Academic Catalog
2021-2022

Lane Community College℠

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Welcome from President Hamilton

Congratulations on your choice to attend one of Oregon's premier community colleges—Lane Community College. At Lane, you can earn an outstanding education, obtain high-demand job skills, improve foundational skills, boost your business, or simply enrich your life.

Like you, Lane is strong. In the face of extraordinary challenges from historic wildfires to a global pandemic, Lane has remained committed to your excellence and success.

You can achieve great things at Lane:

- Transfer to a four-year college or university
- Complete career and technical training
- Prepare for college
- Earn your GED
- Gain skills to run your small business
- Expand your mind and your life

Lane's programs have outstanding industry-based credentials to give graduates an edge in the job market. For instance, our Automotive Technology program is certified by the National Automotive Technicians Education Foundation, and our Dental Assisting and Dental Hygiene programs are accredited by the American Dental Association Commission on Dental Accreditation. Our Geographic Information Science program is endorsed by the National GeoTech Center of Excellence, and our Nursing program is approved by the Oregon State Board of Nursing. These are just a few examples of the quality offerings waiting for you.

Across the college, you will find a commitment to diversity and equity in our student body, in our faculty and all of our support services, from academic advising to veterans' assistance. Our faculty and staff are highly qualified and deeply dedicated to your success. We strive to keep tuition as affordable as possible through the awarding of scholarships, state grants and federal student aid.

At Lane Community College, you can transform your life through learning, and we are here to support you every step of the way.

— Margaret Hamilton, President

About Lane Community College

Lane Community College, founded in 1964, is a comprehensive community college dedicated to transforming lives through learning. The college fulfills its promise to the community by providing access to higher education, supporting student success, and ensuring its mission, core values, programs and services reflect community values and needs.

Lane's service district represents approximately 375,000 residents. The district encompasses 5,000 square miles, which includes most of Lane County from the Pacific Ocean to the Cascade Mountains, as well as individual school districts in Benton, Linn, and Douglas Counties. Lane's 314-acre campus is located in southeast Eugene, and the college offers classes and services at a number of other locations including centers in Cottage Grove, Florence, the Eugene Airport and outreach sites in the community.

Lane employs more than 920 employees who serve over 24,000 students annually. Approximately 50% are regular credit students, 18% are College Now credit students, and 27% are non-credit Continuing Education students, and 6% are non-credit skills development students.

Students come to Lane with a variety of goals including transfer to a four-year college or university, career technical education, foundational skills development, and life-long learning. All students at Lane benefit from a broad range of options for their education and support, as the college provides comprehensive programming to meet both the community's and students' needs.

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

Learning Outcomes

Lane's Institutional Learning Outcomes

Lane's Institutional Learning Outcomes (ILOs) are skills and habits of mind that each Lane student should develop through their involvement in our programs and courses. Each ILO is characterized by a main definition and example outcomes language. These examples show different levels of engagement possible with the ILOs and, while not exhaustive, provide guidance as to how the ILOs can be applied to Lane's broad array of learning contexts.

Think Critically

Students explore issues, ideas, artifacts, and/or events in the process of accepting or formulating opinions or conclusions. They will be able to:

- 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

Students build and reinforce awareness of the value and impact of both their personal perspectives and those of others in diverse local and global communities. They will be able to:

- 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

Students use their understanding of established disciplinary knowledge in conjunction with their own experiences and perspectives to create new ideas, questions, formats, solutions, or products. They will be able to:

- 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

Students effectively convey and interact with information in a variety of contexts and modalities with awareness of the influence of audience and purpose. They will be able to:

- 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

Students reflect on and transfer their learning, knowledge, and skills to new contexts in order to solve problems, make connections, and/or innovate. They will be able to:

- 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 or quantitative reasoning to solve problems
- Integrate and reflect on experiences and learning from multiple and diverse contexts

State General Education Learning Outcomes

Lane's general education courses and general education associate degree programs are aligned with the following outcomes, approved in 2010 by the state Joint Boards of Education. Additionally, many courses and programs are aligned with Lane's Institutional Learning Outcomes.

Arts and Letters

- 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.

Cultural Literacy

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

Information Literacy

- 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

- 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.

Science and Computer Science

- 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.

Social Science

- 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.

Speech/Oral Communication

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

Writing

- 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.

General Information

About the Catalog

The information presented here reflects the most current information about Lane's programs, courses, and services at the time of publication. Lane's catalog is published for informational purposes and every effort is made to ensure accuracy. In the event of a discrepancy between a printed copy of the catalog and the online catalog, **the online catalog will be considered the catalog of record**. 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.

Academic Calendar 2021-22

For full calendar, see lanecc.edu/calendars/academic-calendar

	Summer	Fall	Winter	Spring
Registration begins (for dates and times, see lanecc.edu/calendars/registration-calendar)	May 2021	May 2021	November 2021	February 2022
Term starts	June 21	September 27	January 3	March 28
Finals week (for days and times, see lanecc.edu/schedule/final-exam-schedule)	Varies	December 6 - 10	March 14 - 18	June 6 - 10
Term ends	September 11	December 11	March 19	June 11
Commencement				June 11

Lane Online

LaneOnline offers students the opportunity to earn credits that can lead to degrees by taking online and hybrid courses. For more information, please see LaneOnline in the Other Learning Opportunities section of this catalog, or at Lanecc.edu/Laneonline.

Locations

- Aviation Academy, 541-463-4195, 28715 Airport Road, Eugene, OR 97402
- Cottage Grove, 541-463-4214, 1275 S. River Road, Cottage Grove, OR 97424
- Lane Dental Clinic, 541-463-5206, 2460 Willamette Street, Eugene, OR 97401
- Florence, 541-463-4835, 3149 Oak Street, Florence, OR 97439
- Main Campus, 541-463-3000, 4000 E. 30th Ave, Eugene, OR 97405
- Mary Spilde Downtown Center, 541-463-6180, 101 W. 10th Ave., Eugene, OR 97401

Contact Lane

See the directory at directory.lanecc.edu to locate contact information for all Lane Community College departments.

Transportation

LTD Bus Passes

Lane Community College students taking a credit class at the main campus, the Mary Spilde Downtown Center, or the Aviation Academy, and students in ESL, ABSE, or GED

who are taking classes at main campus or the Mary Spilde Downtown Center, are eligible for a Lane Transit District (LTD) bus pass when they pay the transportation fee. Students taking only online classes are not eligible for a bus pass.

For information on how to obtain a bus pass and sticker, go to lanecc.edu/facilities/transportation/lcc-bus-pass. For bus routes and other information, go to ltd.org or call LTD Customer Services at 541-687-5555 or 711 (TTY—Oregon Relay).

BikeLane

lanecc.edu/sustainability/bikelane

The BikeLane bicycle loan program provides a FREE bicycle loan for one term to all Lane students taking a credit class and ESL, ABSE, and GED students on the main campus, Mary Spilde Downtown Center or at the Aviation Academy. Participants are provided a bicycle, lock, lights, and helmet for one term to use as they wish.

Parking

Main Campus

Parking is permitted in all parking lots on the main campus. Accessible Parking spaces are available in lots A, B, C, E, L, M, and N. All persons with state-issued disability parking permits may use these spaces. Valid placards must be displayed.

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 South Place garage, (900-946 Charnelton St.) Parking here is free on weekends and after 6 p.m. with hourly parking available by machine (which accepts credit cards). Enrolled students may get their parking validated for the hours they are in class when parking in the Overpark (1000 E. 10th Ave.) and Parcade (35 W. 8th Ave.) garages. Parking in these lots is also free on weekends, 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 541-463-5000 or go to lanecc.edu/facilities/transportation.

What Lane Has to Offer

Lane Community College offers college courses, career technical training, pre-college and skill development, cooperative programs with local high schools, career and life planning, services for businesses, continuing education, and cultural activities. For information about programs and degrees offered, see Programs (A-Z). For information about courses, see the complete course listing.

- Lower-division college courses
- Career technical degrees and certificates
- Transfer degrees
- Transfer pathways
- Career preparation
- Pre-college skill development
- Cooperative education
- High school dual enrollment

Continuing Education

101 W. 10th, Eugene, OR 97401, 541-463-6100, lanecc.edu/ce

Lane offers a variety of non-credit courses intended for the community. Many options are available, whether you want to pursue personal enrichment, boost career skills, or enhance your career through in-person or online coursework.

Who Can Attend Lane?

Anyone 18 years or older may enroll in Lane Community College credit classes. A high school diploma is not required. Non-credit classes are generally open to those 16 years or older.

Accreditation, Certifications, Affiliations

Institutional Accreditation

Lane Community College is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer-review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation. Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution. Inquiries regarding Lane's accredited status by the Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution. Individuals may also contact: Northwest Commission on Colleges and Universities, 8060 165th Avenue N.E., Suite 100, Redmond, WA 98052, 425-558-4224, nwccu.org.

Other Accreditation, Certifications, Affiliations

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. A student graduating from the program will be eligible to receive national certification status as a Certified Culinarian (CC)

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

Dental Hygiene, 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

Diesel Technology, evaluated and accredited by the Association of Equipment Distributors Foundation (AEDF). Membership: Northwest Diesel Industry Council (NDC) and Oregon Trucking Association (OTA)

Flight Technology Private Pilot, Instrument and Commercial Flight Training is FAA Part 141 approved

Geographic Information Science, endorsed by the National GeoTech Center of Excellence

Health Information Management, by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)

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, 727-210-2350

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. OCNE is a partnership of Oregon nursing programs dedicated to educating future nurses. Faculty from eleven community colleges and six university campuses created – and continue to develop – a shared curriculum taught on all consortium campuses

Paramedicine, nationally accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Physical Therapist Assistant, accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, Virginia 22314, 703-706-3245

Practical Nursing, accredited by the Oregon State Board of Nursing (OSBN), 17938 SW Upper Boones Ferry Rd., Portland, OR 97163-0685, oregon.gov/OSBN

Credit Student Outcomes

From a cohort of full-time, first time in college, degree-seeking students who enrolled at Lane fall term of 2016, by August 2019, 18% had completed a degree and 21% transferred to another higher education institution. (Source: IPEDS)

Nondiscrimination Statement

lanecc.edu/copps/documents/nondiscrimination-statement

It is a policy of the Board of Education and a priority of Lane Community College that there will be no discrimination and harassment on the grounds of race, color, sex, sexual orientation, gender identity, marital status, religion, national origin, age, or disability in any educational programs, activities or employment. Inquiries may be directed to Shane Turner, Chief Human Resource Officer and Section 504 Coordinator, 541-463-5115.

Get Started: Admissions and Registration

Who May Enroll in 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. To finalize the admissions 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. For admissions information, go to lanecc.edu/earlycollege

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

Students are considered 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 link 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, lanecc.edu/international

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 the website 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. 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 lanecc.edu/esl

Programs with Special Admission Procedures

Health Professions Programs

Many Health Professions degrees and certificates have special admission requirements. Students must be officially admitted to these programs. Contact the Health Professions Application Center for more information *hpapplicationcenter@lanecc.edu*.

Limited Enrollment Programs

Some programs are limited enrollment, requiring that the program be declared as the major or requiring a special application for acceptance. Individual program pages provide more details.

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*.

Class Schedule and Schedule Changes

View the current class schedule at lanecc.edu/schedule.

Students may add full-term classes through Monday of the second week of the term. Students can withdraw from a course through the eighth week of the term using myLane. Schedule changes could result in additional tuition and fees.

Some classes require an 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 at 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 withdraw after this deadline will not receive a refund. More information about the refund process is provided at lanecc.edu/esfs/refunds.

Tuition, Fees, Financial Aid

Non-credit Classes

For information about costs associated with non-credit classes, please contact the respective departments. Adult Basic and Secondary Ed/GED or ESL students taking classes at the main campus or at the downtown Mary Spilde Center are assessed a $27 transportation fee per term.

Credit Classes

For information about tuition, fees, and expenses, visit lanecc.edu/esfs/credit-fees-and-expenses

Tuition

Oregon residents - $126.00 per credit hour

Non-residents of Oregon - $293.00 per credit hour

Non-resident online tuition - $126.00 per credit hour

International students (summer, fall, winter, spring)

1-5 credits: $315.00 per credit hour

6-8 credits: $2028.00 per term

9-12 credits: $2988.00 per term

13-18 credits: $3415.50 per term

Emergency Fee

$10 per credit hour. This fee was approved by the Board of Education for the 2021-2022 academic year to cover expenses related to the economic shutdown in response to COVID-

19. Federal emergency relief funds funding will be used to cover this fee. At the same time this fee is assessed, a credit will be issued for the exact same amount to offset that charge. **Students will not have a balance from this charge/credit.**

Student Fees

Fees are subject to annual increase.

Books and materials - Books and materials will vary by class. Please refer to your program or course for specific information on book and material charges. Some classes at Lane use Open Educational Resources (OER). The term OER refers to a resource with an open copyright license that is available free of cost or at a low cost. To earn Lane's low-cost textbook designation, a course must use materials that total $40 or less. For more information on classes using free or low-cost materials, visit lanecc.edu/oer.

Class fees - listed next to each class in the class schedule

Technology fee - $11.00 per credit

Online and hybrid course fee - $10.00 per credit (maximum = $50.00 per course)

Student Health Clinic fee - $45.00 per term

Transportation fee

- Classes on main campus - $27.00 per term
- Classes not held on main campus - $5.00 per term

International student fee - $125.00 per term

Credit by exam or credit by assessment fee - $50.00 per review

First-time credit enrollment fee - $30.00

Transcripts - Transcripts are available directly through the National Student Clearinghouse. Fees for transcripts ordered through the NSC will need to be paid with VISA or MasterCard.

