, time management, discussion, research, and critical thinking skills with a focus on specific content. For a description of this ALS class in Spanish, see lanecc.edu/als/classesenspanol.htm.

RD 087 Preparatory Academic Reading.....3 credits
Prerequisite: Placement test. Corequisite: EL 115R. Students will learn active reading strategies such as finding main idea and supporting details to improve textbook comprehension. In addition, students will develop techniques for enlarging vocabulary and creating study tools. Reading selections from actual first-year textbooks are part of the course.

RD 121 Academic Literacy.....4 credits
This course teaches critical thinking, reading, and writing. Topics include strategies for reading and analyzing academic prose, the influence of experience, attitude, and belief on thinking processes; understanding the rhetorical dimensions of language; and methods of academic research as inquiry.

Television - See Media Arts

Theatre Arts

For information, contact the Music, Dance and Theatre Arts Department, Bldg. 6/Rm. 204, 541.463.5209.

TA 121 Introduction to Costume Design.....3 credits
Student will learn basic sewing, costume rendering and execution of a design.

TA 140 Acting Shakespeare.....4 credits
Students become "Shakespeare-friendly" through lectures and classroom activities. Introductory training includes script analysis, acting, vocal, physical and interpersonal skills. Actors receive personal coaching on contemporary approaches to performing Shakespeare. Final performance is presented for the public.

TA 141 Acting 1 .....3 credits
Introduces the student to basic acting skills. Class exercises focus on increased self-awareness, observation skills, relaxation techniques, voice technique, 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 .....4 credits
Prerequisite: TA 141Continuation of the Beginning Acting sequence. Students are introduced to in-depth character analysis and more advanced scene work. Performance material includes a ten-minute play and monologue written in contemporary language. Other topics include development of the actor's voice, release of tension, script analysis, and analyzing the work of other actors. Final performance is presented in a public presentation.

TA 143 Acting 3 .....4 credits
Prerequisite: TA 142 Continuation of the Beginning Acting sequence. Continued in-depth character and scene work. Students learn to believably and compellingly act in scenes and monologues from contemporary or classic dramatic literature with heightened emotional stakes. Topics include auditioning techniques, development of the actor's voice, relaxation, script analysis, and analyzing the work of other actors. Final performance is presented in a public presentation

TA 144 Improvisational Theatre 1.....3 credits
Students learn theater games, scene development, and other improv techniques. This course develops creative energy and helps minimize inhibitions. It is beneficial for actors and professionals of all fields.

TA 150 Technical Production .....3 credits
This course provides comprehensive information for students who want to learn the necessary technical functions, aspects and operations of Performing Arts productions. Besides a strong knowledge of many technical elements of productions, 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. Should be taken by participants in a theatrical production of this department scheduled for public performance.

TA 227 Stage Makeup .....3 credits
Stage Makeup covers the history, purpose, and especially the technique of application of theatrical makeup. Students study the use of makeup in various theatrical media, with emphasis on stage performers.

TA 241 Intermediate Acting 1.....4 credits
Prerequisite: TA 143 This course augments previous training by focusing on characterization using dramatic literature with heightened language such as plays by Ibsen, Checkhov, and Wilde. Other topics include development of the actor's voice, release of tension, script analysis, and analyzing the work of other actors. Final performance is presented in a public presentation.

TA 242 Intermediate Acting 2.....4 credits
Prerequisite: TA 241. This course augments previous training by focusing on characterization in "non-realistic" dramatic literature such as Absurdist, Post-modern, and non-linear plays. Other topics include continued development of the actor's voice, focus and concentration, script analysis, and in-depth analysis of the work of other actors. Final performance is presented in a public presentation.

TA 243 Acting for the Camera .....4 credits
Prerequisite: TA 242 This course augments previous training by focusing on acting for electronic media. Students learn the fundamentals of believable and compelling acting for the camera. Topics include articulation, relaxation, script analysis, and analyzing the work of other actors. Final project produces a professional work sample for students to use for auditions and agent submissions. These "reels" are shown at a public presentation.

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.

TA 272 Introduction to Theatre.....4 credits
Introduces students to the art and business of contemporary theatre. Topics include playwriting, theatre history, and contemporary production practices. Emphasis is placed on the value of theatre arts to

society and the individual. No performing required. No materials to buy. Includes free attendance at local theatrical productions. May be offered online.

TA 280 Co-op Ed: Performing Arts.....3-12 credits
Co-op offers students on-the-job work experience in a theatre-related site. Students integrate theory and practice gained in the classroom with practical experience in the professional world. Students develop skills, explore career options and network with professionals and employers while earning credit toward a degree. Please contact performing arts cooperative education coordinator before attempting to register.

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 College Reading and Learning Association's (CRLA) 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 achieve 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 achieve 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 achieve Master/Level III certification from CRLA.

Video Production - See Media Arts

Vocabulary - See Writing

Water Conservation

For information, contact the Science Division, Bldg. 16/Rm. 253, 541.463.3997.

IDS 280S Co-op Ed: Sustainability Coordinator.....3-12 credits
This internship course offers a work experience that integrates theory and practice in the field of sustainability. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

SUST 101 Introduction to Sustainability.....3 credits
What is sustainability?' Students discuss, measure and learn how to implement action. Topics include economic, ecologic and environmental literacy; history; power and privilege; basic needs of food, water and shelter; energy, transportation and development; products, purchasing, waste and recycling; governance. Features guest speakers. May be offered online.

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 102 Water Careers Exploration.....4 credits
The course provides an introduction to water conservation and watershed science technician fields, examining personal and global water issues. The class will define water as a critical concern of society at all levels. Students will investigate water employment opportunities through various sources.

WATR 105 Water Conservation: Residential.....4 credits
This course focuses on residential water conservation and efficiency strategies. The course covers program development, water use, waste water, auditing, efficiency measures, alternative sources, and incentives as well as fixtures and appliances. Students participate in hands-on activities.

WATR 202 Fostering Sustainable Practices.....3 credits
Study communication and collaboration skills that develop effective community sustainability programs. Learn techniques to overcome sustainable behavior barriers. Practice community initiatives through direct people contact, and learn how green industry practitioners encourage sustainable practices.

WATR 206 Co-op Ed: Water Conservation Seminar.....2 credits
Students will increase their understanding of industry expectations as well as job search tools and skills. Course 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, their professional careers.

WATR 209 Urban Agriculture and Water.....2 credits
Prerequisite: WATR 107 and WATR 208 This course extends knowledge introduced in WATR 208 and WATR 107 into the urban environment. Retrofitting for resilient food production in urban and suburban environments. Building of local infrastructure to support water stewardship in response for forecast climate changes. Integration of Outdoor Landscape with Agricultural Production.

WATR 210 Water Conservation: Industrial / Commercial.....4 credits
Course focuses on retrofitting 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 include metering, sanitation, process water use, and heating and cooling systems. Concept of Industrial Ecology introduced.

WATR 215 Integrated Water Management.....4 credits
Prerequisite: SUST 101 and WATR 101 This class examines a wide range of water uses and water issues in multiple settings and at various scales using global, regional and local case studies. Emphasis will be on the interaction between various resource uses and the effects of conservation measures.

WATR 220 Water Conservation:Program Development.....4 credits
This capstone class explores the design, implementation, maintenance and evaluation of water efficiency plans and programs. Emphasis is on creating formal water conservation plans. Students learn 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. 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 technologies.

WATR 222 Stormwater Best Management Practices.....4 credits
Students gain a working knowledge of best management practices for stormwater management with a focus on Low Impact Development strategies from constructed wetlands to swales to green roofs. Topics will include site analysis, flow management, and phyto-remediation. Labs include field trips, field work and guest lecturers.

WATR 261 Regional Water Policy.....3 credits
Explores policy, regulation, rights and law pertaining to the Pacific Northwest bioregion. Additional topics 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 internship course offers work experience that integrates classroom theory with practical experience in the field of water conservation. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

Watershed Science

For information, contact the Science Division, Bldg. 16/Rm. 253, 541.463.3997.

WST 102 Introduction to Watershed Field Methods.....2 credits
Co-Requisite: GS 101 or instructor consent. Introduction to field data collection, including site sketching, photo documentation;

measuring direction, length, area and slope; species counts and plant cover quantification. Students learn procedures for permanent plot installation and how to protect data integrity.

WST 205 Soils Fields Methods.....2 credits
Basic principles of experimental design, site and instrument selection for field research to study soil and slope physical and biological characteristics. Basic tools and data acquisition techniques are used in a variety of field settings. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 221 Invasive Species Field Methods.....1 credits
Practical field experience using standard protocols to collect data on invasive species and their mitigation in a variety of natural systems. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 222 Threatened and Endangered Species Field Methods.....1 credits
Practical field experience in monitoring the status of threatened and endangered species and assessing strategies to mitigate their loss. Field research exercises on evenings and/or weekends combined with self-paced online learning.

WST 223 Prairies to Woodlands Field Methods.....2 credits
Practical field experience in collecting data on the condition of prairies, savannas, woodlands, and forests. Emphasis is on species of concern including endangered, keystone, invasive, and indicator species. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 224 Wetlands Field Methods.....2 credits
Practical field experience in monitoring biological, chemical and physical properties of wetlands. Includes plant communities and microbiology. Introduction to hydraulics and treatment efficiencies. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 225 Riparian Field Methods.....2 credits
Prerequisite: ENVS 183 or instructor consent. Introduction to basic skills needed to determine the functional status of riparian systems. Vegetation identification. Habitat assessment of stream-side plants, animals and macro-invertebrates. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 226 In-Stream Field Methods.....2 credits
Prerequisite: ENVS 183 or instructor consent. Introduction to protocols and procedures used in streams to measure stream and channel attributes, aquatic ecology and water quality. Emphasizes where, when and how to sample stream ecosystems. Field exercises on evenings and/or weekends combined with self-paced online learning.

WST 230 Watersheds and Hydrology.....4 credits
Prerequisite: ENVS 181 or ENVS 183 with grade of "C-" or better. Physical hydrology of watersheds including the water cycle, water budgets, water yields and peak flows. Effects of surface erosion, stream temperatures, nutrient levels and human activities upon watershed health.

WST 234 Watershed Best Practices.....4 credits
Prerequisites: WST 225, WST 226, WST 230 and GIS 245. Corequisites: WST 221, WST 222 and WST 224. This capstone experience explores sustainable approaches to watersheds that will improve and maintain the integrity of water systems. Students combine watershed field skills and conceptual knowledge to produce a site proposal incorporating standard best management practices.

WST 280 Co-op Ed: Watershed Science Technician.....1-12 credits
This internship course offers work experience that integrates classroom work with practical experience in the field of watershed science. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

Web - See Business and Computers: Introduction/ Information Systems/Computer Science

Welding - See Fabrication and Welding

Women in Transition

For information, contact the Gender and Equity Center, Bldg.1/Rm. 202, 541.463.5353.

CG 140T Career and Life Planning: WIT.....3 credits
Co-Requisite: CG 220. This course is designed to help students in Women in Transition plan their careers and their lives. This course will explore: self-awareness, values, interests, skills, personality styles, available careers, careers that fit personal wants and needs, steps to pursuing career goals, how to make decisions, weigh options, and set goals.

CG 207 Life Transitions 2.....3 credits
Prerequisite: CG 220. This course 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 and attaining personal and academic goals. Class activities will stress practical and personal application of course information.

CG 210 Life Transitions 3.....3 credits
Prerequisite: CG220. This course is focused on the concept of "life as a relationship to everything." It is designed to assist students in their capacity to identify the enduring components of healthy attachment and relational connections that actively contribute to their well-being and ability to successfully achieve their educational goals. Topics include: attachment theory, the effect of trauma on relational capacity, relationship mapping and the exploration of relational narratives, multicultural, gender and historical perspectives on relationships, looking beyond family and intimate partnerships in defining relationships and creation of positive relational attachments at Lane Community College.

CG 220 Life Transitions: Women in Transition.....4 credits
Co-requisite: CG 140T. This course is designed to help students in Women in Transition navigate their current life transitions and explore positive new life directions. Topics include: understanding life transitions, relationships, increasing self-esteem, coping with powerful emotions, developing healthy power and assertiveness).

Women's Studies

For information, contact the Social Science Division, 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.

Writing

For information about classes with course numbers that begin with:

ENG and WR087-097 - Contact Academic Learning Skills, Center Bldg./Rm. 218, 541.463.5439.
WR105-242 - Contact the Language, Literature and Communication Division, Center Bldg./Rm. 457, 541.463.5419.

WR 087 English Grammar and Paragraph Writing.....3 credits
Prerequisite: Placement by the LCC reading/writing test, instructor consent, or a passing grade in RD080 or RD087. This course integrates English grammar, paragraph writing, and readings. Students will develop their ability to write standard English sentences that demonstrate a mastery of grammatical concepts while learning about and using the writing process. Students will also demonstrate control and understanding of the writing process: generate and organize ideas, write drafts, revise and edit paragraphs. In addition, students will practice paragraph structures, development of ideas in a paragraph, and sentence editing and revision. Course activities may be enhanced through conferences, workshops, and/or online modules. May be offered online.

WR 093 College Writing for ELL Students.....3 credits
Prerequisite: A passing grade in WR089 or WR090, a passing grade (C- or better) in English as a Second Language (ESL) College Transition Writing and Grammar F and College Transition Reading F and College Transition Listening and Speaking F, or placement by the LCC Accuplacer or Accuplacer ESL, or recommendation of the instructor. Corequisite: EL113. This course develops English language learners' advanced competence in essay writing and prepares students for WR115. 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 learn to recognize and correct grammatical errors in their writing. Students will also learn advanced grammatical concepts and produce essays that reflect that knowledge. Students will also use critical reading skills to analyze essays and improve their own writing. Students will submit papers using word processing software.