- Transcript fee - $5.00-$10.00 depending on delivery method
- Transcript rush fee - $5.00

Photo identification (not required to attend Lane) - $5.00

Other Credit Student Fees

ASLCC Student Activity Fee

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

Credit students taking main campus classes - $63.07

Breakdown of student activity fee

- Student Life (clubs) - $1.75
- Lane Student Government Association (Lane SGA) - $10
- Black Student Union (BSU) - $.95
- Oregon Student Public Interest Research Group (OSPIRG) - $2.50
- Longhouse - $3
- International Study programs - $1.95
- Student Production Association (SPA) - $2.40
- Childcare Subsidy - $8.62
- Athletics and Recreational Sports - $11.50
- TORCH student publication - $2.70
- Gender Equity Center - $1.90
- Learning Garden - $3.35
- Maxwell Student Veteran's Center - $2.85
- Native American Student Association (NASA) - $0.70
- Movimiento Estudiantil Chicano de Aztlán (MeCHA) - $0.70
- Gender and Sexuality Alliance (GSA) - $0.70
- Asian and Pacific Islander Student Union (APISU) - $0.95
- Oregon Student Association (OSA) - $3.85
- Student Legal Services - $2.70

Differential Fees

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 programs include courses with differential fees. See individual program requirements for cost and fee information.

Determination of Residency

Residents of Oregon

In-district - In-district includes Lane County, Monroe Elementary District, and Harrisburg Union High School 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 completing an online residency form. Students must attach appropriate documentation. 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-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.

Out-of-State and International

There are two other residency categories:

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 are entitled to in-district tuition in accordance with the Basic Choice Act (see Veterans Benefits and Certification).
- 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. 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 effect 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.

Non-credit 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 2021-2022 academic year. The financial aid process takes approximately 6-8 weeks. Students should apply as early as possible after October 1, 2021, for the 2022-2023 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.

Pay Online

Payments can be made online by check or savings account, VISA or MasterCard. Access myLane by logging into mylane.lanecc.edu. Once in myLane, click on the "myFinances" tab, then click on "Make an Online Payment." Contact Student Accounts at 541-463-3011 if you have questions about online payments.

Pay 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.

Payment from 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 does not 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 at lanecc.edu/collfin/college-account-payment-plans.

Deferred Billing Terms Agreement

When you register for the first time, the college sets up a 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, a student has automatically accepted the terms of Lane's Deferred Billing Agreement. See lanecc.edu/copps/documents/accounts-receivable-billing to access the Deferred Billing agreement. Furthermore, by registering for any class at Lane, students are agreeing to retrieve their 1098T form by accessing the electronic version in myLane. The college does not mail 1098T forms.

Payments on Account Using myLane

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 students may use the Billing Statement link under Student Records in myLane to arrange to have a paper bill mailed. Non-credit 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 and click on the 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 for 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 checks with insufficient funds or for 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
- Drop 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 the class schedule for deadlines.

Lane has an **all** or **no** refund policy. Tuition is not prorated. 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. 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 Non-credit 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 students' responsibility to drop/withdraw from any class(es) they do not plan to attend. No refunds or adjustments of tuition and fees will be granted after stated refund deadlines.

Student Activity and Registration Fee Refunds

If the college cancels your 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 check or credit/debit card, refunds are issued via the same payment type
- The college applies all other refunds as a credit to your account
- The Transportation Fee is nonrefundable after the full-term refund deadline

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. 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.

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 prevents 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 for Community Education classes.

- Continuing Education, 541-463-6100, lanecc.edu/ce
- Cottage Grove Center, 541-463-4202, *cg@lanecc.edu*
- Florence Center, 541-463-4800
- Small Business Development Center, 541-463-6200, *LaneSBDC@lanecc.edu*
- 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 Support and Services

Academic Advising

Main Campus, Building 1, Room 103, 541-463-3800, lanecc.edu/advising or email *academicadvising@lanecc.edu*

Academic advisors are located across campus and are situated in "neighborhoods" identified with instructional programs or Career Communities. Students can access their academic advisor by emailing *academicadvising@lanecc.edu*; by viewing the advisors' drop-in schedule at Drop in Advising Calendar and clicking on a 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 from Academic Advising.

Academic Learning Skills

Main Campus, Building 11, Room 245, 541-463-5439, lanecc.edu/als

Academic Learning Skills (ALS) offers courses to improve student success in general education, career technical, and transfer courses. 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.

Adult Basic and Secondary Education

Main Campus, Building 11, Room 201, 541-463-5214; Downtown Campus, Room 404, 541-4636180, lanecc.edu/abse

The Adult Basic and Secondary Education (ABSE) department offers preparation for the General Education Development (GED) exam, college preparation, career pathways and workforce exploration, and workplace skills development.

Career Exploration Center

Main Campus, Building 1, Room 103, 541-463-3700, lanecc.edu/cec or email *CareerExplorationCenter@lanecc.edu*

Our faculty and staff provide high-quality career assessment tools and career information resources to help students learn more about themselves, explore their options, clarify their direction, create a vision for their future, and take steps toward their goals.

We recognize each students' unique strengths, interests, and values and their desire to create authentic, meaningful lives

We refer students to retention counselors for more in-depth career counseling and personal development

We collaborate with and support student success and retention programs, such as First-Year Experience and Guided Pathways

We connect students with campus and community resources to support their success and goal attainment

Center for Accessible Resources

Main Campus, Building 19, Room 263A, 541-463-5150, (voice); TTY Relay: 711, FAX 541-463-4739, lanecc.edu/disability or email *accessibleresources@lanecc.edu*

The Center for Accessible Resources' (CAR) mission is to provide equal access and remove barriers to various learning environments through reasonable accommodations so that all students can be active participants in the Lane community. CAR strives to promote inclusion while fostering student independence, resilience, and self-advocacy skills.

CAR works to advocate for disability as an important element of intersectional identity and human diversity. CAR works with students and faculty to determine appropriate academic adjustments and services for students with disabilities and partners with the Lane campus community to provide education, resources, and support with an emphasis on Universal Design and inclusive environments.

CAR Support and Services include:

- Strategies for student success
- Academic support and consultation
- Campus and community support referrals
- Test accommodations
- Alternate text format for course materials
- Accessible technology
- Sign language interpreting
- Captioning and transcription
- Notetaking

Child Care

Main Campus, 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 (NAEYC) 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 7:30 a.m.-5:30 p.m., Monday-Friday during the academic year and 7:30 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. See lanecc.edu/cfe/lcfc/ccampis.

In addition, the Lane Child and Family Center has a Preschool Promise classroom which provides free child care for children 3-4 years old. See lanekids.org/preschool-promise. For additional information and fee schedules, contact the Child and Family Education Department office or visit the website.

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 provides 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 computer labs on the Main, Downtown, Cottage Grove, and Florence campuses. The technology resource fee paid by each student provides this access. For more information including current hours and specific locations of open labs, go to lanecc.edu/it/computerlabs.

Concepcion "Connie" Mesquita Multicultural Center

The Multicultural Center promotes community building for students of color success. The center provides a cultural, academic, and social framework in collaboration with college and community partners. The main focus is on social justice while addressing issues and concerns of race, culture, and ethnicity, as well as the development of culturally relevant and appropriate knowledge, skills, and abilities. The center has four programs: the African American Student Program, the Chicano/Latino Student Program, the Native American

Student Program, and the Asian and Pacific Islander Student Program. A faculty member coordinates each program. lanecc.edu/mcc

The services offered include:

- Assistance regarding admission, registration, FAFSA seminars, and scholarship guidance
- Advocacy, support, and resources for community building
- Lounge area with a kitchenette and computers for student use
- Extensive library on diversity issues
- Staff bilingual in Spanish

Counseling Center

Main Campus, Building 1, Room 103, 541-463-3600, lanecc.edu/cc

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

Retention 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 education and career goals. Access, equity, and inclusion principles help us prioritize our efforts.

Personal, academic, and retention counseling - We provide no-cost counseling and resource referrals for students with academic or personal concerns impacting their ability to reach short-term and long-term goals.

Career counseling - Through individual counseling, we help students become clear about their academic and career goals. We assist students with clarifying their interests, strengths, values, and goals; explore majors and career fields; and develop a vision for their future and next steps.

Human development classes - Counselors are faculty members who teach Human Development classes, including College Success (CG 100), Career and Life Planning (CG 140), Human Relations at Work (CG 203), College Success: Back on Course (CG 100BC), and Improving Parent-Child Relations (CG 213). Courses are offered in varied formats; in-person, hybrid and online. CG 100 (the 3-credit course only) and CG 203 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 Science, AS degree. All CG courses (1-3 credits) will fulfill electives for the Associate of Arts Oregon Transfer degree 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 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.

Enrollment Services

Main Campus, Building 1, First Floor Lobby, 541-463-3100, 877-520-5391, lanecc.edu/esfs or email *AskLane@lanecc.edu*. Virtual appointments are available through the online appointment system.

The Enrollment Services department at Lane is the place to go for information and assistance with registration, student records/transcripts, degree evaluation and other enrollment-related services.

Financial Aid

Main Campus, Building 1, First Floor Lobby, 541-463-3400, lanecc.edu/finaid, or email *finaid@lanecc.edu*

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

First Year Experience

Main Campus, Building 1, Room 103, 541-463-5771, lanecc.edu/firstyearexperience or email *SuccessCoach@lanecc.edu*

The three pillars of Lane's First Year Experience (FYE) are academic planning, career exploration, and financial skill-building. 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. Participation in Lane's FYE is open to all new students and a requirement for recipients of the Oregon Promise grant.

Gender Equity Center

Main Campus, Building 1, Room 202, 541-463-5353, lanecc.edu/gec or email *GenderEquityCenter@lanecc.edu*

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:

- Resources, advocacy, and support for women, including the Women in Transition (WIT) Learning Community
- GBTQ+ support, advocacy, resources, and community building
- Healthy masculine identities
- Domestic and sexual violence prevention and support

Health Clinic

Main Campus, Building 18, Room 101, 541-463-5665, lanecc.edu/healthclinic

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

Services - The Health Clinic provides convenient health care services to eligible Lane students. Our mission is to provide affordable, efficient, evidence-based health care to the students of Lane Community College. The Health Clinic staff provides quality care in a collaborative partnership with the patient, with respect for diverse beliefs and needs, assisting the patient to make informed decisions about their health. 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. Office visits are free of charge to all eligible students. We offer some additional services at low cost, including immunizations, in-house labs, program and sports physicals, 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:

- Sexual health
- STI testing and treatment
- Student program physicals
- Sports physicals
- Immunizations/titers
- Tobacco cessation
- Treatment of minor injuries, including sprains, strains, cuts, and abrasions
- 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 the 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, PacificSource Community Solutions, and DMAP for 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 Lane 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 that classes are in session, with appointments available Mondays - Thursdays; summer term hours may vary and the campus, including the Health Clinic, is closed on Fridays during the summer. 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. For current hours, go to lanecc.edu/healthclinic/hours

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.

Housing

Titan Court is a 6-story apartment community located in downtown Eugene, Oregon. The apartments are leased individually by the bedroom and come fully furnished. Titan Court is within walking distance to many downtown attractions and services. Titan Court offers a Students First™ program with resident events to encourage social interaction and academic success. For more information, visit titancourt.com or call 541-234-8193.

Other options may be available for Lane students. See lanecc.edu/studentlife/housing for more information.

International Programs

Main Campus, Building 11, Room 235; 541-463-3434; lanecc.edu/international

International Programs serves international students coming to the United States, students seeking global degrees and study abroad, and global learning for all students. 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 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.

Global degree completion and study abroad is offered across a variety of majors and locations with options expanding to meet student needs. Please visit lanecc.edu/international/study-abroad

Library

Main Campus, Center Building, 2nd 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.

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 Monday through Friday from 8:00 a.m. - 5:00 p.m. 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*

Longhouse

Main Campus, Building 31, 541-463-3660, lanecc.edu/longhouse or email *longhouse@lanecc.edu*

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 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.

Maxwell Student Veterans Center

Main Campus, Building 19, Room 233, 541-463-5847 lanecc.edu/va

The Maxwell Student Veteran Center (MSVC) is dedicated to the success and academic achievement of Lane Community College's student and staff veterans and family members. The MSVC provides a space where students can study and socialize among fellow service members. By connecting students to resources and services, both on campus and in the community, the MSVC offers support for the wide range of challenges faced by our student veteran population.

Mental Health and Wellness Center

Main Campus (location details TBA), 541-463-5920, email *MHWC@lanecc.edu* or see the website at lanecc.edu/mhwc

Hours of operation - Monday – Friday, 9:00 AM to 4:00 PM. The MHWC does not provide after-hours care. If you are experiencing a mental health emergency, please call 911 or campus public safety at 541-463-5555.

Services - The Mental Health and Wellness Center (MHWC) provides a wide range of wellness services and resources for Lane students. At the MHWC we provide mental health clinical services and referrals to currently enrolled students at no cost. The goal of the MHWC is to provide early intervention assistance to students and offer on-campus services and referrals. Available services include but are not limited to:

Clinical mental health counseling

Mental health support groups

Referrals to community resources as necessary

Educational programming for students and faculty/staff

Virtual mental health supports

Individual and group addiction services and supports. *Visit the section on addiction services for more information*

Title IX (Sexual Assault); *visit the section on Title IX for more information*

Appointments can be made by calling or emailing the MHWC via the contact information above. All information will remain confidential and will not be shared with anyone except when legally or ethically required.

Addiction Program

Lane supports programs for the prevention of addiction by Lane students and employees, as well as assistance programs for those with problems related to abuse/addiction. We strive to educate the campus community about responsible substance use and addiction. The Addiction Program is housed within the Mental Health and Wellness Center (MHWC). To connect with resources, please email *mhwc@lanecc.edu* or call 541-463-5920 or visit the website at lanecc.edu/mhwc/drug-and-alcohol-prevention

Please see the following COPPS policies for further information:

Lane Community College Substance Abuse Statements

Lane Community College Statement of Prevention of Alcohol Abuse and Drug use on Campus and in the Workplace – Student Statement

Lane Community College Statement of Prevention of Alcohol Abuse and Drug Use on Campus and in the Workplace – Staff Statement

Title IX and Sexual Respect

Lane Community College does not tolerate sex or gender discrimination, including sexual misconduct such as sexual harassment and sexual assault, stalking, and intimate partner violence. These behaviors are harmful to the well-being of our community members, the learning/working environment, and collegial relationships among our students, faculty, and staff and are prohibited under federal and state Title IX Law. The college has a variety of resources available to students regarding this area. Please visit lanecc.edu/sexualrespect email *titleix@lanecc.edu* or call 541-463-5920 for more information.