WR 097 Introduction to Essay Writing.....3 credits
Prerequisites: WR080 or WR087 or WR089 or WR090, or a passing grade (C- or better) in English as a Second Language (ESL) College Transition Writing and Grammar F and College Transition Reading F and College Transition Listening and Speaking F, or placement by the LCC Accuplacer or Accuplacer ESL. Corequisite: EL 113W. This course introduces students to essay writing and prepares students for WR115. 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 learn to recognize and correct grammatical errors in their writing. Course activities may be enhanced through conferences, workshops, and/or online modules. May be offered online.

WR 105 Writing for Scholarships.....2 credits
Prerequisite: WR 115 or placement test. Central to "Writing for Scholarships" is your involvement in the classroom community. In other words, a key to success in this course is active participation. This course functions as a support system, encouraging you to develop your ideas and writing skills beyond the classroom. First, you will learn to present your self-inquiry in the form of effective scholarship essays. Then, you will include these essays in a scholarship application to the Oregon Office of Student Access and Completion (OSAC) and, optionally, another scholarship application of your choice. This course focuses on prewriting, descriptive writing, organizational strategies, sentence fluency, concision, and, importantly, revision. It is not uncommon for students to rewrite their essays multiple times after starting over. We will look at scholarship essays from former WR 105 students who have earned scholarships, to define what works and to employ working techniques in current assignments. Your writing will be your own, and yet you may draw upon campus resources and the community experience to facilitate your leaps in learning. We will collaborate and consider each essay together, to determine how to communicate your personal experiences such that they inspire you and touch the lives of others. 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 Composition.....4 credits
A passing grade in (C- or better) in WR 93, WR 95, or WR 97, or an appropriate placement. WR 115 introduces students to the expectations of college-level reading, thinking, and writing. Students will be introduced to rhetorical concepts and engage in a collaborative writing process to produce projects for a variety of purposes and audiences, across more than one genre. Reading, writing, and critical thinking activities will focus on inquiry and the development of the metacognitive awareness of individuals as writers. Students will produce one formal essay of 700-800 words and a total of 2000-2500 words of revised, final draft copy over the term that incorporate source material and practice MLA citation and attribution conventions.

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 093, WR 095, WR 97, or equivalent. WR 115W introduces students to the expectations of college-level reading, thinking, and writing. Students will be introduced to rhetorical concepts and engage in a collaborative writing process to produce projects for a variety of purposes and audiences, across more than one genre. Reading, writing, and critical thinking activities will focus on inquiry and the development of the metacognitive awareness of individuals as writers. Students will produce a variety of assignments across multiple genres such as job letters, essays, technical reports, for a total of 2000-2500 words of revised, final draft copy over the term; at least one of the compositions will incorporate source material and practice attribution conventions. Courses may include multimodal projects. This course fulfills writing requirements for some Lane programs. Note: This three-credit writing course will not count as a prerequisite for WR 121.

WR 121 Academic Composition.....4 credits
Prerequisite: A passing grade (C- or better) in WR 115 or an appropriate placement WR 121 focuses on rhetorical reading, thinking, and writing as means of inquiry. Students will gain fluency with key rhetorical concepts and utilize these in a flexible and collaborative writing process, reflecting on their writing process with the goal of developing metacognitive awareness. They will employ conventions, including formal citations, appropriate for a given writing task, attending to the constraints of audience, purpose, genre, and discourse community. Students will compose in two or more genres. They will produce 3000-3500 words of revised, final draft copy or an appropriate multimodal analog for this amount of text. Students will produce at least one essay that integrates research and demonstrates an understanding of the role of an assertive thesis in an academic essay of at least 1000 words.

WR 121_H Academic Composition.....4 credits
Prerequisite: Appropriate scores on Lane's Writing Placement Test or a passing grade (C- or better) in WR 115. This honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. See *lanecc.edu/honors* for information. 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 online. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

WR 122 Argument, Research and Multimodal Composition.4 credits
Prerequisite: A passing grade (C- or better) in WR 121. WR 122 continues the focus of WR 121 in its review of rhetorical concepts and vocabulary, in the development of reading, thinking, and writing skills, along with metacognitive competencies understood through the lens of a rhetorical vocabulary. Specifically, students will identify, evaluate, and construct chains of reasoning, a process that includes an ability to distinguish assertion from evidence, recognize and evaluate assumptions, and select sources appropriate for a rhetorical task. Students will employ a flexible, collaborative, and appropriate composing process, working in multiple genres, and utilizing at least two modalities. They will produce 3500-4500 words of revised, final draft copy or an appropriate multimodal analog for this amount of text. Students will produce at least one essay of a minimum of 1500 words, demonstrating competence in both research and academic argumentation.

WR 122_H Argument, Research and Multimodal Composition ..... 4 credits
Prerequisite: A passing grade (C- or better) in WR 121 or a passing score on the English Department's Waiver exam. This honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. See *lanecc.edu/honors* for information. While continuing the concerns of WR 121-English Composition: Introduction to Academic Writing WR 122-Argument, Style, and Research¬ófocuses 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. This course also meets Lane Degree requirements that are fullfilled by the same course number without the _H.

WR 123 Composition: Research Writing ..... 4 credits
Prerequisite: A passing grade (C- or better) in WR 122. 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 online.

WR 227 Technical Writing ..... 4 credits
Prerequisite: A passing grade (C- or better) in WR 121.. Recommend: A passing grade (C- or better) in WR 122. Students in WR 227 will produce instructive, informative, and persuasive documents aimed at well-defined and achievable outcomes within a variety of technical/professional contexts. The purpose and target audience of each document determine the style that an author chooses, which includes document layout, vocabulary, sentence and paragraph structure, and visuals. Students can expect to gather, read, and analyze information and learn a variety of strategies for presenting such information in attractive, carefully edited deliverables designed for specific audiences.

WR 227_H Technical Writiing ..... 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 honors class delves deeper into course topics and requires a high level of student motivation; the pace may be faster than non-honors courses. See *lanecc.edu/honors* for information. This transfer course emphasizes forms of writing demanded in the workplace. While addressing issues like evaluation of materials and audiences, sources of information, organization, design, and visual aids, the projects include letters, informal reports, descriptions, instructions, and proposals. May be offered online.

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 the genre of Creative Nonfiction. Students will learn the conventions and techniques of creative non fiction through guided writing projects. Students will learn strategies for developing narrative, backstory, pacing, and characterization by reading the work of other students and published authors, whose work will serve as models. The reading assignments will include 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 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 242 is a course in writing poetry. The course will help students: 1) learn the elements of poetry; 2) read poems by well-known poets; 3) develop ability in poetic composition; 4) read and write poems effectively; 5) receive constructive criticism of their writing; 6) learn to be balanced and confident in their critical evaluations of their peers; and 7) gain a better understanding of themselves and others as writers.

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 the Academic and Student Services section in this catalog.

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 the Tuition, Fees, Financial Aid, and Payment section in this catalog.

Continuing Education

Continuing Education 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.

Continuing Education 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. A few of the current noncredit technical trainings available through Continuing Education are described in this catalog, Continuing Education Class Schedule and the quarterly web class schedule.

Enrollment in most courses is open to any interested person over 16 years of age. A list of course offerings and registration information is included in the Continuing Education Class Schedule, mailed each quarter to area residents. The Continuing Education Class Schedule also is available on the main campus, at the Downtown Campus, at the Cottage Grove center, and at *lanecc.edu* prior to the beginning of each term.

Tuition and fees for noncredit classes are published in the Continuing Education Class Schedule and on the web class schedule.

Instructors have expertise in the subjects they teach. People interested in teaching an Continuing Education course may contact a coordinator at the Continuing Education office at the Downtown Campus or call 541.463.6100.

Continuing Education's Accreditations, Certificates and Affiliations

- Alcohol Servers Permit, certified by the Oregon Liquor Control Commission
- Community Health Worker Certification, approved by Oregon Health Authority
- Flaggers Permit, credential through Oregon Department of Transportation
- Licensed Massage Therapists, approved by Oregon Board of Massage Therapists
- Nursing Assistant 1 authorized testing center, Headmaster approved
- Nursing Assistant I and II Certification, approved training by Oregon State Board of Nursing
- Pharmacy Technician Certification, Pharmacy Technician Certification Board
- Phlebotomy Certification, American Society of Clinical Pathology
- Real Estate Broker and Property Management License, approved by the Oregon Real Estate Agency

Continuing Education Career Training

Community Health Worker Certification Training The Community Health Worker will play an increasing important role in helping Oregon's healthcare system. The Community Health Worker is at the forefront in advocating for, engaging and couching patients to improve long-term health behaviors and increase rates at which patients follow treatment protocols.

The Community Health Worker certification training will be a supplemental certification for incumbent healthcare workers in established jobs that are similar to, though differentiated from, Community Health Workers, such as Homecare Worker, Certified Nursing Assistants, Licensed Practical Nurse, Medical Assistant, Paramedic or Physical Therapy Assistants.

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 Therapy Pre-licensure This training is designed to prepare students to sit for the Oregon State Board of Massage Therapists Licensing Exams and has been approved by the Oregon Board of Massage Therapists. The training 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, labs and clinical. Contact hours and program content are subject to change. For current information, visit *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. The program is OSBN approved. For more information, visit *lanecc.edu/ce*.

Phlebotomy Upon completion of two courses, Phlebotomy I and Phlebotomy II, and one year of work experience, 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*.

English as a Second Language Department

The English as a Second Language (ESL) Department provides instruction for adult non-native English speakers seeking to improve their oral and written communication skills for work, community involvement, academic, or personal goals. Courses are designed to help students with everyday communication, as well as with the transition to work or to other training and/or academic programs, including credit and noncredit programs in community colleges or universities.

This noncredit program enrolls resident and international students from all over the world. All classes are culturally diverse, and all instruction is conducted exclusively in English. This program provides instruction at all skill levels, with classes that focus on grammar, reading, writing, oral communication skills, digital literacy and workplace and academic skill development. Daytime classes are offered at both the Main Campus five days a week and the Downtown campus three days a week. Evening classes are offered at the Downtown Campus two and three days a week. There is no minimum skill level to enroll in ESL classes.

Admissions Students who reside permanently in the U.S. are admitted directly through the ESL Department office. The admissions process begins with an enrollment meeting in the ESL office, which students can schedule in person or by phone.

International students on a visa are admitted through the International Programs Office. For more information on the international student admissions and application process, please visit *lanecc.edu/international.*

Testing, Placement and Registration New resident students must take an English level placement test. Students can register immediately after testing is completed.

New international students complete required placement testing either before arriving in the United States or during the International Programs student orientation. Upon completion of placement exams, students are registered for recommended levels.

For more information, contact the ESL Department office at 541.463.5253.

Locations

Main Campus
4000 East 30th Ave, Building 11, Room 201
Eugene, OR 97405

Downtown Campus
101 West 10th Ave., Room 203
Eugene, OR 97401

Programs

Intensive English Program (Main Campus) The Intensive English Program (IEP) is a full-time English study program offered during the day Monday-Friday. It is divided into six proficiency levels and is designed to serve all non-native English speakers from absolute beginners with basic literacy, vocabulary, and pronunciation needs to advanced learners preparing to enter higher-level academic programs. The levels (A-F) are further subdivided by skill type (reading, listening, speaking, and writing/grammar), and each level is designed to prepare students for success in the subsequent level after one term of study.

ESL Bridge to Credit: As part of the The Intensive English Program, students enrolled in the ESL Bridge to Credit are enrolled as full time Level E or Level F students. Students in this program take two ESL classes jointly with one 4 credit class. This program offers students with an accelerated model for transitioning from ESL to credit bearing programs. Students who successfully complete (C- or better) all skill classes in Level F are automatically eligible for entry into the LCC credit program. Each level in the IEP is represented by 2-3 courses that constitute between 5-20 hours of ESL class time per week.

Level	Class Title	Class focus	Hours per week
A	Basic Combined Skills	Students learn to practice new vocabulary in writing and speaking, increase listening and reading skills and strategies, and recognize and pronounce the most common English words.	10
	Reading and Writing	Students learn to write basic sentences with grammatical accuracy, fill out forms, practice new vocabulary in writing, and increase reading skills and strategies.	10
B	Writing and Grammar	Students learn to write a well-organized informational paragraph with basic sentences and practice new vocabulary in writing.	10
	Reading and Oral Skills	Students learn to recognize and pronounce common academic English words and develop vocabulary. Students also read informational texts for fluency and comprehension.	10
C	Writing and Grammar	Students learn to write well-developed, evidence-based narrative and informative paragraphs, improve spelling and grammatical accuracy, and practice new vocabulary in writing.	10
	Reading and Oral Skills	Students learn to comprehend and use academic vocabulary in spoken English and improve pronunciation. Students also read moderately complex informational texts for fluency and comprehension.	10
D	Writing and Grammar	Students learn to write paragraphs and short essays on basic processes and problem solution in community and academic contexts using new vocabulary.	10
	Reading and Oral Skills	Students learn to develop and pronounce more advanced phrasal and academic vocabulary. Students also read moderately complex academic and informational texts for fluency and comprehension.	10
E	Writing and Grammar	Students learn to write evidence-based cause-effect and comparison-contrast, essays and practice new vocabulary in writing.	10
	Reading	Students learn strategies for reading and understanding academic texts more effectively, develop academic vocabulary, and increase reading speed.	5
	Listening and Speaking	Students develop accuracy and organization in spoken English and increase listening skills in a variety of academic contexts.	5
F	Writing and Grammar	Students learn to recognize errors in writing; write with the composition skills, appropriate rhetoric, fluency, and vocabulary necessary to communicate authentic academic writing tasks; use various research tools; and cite research in an academic context.	10
	Reading	Students learn to effectively read and understand complex academic texts, develop vocabulary, and increase reading fluency.	5
	Listening and Speaking	Students develop an advanced level of accuracy and organization in spoken English and increase comprehensive listening skills in a variety of academic contexts.	5

E Bridge to Credit	Reading and Writing	ESL students advance their college credit course work while continuing to receive ESL support by taking a credit-level class and skills-integrated, noncredit ESL classes simultaneously	8
	ESL Oral Skills		5
F Bridge to Credit	Reading and Writing		7
	ESL Oral Skills		5

Community English Program (Downtown Campus) The Community English Program is a part-time ESL study program. Students enrolled in the CEP may choose to take face-to- face only classes offered exclusively in the evenings or take a blended online/face-to- face course offered both in the daytime and evening.

Face-to- face only classes are divided into six combined-skills proficiency levels and two literacy skills classes and is designed to serve non-native English speakers seeking more community involvement through English skills. These classes serve students ranging in skill from absolute beginners to high intermediate. The main levels (0-5) integrate all language skills (reading, listening, speaking, writing/grammar), and each level is designed to prepare students for success in the subsequent level after three terms of study. The literacy classes focus only on developing reading and writing skills and are not part of the sequential combined skills portion of the program. Courses in this offering meet for 5 hours per week.

The blended online/Face-to- face classes are designed for students at the high-beginning/low-intermediate level and provide students with 14 hours of combined weekly instruction. Students completing the CEP program are prepared to enter Adult Basic Skills courses, the Intensive English Program, or vocational training.

Level	Class Focus	Hours per week
0	Students learn to communicate in situations related to immediate needs, simple oral communication, read and write letters and numbers, and recognize a limited number of basic words and phrases related to immediate needs.	5
1	Students learn to communicate in situations related to immediate needs, use basic phrases and sentences, and improve basic vocabulary about personal information.	5
2	Students learn to speak and write basic sentences in present tense and begin to communicate about the past, and develop basic vocabulary about community life.	5
3	Students develop basic conversational skills, learn to read and write vocabulary related to personal interests and some high-frequency academic words, and begin to implement paragraph structure in writing.	5
4	Students learn to speak and write extended explanations with compound and complex sentences; develop more advanced vocabulary; revise and edit writing; develop phrasal vocabulary; and recognize and use present, past, and future tenses; and develop civics knowledge.	5
5	Students learn to write narrative and informational paragraph styles using a variety of verb tenses, understand and use everyday and academic vocabulary, and develop civics knowledge.	5
Fundamentals of Literacy	Students learn to develop reading and writing skills to match their higher-level oral skills in order to prepare to enter combined skills levels 1-3.	5
Elements of Literacy	Students learn to develop reading and writing skills to match their higher-level oral skills in order to prepare to enter combined skills levels 2-4.	5
ESL Hybrid Course	This course is a blended online and face-to-face class that allows busy adults to quickly improve their language skills. Students complete their coursework on-line and meet 3 days per week in the classroom. Morning and evening schedules are available.	
Face-to-face		7
Online		7

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, have a referral from the local public school district if 16 or 17 years of age, or have 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 on the department website at *lanecc.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, Center for Accessible Resources, and the Multicultural Center. For complete information about these resources, see the Academic and Student Services section in this catalog.

Registration, Costs and Payment Methods To learn about registration, costs and payment methods for Adult Basic and Secondary Education, consult the department website at *lanecc.edu/abse* 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 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 four test areas: social studies, science, language arts, 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 Classes

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.
- Develop reading comprehension skills and strategies
- Renew or increase math skills
- Develop writing and grammar skills

Community Services

CENTER for Meeting and Learning

Now offering two event venue locations to serve campus, community and regional events of all types! CENTER at Main Campus offers 10+ breakout rooms and a versatile banquet/ballroom dividable into three separate rooms or used as one large event space for seating up to 600. CENTER at Downtown Campus offers a newly built LEED Platinum Certified event space with a banquet/ballroom dividable into three separate rooms or used as one large space for seating up to 200. Both locations have extensive Audio Visual equipment options and complimentary wifi throughout. The CENTER offers full service catering at either location with a focus on sustainable practices, menu customization, dietary accommodations, and use of local, seasonal ingredients harvested seasonally from our on-site Learning Garden. Culinary Arts and Hospitality Management students have the opportunity to work side by side with the CENTER's professional staff in a learning lab environment. For information about catered events, see Lane Catering.

Call 541.463.3500 or visit *lanecc.edu/center* to schedule your events.

Community Center for Family Counseling

Counseling and Continuing Education at Lane sponsor the Community Center for Family Counseling, informally known as Saturday Circus. Email Laura Jones at *jonesl@lanecc.edu.*

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 Campus. Participants can view family counseling sessions that illustrate principles and skills for improving relationships with children and participate in exercises and discussion. An advanced noncredit class (CG 212) 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.

A credit class is also available. 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.

English As A Second Language See page 228.

KLCC-FM Radio *klcc.org*

KLCC 89.7 FM, NPR for Oregonians, is a listener-supported public radio station licensed to Lane Community College serving over 88,000 people in the Eugene/Springfield area and western and central Oregon each week. KLCC provides NPR news, local and regional news, plus talk and entertainment. Weekends offer a wide world of intelligent music including jazz, folk, blues, world beat and Americana.

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 NPR and consistently ranks among the top five public stations in the country for market impact.

Family Connections

Family Connections is a community-based child care resource. For more information, see the Academic and Student Services section in this catalog.

Lane Catering

Experience "culinary excellence" when booking your catered events with Lane Catering. Lane Catering offers full catering services delivered anywhere in Eugene/Springfield and surrounding areas with a focus on sustainable practices, menu customization, and use of local, seasonal ingredients harvested seasonally from our on-site Learning Garden. Culinary Arts and Hospitality Management students have the opportunity to work side by side with Lane Catering's professional staff in a learning lab environment. We welcome and specialize in accommodating all dietary requirements. Call 541.463.3500 or visit *lanecc.edu/catering* to schedule your catering.

Library

The Library provides resources for students, faculty, staff, and community residents. For more information, see the Academic and Student Services section in this catalog.

Music, Dance and Theatre Arts

The department presents concerts and performances available to the community. For information, see the Academic and Student Services section in this catalog.

Specialized Support Services

Specialized Support Services (S3) provides vocational training and employment supports to adult students who experience intellectual and developmental disabilities and have intensive support needs. S3 offers individual and small group instruction and experiential learning opportunities that address social skill development, on-the-job training, and employability skill enhancement in integrated settings with competitive employment as a goal. Supported employment and retention services also are available.

Work experience opportunities are provided through inter-department agreements throughout the college that include recycling, waste management, custodial and housekeeping, confidential shredding and food services.

Contact 541.463.5101 or visit *lanecc.edu/sss* for more information.

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 20+ agencies throughout rural and urban Lane County, Companions provide visits and transportation to hundreds of 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, some reimbursement for meals and mileage, 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 541.463.6260 or visit *lanecc.edu/scp.* (The Senior Companion Program does not link Companions with clients directly. Please contact Senior & Disabled Services at 541.682.3353 if you would like to receive the services of a Senior Companion.)

Business and Workforce Development

Small Business Development Center

Small Business Development Center

The Lane Community College Small Business Development Center is the premier provider of real world business and entrepreneurial education, advising and mentoring for small businesses in Lane County, leading to increased employment and revenue growth in our communities.

Our knowledgeable advisors provide confidential one-on-one business advising at no cost. As our client, you gain access to powerful research tools and insights that are often reserved for much larger companies due to their prohibitively high price. Because knowledge is power, we provide training from basic workshops to advanced courses from world-class providers in a variety of business disciplines.

The Lane SBDC is also a member of the Association of Small Business Development Centers. The Lane SBDC is located at the LCC Downtown Campus at 101 West 10th Avenue, Ste. 304, Eugene. Business hours are from 9 am to 5 pm, Monday-Friday • Phone number is 541.463.6200 • Website is LaneSBDC.com • Facebook is facebook.com/LaneSBDC • LinkedIn is Lane Small Business Development Center.

Whether your business has been in existence for a hundred years, or is just starting out, the Lane SBDC has the specialized tools and the right expertise to help you find success.

Small Business Management (SBM) Program and Specialized Services

It's Our Business to Help Grow Lane County's Small Businesses.

Small Business Management (SBM) Programs

The Small Business Management Programs are the cornerstone of the multiple support services offered by the Lane SBDC to both new and existing businesses. These programs help to build businesses by introducing and then reinforcing key concepts over a period of time. Clients learn with a cohort of peers, customized classes and one-on-one coaching, while getting the support, tools and resources necessary for immediate results.

SBM Year One • Foundations

The SBM Year-one cohort meets for 15 classes over nine months during the year. Personalized one-on-one coaching throughout the year is also included. SBM Foundations consists of the following three modules: • Marketing: This module delivers results. Learn to jump start your business through marketing. Create solid marketing ideas and a plan of action that will improve sales and grow your business. • Financial: Lead your company to a successful financial future. Build knowledge and gain necessary skills to examine and understand business financials. • Operations: Focus on core operations to create a successful enterprise. Develop a short-term plan to manage employee workflow and also learn to create future growth models for long-term planning. Explore the legalities of operating a business.

SBM Year Two • Systems

Focus on growing your business through understanding, creating and implementing systems within your business. With solid systems and processes in place, owners can choose to work or choose not to. The year two cohort meets for a series of 10 classes over a 10-month period. Class topics include: Strategic Planning • Plan/Do/Check/Act • Introduction to "The E-Myth" • Project Management 101 • Performance Evaluations and Development • Financial Statement Strategies and Ratios • CRM Systems and Solutions • Systems Thinking and Process Improvement • Leadership and Ethics • Advertising and Public Relations • Class Customized Topics.

SBM Year Three • Employee Management

Year three is designed for business owners who have completed years one and two of the SBM program. Business owners work on mastering earlier concepts, while using new materials to fine-tune operations. Upon completion of year three, qualified business owners will receive a certificate of recognition. The year three cohort meets for a series of 10 classes over a 10-month period. Class topics include: Personality Profiles and Management - DISC Assessment • Facilitation and Brainstorming • Effective One-On-Ones • Effective Feedback and Coaching • Employee Reviews and Development • Interviewing and Employee Retention • Employment Law • Job Descriptions and Delegation • Leadership/Ethics • Class Customized Topics.

Small Business Management (SBM) • Alumni

This ongoing education and support program embraces the whole lifelong learning notion that is the foundation of the Small Business Management (SBM) program. Open to graduates of the three-year SBM program, Alumni members can drop into any current SBM cohort, get additional one-on-one business coaching, plus attend the Alumni-only "Lunch and Learn" meetings. This is the best way for SBM graduates to keep their skills fresh, their contacts growing and their businesses on the right path.

Employee Management

Also offered as a stand-alone program, Employee Management is designed for business owners, employees or managers in larger organizations who want to improve their skills interacting with employees and for those who want to work on mastering employee management concepts. This program is also part of the SBM year-three cohort and meets for a series of 10 classes over a 10-month period. Class topics include: Personality Profiles and Management–DISC Assessment • Facilitation and Brainstorming • Effective One-On-Ones • Effective Feedback and Coaching • Employee Reviews and Development • Interviewing and Employee Retention • Employment Law • Job Descriptions and Delegation • Leadership/Ethics • Class Customized Topics

SCALE Oregon

The SCALE Oregon program helps existing, traded-sector businesses reach the next level of their business through a combination of specialized services and expert business mentoring and advising.

Whether a traded-sector business is pursuing new markets or improving operational efficiencies, sustaining growth is fundamental to success. SCALE Oregon's highly experienced advisors have been there themselves, and they have the wisdom to help your business thrive.

SCALE services are focused on providing a comprehensive approach to strategic assessment and tactical business development that promotes rapid, sustainable growth by leveraging a variety of different services to maximize the client's benefit.

The SCALE Oregon program is limited to traded-sector companies with a demonstrated growth in sales, profit or employment in three of the past five years. This program is for established companies.

Program requirements: Oregon traded-sector company • $1 m+ annual gross sales • 10 or more employees • Demonstrated growth in three of the past five years.

SCALE Express

The SCALE Express program helps existing, traded-sector businesses reach new heights through a combination of expert mentoring and services designed to tackle challenges specific to traded-sector companies.

Expert advisors work with the leaders of a company to assess business challenges and opportunities and create a plan to address the key issues in the company. This comprehensive approach to strategic assessment and tactical business development promotes fast, sustainable growth.

SCALE Express advisors have the expertise to understand your business and the challenges and opportunities of running a successful traded-sector business. Advisors are experienced business professionals who have run successful companies and are here to help.

The SCALE Express program is limited to traded-sector companies in rural communities with demonstrated growth in sales, net profit or net employment in the past two years.

Serving Oregon's rural traded-sector companies that are ready to grow. Program requirements: Five or more employees • $500,000 or greater annual revenue • Year over year growth in the past two years • Traded-sector company • Scalable and ready for rapid growth

Training for Businesses at Every Stage

Ready, Set, Start Your Business

Begin your business the right way! Cover the basics in two hours and decide if running a business is right for you. We recommend attending this class before scheduling your first advising appointment.

Your Business Plan Accelerator

Committing your idea to paper in the form of a business plan not only increases your chances of obtaining financing, but keeps your business strategically focused. This innovative new class is the only one in the area providing participants with the support and software needed to successfully complete a business plan and be ready to pitch a business idea to lenders. Instructor and peer support will guide you through all of the components of completing a business plan. All class participants receive three months of free LivePlan® software created and provided by local Eugene company, Palo Alto Software, Inc.