Please see the following COPPS policy for more information: Sexual Respect – Sexual Misconduct

Performing Arts

Main Campus, Building 6, Room 204, 541-463-3108, lanecc.edu/perarts

Music -Music students at Lane have many opportunities to perform publicly. Lane currently provides a chamber choir, concert choir, symphonic band, jazz ensemble, and jazz combos and has also staffed a chamber orchestra in the past. These groups perform regularly at the end of the term and on special occasions, including tours. Student musicians are also encouraged to perform as soloists or in chamber groups in showcases held each term on the main stage. Some of Lane's large ensembles are open to all students without audition, while others require an audition. Lane offers a comprehensive two-year transfer curriculum designed for music majors; a vibrant music technology program that offers an AAS degree in Music Technology and Sound Engineering; and a variety of general music courses accessible to beginners. Individual lessons are available for voice and instruments for students at various levels. Regardless of their level of experience, students can share the joy of making music at Lane.

Dance - Dance students have a variety of performance opportunities throughout the year, ranging from informal outdoor performances to formal concerts in the Ragozzino

Performance Hall. Open Show is an informal, supportive and fun performance at the end of each term where dancers of all levels hone their technical and performance skills. Intermediate and advanced dancers audition for the Lane Dance Company to work with faculty and guest choreographers on original and repertory work for the faculty concert. The Works showcases choreography by students in a formal theatrical setting. Students move from choreography studies in the studio, to production work on the stage, learning 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 - Theatre productions are the logical outcome of classwork, and Lane strongly encourages its theatre arts students to audition for shows. Public performance is the ultimate test of skill and courage. Lane's 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 (SPA) 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 maintain 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.

Sports and Fitness

Fitness Center, Main Campus, Building 5, Room 101, 541-463-3987, lanecc.edu/fec/tour-fitness-education-center

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. 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 fee-based CRN through the Recreational Sports Program. The environment is supportive - not competitive - and educational, encouraging people of all fitness levels and abilities. In addition, a professionally trained and dedicated staff is always available for personal guidance.

Recreational Sports Program, Main Campus, Building 5, Room 204,

541-463-5293, lanecc.edu/healthpe/recreation, 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, Main Campus, Building 5, Room 205, 541-463-5599, lanetitans.com

The Athletics Department is housed within Student Affairs. 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 with 36 other schools in the Northwest Athletic Conference (NWAC), which includes colleges in Idaho, Oregon, Washington, and Canada. 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.

Student Government and Engagement

Main Campus, Center Building, Room 201, lanecc.edu/studentlife

Student Life and Leadership Development, through partnerships with academic and student affairs departments on campus, promotes holistic learning and assists students with connecting to college resources and programs including student activities, student organization development, leadership programming, and community service. Student Life and Leadership Development seeks to create an environment of diversity, multicultural education, and cultural competency.

Lane Student Government Association (Lane SGA)

Main Campus, Center Building, Room 201, lanecc.edu/aslcc

The Associated Students of Lane Community College (ASLCC) is the student body at the Lane Community College Main Campus. The Lane Student Government Association (Lane SGA) is an organization of elected and appointed students who represent the student body. Yearly, elections are held to choose who will represent ASLCC members in student government. The elected positions in student government are the President, Vice President, and eight Senators. All credit students at the main campus who are currently enrolled and have paid the mandatory student activity fee are members of the ASLCC.

Student Life Resources

Rainy Day Food Pantry, Center Building, Room 153, is a supplemental pantry providing students with nutritious food in partnership with FOOD for Lane County.

Snack Shack, Building 1, Second Floor, is a convenience store offering snacks and beverages.

The Stash, Center Building, Room 153, is a thrift store where students can shop for clothing and personal hygiene products at no cost. lanecc.edu/aslcc/no-cash-clothing-stash

Council of Clubs

Main Campus, Center Building, Room 201, lanecc.edu/studentlife/council-clubs

The Council of Clubs is a representative body of active and ratified clubs on campus. The purpose of the Council is to plan club activities on campus, provide support for clubs, and encourage an active club presence on campus. For more information on currently active clubs, go to lanecc.campuslabs.com/engage

Asian Pacific Islander Student Union

Main Campus, 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 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

Main Campus, 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

Main Campus, Building 1, Room 210 & Longhouse, 541-463-5238

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)

Main Campus, 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

Main Campus, Building 1, Room 202H, 541-463-3253

The Gender & Sexuality Alliance is a student-run organization dedicated to providing a safe and nurturing environment for LGBTQIA+ people and their straight allies to come together and express themselves, while working toward bettering their community and combating intersectional oppression faced by members of the LGBTQIA+ community.

Phi Theta Kappa Honor Society

541-463-5142, lanecc.edu/ptk

Phi Theta Kappa is the international honors society for students enrolled in two-year colleges. It originated in 1918 in Mississippi and has more than 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; and have a GPA of 3.25 or better. There are one-time dues which are payable in several options.

Student Help Desk (SHeD)

Main Campus, Center Building, 2nd Floor, 541-463-3333, lanecc.edu/learningcommons/student-help-desk; live online chat and online knowledgebase at help.lanecc.edu or email *shed@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 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 Legal Services

Access the Law, 1245 Pearl Street, Suite 1, Eugene, 541-686-4890

ASLCC Legal Services is a student benefit funded by the Student Activity Fee. Legal aid and advice are available to all students who take credit classes on Lane's main campus. For more information, visit lanecc.edu/studentlife/student-legal-services

Student Survivor Legal Services

Main Campus, Building 1, Room 215, 541-346-4666

A free, confidential resource for Lane Community College students, who have been victims of sexual assault, dating or domestic violence, or stalking. Make an appointment at ssls.uoregon.edu

Student Publications

DENALI Literary Arts Magazine, Center Building, Room 024, 541-463-5897, lanecc.edu/llc/denali

DENALI is a publication of Lane Community College. We publish annually in Spring term. Denali accepts original submissions from Lane students and Lane County residents at any time. The Denali encourages artists of all types to submit their works. These can include, but are not limited to: paintings, photographs, short stories, poetry, prose, fine art, graphic art, jewelry, ceramics, and clothing. 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*.

Torch, Center Building, Room 008, 541-463-5654, lanecc.edu/mediaarts/torch

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

Sustainability

Lane offers a variety of degrees and courses that include sustainability concepts and practices. For more information, see the Sustainability website at lanecc.edu/sustainability. For a list of courses identified as having sustainability as a central focus, see Sustainability-Focused Courses

Lane is committed to:

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.

Student clubs

Green Science Club - Science Department or faculty advisor John Thompson, 541-463-5199 or *thompsonj@lanecc.edu*

Learning Garden Club - Learning Garden Specialist, 541-463-5899 or *learninggarden@lanecc.edu*

Oregon Student Public Interest Research Group - 541-463-5166 or *ospirg@lanecc.edu*

Testing Office

Main Campus, Building 1, Room 116, 541-463-5324, lanecc.edu/testing or email *testingoffice@lanecc.edu*

For current information about Testing Office services, including hours, placement options, and professional and certification testing fees, please visit the website.

The Lane Community College Testing Office's main focus is assisting students in finding their math and writing starting point. We currently offer multiple methods of placement for Writing and Math, and provide a single placement test for Spanish and French. We also offer professional and certification testing through Pearson Vue, CLEP, Scantron, and others. The Testing Office follows the National College Test Association (NCTA) Professional Standards and Guidelines.

Titan Store

Main Campus, Center Building, 1st floor, lanetitanstore.com

The Titan Store carries course materials, textbooks, e-books, textbook rentals, general books, art supplies, computer hardware and software, and a variety of snacks and drinks. Students may also purchase clothing, gifts and school supplies.

Current store hours, contact information, and course material information is available on the Titan Store's website.

TRiO Programs

TRiO, Main Campus, Building 1, Room 219, 541-463-3131, lanecc.edu/trio

TRiO STEM (Science/Technology/Engineering/Math), Main Campus, Building 1, Room 218, 541-463-3138

The program is federally funded with the goal of helping students stay in school and successfully graduate from Lane Community College and/or transfer to a four-year institution. The services are provided free to eligible students to assist them in meeting the varied challenges of college life. Lane hosts two TRiO Programs: TRiO Student Support Services, which serves any eligible non-STEM students, and TRiO STEM, which works with eligible STEM degree-seeking students. Both programs offer the same services to all students. The TRiO Learning Center at Lane Community College helps students succeed through academic advising, tutoring, and skill development workshops.

One or more of the following eligibility criteria must be met to apply for TRiO or TRiO STEM:

- First-generation student (neither parent received a four-year degree)
- Low income as determined by the federal government income guidelines
- Have a documented disability that interferes with education and are registered with the Center for Accessible Resources at Lane

Eligible students must also:

- Be enrolled Lane Community College
- Pursuing a degree or certificate with intent to complete it at Lane
- Have a need for academic support
- U.S. citizen or registered permanent resident

Tutoring Services

lanecc.edu/tutor

Academic and Tutoring Services coordinates free in-person and online academic coaching in many subject areas with the goal of developing students' strategic learning behaviors and habits. All services are free to currently enrolled Lane students. ATS provides:

- One-on-one academic coaching for many subject areas
- Group-oriented and course-embedded support
- Early Outreach and Referral staff who are trained as resource specialists and content specialists who can provide academic coaching in specific subjects--plus connect you with campus and community support

To find more information about Lane's full range of options and academic support centers, go to the tutoring website.

Veterans Benefits and Certification

Building 1, (Lobby), 541-463-5663, lanecc.edu/esfs/veterans-education-certification-information or email *VAEdBenefits@lanecc.edu*

Programs at Lane Community College are approved by the Oregon Department of Education, State Approving Agency and the VA as a qualified training institution for students eligible for VA education benefits. All applications for 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 which benefit chapter they wish to utilize. All who qualify for benefits need to submit an application to the VA through va.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 prorated 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 Progress Standards - Academic Progress Standards are listed in this catalog and are provided to new students upon initial establishment of your VA file at Lane.

Schedule changes, drops and adds - Students using VA benefits must report all schedule changes made after a term planner has been submitted. 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 Benefits Office before making schedule changes, drops, or adds to determine the possible impact on education benefits.

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, 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 VA benefits must keep their program of pursuit current with the Veterans Benefits Office and on their Lane account. Students are not certified until discrepancies of a declared program are resolved. The program declared is reported to the VA every term.

Grades - Individual grades are not reported to the VA but non-punitive (No Pass, Audit) grades are reported. Students receiving these grades at the end of the term will have an amended certification processed with the VA. This may result in a benefit adjustment as determined by the VA. Students are encouraged to successfully complete all classes for credit to avoid VA debts.

Program planners - All students wanting to use VA education benefits must submit a completed term planner to the Veterans Benefits Office each term. VA certifications are not processed without a term planner. The term planner must be signed by Academic Advising. 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 should be received in the Veterans Benefits Office no later than 45 days before the term starts to ensure time for processing. Submission later than 45 days prior may result in delayed receipt of VA benefits. Changes to a previously submitted term planner will require either a new planner to be submitted or an email from your advisor confirming the course is applicable to your program.

Certification - New students are required to complete the intake document packet with the Veterans Benefits Office to establish your VA file at Lane. These documents must be completed before we can process a certification to the VA. This initial establishment of your file includes providing official transcripts from prior schools to determine if credit has been earned, and submitting a VA certificate of eligibility (or equivalent from eBenefits).

Certification for a term occurs after the student has registered and submitted a term planner. A new term planner is required every term. Certification can occur up to 120 days before the term begins. Our standard 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. This will be sent to your my.lanecc.edu email account. Students should review the certification email and notify the Veterans Benefits Office if a discrepancy is identified. Initially, credits only are reported to the VA. After the first week of the term, tuition and fees are reported. Students using CH 33 benefits should see the VA funds credited to their Lane account approximately 2 - 4 weeks after the term has started.

VA payments - VA students should monitor their school's financial account on a regular basis. Failure to monitor and inquire about unpaid charges may result in late fees or the inability to register for upcoming terms.

In accordance with 38 USC 3679(e), Lane's policy is to not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from the VA under Chapter 31 or 33. If this should occur, please contact the Veterans Benefits Office so that any discrepancies can be resolved.

VA and financial aid payments operate within different time periods. Students should not assume when the VA will make payments to them personally, when they will be applied to their school account, or when financial aid refunds will be dispersed. Students receiving financial aid in conjunction with VA benefits will not receive financial aid funds until their Lane account is paid in full. Unforeseen circumstances may occur which could delay when the VA payment is received. Students should also monitor their eBenefits account to see when VA payments are scheduled for deposit to their personal bank account.

Flight Technology - An addendum to the Lane Course Catalog is the Flight Technology Information Bulletin, or FTIB, which details current flight training costs (hourly aircraft rental and instructional rates, etc.). This addendum will be provided to the veteran student upon first contact with the Flight Technology Office.

Prior credits (transcripts) -Students applying for VA benefits at Lane who have received college credits at other schools, using VA benefits or not, must provide official transcripts to Lane before their first certification is processed to the VA. Joint Services Transcripts (JST) will be requested by Lane personnel. Air Force veterans will need to request their military transcript from the Community College of the Air Force. These transcripts ensure all prior awarded credit is applied toward the student's program at Lane and that passed courses are not repeated. Students' past enrollments may also be checked with the National Student Clearinghouse.

Lane email - Communication with VA students by email is done through the student's my.lanecc.edu email account. Students should periodically view their school email to ensure they do not miss important communication related to your VA benefits. Email can be accessed through myLane.

Graduation and Transfer Requirements

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

For degree purposes, a governing catalog is a set of academic programs and their requirements. Lane publishes a new catalog each academic year, which begins in the summer and runs through the end of spring term the following year. To earn an associate degree or a certificate, students must meet the requirements in the catalog that is current when they declare their program of study at Lane, unless they choose to meet the requirements of a later catalog for which they qualify. For associate degrees and two-year certificate of completion programs, a catalog's requirements are valid for five years. For certificate programs shorter than two years in length, such as Career Pathway Certificates, a catalog's requirements are valid for three years. If a course of study extends beyond the validity of the catalog program, graduation requirements may have changed and students will have to meet the requirements of a valid catalog for which they qualify. To qualify for a catalog, a student must earn at least one credit in that academic year. Students who do not

earn at least one Lane credit each academic year lose the right to meet the requirements of their original catalog. They must then meet requirements of the current catalog at the time they resume work on their degree or certificate at Lane. Reverse transfer students may graduate using their original catalog if no more than five years old, or any valid catalog for which they qualify using Lane or transfer coursework. If a degree program has a substantive change as defined by the Curriculum Office, then a student not in attendance during the year the change is made, but who qualifies for the immediately previous catalog, may petition to graduate under the new requirements.