Human Resources

Knowledge of the basics of human resources (HR) practices can improve on-the-job effectiveness, protect your business from needless and costly litigation, keep your organization more competitive in today's economy, and advance your career. The SHRM-CP® or SHRM-SCP® credentials make you a recognized expert in the HR field. This material is designed for entry-level HR professionals, small business owners, managers responsible for the HR functions in their companies, as well as anyone looking for a possible career change. Human resource management training in the Lane County area is provided through a partnership with the Society of Human Resource Management, the Lane SBDC and the LCC Customized Training Department (CT).

SHRM-CP® and SHRM-SCP® Test Preparation The SHRM Learning System delivers the most effective SHRM-CP® and SHRM-SCP® certification preparation. Learning modules and study tools teach you everything you need to prepare for your SHRM-CP®/SHRM-SCP® certification exam. • SHRM Essentials® of HR Management Developed by leading HR experts and legal counsel, the SHRM Essentials covers a wide range of introductory HR topics in a condensed, straightforward format. Up-to-date, easy-to-understand content ensures that you master HR concepts and can apply them to everyday situations and issues.

Workshops and Classes for Businesses

Investing in ongoing entrepreneurial training is vital to long-term business success. Consider your refined business skills as your most valuable asset. Stay current on industry trends and regulations while learning how to respond to changes in your market. Each term provides a variety of in-depth classes and workshops conducted at varying times throughout the day and evening. Visit LaneSBDC.com for details and to register. Class topics are: Business Planning and Development • Communications and Leadership • Contractors Certification • Market Research, Marketing and Social Media • QuickBooks Concepts for Business • Record-keeping and Payroll Processing.

No-Cost Business Advising

We offer access to confidential, no-cost professional business advising for Lane County residents who want to start or grow their business. Our business advisors have the knowledge and tools to help start up, emerging and growing businesses. Business Advising is provided by appointment only.

Our advising expertise focuses on areas that are vital to accelerating the growth of businesses such as: Strategic Market

Research • Business and Strategic Plan Development • Market and Revenue Growth Strategy Development and Implementation • Capital Access and Loan Packaging • Financial Analysis and Assessment • Accounting Systems and Financial Literacy • Feasibility Analysis and Start-up Assistance • Marketing and Branding •Technology Improvement • Digital Marketing and Social Media • Website Development and Search Engine Optimization

Resources and Tools

As our client, you will gain access to powerful research tools and insights that are often reserved for much larger companies due to their prohibitive cost. You can utilize numerous valuable resources and tools to assist new and existing business in reaching their goals, such as: Online Resources • SBA Supplied Information and Resources Oregon State Information on Doing Business In Oregon • Construction Contractors Board Self Study Guide • Local Resources and Agencies in Partnership with SBDC.

The Lane SBDC Team

We are a team of highly experienced professionals and business advisors who have developed expertise in Government Contracting and Procurement • International Business Development and Trade • Online Marketing, Social Media • Web Development • Finance and Access to Capital • Business Operations • Marketing, Branding and Communications and much more! Find out more about our advisors and instructors on lanesbdc. com/about-us/.

Contact Us for Assistance at:
LaneSBDC.com
541-463-6200
310 West 10th Ave., Ste. 304, Eugene

AMERICA'S SBDC OREGON

Customized Training Department (CT)

Lane Customized Training (CT) Department is a training resource for Lane County employers of all sizes and industries. We provide innovative and cost-effective training options and consultation for local employers. Our large pool of expert instructors provides engaging and relevant content that can be immediately applied. Investing in your employees and management team can: • Ensure company growth • Retain outstanding employees • Increase efficiency • Improve teamwork • Optimize performance • Increase revenue • Improve operations

Training Provider for Lane County Employees

With over 30 years of experience developing Lane County business, Lane Community College has an excellent reputation in the community and provides the best value you can find in a training provider. A full range of cost-effective training options are available to you: • Contract training customized to your organization • Conflict resolution coaching and consulting • Combined employer training (industry specific) • One-on-one coaching • Curriculum development and instructional design • Business efficiency consultation • Professional development classes offered at the downtown campus • Organizational development consultation •Technical Training

Contract Training

When you outsource your training with us, we provide: • Free initial consultation to assess the specific needs of your company • A pool of highly qualified instructors with a proven track record • Administrative support–we order the books, print the manuals, handle billing • Evaluation tools to ensure objectives and performance outcomes are met • Engaging and relevant curriculum customized to your industry goals • Coordination of all the logistics for your event • Documentation (noncredit college transcript) provided for each employee

Location Options

Your Training can be held at your site or ours. Choose our convenient state-of-the-art downtown campus or the 30th Avenue main campus, right off I-5. The Customized Training department is located at LCC's Downtown Campus, 101 West 10th Avenue, Ste. 304, Eugene. Housed with the Lane SBDC. Contact Customized Training at 541.463.6200 or visit lanecc.edu/ctpd.

Robert and Casey are long-time Lane SBDC clients first visiting the center in 2010 to get advice about how to register their business. They ultimately decided on an LLC with the assistance of our advisor Suzanne Penegor. Robert says of the Lane SBDC, "The information on how to form an LLC gave us all of the tools we needed to succeed." Going forward Robert says, New Reign has grown to a point that he and Casey will need to start making some big decisions about how they will sustain their growth and expand their product line, "we are planning to release waterproof versions of our designs by Winter 2018." Lane SBDC is committed to helping New Reign meet their goals and thrive.

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 Thursday evening of each month, normally in the Boardroom, Building 3, main campus. Additional meetings are held as needed.

Melanie Muenzer, associate vice president, Eugene, appointed April 2017 elected May 2017, term expires June 30, 2021
Zone 1–Western part of college district

Susie Johnston, retired, Eugene, elected May 2005, re-elected May 2009, re-elected May 2015, term expires June 30, 2019
Zone 2 - Northern part of college district

Mike Eyster, retired higher education administrator, elected May 2017, term expires June 30, 2021
Zone 3–Marcola and Springfield part of college district

Matt Keating, creative Marketing Consultant, Eugene, elected May 2013, re-elected May 2017 term expires June 30, 2021
Zone 4–Eastern part of college district

Philip Carrasco, community organizer, Eugene, elected May 2015, term expires June 30, 2019
Zone 5 - Eastern part of college district

Rosie Pryor, retired marketing and strategy officer, elected May 2011, re-elected May 2015, term expires June 30, 2019
At-Large–Position 6

Tony McCown, business owner, Eugene, elected May 2007, re-elected May 2011, re-elected May 2015, term exipres June 30, 2019
At-Large–Position 7

Note: The results of the May 2017 election were not available at the time of publication.

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.

- **Margaret Hamilton,** President; Ph.D. Widener Univ.; M.S. Univ. of **Delaware**; B.S. State Univ. of New York
- **Kerry Levett,** Executive Dean, Student Affairs. Ph.D. Arizona State Univ.; M.A. Univ. of Colorado; B.A. Westminster College
- **Jennifer Frei,** Executive Dean, Academic Affairs – School of Arts and Sciences; Ph.D. Univ. of California Davis; M.A. California State Univ. Sacramento; B.A. Univ. of California Davis
- **Vicki Trier**, Executive Dean, Academic Affairs – School of Professional and Technial Careers; B.A. Indiana Univ.; Ph.D. Univ. of Idaho
- **Brian Kelly,** Vice President of College Services. M.B.A. Marylhurst Univ.; B.A. Southern Illinois Univ.
- **Dennis Carr**, Chief Human Resource Officer; M.S.I.R. Univ. of Oregon; B.S. Hiram College
- **Bill Schuetz**, Chief Information Officer; Ph.D. Claremont Graduate Univ.; M.S. Claremont Graduate School; B.S. Univ. of Washington

Emeriti

Dr. Mary Spilde was named president emerita by the Board of Education in 2017. Dr. Spilde was Lane's sixth president and served from 2001-2017.

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.

The late **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:

- **Jerome Colonna,** Bend
- **Kimberly Howard,** Portland
- **Charles Martinez Jr,** Eugene
- **George Russell,** Eugene
- **Modesta Minthorn,** Pendelton
- **Anthony Veliz,** Woodburn

State Department of Education administration includes:

- **Patrick Crane,** Director, Office of Community Colleges and Workforce Development, Oregon Higher Education Coordinating Commission
- **Colt Gill,** Deputy Superintendent of Public Instruction

Lane Community College Budget Committee

The Budget Committee analyzes the administration's annual budget proposal. The 2017-2018 Budget Committee includes the Board of Education and the following members:

- **Amber White,** term expires 2020, Chief Financial Officer, Eugene
- **Hillary Kittleson,** term expires 2019, retired finance director, Eugene
- **Kevin Matthews,** term expires 2018, CEO Artifice, Dexter
- **Timothy Morris,** term expires 2018, receptionist, Eugene
- **Rudy Venturi,** term expires 2018, Security Architect, Eugene
- **Amber White,** term expires 2020, Chief Financial Officer, Eugene
- **Alayne Clark,** term expires 2020, Senior Financial Analyst, Eugene
- **Celine Swenson Harris,** term expires 2020, Eugene

Advisory Committees

More than 700 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 work practices and employment opportunities.

All of the college's career technical programs, as well as many noncredit programs, have advisory committees. The college also has advisory committees for programs and services such as English as a Second Language and Small Business Development.

The Career Technical Education Coordinating Committee (CTECC) provides oversight for all advisory committees.

Members of the advisory committees may change during the year. Current lists are managed by the Cooperative Education Division.

Lane Community College Foundation

The Lane Community College Foundation raises and invests funds for scholarships, programs and capital needs.

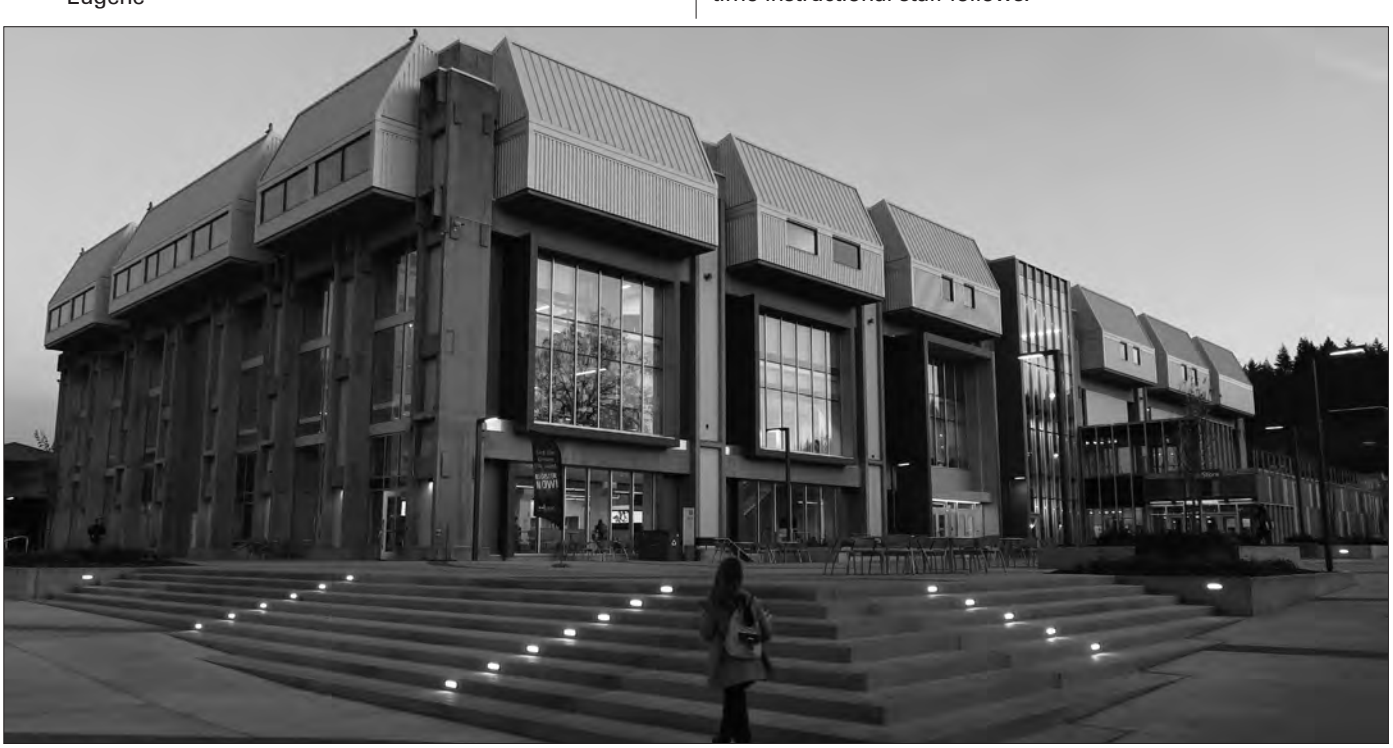
Program and Capital Support The state provides only a portion of the funding necessary to support instructional programs. Gifts from individuals and businesses strengthen Lane's ability to provide education and career training to nearly 35,000 students each year.

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 E. 30th Avenue, Eugene, OR 97405. Call 541.463.5135 for more information on how you can help. If you are interested in applying for a scholarship, visit *lanecc.edu/foundation*.

Staff

For fall term 2016, Lane employed 913 contracted faculty and staff and part-time credit faculty. A list of contracted and part-time instructional staff follows.