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. In the event that a specific associate degree, AAS program option, or certificate of completion is suspended or closed, the requirements for that program must be fulfilled within timeframe in the teach-out agreement. Students affected by changes should contact the appropriate program advisor, program coordinator, or academic dean.

Degrees and Certificates

Lane may confer degrees and certificates upon satisfactory completion of prescribed credit programs. The title of the program will appear on the degree or certificate when awarded. Degrees are awarded with a graduation date commensurate with the completion of the last required course. If a degree program has a substantive change as defined by the Curriculum Office, then a student not in attendance during the year the change is affected, but who qualifies for the immediately previous catalog, may petition to graduate under the new requirements and will be awarded the degree or certificate in the first term of the new catalog year. Petitions are available on the Enrollment Services website.

Graduation Requirements

Candidates for an associate degree or certificate must meet the following general graduation requirements. Some degrees and certificates have additional limitations or requirements. Please see individual programs for requirements and limitations.

Total credits - Complete the number of credits as required for the individual degree, including general education (foundational skills and discipline studies), core courses, and electives requirements.

Minimum credits at Lane - Complete at least 24 credits. Career Pathways Certificates can be earned with fewer than 24 credits.

Cooperative Education - Students may use up to 18 credits of Cooperative Education toward a degree/certificate unless otherwise specified.

Grade Point Average - Earn a minimum cumulative GPA of 2.00 at Lane.

Pass/No Pass - Students may select the P/NP option for up to 16 credits toward a degree/certificate, unless otherwise specified in the program requirements. 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 general education (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 or core 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

Lane uses course work from U.S. colleges and universities that are 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 post-secondary institutions previously attended. An official evaluation will be performed by a Lane degree evaluator and may only be started after Lane has received your official transcript(s). 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 (FERPA). 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, 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 receipt of your official transcripts.

U.S. Transfer Credits

Grades of Pass (P) are only transferable when the issuing institution defines the grade as C- or better.

Coursework at 300-level or higher 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 completed.

International Transfer Credits

Coursework listed on non-U.S. transcripts must be evaluated by an agency on the National Association of Credential Evaluation Services (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 accredited by one of the approved accrediting agencies 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 Physical Education applicable to all PE/Health degree requirements upon the submission of a DD214 with basic training completion.

Policies and Procedures

Definitions

Academic Progress Standards - A student who does not achieve satisfactory academic progress standards (APS) 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.

Academic Requirements Review Committee - The Academic Requirements Review Committee (ARRC) 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 ARRC will not accept petitions solely for the purpose

of improving a Grade Point Average or other cosmetic reasons. Typically, the ARRC 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 ARRC include: substitutions to requirements for AAOT, AS, or AGS degrees, waiver of requirements for AAS degrees and certificates

ARRC petitions are available online at lanecc.edu/esfs/general-education-substitution-and-waiver-petition.

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 must 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 administrator 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/schedule one week before registration begins. Registration usually begins the fourth week of the preceding term except fall term, which occurs the preceding spring term.

Commencement ceremony - There is one college commencement ceremony held each year in June. 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. 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 any time after the graduation ceremony.

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 Dean, students must enroll in a minimum of three credits of co-op per term.

Core Transfer Map (CTM) - The Core Transfer Map is a group of eight classes that add up to at least 30 credits. When the full set of eight courses are successfully completed at an Oregon community college, they are guaranteed to transfer as a block to any Oregon public university, and they will count toward that university's core bachelor's degree requirements. The CTM will be noted on a student's transcript upon completion of the requirements and at the request of the student.

Course - A course is any class or subject (e.g., WR 121 - Academic Composition, BI 101 - General Biology) 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 Course Types by Prefix.

Non-credit 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 non-credit. Non-credit course offerings are listed and described each term in the class schedule. Under the state's definition, a non-credit 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. Non-credit courses will not be counted for financial aid, and will not transfer to another institution.

Credit hour - Credit granted at Lane is based on quarter/term 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 term. Most credit courses are based on 11 weeks. For one 11-week term, there will be 11 class hours per each lecture credit, 22 classroom hours per each lecture/lab credit, and 33 classroom hours per each lab credit.

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.

Direct transfer evaluation - Direct transfer evaluation is done by Academic Advising when a student is in transit to another institution. Unofficial copies of transcripts may be used. Students must take copies of transcripts to Academic Advising for their review of transfer coursework.

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.

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 electronic, official transcript through the National Student Clearinghouse or in person from Enrollment Services. A current list of fees for transcripts can be found on Lane's website at lanecc.edu/esfs/transcripts.

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 to be registered for at least six credits or more per term.

Honor lists - Lane students who achieve high academic standards will have that achievement notated on official transcripts. Honor list requirements include:

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.

Learning modalities - See information about the various learning modalities at Other Learning Opportunities for definitions.

"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.

Miscellaneous training and credit - Credit also may be granted for military training as listed on the ACE/AARTS report for work completed at an approved accredited school. Institutions that are not accredited by an approved agency may be reviewed using the Credit-by-Assessment process.

myGradPlan degree audit system - Lane students may view their progress toward degree and certification completion in myLane under the myGradPlan tab.

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.

Oregon Transfer Module (OTM) - OTM designation can be posted in the student's transcript upon completion at the student's request.

Program - A program is state-approved curriculum that includes credit-bearing courses and which leads to an award (degree or certificate of completion).

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.

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 coursework. 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.

Procedures

Lane publishes regulations in addition to those in this catalog (class schedule, course syllabus, etc.). Students are responsible for knowing these regulations.

Registration Changes

Schedule changes - Students may change their schedule after their original registration by using myLane. For full-term classes, the last day to withdraw from a course, request a pass/no pass grade option or audit a class, is midnight on 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. Students can view schedule change information for classes shorter than 11 weeks. Students who withdraw from classes after the first week of the term (refund period) will have a withdrawal notation (W) 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/withdrawing from classes - When a student does not attend classes during the first week, they are encouraged to drop classes using myLane before the refund deadline. After the first week of a term, students can withdraw from a course using myLane by midnight Friday of the eighth week of a full-term class.

No Show Drop - Students will be administratively dropped for non-attendance or failure to meet prerequisites. Instructors have the right to administratively 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. Additional information about Lane's No Show Drop process can be found at lanecc.edu/esfs/noshow-drops.

Do not assume that an instructor will administratively drop you from your class. Students should drop classes they do not plan to attend. It is the student's responsibility to monitor their account and to verify that the class has been dropped for non-attendance. To receive a refund of paid tuition or a cancellation of tuition not yet paid, the drop procedure must be completed within the refund period. Students who plan to remain enrolled but have attendance difficulties during the first part of the course should notify the instructor to avoid administrative drop. **Prerequisites not met** - Students enrolled in classes for which they do not have prerequisite skills, test scores, or courses may be administratively dropped 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 does not use social security numbers as a student identification number.

Lane provides all students with a nine digit "L" number as a 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). To 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 an 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, registration graduation records and degree/certificate applications.

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 or FERPA, Public Law 93-380), 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 they consider 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 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)

Degree program and major/program of study

Participation in official activities/sports

Weight/height of athletic team members

Dates of attendance (not daily)

Degrees and awards received

Most recent previous school attended and photograph

Enrollment status (half-time/full-time only)

Date of graduation

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.

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 contacting Enrollment Services and the password must match exactly what you have provided. We cannot 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 through the National Student Clearinghouse at studentclearinghouse.org. Fees vary depending on delivery method. See Lane's website for current fees: lanecc.edu/esfs/transcripts.

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 sent to other colleges may be ordered through the National Student Clearinghouse, 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 coursework 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' benefit 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 transcripts 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
Y		No Basis for Grade (Prior to 1997)
NC		No Basis for Credit / Credit Attempted, Not Earned (Eliminated Winter 2019)
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)
*** or W**		Withdrawal after Refund Deadline (no grade recorded)
E		Repeated Course Points earned not included in the cumulative grade point average (GPA)
~		Credit by Exam or CEU By Exam

Please Note: @ Credit by Assessment and ~ Credit by Exam are limited to 25 percent of a degree or certificate. Students may do more than 25 percent, but only 25 percent may be used toward requirements.

	credits	grade	points
BA 226 - Business Law	3	A	12
PE 117 - Strength Training	1	B	3
EL 115 - Effective Learning	3*	P	0*
BT 206 - Co-op Ed: Business Seminar	2	C+	4.60
Total GPA Credit	6	Total Points	19.60
19.60 ÷ 6 = 3.264 GPA			

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**
A	= 4.00
A-	= 3.70
B+	= 3.30
B	= 3.00
B-	= 2.70
C+	= 2.30
C	= 2.00
C-	= 1.70
D+	= 1.30
D	= 1.00
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:

Note - 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.

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 - An Incomplete can be provided when a student has satisfactorily completed 75 percent or more of the coursework as defined by the instructor, but is unable to finish the remaining required scheduled work due to circumstances beyond the student's control. An Incomplete grade is not used to avoid a failing grade or to address student convenience. In general, a grade of Incomplete is to be made up within one term from the last day of the original term the course was taken, but may be extended up to one year at the discretion of the instructor. Assigning an Incomplete requires mutual agreement between the student and instructor, outlined in a contract (or written agreement) that contains the following: a description of the work to be completed, a deadline for its completion, and a standard grade that will be earned if the deadline is not met. The student is responsible for understanding the terms of the contract. The student cannot be required to register again for the Incomplete course (graded or audit) during the term of the Incomplete. At the end of the contract date, the Incomplete will convert to a standard grade as determined by the terms of the contract.

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 at lanecc.edu/esfs/request-absolve-repeated-courses. 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 the recognize Petition to Absolve process when calculating a GPA for admission purposes.

Academic Progress Standards (APS) and Alert System

(lanecc.edu/cc/academic-progress-standards-general-information)

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 are based on academic performance for each individual term. **Attaining a minimum GPA of 2.0 and completing at least 67% of attempted credits each term ensures Good Academic Standing**. Should a student fall below either of these performance indicators, an Alert Status will be activated and the student will be required to complete an intervention listed above.

At the end of every term, the College will review each student's progress. The following identifies the required interventions if a student does not meet these standards:

Term	GPA	Completion Rate	Academic Standing	Intervention
1st	Less than 2.0	Less than 67%	Alert 1	Access the Alert 1 webpage for further information and recommended student support resources
2nd	Less than 2.0	Less than 67%	Alert 2	Requires Alert 2 - Requires access to your Moodle page and completion of the Success Plan Questionnaire
3rd	Less than 2.0	Less than 67%	Alert 3	Requires enrollment in Alert 3 - Requires access to your Moodle page and completion of the Success Plan Questionnaire
4th	Less than 2.0	Less than 67%	Alert 4	Requires Alert 4 - Requires access to your Moodle page and consultation with a Lane Retention Counselor

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-schedulechange-deadline-information for details.

Student Policies and Complaint Procedures

Lane Community College policies and procedures are subject to change without notice. Up-to-date policies and procedures are available online.

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:

The institution represents itself accurately and consistently to prospective students through its catalogs, publications and official statements.

Admissions information forms avoid eliciting information for which there is no clear necessity.

Methods of collecting, reviewing, transmitting, or storing information about learners will be protected against improper access in compliance with federal and state regulations.

Facilities provide a reasonable level of privacy, both visual and aural.

The college environment is welcoming and accepting to all learners.

Learners have a clear understanding of what may be expected from the services offered.

Learners are informed of their rights and responsibilities and are provided a process to address grievances.

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. (lanecc.edu/copps/documents/harassment-sexual-general)

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. (lanecc.edu/copps/documents/harassment-based-race-or-ethnicity-or-national-origin-general)

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, 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. Under no circumstances shall alcohol be served at college-sponsored activities to underage minors as defined by state law.

Exceptions to this policy are as follows:

Alcoholic Beverages may be used/served:

for cooking and/or instructional purposes in food preparation labs or classes and in labs or classes related to the science and/or service of alcohol; or at college-sponsored or on-campus activities catered by legally licensed and insured businesses or agencies with prior approval using procedures specified in college administrative rules (see Alcoholic Beverages on Campus).

With appropriate documentation, prescription opiates, or other psychoactive medications, may be used as legally prescribed by a licensed practitioner. However, according to statute, marijuana shall not be ingested on campus even with a medical marijuana card.

Glue and thinners may be used only in class-related lab environments and in facilities construction and maintenance for non-intoxicating purposes.

Admission for Credit Students BP705

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

Research in community colleges broadly and experience at Lane has shown that implementing a single large increase in tuition in one year because tuition has not

kept pace with inflation has a significant adverse effect on student enrollment in the next academic year.

In order to maintain a constant tuition rate relative to inflation, each year, the board may consider an appropriate index for two-year public colleges on which to discuss a tuition increase. Each year, the board may adjust the per credit tuition rate to reflect the needs of the college. The rate will be rounded to the nearest half-dollar and become effective the following academic year (Summer Term).

For other adjustments:

Each year, the board will review Lane's tuition rates to ensure: a) that tuition revenues are appropriate for the needs of the district, 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, c) access and affordability, and d) the revenue requirements of the college. Should the board conclude that increases above the selected index are required, the board will assure that there are college-wide opportunities, particularly with students, to engage in discussions about the impact of tuition increases on access, affordability and course offerings.

Should the board conclude that tuition should be reduced, the board will similarly assure that there are opportunities to engage in college-wide discussions about the impact on course offerings, access and affordability.

Student Complaint Procedure

(lanecc.edu/copps/documents/student-complaint-procedure)

Purpose

The formal complaint procedure is designed to resolve problems for students who are having difficulties with other students or staff that cannot be resolved through the informal report and resolution process, or that students choose to have investigated and judged in a formal setting. This procedure details the filing process and lists other types of complaint procedures. Although the process is confidential, a student's identity cannot be withheld from the person(s) identified as the source of the problem.

Narrative

Before filing a formal student complaint, students are encouraged to attempt to resolve the issue with the manager of the area or division/department involved.

In addition, complaints against faculty cannot be pursued through this process. Student complaints about faculty members shall be made to the division dean who is that faculty member's supervisor and shall be subject to the dispute resolution procedures as outlined in the faculty contract. If the student believes that the supervisor has not resolved the issue, the student may appeal to the supervisor's Executive Dean.

Impartial Decision Makers

Complainants who do not feel that they have access to impartial decision makers under the procedure outlined below should immediately notify a campus advocate of their concern.

Advocates

Assistance with the complaint process is available at Counseling, Student Life and Leadership Development and the Gender Equity Center.

Record Keeping

All records of the formal complaint process, including the complaint form and all reports and findings, are the property of the college. A formal complaint report that summarizes all formal complaints will be forwarded to the president, vice presidents and division/department managers on a periodic basis. No information that would identify the complainant or the accused will be included in this report.

How to File a Formal Complaint

Step 1: The complainant Completes a complaint Form.

Step 2: The complainant submits the complaint form online or brings a paper copy to the office of the Vice President, Academic and Student Affairs. The office is located on the 2nd floor of the Administration building (Building 3, Main Campus).

Step3: A Student Complaint Officer will be assigned or the complaint will be directed to the appropriate contact. The complainant will receive a letter via email with the contact person's information or the Student Complaint Officer's information as appropriate. The Vice President, Academic and Student Affairs will assign a Complaint Officer and will provide written notification of the complaint to the accused within five working days of receiving the complaint. Campus advocates are available to assist throughout this process. In some instances, the Vice President, Academic and Student Affairs may choose to hear the complaint at her discretion.

Step 4: The Complaint Officer will conduct an investigation.

Step 5: The Complaint Officer notifies the complainant and the accused of their findings. Notification of findings will be sent within 20 working days of the complaint being filed. The complainant will receive the results of the investigation in writing. The complainant will review the findings and decide if they are satisfied with the results. If they are not satisfied with the results, they may proceed to Step 6.

Step 6: The complainant may appeal the ruling by sending an email to *CodeandComplaintAppeals@lanecc.edu* within five days of receiving the outcome letter. The Vice President, Academic and Student Affairs reviews the investigation and findings. The Vice President, Academic and Student Affairs may refer the appeal to a hearings committee at their discretion. If the Executive Dean was the original decision maker in the complaint, the appeal will go to the Vice President of Academic and Student Affairs.

Step 7: A final decision is made. The Vice President, Academic and Student Affairs will make the final decision on the appeal and notify the complainant and the accused in writing within 10 working days.

Substance Abuse

Please contact the Lane Community College Counseling Center at lanecc.edu/cc/contact-us.

Type of Complaint	Explanation	How to file a complaint	How to appeal a complaint outcome
Academic issues: Grade & Degree Appeal	A student may appeal specific grades, probation and dismissal, and degree requirements. Students are directed to appropriate forms, documents, and departments to consult for specific appeal processes.	General Education Substitution and Waiver Petition	Appeals for issues related to Lane Community College's academic probation and/or dismissal policy must be made in writing to the Academic Progress Review Committee through Enrollment Services (Bldg 1).
Discrimination or harassment	This discrimination and harassment complaint procedure is designed to provide all members of the College community with a process for reporting incidents of discrimination or harassment, and to provide for prompt and effective response to and resolution of reports of discrimination or harassment.	Complaint Form	Any appeal must be submitted via email sent to Code and Complaint Appeals within 5 working days of the date of the outcome letter. This appeal must allege a procedural violation.
Disability issues	The process by which students, staff, or members of the public may seek formal or informal resolution to an access complaint under the provisions of the Americans with Disabilities Act	Code and Complaint Appeals within five working days of receiving the resolution. The college will respond in writing.	
Faculty/Curriculum	Student complaints about faculty members or curriculum shall be made to the division dean who is that faculty member's supervisor.	Complaint Form	Appeal must be sent in writing to Code and Complaint Appeals within 5 days of the outcome letter.
General	Examples of general complaints include staff, department, procedures, etc.	Complaint Form	Appeal must be sent in writing to Code and Complaint Appeals within 5 days of the outcome letter.

Timelines

The formal complaint procedure is set up to take no more than 50 working days. To have remedy under the formal complaint process, complaints must be filed within 90 days of the incident. Complaints filed more than 90 days after the incident will not be accepted.

Student Rights and Responsibilities and Student Code

Preamble

Lane Community College exists for the transmission of knowledge, the pursuit of truth, the development of students, and to contribute to the community which it serves. Free inquiry and expression are vital to the attainment of these goals. As members of the academic community, students are encouraged to develop the skills for critical judgment and a life-long search for truth. The minimum standards of academic freedom and conduct are outlined in the Student Code of Conduct. The privilege to teach and to learn are inseparable facets of academic freedom. Students and staff should exercise this freedom with responsibility.

Lane resolves to provide an atmosphere conducive to learning where faculty instruction and student learning occur without external pressure, interference or disturbance. The college vision statement: "Lane provides quality learning experiences in a caring community," embodies the belief that staff and students are expected to conduct themselves in a manner which acknowledges and values a wide range of opinions, beliefs and perspectives.

The purpose of this document is to outline the essential provisions for academic freedom and to guide students in becoming responsible participants in the college community.

Freedom of Access to Higher Education

Lane Community College is open to all persons who are qualified according to its admission and good standing requirements. Anyone age 18 or older may enroll. No high school diploma is necessary. Individuals younger than 18 may attend if they obtain approval from their high school principal or if they have already received their high school diploma. Community education classes generally are open to anyone 16 or older.

Under no circumstances will an applicant be denied admission to the college because of age; sex; race; color; religion; physical or mental disability; national origin; marital status; sexual orientation; 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.

Financial Aid

Although the primary responsibility for meeting college costs rests with students and their families, Lane recognizes that many individuals cannot assume the full financial burden of the costs of a college education. For this reason, financial aid is available to bridge the gap between the costs of education and the available student/family resources. Students must complete a Free Application for Federal Student Aid and meet a variety of federal and state eligibility criteria. For more information, contact the Financial Aid Office 541-463-3100.

The financial aid application process is time-consuming. To receive the maximum amount of aid, it is important to accurately complete all the necessary forms in a timely manner. Financial aid application forms are available in January for the following school year. Applications are available from the Financial Aid Office, the Downtown Center, Lane Community College at Florence and Cottage Grove, and all high schools.

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 Revised Statutes 339.010 (Compulsory School Attendance Law). 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, affirmation action and nondiscrimination in admissions. No applicant shall be denied admission to the college because of protected class status.

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.

Evaluation Criteria

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.

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. See also Freedom of Inquiry and Expression.

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 division/department chair. Students may appeal grades received by following the process described in Grade, Academic and Degree Appeals.

Protection Against Improper Disclosure

Information that 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 staff obligation.

Utilization of the Center for Accessibility Resources

The Center for Accessibility Resources (CAR) 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 Accessibility Resources offers academic accommodations for the removal of barriers to learning environment, and provides: test and in-class accommodations, resource/referral information, alternate formatting of required materials and adaptive equipment/furniture. These services are available to students with disabilities who are attending credit courses, Adult High School, Adult Basic Education, and Continuing Education classes on any of the Lane campuses. Students must request services by following the procedures described on the Center for Accessibility Resource's website and the Center for Accessibility Resources Student Agreements web page.

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.

Standards of Academic Progress

Lane has established standards for academic progress that are applicable to all students. Failure to maintain satisfactory academic progress will result in loss of financial aid and warning, probation, suspension, or dismissal from the college.

Complaint Procedure

See Student Complaint Procedure.

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 that they acquire in the course of their work.

With regard to official documents and student records, information acquired by Lane 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.

Student Affairs

The college has the responsibility and obligation to establish certain standards in order to preserve the freedom of students.

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.

Procedures for recognition of student organizations - Students who would like to start a new organization, or join an existing organization should contact the Associated Students of Lane Community College (ASLCC) 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. See also Student Organizations Guidelines.

Advisors - All student organizations must have a staff advisor. Upon approval of the director of Student Life and Leadership Development, any Lane staff member is eligible to serve as advisor for student organizations.

Non-discrimination policies - Student organizations must abide by existing college and ASLCC policies and may not restrict membership or participation in events.

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 policies and procedures.

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 that do not disrupt the operation of the institution or violate college policies and procedures.

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. Student Life and Leadership Development reserves table space and assists student organizations in scheduling space with the college. See also Facilities: Use in General.

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.

Student Publications

With respect to student publications, the Media Commission 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 first level of appeal and review for all questions concerning publications policy and operation. Final appeal is through the college president and then the college 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 the content of student publications.

Guidelines for the Media Commission shall be contained in administrative rules and procedures.

Distribution of Literature

First Amendment freedom of the press is applicable to the campus of Lane Community College. Students and the distribution of off-campus 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 director of Student Life and Leadership Development. Once authorized, the 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 on the campus.

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 student 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 director of Student Life and Leadership Development on the main campus and by the designated building administrator at each of the following outreach centers: Downtown Center, LCC at Florence and LCC at Cottage Grove. See also Distribution of Literature.

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 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. Student Life and Leadership Development 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 Life and Leadership Development about other possibilities. All outside speakers must be scheduled through Student Life and Leadership Development to ensure 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.

Grievance Procedures for Alleged Discrimination or Harassment

Students who feel they have been discriminated against or treated in some unfair manner have access to formal and informal grievance procedures. See specific procedures outlined in: Student Complaint Procedure; Grade, Academic and Degree Appeals; Discrimination and Harassment Complaint Procedure; Disabilities: Americans With Disabilities Act Complaint Procedures and Affirmative Action Guidelines and Complaint Procedures.

Discipline

The Student Code of Conduct (lanecc.edu/sites/default/files/copps/code_of_conduct.pdf) applies to anyone accepted for college admission, registered for one or more classes and/or enrolled in any special program approved by Lane Community College. Students are required to provide identification such as a photo identification card, current registration receipt or class schedule on demand to campus security personnel, faculty or administrators.

Students deserve fair and equal treatment, so instructors and administrators must employ discretion when initiating disciplinary actions and procedures. Action is warranted for protection of individuals, property and a positive learning climate.

Faculty members may dismiss a student from a class for the day for in-class behavior they judge to be disruptive or inappropriate. Such actions include, but are not limited to: racial, sexual or religious slurs; verbal or physical interruption; offensive language; chewing tobacco or spitting; smoking; and littering or creating unsanitary conditions.

If a student is dismissed for inappropriate behavior, faculty must submit a written report to their division/department chair and to the vice president Academic and Student Affairs detailing the student's name, date and time of class and the improper behavior.

Students may be dismissed only for the day of the misbehavior, but may be dismissed from subsequent classes for a new or repeated behavioral offense. Dismissal as a result of faculty action is counted toward the maximum number of absences allowed in the class.

Public Safety may be called to assist in any disciplinary situation. The assisting security officer must file a report with the vice president Academic and Student Affairs on all disciplinary situations.

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 Public Safety.

Off-Campus Program Students

Students enrolled at LCC satellite campuses (Cottage Grove, Florence, Downtown Center, Community Learning Centers, and 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.

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 or college policy violations. In addition, officers utilize law enforcement tools such as the Criminal Justice Information System, Law Enforcement Data System.

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, 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 red telephones on main 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 12, Room 200 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 12, Room 200. 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 Gender Equity Center, the Title IX officer, Academic and Student Affairs, Veterans Resource Office, Human Resources, the Center for Accessibility Resources, and the Counseling Center.

Other Services Public Safety provides numerous other services including: criminal background checks, access control system assistance, 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.

Degrees and Certificates

Associate of Arts Oregon Transfer (AAOT)

The Associate of Arts Oregon Transfer (AAOT) degree is a state-approved associate degree that is intended to prepare students 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 at Oregon public universities. Students transferring with an AAOT degree will have junior standing for registration purposes only.

Students who receive the AAOT and transfer still must meet the receiving university's admission requirements, including course standing, grade point average and foreign language requirements. The AAOT does not guarantee admission to a public university, admission to a competitive major, or junior standing in a major.

NOTE: Each student is strongly encouraged to work with an academic advisor to match career and major goals with an appropriate program and to select appropriate courses for a major at an intended transfer institution. For current Lane courses that meet AAOT requirements, see: Approved Discipline Studies Courses for Associate Degrees and Oregon Transfer Module

Estimated Cost: $14,634.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fees: ***
- Books / Course Materials: $1,500.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition. **General Education degree costs are based on 90 credits and 6 terms**

*Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

***Online Course fees: $10.00 per course, maximum of $50.00 per course

****Books and materials will vary by class. Please refer to your program or course for specific information on book and material charges. Open Educational Resources (OER) may be available to 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*

Learning Outcomes

This degree is aligned with Lane's Institutional Learning Outcomes and the State General Education Learning Outcomes.

Guidelines

- Complete a total of 90 credits of college-level coursework (see notes).
- Complete at least 24 credits at Lane.
- 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.
- All Elective courses may be any number of credits.
- All courses must be completed with a grade of "C-" or better, or Pass.
- Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.
- Cumulative GPA must be at least 2.0 at the time the Associate of Arts Oregon Transfer is awarded.

Foundational Skills

Writing

A student must have eight credits of Writing. Writing meets the Information Literacy requirement.

If all writing courses are 4 or more credits, complete Option 1:

- **Option 1 - Two courses (8 credits):**
  - WR 121_H / WR 121 - Academic Composition 4 Credit(s)
  - And complete **one** of the following:
    - WR 122_H / WR 122 - Argument, Research and Multimodal Composition 4 Credit(s) or
    - WR 227_H / WR 227 - Technical Writing 4 Credit(s)

If any writing course is 3 credits, complete Option 2:

- **Option 2 - Three courses (9-11 credits):**
  - WR 121_H / WR 121 - Academic Composition 4 Credit(s) and
  - WR 122_H / WR 122 - Argument, Research and Multimodal Composition 4 Credit(s)
  - And complete **one** of the following:

- WR 123 - Composition: Research Writing 4 Credit(s) or
- WR 227_H / WR 227 - Technical Writing 4 Credit(s)

Oral Communication

- Complete one course from the Oral Communication list.