Full-Time Instructional Staff

Academic Learning Skills

Matthews, Grant J. Dean; M.P.A. Portland State University

Coleman, Liz E. B.A. University Of Oregon; M.Ed. Oregon State University

Gayle-Reddoor, Susan C. B.A. Univ Calif Riverside; M.A. Univ Calif Riverside

McQuiddy, Stephen J. B.A. University Of Oregon; M.F.A. University Of Oregon

Mitchell, Adrienne C. B.A. University Of Oregon; M.A. University Of Oregon; M.Ed. University Of Oregon

Adult Basic & Secondary Education

Matthews, Grant J. Dean; M.P.A. Portland State University

Gaudia, Amy B.S. Buffalo State Clg (Suny); B.S. University Of Oregon; M.A. Pacific University

Jackson, Patricia J. B.A. Washington State Univ; M.Ed. Oregon State University

Kent, Leonora T. B.A. San Francisco State University; M.Ed. University Of Oregon; Elem Education Teaching Cert; Teachng Engl Speakr Othr Lang

Lamoreaux, Alice A. B.A. University Of Oregon; M.S. University Of Oregon

Niles, Aliscia M. B.A. Sch For International Trng; M.A. University Of Oregon; Teachng Engl Speakr Othr Lang

Pfaff, Julie A. B.S. Marquette University; M.Ed. University Of Oregon

Schaefer, Karen L. B.A. Seattle Pacific University; Ed.M. Oregon State University

Young, James K. B.A. Rice University

Advanced Technologies Dept

O'Connor, Patrick, Dean; B.A. Univ. of California, Irvine; M.A. Univ. of Idaho; Ph.D. Univ. of Oregon

Bridges, Jon H. B.A. St Marys College Ca; M.Ed. Northwest Christian University; USAF Flight Engineer C5/C130; FAA Private Pilot Single Land

Laskey, Allen L. A.S. Lane Community College; AWS Cert Welding Instructor; AWS Cert Welding Educator; ASME Certified Welder; Cert Prod and Inventory Mgmt; AWS Certified Welder

Mathers, Kelly D. ASE Cert Master; ASE Cert Master Auto Tech

O'Herron II, Phillip J. B.A. Lindenwood University; B.S. Lindenwood University

Riordon, Egan A. A.A. Lane Community College; ASE Cert Master

Robertson, Margaret E. B.L.A. University Of Oregon; M.L.A. University Of Oregon; M.L.A. University Of Oregon

Tidball, Jacob J.

Webb, Steven A. C.E.R.T.1. Lane Community College; A.A.S. Lane Community College; CAT/Cummins/ Detroit Eaton Svc; ASE Cert Master Med/ Hvy Duty

Weiss, Doug O. A.S. Schoolcraft College; A.A. Palomar College; CET Intl Society of Elect Tech

Arts Department

Bird, JS S. B.S. College St Rose; M.F.A. Univ Mass Amherst; M.A. Suny Coll Oswego

Grosowsky, Adam B.A. Evergreen State College; M.F.A. Univ Iowa; M.A. Univ Iowa

Hughes, Teresa B. B.S. University Of Oregon

Imonen, Lee C. B.A. Willamette University; B.A. Willamette University; M.F.A. University Of Oregon

Keene, Meredith A. A.A. Orange Coast College; A.A.S. Lane Community College

Lowdermilk, Susan K. B.F.A. Colorado State Univ Ft Collins; M.F.A. University Of Oregon

Salzman, Andreas C. B.S. Univ Wisc Stevens Point; M.F.A. Univ Minnesota Minneapolis

Aviation Academy

O'Connor, Patrick, Dean; B.A. Univ. of California, Irvine; M.A. Univ. of Idaho; Ph.D. Univ. of Oregon

Gallagher, Neal J. B.A. Albertus Magnus College

Gustafson, Bruce L. B.A. University Of Oregon; FAA Ground Instructor Advanced; FAA Instructor Single Engine; FAA Transp Pilot Single Land; FAA Ground Instructor Instrum; FAA Transp Pilot Mulit Land; FAA Flight Instructor, CFII; FAA MEI (Multiengine Instruct)

Kaetterhenry, Jeremy P. B.S. Coll Ozarks; FAA Airframe and Powerplant; FAA Ground Instructor Advanced; FAA Ground Instructor Instrum

Lancaster, Paul L. B.A. Wheaton College Il; M.A. George Fox University

Business

Rehn, Christopher, Dean; B.A. Frankline and Marshall College; M.B.A. Eastern College; Juris Doctor Cornell Univ. Law School

Boozer, Judy A. B.A. Idaho State University; M.S.T. Portland State University

Culver, Christopher D. B.S. University Of Oregon; M.B.A. University Of Oregon; Certified Public Accountant

Gillett, Jill A. B.A. University Of Oregon; M.A. Oregon State University

Johnson, LuAnne M. B.A. Unknown California College

Computer Information Technology

Rehn, Christopher, Dean; B.A. Frankline and Marshall College; M.B.A. Eastern College; Juris Doctor Cornell Univ. Law School

Bailey, Jim L. B.S. Oregon State University; M.S. Brigham Young Univ Utah; Ph.D. Oregon Health Sci University

Bird, Brian A. B.S. Portland State University; M.A. University Of Oregon

Colton, Joseph W. B.S. Brigham Young Univ Hawaii; M.S. University Of Oregon

Good, Marilou B.S. Univ Minnesota Minneapolis; M.S. University Of Oregon

Little, Ronald K. B.S. Montana State Univ Bozeman; M.S. Portland State University

Wilkins, Paul C. M.S. Oregon State University

Continuing Education

Arbuckle, Mona M. B.A. Oregon State University; B.S.N. Oregon Health Sci University; M.N. Oregon Health Sci University; F.N.P.; Registered Nurse

McCready, Douglas C. A.S. Lewis & Clark College; M.N. University Of Utah

Cooperative Education

Fort, Deron M. Dean; B.A. Coll William And Mary; M.A. Univ North Carolina Wilmington

Fike, Charles E. B.A. Northwest Christian University

Kelsch, Jamie L. A.A.S. Lane Community College; A.G.S. Lane Community College; B.S. Linfield College

Meenaghan, Gerald T. B.A. University Of Oregon; M.S. Kansas St Univ Manhattan

Tully, Tricia G. B.S.N. Northrn Illinois University; M.S. Troy State University Montgmry

Counseling

Herburger, Lida Dean

Alvarado, Jessica S. A.A.S. Lane Community College; A.A.S. Portland Community College; B.S. University Of Oregon; M.S. University Of Oregon

Hampton, Anthony A.A. Chabot College; B.A. Univ Texas Pan American; M.Ed. Univ Texas Pan American

Harris, Mark C. B.A. Sonoma State University; M.A. Sonoma State University

Landy, Beth S. B.S. Cal Poly - San Luis Obispo; M.S. University Of Oregon; National Certified Counselor

Litty, Carolyn L. B.S. Univ Calif San Francisco; M.S.N. Univ Calif San Francisco; M.S. University Of Oregon; Ph.D. University Of Oregon; National Certified Counselor; Mental Health Nurse; Psychiatric/Ment Health N Prac; Cert Licensed Prof Counselor; Marriage and Family Therapist

Siegfried, Jill B.A. Wittenberg University; M.S. Oregon State University

Solomon, Marva D. B.A. Cuny Queens College; M.S.W. Cuny Hunter College

Soriano, Leslie C. M.S. Calif St Univ East Bay

Information reflects Human Resource records as of April 2018

Culinary Arts & Hotel/Restaurant/ Tourism Management

O'Connor, Patrick, Dean; B.A. Univ. of California, Irvine; M.A. Univ. of Idaho; Ph.D. Univ. of Oregon

Benson, Lisa Benson S. B.S. New Mexico St Univ Univ Park; M.A. Coll Santa Fe; Ph.D. University Of Idaho

Crosthwaite, Christopher Cert Exec Pastry Chef, ACF; Cert Culinary Educator, ACF; Cert Executive Chef, ACF

McCully, Joe B.S. University Of Denver; M.S. Florida International Univ; Cert Hospitality Educator, AHM

Partain, Duane A. B.A. Univ Washington; M.B.A. American Grad Sch Intnl Mgmt

Wanstall, Clive B. Dipl. Thanet Technical Clg; Cert Basic Cookery London Inst; Cert Executive Chef, ACF; Cert Cookery London Inst

English as a Second Language

Gates-Tapia, Anna, Dean; B.A. Univ. of Calif.; B.A. Univ. of Calif.; M.S. Nova Southeastern Univ.; Certificate Univ. of Calif. Irvine

Bakshi, Indira M. B.S. Purdue Univ West Lafayette; M.A. University Of Texas - Austin

Henninger-Willey, Tracy L. B.A. Northwstrn College Ia; M.A. Univ Iowa

Todd Le Douarec, Annick M. B.A. University Of Oregon; M.A. University Of Oregon; M.B.A. University Of Phoenix

Health & PE

Good, Julie, Interim Dean; B.S. Texas State Univ.; M.A. Texas State Univ.; Ph.D. Univ. of New Mexico

Cousar, Susie J. A.A. Butte Clg-Oroville; B.A. Calif St Univ - Chico; M.S. Oregon State University; First Aid Instructor Cert; CPR Certified; CPR/AED/Oxyg Admin, ARC

Herbold Sheley, Sharrie A. B.A. Calif St Univ - Chico; M.A. Calif St Univ - Chico

MonDragon, Sean E. B.S. Calif St Univ East Bay; M.S. Calif St Univ East Bay

O'Connor, Patrick G. B.S. University Of Oregon; M.S. Oregon State University

Sheley, Greg N. B.A. Calif St Univ - Chico; M.A. Calif St Univ - Chico

Simmons, Wendy S. B.A. Univ Calif Irvine; M.S. University Of Oregon; ACSM Cert Exercise Specialist; Cert Wellness Coach; Licensed Massage Therapist

Health Professions

Matthews, Grant J. Interim Dean; M.P.A. Portland State University

Blickle, Thomas P. A.A.S. Portland Community College; B.A. University Of Oregon; M.S. Oregon Health Sci University; Cert Hospice & Palliative Care; Registered Nurse

Clark, Leslie W. A.A.S. Clark College; B.S. Concordia University Or; M.Ed. Concordia University Or

Cummins, Michelle R. A.A.S. Lane Community College; B.S. Oregon Institute Of Technology; Registered Dental Hygenist

Driscoll, Norma L. A.S. Lane Community College; B.S. Linfield College; R.C.P.; R.R.T.

Greer, Leslie D. A.G.S. Lane Community College; B.S. Southern Oregon University; Certified Dental Assistant; E.F.D.A.; D.F.O.D.A / E.F.O.D.A.

Hagan, Sharon S. B.S. Idaho State University; M.S. Westrn Kentucky University; Registered Dental Hygenist

Howard, Christina D. B.S. Univ Calif Los Angeles; M.P.T. Univ Calif San Francisco

Jessop, John D.

Kelsay, Patricia K. B.S. Oregon Health Sci University; M.A. Pacific University

Killen, Janet L. A.S. Grossmont Cmty College; A.A.S. Saddleback College; B.S.N. Oregon Health Sci University; M.S.N. Liberty University

Kirkpatrick, Kecia K. M.S. Walden Univ-Minneapolis

McDonald, Shari A. A.S. San Diego City College; B.S.N. Oregon Health Sci University; M.S.N. Walden Univ-Minneapolis; Registered Nurse

McHugh, Maggie A.

Miller-Catlin, Toby E. B.S.N. Oregon Health Sci University

Miner, Jonathon C. A.A.S. Oregon Health Sci University; B.S. University Of Oregon; Advanced Life Support Instruct; NAEMT Prehospital Trauma LS In; Oregon EMT Paramedic; Paramedic Nat'l Registry EMT; Wilderness EMT Certification; Outdoor Emerg Care Tech Instr; P.A.L.S. Cert for AHA; AH Adv Cardiac LS Instruct

Nearing, Francine M.

Novicky, Elizabeth A.S. Excelsior College; B.S. Excelsior College; M.S.N. Regis University

Pittman, Martha E. A.A.S. Excelsior College; C.M.A.; Registered Nurse

Powell, Tamberly M. M.S. Oregon State University

Roders, Susan B. A.A. Pasadena City College; B.S.N. Mount St Marys Coll Chalon; M.S. Oregon Health Sci University

Tavernier, Jennifer R. A.S. Lane Community College; B.S.N. Indiana State Univ-Terre Haute; B.S. University Of Oregon; M.S.N. Indiana State Univ-Terre Haute

Thorpe, Beth A. A.A. Univ Evansville; B.S. Univ Evansville

Tiel, Bren A. A.A.S. Portland Community College; B.S.N. Walla Walla University; M.N. Univ Calif Los Angeles; Registered Nurse

Walters, Kathleen A.A.S. Skagit Valley College; A.A. Moorpark College; B.S. Calif St Univ Northridge; M.Ed. Bowling Green St Univ Bwlng Gr; M.S.N. Walden Univ-Minneapolis

Welch, Janet S. B.S.N. Univ Minnesota Minneapolis; M.N. Univ Minnesota Minneapolis; Registered Nurse

Williams, Shelley K. A.A.S. Lane Community College; A.A.S. Westrn Nebraska C C Scttsbluff; B.A. Northwest Christian University; Registered Nurse

Institute for Sustainable Practices

Ebbage, Roger A. B.A. San Francisco State University; M.A. San Jose State University

International Student Program

Falzerano, Jennifer M. Dean; B.A. Univ Minnesota Morris; M.Ed. Univ Minnesota Duluth

Language, Literature, & Communication

Blaine, Patrick G., Dean

Almquist, Karin B.A. University Of Oregon; M.A. University Of Oregon; Ph.D. University Of Oregon

Bartley, Aryn E. B.A. Michigan State University; M.A. Michigan State University; Ph.D. Michigan State University

Beasley, Amy B.A. Gettysburg College; M.A. Washington State Univ

Chaves, Hernando J. B.A. Western Washington University; M.F.A. University Of Oregon

Frasier, Crosby J. B.A. Ambassador Clg-Big Sandy; M.A. Univ Louisiana Monroe

Harrison, Jeffrey D. B.A. Duke University; M.A.T. Duke University; Ph.D. University Of Oregon

Krumrey-Fulks, Karen S. B.A. Southrn Utah University; M.A. Univ Kentucky Lexington; Ph.D. Univ Kentucky Lexington

Luke, Matthew M. B.A. San Diego State University; M.A. University Of Oregon

Lushia, Sarah M. M.A. Illinois State University; Ph.D. Illinois State University

Matalon-Florendo, Sylvie B.A. Univ Sorbonne Nouv - Paris Iii; B.A. Univ Sorbonne Nouv - Paris Iii; M.A. University Of Oregon

McDonald, Michael B. M.A. University Of Oregon; Ph.D. University Of Oregon

McGrail, Anne B. B.A. Univ Mass Boston; M.A. Suny Buffalo; Ph.D. Suny Buffalo

Pelletier, Laura K.

Shitabata, Russell H. B.A. Univ Hawaii Manoa; M.A. University Of Oregon; Ph.D. University Of Oregon

Sullivan, Kate E. B.A. Minnesota State Univ Moorhead; M.A. Northeastern University; Ph.D. University Of Oregon

Szabady, Gina L. B.A. University of Wyoming; M.A. Univ Hawaii Manoa; Ph.D. University Of Arizona

Thompson, Eileen M. B.A. Univ Puget Sound; M.A. University Of Oregon; Ph.D. University Of Oregon

Tullis, Lynn B. B.A. Colorado College; M.A. Portland State University; Ph.D. University Of Oregon

Viles, Andrew M. A.S. Blue Mountain Comm College; B.A. Oregon State University; M.F.A. Univ Of Michigan-Ann Arbor; Ph.D. University Of Oregon

Information reflects Human Resource records as of April 2018

Von Ammon, Jennifer L. B.A. Florida State University; M.A. Florida State University; Ph.D. Florida State University

Library

Dannenbaum, Claire

Doctor, David L. B.A. Univ Puget Sound; M.L.S. Univ Washington

Ferro, Jennifer A. B.A. University Of Arizona; M.L.I.S. University Of Texas - Austin

Wright, Meggie

Mathematics

Green, Dale E. B.A. University Of Oregon; M.A. Oregon State University

Harbowy, Daniel P. B.A. Rutgers/State Univ-New Jersey; M.S. University Of Florida

Hsiao, Berri B.S. University Of Oregon; M.S. Montana State Univ Bozeman; M.S. University Of Oregon

Knoch, Jessica R. B.S. Randolph-Macon Womans College; M.A. University Of Cincinnati; M.A. Univ Of Virginia

Kovcholovsky, Michel P. B.A. University Of Oregon; M.S. University Of Oregon

Lightheart, Wendy N. B.S. Oregon State University; M.S. Oregon State University

Martinek, Angela B. B.S.M.E. Univ Vermont; M.S. Univ Vermont; M.S.M.E. Univ Vermont

Moore, Philip E. B.A. Harvard University; M.S. Univ Iowa

Murphy, Deanna J. B.A. Temple University; M.S. Portland State University

Peck, Arthur M. B.S. Muhlenberg College; M.S. University Of Oregon

Rajabzadeh, Ahmad B.S. Eastern Washington University; M.S. Oregon State University

Rawlinson, Wendelle L. B.A. Sonoma State University; M.S. University Of Oregon

Selph, Stephen L. B.S. Trinity University; M.S. Northwstrn University

Thonney, Paula A. B.S. Illinois State University; M.S. Southrn Illinois Univ Carbndle

White, Karen L. B.A. Colorado College; M.S. University Of Oregon

Music - Dance & Theatre Arts Div

Haimbach, Brian P. B.A. Florida State University; M.A. Univ Nevada Las Vegas; Ph.D. Univ Georgia Athens

McManus, Edward C. B.M. University Of Oregon; M.M.Ed. University Of Oregon

Myrick, Barbara B.M.E. Montana State Univ Bozeman; M.M. University Of Oregon; M.A. Eastman Sch Of Music-Rochester; D.M.A. University Of Oregon

Simoa Reid, Bonnie L. B.A. Calif St Univ - Chico; M.F.A. Mills College; Cert Continuum Movement Instr

Svoboda, Matthew D. B.A. Lewis & Clark College; B.M. University Of Oregon; M.M. University Of Oregon; M.M. University Of Oregon

Watanabe, Hisao B.M. Roosevelt University; M.M. New England Conservatory Music

Science

Ruscher, Paul H. Dean; B.S. Suny Coll Oneonta; M.S. Oregon State University; Ph.D. Oregon State University

Andrews, Christine M. B.S. Univ Washington; Ph.D. Univ Pennsylvania Undrgrd Adm

Bunson, Paul E. B.S.E.E. Univ Pennsylvania Undrgrd Adm; M.S. University Of Oregon; Ph.D. University Of Oregon

Gilbert, Dennis D. B.S. Calif St Univ Fresno; M.S. University Of Oregon; Ph.D. University Of Oregon

Kiser, Stacey L. B.S. Oregon State University; M.S. University Of Oregon

McLaughlin, Jeanne M. B.S. University Of Oregon; M.S. University Of Oregon; Ph.D. University Of Oregon

Morrison-Graham, Kathleen B.S. Univ Calif Davis; Ph.D. Univ Calif Los Angeles

Mort, Gary E. B.S. Southern Oregon University

Newell, Carrie L. B.S. South Dakota State University; B.S. Southrn Utah University; M.S. Northrn Arizona University

Nichols, Brian R. A.A.S. Lane Community College; B.S. University Of Oregon; M.S. University Of Oregon

Swank, Stanton R. B.S. Cal Poly - San Luis Obispo; M.S. University Of Oregon; Ph.D. University Of Oregon

Taylor, Brooke E. B.S. University Of Oregon; M.S. University Of Oregon

Thompson, John E. B.S. Westmont College; M.S. Univ Colorado Boulder

Young, Douglas M. B.A.S. Univ Calif Davis; M.S. University Of Oregon; Ph.D. University Of Oregon

Social Science

Martinez, Philip R. Dean; B.A. Univ Calif Irvine; M.A. Univ Calif Berkeley; M.A. Univ Calif Riverside

Adams, Cynthia B.A. Calif St Univ Long Beach; M.A. Calif St Univ Long Beach; Ph.D. Wayne State University

Anderson, Jody L. B.A. University Of Oregon; M.A. University Of Oregon

Bishop, Jean M. B.A. Eastern Washington University; M.A. University Of Oregon

Borrowdale, Jeffrey B.A. Calif St Univ Sacramento; M.A.C.Phl. Univ Calif Santa Barbara

Broderick, Sheila N. B.A. University Of Oregon; M.A. University Of Oregon

Burrows, Kendra S. B.S. Carnegie Mellon University; M.S. University Of Utah

Burrows, William H. B.S. Southern Oregon University; M.S. Southern Oregon University

Escobar, Joe G. B.A. Calif St Univ Fullerton; M.A. Calif St Univ Fullerton

Helzer, Margaret M. A.S. Penn State Univ/Mont Alto; B.S. University Of Oregon; M.S. University Of Oregon; Ph.D. University Of Oregon

Hickey, Beverly J. B.S. Univ Calif Davis; M.A. Stanford University; Bilingual Spanish/English; Elem Education Teaching Cert

Lloyd, Kathleen M. B.A. Lewis & Clark College; M.Ed. University Of Portland; Ph.D. Oregon State University

OFearghail, Caoimhin P. B.A. Northrn Arizona University; B.S. Northrn Arizona University; M.A. Univ Nevada Las Vegas

Raza, Nadia K. A.A. Orange Coast College; B.A. Univ Calif Los Angeles; M.A. Humboldt State University

Salt, James T. B.S. Univ Maine Orono; M.A. University Of Oregon; Ph.D. University Of Oregon

Salter, Christina L. B.A. New Clg - Univ South Florida; M.S. University Of Oregon; Cert Licensed Prof Counselor; National Certified Counselor

Samano, Michael L. B.A. University Of Oregon; M.A. Univ Calif Davis; M.A. Humboldt State University; Ph.D. Oregon State University

Shipp, Susan H. B.A. Univ Colorado Boulder; M.A. Univ Colorado Denver

Songer, Lynn C. B.S. University Of Oregon; M.A. University Of Oregon; Ph.D. University Of Oregon

Taylor, Stan N. B.A. Univ Kansas; M.A. University Of Oregon; L.L.M. Georgetown Univ-Law Ctr; J.D. Univ Of Pacific/Mc George Law; Ph.D. University Of Oregon

Williams, Suzanne L. B.S. Grand Valley State University; M.S. University Of Oregon; Ph.D. University Of Oregon

Student Life & Leadership Dev

Delansky, Barbara L. Dean; B.S.E. Suny Coll Cortland; M.S. Indiana Univ Bloomington; Ph.D. University Of Oregon

Garcia, James S. B.S. University Of Oregon

TRIO

Parthemer, Mary S. Dean; A.A.S. Whatcom Community College; B.A. Western Washington University; M.S.W. Arizona State University; Licensed Clinical Social Worker

Women's Programs

Di Marco, Cara E. B.A. University Of Oregon; M.S. University Of Oregon; Ph.D. University Of Oregon

Information reflects Human Resource records as of April 2018

Part-Time Instructional Staff

Academic Learning Skills

Kepka, Jennifer A. B.A. Univ Kansas; M.F.A. University Of Oregon

Kolman, Sue E. B.A. Goucher College; M.Ed. Goucher College

Murrell, Richard J. B.S. University Of Oregon; M.A. Pacific University; M.A. Troy State University Troy

Myers, Karen D. B.A. Univ Of Guelph - Ontario; M.A. University Of Oregon

Rossini, Francis X. B.A. Fordham University; M.A. University Of Oregon; M.F.A. University Of Oregon

Schweigert, Cynthia J. B.A. University Of Oregon; M.A. University Of Oregon

Summers, Leroy M.Ed. Oregon State University

Wight, Sherrill C. B.S. Brigham Young Univ Utah; M.A. University Of Utah

Academic Technology

Coronado, Ian I. B.F.A. Univ Oklahoma; M.F.A. University Of Oregon

Adult Basic & Secondary Education

Arias Anrango, Rafael B.A. University Of Oregon; M.A. University Of Oregon

Mason, Teresa E. B.S. New Mexico Inst Mining & Tech; M.Ed. University Of Oregon

Monroe, Anne S. B.S. Univ Wisc Madison

Nissila, Phyllis M. B.A. George Fox University; M.A. Calif St Univ Dominguez Hills

Owens, Jackie A.

Shelly, Rachel R. M.A. Pacific University

Siron, Shania E. B.A. University Of Oregon

Walker, Ann E. B.A. San Francisco State University; M.A. Pacific University

Advanced Technologies Dept

Babson, James N. B.A. Cornell University

Caffey, Stephen P. A.A.S. Lane Community College

Call, Daniel L. B.S. Univ Washington; Cert Master RV Technician

Carrere, Daniel A. B.S. Georgia Coll & State Univ; M.S. Georgia Coll & State Univ

Dale, Terry R. A.S. Spartan School Aeronautics; B.S. San Jose State University

DeHaven, Joshua D.

Kruse, David A. B.S. Yale University; B.M. Juilliard School; M.M. Juilliard School

Moore, Herbert E. FAA Airframe and Powerplant; ASE Cert Master Gas Eng Mach

Rea, Paul H.

Revell, Robert D. Journeyman Cert Millwright

Information reflects Human Resource records as of April 2018

Arts Department

Berner, Christopher A. B.F.A. Kansas City Art Institute

Beyer, Erika R. B.A. Carleton College; M.A. University Of Oregon

Breding, Corral L.

Burton, Thomas J. A.A.O.T. Lane Community College

Campbell, George R. A.A. Lane Community College; B.S. University Of Oregon

Caprario-Ulrich, Kathleen M. Dipl. Newark Sch Fine & Indust Art

De Vine, Robert B.F.A. St Johns University

DeVore, Carla E. B.F.A. Univ Minnesota Duluth; M.A. University Of Oregon

Dussinger, Camilla A. N.O.D.E.G. Parkland College; B.F.A. Westrn Illinois University; M.F.A. Syracuse University

Finnerty, Kathryn A. M.F.A. Louisiana St Univ Baton Rouge

Goolsby, Jefferson J. B.A. Calif St Univ - Chico; M.A. Calif St Univ - Chico; M.F.A. University Of Oregon

Halvorsen, Jan A. B.F.A. University Of Oregon

Jolicoeur, Michelle A.