Mathematics

Complete one course in college-level mathematics:

- MTH 105 - Math in Society 4 Credit(s)
- MTH 106 - Math in Society 2 4 Credit(s)
- MTH 107 - Math in Society 3 4 Credit(s)
- MTH 111 - College Algebra 5 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)
- Any 200-level mathematics course

Health/Wellness/Fitness

- Complete one or more courses, totaling at least three credits, from the Health/Wellness/Fitness list.

Discipline Studies

Cultural Literacy

Complete 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 ^{CL} in the lists of courses on the Approved Discipline Studies Courses for Associate Degrees and Oregon Transfer Module. The credits for Cultural Literacy courses will only be counted once toward the 90 credits required to complete the degree.

Arts and Letters

- Complete three courses from two or more disciplines from the Arts and Letters list.

Social Science

- Complete four courses from two or more disciplines from the Social Science list.

Science/Math/Computer Science

- Complete 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 list.

Notes:

-Biology: 100-level Biology courses are not repeatable. Students may only use one BI 101, one BI 102, and one BI 103 to meet requirements for any Lane degree, regardless of letter option. BI 213B - Principles of Botany and BI 213Z - Principles of Zoology are considered repeats at some four-year universities. Students will only receive credit for one course. Please contact your academic advising team for details.

-Chemistry: General Chemistry and Organic Chemistry series have separate lab courses. It is highly recommended students take lecture and lab courses together. To complete an AAOT Lab Science requirement, both lecture and lab courses must be completed.

-Computer Programming: Students taking their first programming language (C++, .NET, or Python) will take CS 161 and 162. Because CS 161 and 162 are not repeatable courses, students taking a second programming language must use the CS 133 and 233 course numbers. Please contact the department or your academic advising team for details.

Electives

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

- Up to 12 credits of Career Technical Education. See the list of Course Types by Prefix. Policies on accepting career technical credits vary at four-year institutions in Oregon. Consult an academic advisor about taking these courses within the degree.
- Up to 18 credits of Cooperative Education may be included as electives. Cooperative Education courses identified as Career Technical Education courses count toward the 12-credit maximum for Career Technical Education.
- Up to 12 credits of Individual Music Lessons (MUP).
- 12 credits of Physical Education activity (PE, PEAT, PEO) may be included within the entire degree
- Transfer institution requirements. Consult Lane's Academic Advising department for a list of recommended coursework. Transfer institution requirements may change without notice.
- Notes
- 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 also considered developmental.
- Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact an academic advisor. Waiver testing is not the same as placement testing.
- 200-level second language courses count toward the Arts and Letters requirement. American Sign Language (ASL) is considered a second language.
- University second language admission requirements for transfer students graduating high school 1997 or later include one of the following:
- Two terms of the same college-level second language with an average grade of C- or above.
- Two years of the same high school-level second language with an average grade of C- or above.
- Satisfactory performance on an approved second language assessment of proficiency.
- Demonstrated proficiency in American Sign Language meets second language admission requirements.
- Credit-by-Exam and Credit-by-Assessment may comprise no more than 25% of total degree credits.
- Only the Academic Requirements Review Committee (ARRC) may waive a college-related instruction requirement. Petitions are available from Enrollment Services at lanecc.edu/esfs/general-education-substitution-and-waiver-petition.
- Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
- Some courses are included on more than one Discipline Studies list. These courses may be used only once to meet a specific Discipline Studies requirement. Please contact your academic advisor for details.
- Lower-division college-level courses taken at Lane will not always meet the same requirements an upper-division college-level course with similar content does at a four-year transfer institution. In such cases, the course(s) in question will generally transfer as an elective. Please contact specific four-year schools for details.
- General Information on in transferring credits in from a prior institution: lanecc.edu/esfs/general-information-transferring-credits
- Courses numbered 197, 198, 199, 280, 297, 298, or 299 count as electives and do not meet Foundational Skills or Discipline Studies requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved to meet Discipline Studies requirements.
- Although the AAOT degree provides an excellent framework for many students pursuing a baccalaureate degree, it is not ideal for all students. Students should consult with an academic advisor.
- HE 252 can be used in the Health/Wellness/Fitness category if taken in Summer 1997 or after. Prior to this, HE 252 would be considered an elective.

Associate of Science Oregon Transfer (ASOT) Degrees

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 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.

For current Lane courses that meet ASOT Foundational and Discipline requirements, see: Approved Discipline Studies Courses for Associate Degrees and Oregon Transfer Module.

Estimated Cost: $14,634.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fees: ***
- Books / Course Materials: $1,500.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

General Education degrees costs are based on 90 credits and 6 terms

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

***Online Course Fees: $10.00 per course, maximum of $50.00 per course

****Books and materials will vary by class. Please refer to your program or course for specific information on book and material charges. Open Educational Resources (OER) may be available to 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*

Learning Outcomes

This degree is aligned with Lane's Institutional Learning Outcomes and the State General Education Learning Outcomes.

Guidelines

- Complete a total of 90 credits college-level coursework (see notes).
- Complete at least 24 credits at Lane.
- Foundational Skills and Discipline Studies courses must be a minimum of 3 credits.
- All Elective courses may be any number of credits.
- All courses must be completed with a grade of "C-" or better, or Pass.
- Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.
- Cumulative GPA must be at least 2.0 at the time 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.

Foundational Skills

Writing

A student must have eight credits of Writing. Writing meets the Information Literacy requirement.

If all writing courses are 4 or more credits, complete Option 1:

- **Option 1 - Two courses (8 credits):**
  - WR 121_H / WR 121 - Academic Composition 4 Credit(s)
  - And complete **one** of the following:
    - WR 122_H / WR 122 - Argument, Research and Multimodal Composition 4 Credit(s) or
    - WR 227_H / WR 227 - Technical Writing 4 Credit(s)

If any writing course is 3 credits, complete Option 2:

- **Option 2 - Three courses (9-11 credits):**
  - WR 121_H / WR 121 - Academic Composition 4 Credit(s) and
  - WR 122_H / WR 122 - Argument, Research and Multimodal Composition 4 Credit(s)
  - And complete **one** of the following:
    - WR 123 - Composition: Research Writing 4 Credit(s) or
    - WR 227_H / WR 227 - Technical Writing 4 Credit(s)

Oral Communications

- Complete one course from the Oral Communication list.

Mathematics

Complete three courses in college-level mathematics:

- MTH 243 - Introduction to Probability and Statistics 4 Credit(s) (required)
- And any two additional courses from the following:
  - MTH 105 - Math in Society 4 Credit(s)
  - MTH 106 - Math in Society 2 4 Credit(s)
  - MTH 107 - Math in Society 3 4 Credit(s)
  - MTH 111 - College Algebra 5 Credit(s)
  - MTH 112 - Trigonometry 5 Credit(s)
  - Any 200-level mathematics course

Note: Students who intend to transfer to Oregon State University should work with an academic advisor prior to taking MTH 243. OSU requires business-specific statistics, and academic advisors can help with reverse transfer.

Computer Applications

Complete one computer applications course from the following:

- CIS 101 - Computer Fundamentals
- CS 120 - Concepts of Computing: Information Processing.

Note: Students who intend to transfer to Oregon State University should take CIS 101 - Computer Fundamentals. OSU accepts Lane's CIS 101 + BA 101 as equivalent to OSU's BA 101 Business Now course. CIS 101 counts toward the 12 credit limit for career-technical education (CTE) courses. See Course Types by Prefix for information about CTE course prefixes. Please contact your academic advisor for details.

Discipline Studies

Cultural Literacy

Complete 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 CL in the lists of courses on the Approved Discipline Studies Courses for Associate Degrees and Oregon Transfer Module. The credits for Cultural Literacy courses will only be counted once toward the 90 credits required to complete the degree.

Arts and Letters

- Complete three courses from two or more disciplines from the Arts and Letters list.

Social Sciences

Complete four courses from two or more disciplines from the Social Science list.

- ECON 201 - Principles of Economics: Introduction to Microeconomics 3 Credit(s) (required)
- ECON 202 - Principles of Economics: Introduction to Macroeconomics 3 Credit(s) (required)
- And any two additional courses from the Social Science list.

Science/Math/Computer Science

- Complete 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 list.

Notes:

-Biology: 100-level Biology courses are not repeatable. Students may only use one BI 101, one BI 102, and one BI 103 to meet requirements for any Lane degree, regardless of letter option. BI 213B - Principles of Botany and BI 213Z - Principles of Zoology are considered repeats at some four-year universities. Students will only receive credit for one course. Please contact your academic advising team for details.
-Chemistry: General Chemistry and Organic Chemistry series have separate lab courses. It is highly recommended students take lecture and lab courses together. To complete an AAOT Lab Science requirement, both lecture and lab courses must be completed.
-Computer Programming: Students taking their first programming language (C++, .NET, or Python) will take CS 161 and 162. Because CS 161 and 162 are not repeatable courses, students taking a second programming language must use the CS 133 and 233 course numbers. Please contact the department or your academic advising team for details.

Business Specific Requirements

Complete five Business courses (20 credits) from the following:

- BA 101 - Introduction to Business 4 Credit(s) (required)
- BA 211 - Financial Accounting 4 Credit(s) (required)
- BA 213 - Managerial Accounting 4 Credit(s) (required)

And two additional courses from the following:

- BA 206 - Management Fundamentals 4 Credit(s)
- BA 214 - Business Communications 4 Credit(s)
- BA 223 - Marketing 4 Credit(s)
- BA 224 - Human Resource Management 4 Credit(s)
- BA 226 - Business Law 4 Credit(s)
- BA 250 - Small Business Management 4 Credit(s)
- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- BA 280 - Co-op Ed: Business Management 3-12 Credit(s)
- BA 281 - Personal Finance 4 Credit(s)
- Additional courses considered on a case-by-case basis. Contact Business Department for details.

Electives

- Any college-level courses that bring total credits to 90 credits including:
- Up to 12 credits of Career Technical Education. See the list of Course Types by Prefix. Policies on accepting career technical credits vary at four-year institutions in Oregon. Consult an academic advisor about taking these courses within the degree.
- Up to 18 credits of Cooperative Education may be included as electives. Cooperative Education courses identified as Career Technical Education courses count toward the 12-credit maximum for Career Technical Education.
- Up to 12 credits of Individual Music Lessons (MUP).
- 12 credits of Physical Education activity (PE, PEAT, PEO).
- Transfer institution requirements. Consult Lane's Academic Advising department for a list of recommended coursework. Transfer institution requirements may change without notice.

Notes

- 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 also considered developmental.

- Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact an academic advisor. Waiver testing is not the same as placement testing.
- 200-level second language courses count toward the Arts and Letters requirement. American Sign Language (ASL) is considered a second language.
- University second language admission requirements for transfer students graduating high school 1997 or later include one of the following:
- Two terms of the same college-level second language with an average grade of C- or above.
- Two years of the same high school-level second language with an average grade of C- or above.
- Satisfactory performance on an approved second language assessment of proficiency.
- Demonstrated proficiency in American Sign Language meets second language admission requirements.
- Credit-by-Exam and Credit-by-Assessment may comprise no more than 25% of total degree credits.
- Only the Academic Requirements Review Committee (ARRC) may waive a college-related instruction requirement. Petitions are available from Enrollment Services at lanecc.edu/esfs/general-education-substitution-and-waiver-petition.
- Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
- Some courses are included on more than one Discipline Studies list. These courses may be used only once to meet a specific Discipline Studies requirement. Please contact your academic advisor for details.
- Lower-division college-level courses taken at Lane will not always meet the same requirements an upper-division college-level course with similar content does at a four-year transfer institution. In such cases, the course(s) in question will generally transfer as an elective. Please contact specific four-year schools for details.
- General Information on in transferring credits in from a prior institution: lanecc.edu/esfs/general-information-transferring-credits
- Courses numbered 197, 198, 199, 280, 297, 298, or 299 count as electives and do not meet Foundational Skills or Discipline Studies requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved to meet Discipline Studies requirements.
- Although the ASOT-Business degree provides an excellent framework for many students pursuing a baccalaureate degree in business, it is not ideal for all students. Students should consult with a business academic advisor.

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 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.

For current Lane courses that meet ASOT Foundational and Discipline requirements, see: Approved Discipline Studies Courses for Associate Degrees & Oregon Transfer Module

Estimated Cost: $14,634.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fees: ***
- Books / Course Materials: $1,500.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

General Education degrees costs are based on 90 credits and 6 terms

***** Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

***Online Course Fees: $10.00 per course, maximum of $50.00 per course

****Books and materials will vary by class. Please refer to your program or course for specific information on book and material charges. Open Educational Resources (OER) may be available to 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*

Learning Outcomes

This degree is aligned with Lane's Institutional Learning Outcomes and the State General Education Learning Outcomes.

Guidelines

- Complete a total of 90 credits of college-level coursework (see notes).
- Complete at least 24 credits at Lane.
- 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.
- All Elective courses may be any number of credits.
- Computer Science Specific requirements (see below) must be completed with a letter grade of "C" or better. P/NP is not accepted. All other courses must be completed with a grade of "C-" or better, or Pass.
- Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.
- Cumulative GPA must be at least 2.0 at the time the Associate of Science Oregon Transfer: Computer Science degree is awarded.

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

Foundational Skills

Writing

A student must have eight credits of Writing. Writing meets the Information Literacy requirement.

If all writing courses are 4 or more credits, complete Option 1:

- **Option 1 - Two courses (8 credits):**
  - WR 121_H / WR 121 - Academic Composition 4 Credit(s)
  - And complete **one** of the following:
    - WR 122_H / WR 122 - Argument, Research and Multimodal Composition 4 Credit(s) or
    - WR 227_H / WR 227 - Technical Writing 4 Credit(s)

If any writing course is 3 credits, complete Option 2:

- **Option 2 - Three courses (9-11 credits):**
  - WR 121_H / WR 121 - Academic Composition 4 Credit(s) and
  - WR 122_H / WR 122 - Argument, Research and Multimodal Composition 4 Credit(s)
  - And complete **one** of the following:
    - WR 123 - Composition: Research Writing 4 Credit(s) or
    - WR 227_H / WR 227 - Technical Writing 4 Credit(s)

Note: WR 227 will meet additional requirements for some Computer Science baccalaureate programs. Contact your academic advisor for details.

Oral Communication

- Complete one course from the Oral Communication list.

Mathematics

Complete the following two math courses:

- MTH 251 - Calculus 1 (Differential Calculus) 5 Credit(s)
- MTH 252 - Calculus 2 (Integral Calculus) 5 Credit(s)

Health/Wellness/Fitness

- Complete one or more courses, totaling at least three credits, from the Health/Wellness/Fitness list.

Discipline Studies

Cultural Literacy

Complete 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 CL in the lists of courses on the Approved Discipline Studies Courses for Associate Degrees and Oregon Transfer Module. The credits for Cultural Literacy courses will only be counted once toward the 90 credits required to complete the degree.

Arts and Letters

- Complete three courses from two or more disciplines from the Arts and Letters list.

Social Sciences

- Complete four courses from two or more disciplines from the Social Science list.

Science/Math/Computer Science

- Complete 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 list.

Notes:

-Biology: 100-level Biology courses are not repeatable. Students may only use one BI 101, one BI 102, and one BI 103 to meet requirements for any Lane degree, regardless of letter option. BI 213B - Principles of Botany and BI 213Z - Principles of Zoology are considered repeats at some four-year universities. Students will only receive credit for one course. Please contact your academic advising team for details.
-Chemistry: General Chemistry and Organic Chemistry series have separate lab courses. It is highly recommended students take lecture and lab courses together. To complete an AAOT Lab Science requirement, both lecture and lab courses must be completed.
-Computer Programming: Students taking a second programming language (after the required CS 161 and 162) must use the CS 133 and 233 course numbers. Please contact the department or your academic advising team for details.
-Physics: Some computer science baccalaureate programs require physics. Students planning to transfer should contact their academic advisor for help determining the appropriate physics sequence.

Computer Science Specific Requirements

Complete the following four Computer Science courses (16 credits). Computer Science requirements must be completed with a letter grade of C or better. P/NP is not accepted.

- CS 160 - Orientation to Computer Science 4 Credit(s)
- CS 161 - Computer Science 1 4 Credit(s) (CS 161C, CS 161N or CS 161P)
- CS 162 - Computer Science 2 4 Credit(s) (CS 162C, CS 162N or CS 162P)
- CS 260 - Data Structures 1 4 Credit(s)

Note: Lane offers Computer Science 1 and 2 in the following programming languages: C++, .NET, and Python. Some computer science baccalaureate programs require specific programming courses. Students planning to transfer should contact their academic advisor for help determining the appropriate computer science programming sequence.

Electives

- Any college-level courses that bring total credits to 90 credits including:
- Up to 12 credits of Career Technical Education. See the list of Course Types by Prefix. Policies on accepting career technical credits vary at four-year institutions in Oregon. Consult an academic advisor about taking these courses within the degree.
- Up to 18 credits of Cooperative Education may be included as electives. Cooperative Education courses identified as Career Technical Education courses count toward the 12-credit maximum for Career Technical Education.
- Up to 12 credits of Individual Music Lessons (MUP).
- 12 credits of Physical Education activity (PE, PEAT, PEO) may be included within the entire degree.
- Transfer institution requirements. Consult Lane's Academic Advising department for a list of recommended coursework. Transfer institution requirements may change without notice.

Notes

- 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 also considered developmental.
- Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact an academic advisor. Waiver testing is not the same as placement testing.
- 200-level second language courses count toward the Arts and Letters requirement. American Sign Language (ASL) is considered a second language.
- University second language admission requirements for transfer students graduating high school 1997 or later include one of the following:
- Two terms of the same college-level second language with an average grade of C- or above.
- Two years of the same high school-level second language with an average grade of C- or above.
- Satisfactory performance on an approved second language assessment of proficiency.
- Demonstrated proficiency in American Sign Language meets second language admission requirements.
- Credit-by-Exam and Credit-by-Assessment may comprise no more than 25% of total degree credits.
- Only the Academic Requirements Review Committee (ARRC) may waive a college-related instruction requirement. Petitions are available from Enrollment Services at lanecc.edu/esfs/general-education-substitution-and-waiver-petition.
- Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
- Some courses are included on more than one Discipline Studies list. These courses may be used only once to meet a specific Discipline Studies requirement. Please contact your academic advisor for details.
- Lower-division college-level courses taken at Lane will not always meet the same requirements an upper-division college-level course with similar content does at a four-year transfer institution. In such cases, the course(s) in question will generally transfer as an elective. Please contact specific four-year schools for details.
- General Information on in transferring credits in from a prior institution: lanecc.edu/esfs/general-information-transferring-credits
- Courses numbered 197, 198, 199, 280, 297, 298, or 299 count as electives and do not meet Foundational Skills or Discipline Studies requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved to meet Discipline Studies requirements.
- Although the ASOT-Computer Science degree provides an excellent framework for many students pursuing a baccalaureate degree in computer science, it is not ideal for all students. Students should consult with a computer science academic advisor.
- HE 252 can be used in the Health/Wellness/Fitness category if taken in Summer 1997 or after. Prior to this, HE 252 would be considered an elective.

Associate of General Studies (AGS)

The Associate of General Studies (AGS) degree will be awarded to students who complete a curriculum generally designed to meet broad educational goals. The AGS may be earned through coursework that includes lower-division collegiate and elective courses, or a combination of courses that includes career-technical education.

Due to this degree's flexibility, it is not considered to be a transfer degree. It does not guarantee admission to a four-year institution, nor does it ensure all lower-division general education requirements have been met. Students should work closely with an Academic Advisor to craft a degree plan appropriate to their educational goals.

Estimated Cost: $14,634.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fees: ***
- Books / Course Materials: $1,500.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

General Education degrees costs are based on 90 credits and 6 terms

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

***Online Course Fees: $10.00 per course, maximum of $50.00 per course

****Books and materials will vary by class. Please refer to your program or course for specific information on book and material charges. Open Educational Resources (OER) may be available to 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*

Learning Outcomes

Students who complete this degree will have a broad knowledge base cultivated through coursework that spans a variety of discipline areas. Students who complete the AGS will be able to:

- Examine complex issues using multiple information sources and evidence
- Describe the impact of diverse cultural, political, and scientific perspectives on individuals, societies, and environments
- Communicate effectively and purposefully within different contexts and across modes of communication
- Apply learning through integration of theory and practice

This degree is aligned with Lane's Institutional Learning Outcomes.

Guidelines

- Complete a total of 90 credits of college-level coursework (see notes).
- Complete at least 24 credits at Lane.
- 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.
- All Elective courses may be any number of credits.
- Complete all Foundational Skills with a grade of "C-" or better, or Pass.
- Complete all Discipline Studies and Elective courses with a grade of "D-" or better, or Pass.

- Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.
- Cumulative GPA must be at least 2.0 at the time the Associate of General Studies degree is awarded.

Foundational Skills

Foundational Skills must be completed with a grade of "C-" or better, or Pass.

Writing

- WR 121_H / WR 121 - Academic Composition 4 Credit(s)

Mathematics

- MTH 052 satisfies this degree requirement but does not meet college-level requirements. Students who use developmental math to meet this requirement need to reach 90 credits total of college-level coursework to meet degree requirements.

MTH 052 - Math for Health and Physical Sciences 4 Credit(s) or higher-level Math course

Health/Wellness/Fitness

- Complete one or more courses, totaling at least three credits, from the Health/Wellness/Fitness list.

Discipline Studies

Complete 16 credits of Discipline Studies requirements, including one course from each discipline below. Additional credits to meet a minimum of 16 credits may be completed from any discipline below. Discipline Studies must be completed with a grade of "D-" or better, or Pass.

Arts and Letters

- Complete a minimum of one course from the Arts and Letters list.

Social Science

- Complete a minimum of one course from the Social Science list.

Science/Math/Computer Science

- Complete a minimum of one course from the Science/Math/Computer Science list.

Notes:

-Mathematics: College-level mathematics (MTH 105 or higher) may be used to meet this requirement.

-Biology:100-level Biology courses are not repeatable. Students may only use one BI 101, one BI 102, and one BI 103 to meet requirements for any Lane degree, regardless of letter option.

-Chemistry: General Chemistry and Organic Chemistry series have separate lab courses. It is highly recommended students take lecture and lab courses together. To complete an AAOT Lab Science requirement, both lecture and lab courses must be completed.

-Computer Programming: Students taking their first programming language (C++, .NET, or Python) will take CS 161 and 162. Because CS 161 and 162 are not repeatable courses, students taking a second programming language must use the CS 133 and 233 course numbers. Please contact the department or your academic advising team for details.

Additional Discipline Studies

Complete additional Discipline Studies courses to meet a minimum of 16 credits from any of the following lists:

- Arts and Letters
- Social Science
- Science/Math/Computer Science

Electives

- Any college-level courses that bring total credits to 90 credits. Courses completed may include any combination of lower-division collegiate and/or career technical education courses. All courses must be 100-level or higher and may include:
- Up to 18 credits of Cooperative Education may be included as electives. Cooperative Education courses identified as Career Technical Education courses count toward the 12-credit maximum for Career Technical Education.
- Up to 12 credits of Individual Music Lessons (MUP).
- 12 credits of Physical Education activity (PE, PEAT, PEO) and/or Dance activity may be included within the entire degree.
- Transfer policies regarding Course Types by Prefix vary by institution. Students planning to transfer should contact their academic advisor for help determining appropriate courses.

Notes

- 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 also considered developmental.
- Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact an academic advisor. Waiver testing is not the same as placement testing.
- 200-level second language courses count toward the Arts and Letters requirement. American Sign Language (ASL) is considered a second language.
- University second language admission requirements for transfer students graduating high school 1997 or later include one of the following:
- Two terms of the same college-level second language with an average grade of C- or above.
- Two years of the same high school-level second language with an average grade of C- or above.
- Satisfactory performance on an approved second language assessment of proficiency.
- Demonstrated proficiency in American Sign Language meets second language admission requirements.
- Credit-by-Exam and Credit-by-Assessment may comprise no more than 25% of total degree credits.
- Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
- Some courses are included on more than one Discipline Studies list. These courses may be used only once to meet a specific Discipline Studies requirement. Please contact your academic advisor for details.
- Lower-division college-level courses taken at Lane will not always meet the same requirements an upper-division college-level course with similar content does at a four-year transfer institution. In such cases, the course(s) in question will generally transfer as an elective. Please contact specific four-year schools for details.
- General Information on in transferring credits in from a prior institution: lanecc.edu/esfs/general-information-transferring-credits
- Courses numbered 197, 198, 199, 280, 297, 298, or 299 count as electives and do not meet Foundational Skills or Discipline Studies requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved to meet Discipline Studies requirements.
- The AGS is not ideal for students planning to transfer to a four-year institution. However, some students may benefit from the flexible framework of the AGS and use it for transfer on a limited basis. Students planning to transfer should work closely with their academic advisor.

Approved Discipline Studies Courses for Associate Degrees and Oregon Transfer Module

The courses on the following lists are approved for these degree and transfer programs:

- *Associate of Applied Science (AAS)
- Associate of Arts Oregon Transfer
- Associate of General Studies
- Associate of Science Oregon Transfer - Business
- Associate of Science Oregon Transfer - Computer Science
- Oregon Transfer Module

*Associate of Applied Science (AAS) degrees are crafted to meet specific career or professional outcomes and may include or allow courses other than what are on these lists to count toward general education outcomes.

Arts and Letters

Although these courses are listed under categories, they may satisfy a different general education category at a receiving institution. Work with an Academic Advisor to determine transferability.

Cultural Literacy note: Courses marked with CL are approved to meet the Cultural Literacy requirement.

Art

ART 111 - Introduction to Visual Arts 3 Credit(s)

ART 115 - Basic Design: Fundamentals 3 Credit(s)

ART 115_H - Basic Design: Fundamentals-Honors 3 Credit(s)

ART 116 - Basic Design: Color 3 Credit(s)

ART 117 - Basic Design: 3-Dimensional 3 Credit(s)

ART 118 - Artist Books and Pop-up 4 Credit(s)

ART 120 - Intermediate Artist Books and Pop-up 4 Credit(s)

ART 131 - Introduction to Drawing 3 Credit(s)

ART 220 - Documentary Photography 3 Credit(s)

ART 231 - Drawing: Intermediate 3 Credit(s)

ART 234 - Drawing: Figure 3 Credit(s)

ART 237 - Illustration 1 3 Credit(s)

ART 240 - Natural Science Drawing 3 Credit(s)

ART 248 - Stone Sculpture 3 Credit(s)
ART 250 - Ceramics: Hand Building 3 Credit(s)
ART 251 - Ceramics: Wheel Throwing 3 Credit(s)
ART 253 - Ceramics: Intermediate 3 Credit(s)
ART 261 - Photography 1 3 Credit(s)
ART 270 - Printmaking: Traditional and Digital Etching 3 Credit(s)
ART 271 - Printmaking; Woodcut and Linocut 3 Credit(s)
ART 272 - Printmaking: Experimental Processes 3 Credit(s)
ART 273 - Printmaking: Intermediate Traditional and Digital Etching 3 Credit(s)
ART 274 - Printmaking: Intermediate Woodcut and Linocut 3 Credit(s)
ART 275 - Screen Printing 3 Credit(s)
ART 276 - Sculpture: Introduction 3 Credit(s)
ART 277 - Sculpture: Welding 3 Credit(s)
ART 278 - Sculpture: Wood 3 Credit(s)
ART 281 - Painting: Introduction 3 Credit(s)
ART 282 - Landscape and Architectural Photography 4 Credit(s)
ART 284 - Painting: Intermediate 3 Credit(s)
ART 285 - Advanced Screen Printing 3 Credit(s)
ART 291 - Sculpture: Metal Casting 5 Credit(s)
ART 293 - Sculpture: Figure 3 Credit(s)
ART 294 - Watercolor: Introduction 3 Credit(s)
ART 295 - Watercolor: Intermediate 3 Credit(s)

Art History

ARH 200 - History of Design Arts 3 Credit(s)
ARH 203 - Survey of American Indian Art and Architecture: North and Central America 4 Credit(s) CL
ARH 204 - History of Western Art 1 3 Credit(s)
ARH 205 - History of Western Art 2 3 Credit(s)
ARH 206 - History of Western Art 3 3 Credit(s)
ARH 207 - History of Indian Art 3 Credit(s) CL
ARH 208 - History of Chinese Art 3 Credit(s) CL
ARH 209 - History of Japanese Art 3 Credit(s) CL
ARH 211 - Early Modern Art: 1850-1910 3 Credit(s)
ARH 212 - Twentieth-Century Art 3 Credit(s)
ARH 214 - Arts of the United States 3 Credit(s)
ARH 217 - History of Middle Eastern and Islamic Art 3 Credit(s) CL
ARH 218 - History of Photography:1700-1910 3 Credit(s)
ARH 219 - History of Photography: 1910-1950 3 Credit(s)
ARH 220 - History of Photography: 1950-Present 3 Credit(s)