Lucanio, Patrick J. B.S. Western Oregon University; M.A.T. Western Oregon University; M.S. University Of Oregon; Ph.D. University Of Oregon

Madison, Thomas O. B.S. Western Oregon University

McDonald, Damian J. A.A. Lane Community College; B.A. University Of Oregon

Osterkamp, Ellen A. B.A. Loyola Univ Chicago; M.A. University Of Oregon

Phillips, Michael G. B.F.A. University Of Oregon; M.F.A. Rochester Inst Tech

Potwora, Kristie A. B.A. Humboldt State University; B.F.A. University Of Oregon; M.F.A. University Of Oregon

Richenberg, Carrie O. B.A. University Of Oregon; B.A. University Of Oregon; M.F.A. American University Dc

Salzman, Jennifer K. B.S. Univ Wisc Stevens Point; M.F.A. Univ Minnesota Minneapolis

Seloover, Robin E. B.F.A. University Of Oregon; M.F.A. University Of Oregon; M.F.A. University Of Oregon

Stark, Melissa E. A.A. Sacramento City College; B.M. Univeristy Of The Pacific; M.M. University Of Oregon

Tykeson, Ellen P. B.S. University Of Oregon; M.F.A. University Of Oregon

Welton, Daniel V. B.A. San Jose State University; M.S. University Of Oregon

Athletics

Garner, Scott V. B.S. University Of Oregon; M.S. University Of Oregon

Aviation Academy

Lowenkron, Laurence H. B.S. Humboldt State University; FAA Comm Pilot Glider; FAA Com Pilot Sgl Eng Lnd Inst; Cert Professional Engineer; FAA Airframe and Powerplant; FAA Comm Pilot Single Sea

Parrish, Walter S. A.S. Lane Community College; B.A. Northwest Christian University; FAA Ground Instructor Advanced; FAA Flight Instructor, CFII; FAA MEL (Multi-Engine Land); FAA MEI (Multiengine Instruct); FAA Com Pilot Sgl Eng Lnd Inst; FAA Ground Instructor Instrum

Roney, Michael S. A.A.S. Lane Community College; FAA Ground Instructor Instrum; FAA Ground Instructor Advanced; FAA MEL (Multi-Engine Land); FAA Com Pilot Sgl Eng Lnd Inst; FAA Flight Instructor, CFII

Ruwaldt, Bryan R.

Wisdom, Jacob I. A.S. Lane Community College; FAA Com Pilot Sgl Eng Lnd Inst; FAA Ground Instructor Advanced; FAA Ground Instructor Instrum; FAA Flight Instructor, CFII

Withrow, Jesse J. FAA Com Pilot Sgl Eng Lnd Inst; FAA Flight Instructor, CFII; FAA Ground Instructor Advanced; FAA Ground Instructor Instrum

Wynn, Brandon D.

Business

Boyle, Patricia A. B.S. Cal Poly - San Luis Obispo; M.B.A. Oregon State University

Chase, James A.A.S. Lane Community College; B.S. Northwest Christian University; M.A. Northwest Christian University

Hovet, Timothy D. B.A. Univ Montana; M.B.A. University Of Oregon

Kimble, Sharon R. B.S. Westrn Carolina University; B.S. Westrn Carolina University; M.Ed. Westrn Carolina University

LePelley, Eilene R. B.A. Idaho State University

McGlynn, Kaaren L. B.S. Portland State University; M.B.A. Portland State University; M.S. E-Commerce National Univ

Parsons, Rick L. A.A. Columbia College Mo; B.A. Columbia College Mo; M.A. Calif St Univ Long Beach

Reed, Kathryn A. B.A. University Of Oregon

Wallace, Tulsi E. B.L.A. University Of Oregon; M.B.A. George Fox University

Winnick, Keith E. B.S. Calif St Univ Northridge; M.B.A. University Of Oregon; Certified Public Accountant

Computer Information Technology

Crissman, Kevin L.

Dotson, Pamela J. B.A. Washington State Univ; M.A. San Francisco Theol Seminary

Evans, Susan R. B.A. Montana Tech Of Univ Montana; M.S. Colorado State Univ Ft Collins

Gray, Michael K. B.A. University Of Oregon; M.A. University Of Oregon; Secondary Teaching Certificate

Hirons, Andrea S. A.A. Lane Community College; B.A. George Fox University

Lindsey, Julie L. B.S. Linfield College; M.B.A. Grand Canyon University

Maleki, Mohammad B.S. University Of Oregon; B.S. University Of Oregon; M.S. University Of Oregon

Osak, Linda S. B.S. Univ Calif Riverside

Rizk, Ziad A. B.A. San Diego State University

Ross, Gerald J. B.A. Suny Buffalo; M.A. University Of Oregon; Teacher Corps Graduate

Scott, Lawrence R. B.S.C. Univ Of Victoria - Canada; B.S.C. Univ Of Victoria - Canada; M.A. Antioch Univ-Yellow Springs

Tippin, Deborah J.

Continuing Education

Oldham, Garry A. B.S. University Of Oregon; M.S. University Of Oregon

Steinberg, Shalimar B.A. Unknown Oregon College

Cooperative Education

Farfan, Beverly V. C.E.R.T.1. San Jose State University; A.S. Univ Calif Santa Cruz; B.A. Calif St Univ Long Beach; Elem Education Teaching Cert; Learning Hndicpd Teaching Cert; Severely Disab Teaching Cert

King, Owren A. B.S. Indiana Univ Bloomington; M.S. Indiana Univ Bloomington; M.S. Indiana Univ Bloomington

Watrous, Merrill K. B.A. Scripps College; B.A. Occidental College; M.Ed. Santa Clara University

Cottage Grove Center

Couch, Denise D. B.A. San Diego State University; M.A. San Diego State University

Farrington, Marianne P. C.E.R.T.1. Alvin Ailey American Dance Ctr; A.A.S. Fashion Inst Tech; AFAA Certification; OSSA Coach; Personal Trainer Certification; Kickboxing Certification

Rothgery, Andrew W. B.A. University Of Oregon; M.A. University Of Oregon

Counseling

Areford, Lori L. A.A. Delta College

Graham, Andrea C.

Jones, Laura M. B.S. University Of Oregon; M.S. University Of Oregon; Ph.D. University Of Oregon

Ochoco, Kelly K.

Willoughby-Roberts, Dawna R. B.A. University Of Oregon; M.S. University Of Oregon

Culinary Arts & Hospitality

Dombrosky, Adrienne L. B.A. University Of Oregon

Lohr, Peter Journeyman Cert Hotel/ Catering

Tracey, Shane P.

English as a Second Language

Burley, Hali M. M.A. Oregon State University; Teachng Engl Speakr Othr Lang

Claypool, Leah A. B.A. University Of Oregon; M.A. Portland State University

Elms, Hillary F. B.S. University Of Oregon; B.S. University Of Oregon; M.A. Concordia University Or

Haynes, Pamela G. B.A. University Of Oregon; M.A. Portland State University; Elem Education Teaching Cert

Higgins, Cybele M. B.A. Univ Calif Santa Cruz; M.A. Portland State University

Howard, Andrew C. B.S. Oregon State University; B.A. Brown University

Kremers, Luda V. B.Ed. Odesssa State Linquistic Univ; Ph.D. Foreign Colleges; Ph.D. Odesssa State Linquistic Univ

McClelland, Sean C. B.A. University Of Oregon; M.A. University Of Oregon

Sacklin, Jennifer M.

Shields, Colleen M. B.A. Boston University; M.A. Univ Mass Boston

Zinniker, Stacey M. B.A. University Of Oregon; M.A. Pacific University

Enrollment & Student Financial Svs

Gilroy, Mary M. A.A. Ventura Community College; B.A. Humboldt State University; M.A. Oakland University

Facilities Mgmt & Planning

Hayward, Jennifer B. B.S. University Of Oregon

Williams, Kevin L.

Florence Center

Anderson, Deborah G. B.A. Calif St Univ Los Angeles; M.S. Calif St Univ Los Angeles

Anderson, Jo Ellen B.S. Oregon State University; M.S. Stanford University; Ph.D. Stanford University

Brown, Karen S. B.A. Wright State Univ-Dayton; M.A. Wright State Univ-Dayton

DePuente, Yvonne B. A.A. Lane Community College; B.S. Oregon State University; M.S. Oregon State University

Mitchell, James A. M.S. Brigham Young Univ Utah

Purtell, Elizabeth B.A. Linfield College; M.Ed. University Of Oregon

Robbins, Lawrence W. B.A. University Of Oregon; M.Ed. University Of Oregon; M.Ed. University Of Oregon

Health & PE

Blunt, Joshua W. B.A. Cal Poly - San Luis Obispo; M.S. Valdosta State University

Davis, Tina M. B.S. Oregon State University; M.Ed. Oregon State University

Farwell, Christie M.

Gibeau, Samantha J. A.A. Portland State University; B.S. Western Oregon University; M.Ed. Pacific University

Hayes, Sean W. B.A. Michigan State University

Kaczenski, Louis H. B.A. University Of Oregon; M.A.T. Oregon State University

Mertz, Erica L. B.A. Univ Nevada Las Vegas; M.S. Univ Nevada Las Vegas

Oberstaller, Peggy E. M.S. Oregon State University; AHA Cert Basic Life Supt HPI; First Aid Instructor Cert; AH CPR Instructor

Olmos, Kristen C. B.S. Calif St Univ San Bernardino; M.P.H. Loma Linda University; Registered Dietician

Pearce, Kelley L. C.E.R.T.1. Lane Community College; ACSM Cert Exercise Specialist; ACE Cert Group Fitness Instr

Reidy, Vernasue E.

Schaudt, Brian R.

Seeley, Kathleen M. B.S. University Of Oregon; ACE Cert Group Fitness Instr

Wilken, Lyndell K. B.S. Univ Illinois Urbana; M.S. Univ Illinois Urbana

Willett, Stephanie A. A.A.O.T. Southwestern Ore Comm College; B.S. Western Oregon University; M.A. Concordia Univ-Irvine

Health Professions

Brown, Natalie J. A.A.S. Lane Community College; B.S. Oregon Health Sci University; M.S. Oregon Health Sci University

Callahan, Alice S. B.S. Cornell University; Ph.D. Univ Calif Davis

Collins, Kelly D. B.S. Univ Missouri Columbia; J.D. University Of Oregon

Cully, Imogene V.

Dodge, Vicki L. A.A. Fresno City College; B.S. Northrn Arizona University

Duyck, Mark G. A.A. Mount Hood Community College; B.S. Portland State University; B.S. University Of St Francis; M.S. Portland State University; Lic Phys Therapist Assistant

Hamlin Rupp, Piper L. B.S. Linfield College; Cert Computer Science

Heppel, Christopher E.

Hill, Richard W.

Houser, Cris A. B.S. Oregon Institute Of Technology

Johns, Tamra R. B.S. Oregon Institute Of Technology

Jones, Jill M. B.S.D.H. Oregon Health Sci University; M.S. Univ Iowa

Knight, Stephen G. A.A.S. Lane Community College; B.S. University Of Oregon

Maahs, Tamara A.A.S. Lane Community College; B.S. Oregon Institute Of Technology; Registered Dental Hygenist

Information reflects Human Resource records as of April 2018

Manning, Cindy A. B.S. Linfield College; M.A. Ldrshp Inst Seattle-Bastyr Unv

McCabe, Chanlin C.

McFerran, Teresa M. B.S. Quinnipiac University; B.S. Rutgers/State Univ-New Jersey; M.S. Rutgers/State Univ-New Jersey; Registered Dietician

Miner, Jennifer A. B.A. University Of Oregon; M.S. University Of Oregon

Peterson, Kym M. Certified Dental Assistant

Rathakette, Noy B.S. Mahidol University -Thailand; M.S. Univ Of London - U.K.; Ph.D. University Of Oregon

Reynolds, Susan M. B.S. Simmons College; M.S. University Of Oregon

Smith, Jan M.

Trickey, Linda S.

Wilkinson, Brian J.

Yui, Amber M. B.S. Cal Poly - San Luis Obispo; M.P.H. Calif St Univ Long Beach; Registered Dietician; Cert Health Educ Specialist

Institute for Sustainable Practices

Cunningham, Kai R.

MacDonald, Fraser E. B.S. Univ Nebraska Lincoln; M.A. University Of Oregon

Mae, Sonja A.A.O.T. Lane Community College; B.A. Prescott College

Marinello, Suzanne L. B.S. Cal Poly - San Luis Obispo

Mayfield, Ryan J. B.S. Humboldt State University

Merris, William D. B.A. Univ Illinois Urbana

Sims, Michael D. B.B.A. Texas A&M Univ-Clg Station; B.A. Univ Montana; M.S. University Of Oregon

Vaccher, Joseph V. A.A.S. Lane Community College

Willis, Erika C. B.A. Coll Wooster

International Student Program

Rivera, Caitlan M. B.A. Queens University Charlotte; M.A. Sch For International Trng

Yardley, Russell E. B.A. University Of Oregon

Language- Literature &Communication

Andersen, William C. A.A. Clackamas Community College; A.S. Clackamas Community College; B.S. Oregon State University; M.A. Oregon State University

Aydelott, Elizabeth B.A. Emory University; M.A. Indiana Univ Bloomington; Ph.D. Indiana Univ Bloomington

Bockoven, David S. B.A. Univ Washington; M.A. University Of Oregon; Ph.D. University Of Oregon

Brasted-Maki, Donald M. B.A. St Olaf College; B.S. Univ Minnesota Minneapolis; Ph.D. Temple University

Budz, Devon T. B.A. University Of Oregon; M.A. University Of Oregon

Casimir, Ulrick C. B.A. North Car State Univ Raleigh; M.F.A. Univ North Carolina Greensboro; M.A. University Of Oregon; Ph.D. University Of Oregon

Caston, Merry C. B.A. Univ Iowa; M.F.A. University Of Oregon

Coleman, Stanley R. B.A. Dillard University; M.S. Univ Louisiana Lafayette; Ph.D. Louisiana St Univ Baton Rouge

Cordova, Angela J. B.S. Oregon State University; M.S. Oregon State University

Daniels, Joshua B.A. Univ Calif Santa Cruz; B.A. Cornell University; M.A. University Of Oregon

De Vries, Rosemarie T. A.A.S. Onondaga Community College; B.S. Syracuse University; M.S. Syracuse University; Ph.D. University Of Oregon

Fleming, William P. M.A. Cuny City College; M.F.A. University Of Oregon

Gabrieli, Daphne A. B.A. New Clg - Univ South Florida; M.A. University Of Oregon

Ghiselin, Katherine B.A. Bethany College Wv; Ph.D. University Of Oregon

Ginsberg, Marsha W. B.A. Cornell University; Ph.D. Suny Buffalo

Hankinson, Cheryl L. B.Ed. Central Washington University; M.A. Brigham Young Univ Utah

Harper, Zachary C. B.A. Fontbonne University; M.A. Northrn Illinois University

Henry, Daniel L. B.S. Western Oregon University; M.S. University Of Oregon

Hermach, Deborah A. B.S. Northwest Christian University; M.S. University Of Oregon

Horton, Kathleen A. A.A. Grays Harbor College; B.A. St Martins College; M.A. University Of Oregon; Ph.D. University Of Oregon

Houchens, Clayton F. B.A. Davidson College; M.A. Univ North Carolina Chapel Hl; Ph.D. University Of Oregon

Jensen, Peter J. B.A. Univ Of Michigan-Ann Arbor; M.A. New York University

Jensen, Sandra M. B.A. Univ Washington; M.A. Calif St Univ Fullerton; Bilingual Spanish/English

Kaveney, Paul J.

Keech, Beth E. B.A. Villanova University; B.S. Villanova University; M.A. Middlebury College

Kemmy, Ann M. B.A. Reed College; M.A. University Of Oregon; Ph.D. University Of Oregon

Kendall, Brooke M. B.S. Oregon State University; M.A. Washington State Univ

Kiser, James J. B.A. Humboldt State University; M.A. Humboldt State University

Levin, Mara B.A. Suny Buffalo; M.A. Univ Connecticut - Storrs; Ph.D. University Of Denver

Lougee, Cameron E. B.A. Southern Oregon University; M.A. University Of Oregon

Love, Jennifer M. B.A. Oberlin College; M.A. Oregon State University; M.L.I.S. Univ Wisc Milwaukee; Ph.D. Univ Nevada Reno

Ma, Perry W. B.A. Shanxi Univ -Taiyuan China; M.A. University Of Oregon; Ph.D. University Of Oregon

Mackay, Daniel J. B.A. Wayne State University; M.A. New York University; M.A. University Of Oregon; Ph.D. University Of Oregon

McLauchlin, Robert A. B.A. Univ Oklahoma; M.A. University Of Oregon

McQuillan, Lucas P. B.A. Humboldt State University; M.A. San Diego State University

Mortensen, Camilla H. B.A. New Clg - Univ South Florida; M.A. Univ Calif Los Angeles; Ph.D. University Of Oregon

Owens, Nancy R. B.A. Knox College; M.A. Univ Calif San Diego; M.F.A. Washington University; Ph.D. Univ Calif San Diego

Rothgery, David B. B.A. Baldwin-Wallace College; M.Ed. Univ Of Virginia; M.A.T. Duke Univ/Grad Sch Arts & Sci; Ph.D. University Of Oregon

Shaner, Timothy W. B.A. Ft Lewis College; M.A. Antioch Univ-Yellow Springs; Ph.D. Suny Buffalo

Shull, Kathleen R. B.A. University Of Oregon; M.A. University Of Oregon; Ph.D. University Of Oregon

Skupsky, Michael M.A. Colorado Mesa University; M.S. Colorado Mesa University; M.A. University Of Oregon; M.S. University Of Oregon

Stevenson, Gail C. B.A. University Of Oregon; M.S. University Of Oregon

Sullivan, Barbara T. B.A. Antioch Univ-Yellow Springs; M.F.A. University Of Oregon

Thompson, Angela M. Ph.D. University Of Oregon

Thompson, Rebecca C. B.A. University Of Oregon; M.A. University Of Oregon

Treichel, Eliot H. B.A. Prescott College; M.F.A. Bennington College

Untz, Lynn M. B.A. New School/Eugene Lang College; M.F.A. University Of Oregon

Viles, Jerome M.

Watt, Carol D. B.A. Univ Calif Los Angeles; M.A. Calif St Univ Long Beach; Ph.D. University Of Oregon

Williams, John E. B.A. Univeristy Of The Pacific; M.A. New York University; M.A. University Of Oregon

Williams, Susan E. B.A. Cornell University; M.A. Univ Calif Berkeley

Mathematics

Albrethsen, Kristen B.A. Mount Holyoke College; M.S. Purdue Univ West Lafayette

Bahen, Gordon B.A. Brigham Young Univ Utah; M.A. Univ Montana; Secondary Teaching Certificate

Behm, Charlotte E. B.A. Univ Tennessee Knoxville; B.S. Univ Tennessee Knoxville; M.A. San Francisco State University; M.B.A. Xavier University Oh; M.S. Univ Tennessee Knoxville; Cert Professional Engineer

Information reflects Human Resource records as of April 2018

Beick, Molly M. B.A. Calif Lutheran University; M.A. Univ Calif Berkeley

Blackburn, Christopher J. B.A. College Of The Holy Cross; M.A.T. University Of Florida

Carroll, Ron M. B.A. Calif St Univ Northridge; M.S. Calif St Univ Northridge

Cataldo, Donavon B. A.A. North Iowa Area Cmty College; B.S. Iowa State University; M.E.P.D. Univ Wisc Whitewater

Cataldo, Inga A. M.S. Univ Ukraine Kyiv Polytech Ins

Collett, David L. B.S. Univ Montana; M.S. University Of Oregon

Cunningham, Allison M. A.A. Cuesta Cmty College; A.S. Cuesta Cmty College; B.S. Cal Poly - San Luis Obispo; M.S. Cal Poly - San Luis Obispo

Dawson, Kimberly L. A.A. Orange Coast College; B.S. Utah State University

Dixon, Harley T. B.S. Southern Oregon University; M.A. University Of Oregon

Gavin, Nikki G. B.S. Calif St Univ Bakersfield; M.S. Univ Calif Berkeley

Gettys, Thomas P. B.A. Calif St Univ - Chico; M.S. Calif St Univ - Chico

Gladfelter, Stephen G. B.A. Oberlin College; M.S. University Of Oregon; M.S. Rutgers/State Univ-Camden

Gyde, Nina J. B.A. University Of Oregon; M.A. Oregon State University

Henderson, Kristen L. B.A. Univ Calif Berkeley; M.S. Univ Nevada Reno

Hertzberg, Steve L. B.A. Mass Institute Technology; M.A.T. Tulane University

Hill, Benjamin L. B.A. Univ North Dakota Grand Forks; M.S. University Of Oregon; Ph.D. University Of Oregon

Holland, Debra R. B.S. Westrn Michigan University; Ph.D. University Of Oregon

Kau, Brian S. B.S. University Of Oregon; M.S. University Of Oregon

Larson, Jody A.A. Lane Community College; B.S. University Of Oregon; M.S. University Of Oregon

Luchkovska-Burton, Alla M. B.A. Lviv State Univ; M.S. Lviv State Univ; Ph.D. Lviv State Univ

Myers, Steven L. B.S. University Of Oregon; M.S. University Of Oregon

Oskui Tabrizi, Reza Oskui M.S. University Of Idaho; Ph.D. University Of Idaho

Shatalova, Larissa A. M.S. Univ Ukraine Kyiv Polytech Ins; Ph.D. Univ Ukraine Kyiv Polytech Ins

Smith, Nathanael D.

Steele, John W. B.S. Oregon State University

Van Slyke, David L. B.A. Pomona College; M.A. Univ Calif Santa Barbara; M.Ed. Univ Calif Santa Barbara

Wilkinson, Nathan A. B.S. Northwst Nazarene University

Wofford, Margaret A. B.A. University Of Oregon; M.Ed. Regent Univ - Virginia Beach

Zalonis, Elaine F. B.S. Bloomsburg Univ Of Pa; M.S. Bucknell University; M.B.A. Golden Gate University

Music - Dance & Theatre Arts Div

Alves, Olem B.A. University Of Oregon; M.M. University Of Oregon

Brabham, Vicki B. B.S. Northwest Christian University

Chu, Hung-Yun M.M. Peabody Institute; D.M.A. University Of Oregon

Clabby, Lawrence E. B.M. Boise State University; M.M. University Of Oregon

Cloninger, Jesse M. B.M. Univ North Texas; M.M. Univ North Texas

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Vision

Transforming lives through learning

Mission

Lane is the community's college: we provide comprehensive, accessible, quality, learning-centered educational opportunities that promote student success.

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 a 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

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 and VEVRAA. The college prohibits discrimination in admissions, employment, recruitment 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, and all other protected categories as defined by federal or state law. The college intends to comply with all statutes that prohibit discrimination in education, including Title VI and Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990 and the Americans with Disabilities Amendments Act of 2008. The College also intends full compliance with the Title IX sexual harassment prevention requirements. The college shall take timely actions to prevent, correct, and if necessary, discipline behavior that violates harassment and discrimination guidelines. This commitment is made by the college in accordance with federal, state, and local laws and regulations, as well as in alignment with college policies and procedures. Inquiries may be directed to the Chief Human Resource Officer, Lane Community College, 4000 East 30th Avenue, Eugene, Oregon 97405-0640, 541.463.5585. Inquiries regarding Title IX may be directed to Terrie Minner, Interim Associate Dean for Accessibility and Support, 541.463.3010, or to the Title IX deputies Carl Yeh, Director of Student Standards, 541.463.5787, or to Dennis Carr, Chief Human Resource Officer, 541.463.5585. Inquiries regarding Section 504 may be directed to Dennis Carr, Chief Human Resource Officer and Section 504 Coordinator, Building 3, Room 114, 541.463.5585.

Core Themes

Lane's core themes represent the essential elements of out comprehensive mission. In accordance with our accrediting body, the Northwest Commission on Colleges and Universities, we have established objectives and indicators of achievement for each core theme to evaluate accomplishment of core theme objectives, and ultimately, our mission.

Core Theme 1: Responsive Community Engagement

As an engaged member of our community, Lane's programs, services, and activities serve the community's needs.

- Objective 1: Lane offers comprehensive programs that support individual and community needs
- Objective 2: Lane serves the intellectual and social needs of the community through non-academic programs and services

Core Theme 2: Accessible and Equitable Learning Opportunities

Lane's policies, procedures, programs, and services facilitate open, fair, and just educational experiences.

- Objective 1: Lane minimizes barriers and maximizes opportunities for diverse student populations

Core Theme 3: Quality Educational Environment

Lane's quality educational environment embraces academic and instructional integrity, relevancy, rigor, innovation, and transparency.

- Objective 1: Lane employs high-impact practices
- Objective 2: Lane faculty and staff regularly engage in professional development
- Objective 3: Lane's curricula are designed with intention to support discipline-level/ program-level, and college-level outcomes

Core Theme 4: Individual Student Achievement

Lane's students advance on their academic paths and reach their educational goals.

- Objective 1: Students progress toward their educational objectives
- Objective 2: Students complete their educational goals

Strategic Directions

Lane Community College's 2016-2021 Strategic Plan provides a five-year framework for achieving objectives in support of our core themes of responsive community engagement, accessible and equitable learning opportunities, quality educational environment, and individual student achievement. Our 2016-2021 strategic plan builds upon our existing work around student success and institutional effectiveness, focusing on five interrelated strategic directions designed to advance this work in response to present and foreseeable needs:

- Commitment to Student Learning and Success
- A Culture of Teaching, Learning, and Innovation
- Access, Equity, and Inclusion through Social Justice
- Strengthened Community
- Financial and Environmental Stewardship

Lane Community College está comprometido a proporcionar un ambiente de trabajo y aprendizaje que sea libre de discriminación, acoso y represalias. Lane está comprometido a la igualdad de oportunidades en la educación y el empleo, la acción afirmativa, diversidad, y cumplimiento con la Ley de Estadounidenses con Discapacidades y VEVRAA. El Colegio prohíbe la discriminación en la admisión, empleo, reclutamiento y acceso a programas del colegio, actividades y servicios en base a la raza, color, origen nacional, sexo, estado civil, relación familiar, orientación sexual, embarazo, edad, discapacidad, religión, antecedentes juveniles sellados, o condición de veterano, y cualquier otra categoría protegida definida por la ley federal o estatal. El Colegio procura cumplir con todos los estatutos que prohíben la discriminación en la educación, incluyendo el Título VI y Título VII de la Ley de Derechos Civiles de 1964, Título IX de las Enmiendas de Educación de 1972, Sección 504 de la Ley de Rehabilitación de 1973, la Ley de Discriminación por Edad de 1975, la Ley de Estadounidenses con Discapacidades de 1990 y la Ley de Enmiendas de Estadounidenses con Discapacidades de 2008. El Colegio también procura un cumplimiento total de los requisitos del Título IX de prevención de acoso sexual. El Colegio tomará medidas oportunas para prevenir, corregir, y si es necesario, disciplinar comportamientos que estén en violación de las pautas de acoso y discriminación. Este compromiso lo hace el Colegio de acuerdo a las leyes y regulaciones federales, estatales, y locales, y conforme a las políticas y procedimientos del Colegio. Preguntas pueden dirigirse al primer oficial de recursos humanos, Lane Community College, 4000 East 30th Avenue, Eugene, Oregon 97405-0640, 541.463.5585. Preguntas sobre el Título IX pueden ser dirigidas a Terrie Minner, Decano Interino Asociado para la Accesibilidad y Apoyo de Servicios, 541.463.3010, o a Carl Yeh, Director de Normas Estudiantiles, 541.463.5787, o a Dennis Carr, primer oficial de recursos humanos, 541.463.5585. Preguntas sobre la Sección 504 pueden ser dirigidas a Dennis Carr, primer oficial de recursos humanos y coordinador de la Sección 504, Edificio 3, Salón 114, 541.463.5585.

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*Compared to the average cost to attend University of Oregon, Oregon State University, and Portland State University. AA/EEO/Vet/Disabilities Employer.