Chinuk Wawa

CW 201 - Chinuk Wawa 4 Credit(s) CL
CW 202 - Chinuk Wawa 4 Credit(s) CL
CW 203 - Chinuk Wawa 4 Credit(s) CL

Cinema Studies

CINE 265 - Film History 1-The Silent Era to Early Sound 4 Credit(s)
CINE 266 - Film History 2-The Sound Era through the 1960s 4 Credit(s)
CINE 267 - Film History 3-1960s-the present 4 Credit(s)

Communications

COMM 100 - Basic Communication 4 Credit(s)
COMM 105 - Listening and Critical Thinking 4 Credit(s)
COMM 111 - Fundamentals of Public Speaking 4 Credit(s)
COMM 111_H - Fundamentals of Public Speaking-Honors 4 Credit(s)
COMM 112 - Persuasive Speech 4 Credit(s)
COMM 115 - Introduction to Intercultural Communication 4 Credit(s) CL
COMM 130 - Business and Professional Communication 4 Credit(s)
COMM 218 - Interpersonal Communication 4 Credit(s)
COMM 219 - Small Group Communication 4 Credit(s)
COMM 220 - Communication, Gender and Culture 4 Credit(s) CL
COMM 265 - Environmental Communication 4 Credit(s)
COMM 285 - Mediated Communication 4 Credit(s)

Creative Writing

CRWR 240 - Creative Writing: Nonfiction 4 Credit(s)
CRWR 241 - Creative Writing: Fiction 4 Credit(s)
CRWR 242 - Creative Writing: Poetry 4 Credit(s)
CRWR 242_H - Creative Writing: Poetry-Honors 4 Credit(s)

Dance

D 160 - Dance Composition 3 Credit(s)
D 251 - Looking at Dance 4 Credit(s) CL
D 260 - Group Choreography 3 Credit(s)

English

ENG 100 - Children's Literature 4 Credit(s)
ENG 104 - Introduction to Literature: Fiction 4 Credit(s)
ENG 104_H - Introduction to Literature: Fiction-Honors 4 Credit(s)
ENG 105 - Introduction to Literature: Drama 4 Credit(s)
ENG 105_H - Introduction to Literature: Drama-Honors 4 Credit(s)
ENG 106 - Introduction to Literature: Poetry 4 Credit(s)
ENG 106_H - Introduction to Literature: Poetry-Honors 4 Credit(s)
ENG 107 - Survey of World Literature 4 Credit(s) CL
ENG 109 - Survey of World Literature 4 Credit(s) CL
ENG 151 - Black American Literature 4 Credit(s) CL
ENG 194 - Literature of Comedy 4 Credit(s)
ENG 201 - Shakespeare 4 Credit(s)
ENG 203 - Shakespeare 4 Credit(s)
ENG 204 - Survey of British Literature 4 Credit(s)
ENG 205 - Survey of British Literature 4 Credit(s)
ENG 215 - Latino/a Literature 4 Credit(s) CL
ENG 217 - Reading, Writing and Digital Culture 4 Credit(s)
ENG 222 - Literature and Gender 4 Credit(s) CL
ENG 232 - Native American Literature, Myth and Folklore 4 Credit(s) CL
ENG 240 - Nature Literature 4 Credit(s)
ENG 243 - Native American Autobiography 4 Credit(s) CL
ENG 244 - Asian American Literature 4 Credit(s) CL
ENG 250 - Introduction to Folklore and Mythology 4 Credit(s) CL
ENG 253 - Survey of American Literature 4 Credit(s)
ENG 254 - Survey of American Literature 4 Credit(s)
ENG 257 - The American Working Class in Fiction and Non-Fiction 4 Credit(s) CL
ENG 260 - Introduction to Women Writers 4 Credit(s) CL
ENG 261 - Science Fiction 4 Credit(s)
ENG 270 - Bob Dylan: American Poet 4 Credit(s)
ENG 282 - Introduction to Comics-Graphic Novels 4 Credit(s)

Ethnic Studies

ES 244 - Native American Leadership 1: Building Leadership Through Indigenous Oratory 4 Credit(s) CL

Film Arts

FA 255 - Understanding Movies: American Cinema 3 Credit(s)
FA 264 - Women Make Movies 4 Credit(s) CL
FA 270C - Film Genres: Comedy 4 Credit(s)
FA 270H - Film Genres: Horror 4 Credit(s)
FA 270N - Film Genres: Noir 4 Credit(s)
FA 276 - Gender, Race, and Class in U.S. Cinema 4 Credit(s) CL

French

FR 201 - Second-Year French 4 Credit(s)
FR 202 - Second-Year French 4 Credit(s)
FR 203 - Second-Year French 4 Credit(s)
FR 288 - Study Abroad: French Language and Culture in Normandy 6 Credit(s) CL

Humanities

HUM 100 - Humanities Through the Arts 4 Credit(s)

Journalism

J 134 - Photojournalism 3 Credit(s)
J 216 - Newswriting 1 3 Credit(s)

Music

MUS 101 - Music Fundamentals 3 Credit(s)

MUS 103 - Songwriting Techniques and Analysis 1 3 Credit(s) CL
MUS 111 - Music Theory 1 (First Term) 4 Credit(s)
MUS 112 - Music Theory 1 (Second Term) 4 Credit(s)
MUS 113 - Music Theory 1 (Third Term) 4 Credit(s)
MUS 118 - Music Technology MIDI/Audio 1 4 Credit(s)
MUS 119 - Music Technology MIDI/Audio 2 4 Credit(s)
MUS 201 - Exploring Music: Introduction to Music History 3 Credit(s)
MUS 202 - Exploring Music: Introduction to Music History 3 Credit(s)
MUS 203 - Exploring Music: Introduction to Music History 3 Credit(s)
MUS 205 - Introduction to Jazz History 3 Credit(s) CL
MUS 211 - Music Theory 2: (First Term) 3 Credit(s)
MUS 212 - Music Theory 2 (Second Term) 3 Credit(s)
MUS 213 - Music Theory 2 (Third Term) 3 Credit(s)
MUS 260 - History of Hip-Hop and Rap Music 3 Credit(s) CL
MUS 264 - Roots of Rock (Roots-1963) 4 Credit(s) CL
MUS 265 - Golden Age of Rock & Roll (1964-1974) 4 Credit(s) CL
MUS 266 - Rockin' the New Millennium (1974-2006) 4 Credit(s) CL
MUS 268 - History of Electronic Music 3 Credit(s)

Philosophy

PHL 201 - Ethics 4 Credit(s)
PHL 202 - Theories of Knowledge 4 Credit(s)
PHL 203 - Theories of Reality 4 Credit(s)
PHL 221 - Critical Thinking 4 Credit(s)

Spanish

SPAN 201 - Spanish, Second-Year 4 Credit(s)
SPAN 202 - Spanish, Second-Year 4 Credit(s)
SPAN 203 - Spanish, Second-Year 4 Credit(s)
SPAN 218 - Spanish for Spanish-Speakers 4 Credit(s)

Theatre Arts

TA 140 - Acting Shakespeare 4 Credit(s)
TA 141 - Acting 1 4 Credit(s)
TA 142 - Acting 2 4 Credit(s)
TA 143 - Acting 3 4 Credit(s)
TA 144 - Improv 4 Credit(s)
TA 241 - Intermediate Acting 1 4 Credit(s)
TA 242 - Intermediate Acting 2 4 Credit(s)
TA 243 - Acting for the Camera 4 Credit(s)
TA 272 - Introduction to Theatre 4 Credit(s) CL
TA 272_H - Introduction to Theatre-Honors 4 Credit(s) CL

Social Science

Although these courses are listed under categories, they may satisfy a different general education category at a receiving institution. Work with an Academic Advisor to determine transferability.

Cultural Literacy note: Courses marked with CL are approved to meet the Cultural Literacy requirement.

Anthropology

ANTH 101 - Physical Anthropology 4 Credit(s)
ANTH 102 - World Archaeology 4 Credit(s) CL
ANTH 102_H - World Archaeology-Honors 4 Credit(s) CL
ANTH 103 - Cultural Anthropology 4 Credit(s) CL
ANTH 227 - Prehistory of Mexico 4 Credit(s) CL
ANTH 228 - Chicano Cultures 4 Credit(s) CL
ANTH 231 - American Indian Studies 3 Credit(s) CL
ANTH 232 - American Indian Studies 3 Credit(s) CL
ANTH 233 - American Indian Studies 3 Credit(s) CL

Business

BA 101 - Introduction to Business 4 Credit(s)

Criminal Justice

CJA 200 - Introduction to Criminology 4 Credit(s)

Economics

ECON 200 - Principles of Economics: Introduction to Economics 3 Credit(s)
ECON 201 - Principles of Economics: Introduction to Microeconomics 3 Credit(s)
ECON 202 - Principles of Economics: Introduction to Macroeconomics 3 Credit(s)
ECON 204 - Introduction to International Economics 4 Credit(s)
ECON 260 - Introduction to Environmental and Natural Resource Economics 4 Credit(s)

Education

ED 100 - Introduction to Education 3 Credit(s)
ED 216 - Foundations of Education 3 Credit(s)
ED 230 - Language and Literacy 3 Credit(s)
ED 233 - Adolescent Learning and Development 3 Credit(s)
ED 258 - Multicultural Education 3 Credit(s) CL
ED 269 - Inclusion and Special Needs 3 Credit(s)

Ethnic Studies

ES 101 - Historical Racial and Ethnic Issues 4 Credit(s) CL
ES 102 - Contemporary Racial and Ethnic Issues 4 Credit(s) CL
ES 212 - Chicano/Latino Studies: Political and Ideological Perspectives 4 Credit(s) CL
ES 213 - Chicano/Latino Studies: Contemporary Identity and Cultural Issues 4 Credit(s) CL
ES 221 - African American Studies: Down from the Pyramids, Up from Slavery 4 Credit(s) CL
ES 223 - African American Studies: A Luta Continua: The Struggle Continues 4 Credit(s) CL
ES 224 - Black Male Studies: Lies, Literature, and Legacy 4 Credit(s) CL
ES 241 - Native American Studies: Consequences of Native American and European Contact 4 Credit(s) CL
ES 243 - Native American Studies: Contemporary Indigenous Issues 4 Credit(s) CL
ES 244 - Native American Leadership 1: Building Leadership Through Indigenous Oratory 4 Credit(s) CL

Geography

GEOG 141 - Natural Environment 4 Credit(s)
GEOG 142 - Introduction to Human Geography 4 Credit(s) CL
GEOG 201 - World Regional Geography 4 Credit(s) CL

Geographic Information Science

GIS 151 - Digital Earth 4 Credit(s)
GIS 245 - GIS 1 4 Credit(s)
GIS 246 - GIS 2 4 Credit(s)

Health

HE 212 - Women's Health 3 Credit(s)
HE 255 - Global Health and Sustainability 4 Credit(s)

History

HST 101 - Western Civilization: Ancient Mediterranean 4 Credit(s)
HST 102 - Western Civilization: Making of Modern Europe 4 Credit(s)
HST 103 - Western Civilization: Europe and the World 4 Credit(s)
HST 104 - World History 4 Credit(s) CL
HST 105 - World History 4 Credit(s) CL
HST 106 - World History 4 Credit(s) CL
HST 195 - History of the Vietnam War 4 Credit(s) CL
HST 201 - History of the United States 4 Credit(s) CL
HST 202 - History of the United States 4 Credit(s) CL
HST 203 - History of the United States 4 Credit(s) CL
HST 208 - US History Since 1945 4 Credit(s)
HST 209 - American History: The Civil War 4 Credit(s)
HST 266 - US Women's History 4 Credit(s) CL

Philosophy

PHL 201 - Ethics 4 Credit(s)
PHL 202 - Theories of Knowledge 4 Credit(s)
PHL 203 - Theories of Reality 4 Credit(s)
PHL 221 - Critical Thinking 4 Credit(s)

Political Science

PS 101 - Modern World Governments 4 Credit(s)
PS 201 - U.S. Government and Politics 3 Credit(s)

PS 202 - U.S. Government and Politics 3 Credit(s)
PS 203 - State and Local Government and Politics 3 Credit(s)
PS 205 - International Relations 3 Credit(s) CL
PS 208 - Introduction to Political Theory 4 Credit(s)
PS 211 - Peace and Conflict Studies: Global 4 Credit(s)
PS 225 - Political Ideology 4 Credit(s)
PS 275 - Legal Processes Through Civil Rights and Liberties 4 Credit(s)
PS 297 - Environmental Politics 4 Credit(s)
PS 297_H - Environmental Politics-Honors 4 Credit(s)

Psychology

PSY 201 - General Psychology 4 Credit(s)
PSY 201_H - General Psychology-Honors 4 Credit(s)
PSY 202 - General Psychology 4 Credit(s)
PSY 203 - General Psychology 4 Credit(s)
PSY 215 - Lifespan Developmental Psychology 4 Credit(s)
PSY 239 - Introduction to Abnormal Psychology 3 Credit(s)

Sociology

SOC 108A - Selected Topics in Women's Studies, Women's Bodies, Women's Selves 3 Credit(s) CL
SOC 204 - Introduction to Sociology 4 Credit(s)
SOC 204_H - Introduction to Sociology-Honors 4 Credit(s)
SOC 205 - Social Stratification and Social Systems 4 Credit(s)
SOC 206 - Institutions and Social Change 4 Credit(s)
SOC 208 - Sport and Society 4 Credit(s) CL
SOC 210 - Marriage, Family, and Intimate Relations 4 Credit(s)
SOC 211 - Social Deviance 3 Credit(s)
SOC 213 - Race and Ethnicity 4 Credit(s) CL
SOC 218 - Sociology of Gender 4 Credit(s) CL
SOC 225 - Social Problems 4 Credit(s)
SOC 228 - Introduction to Environmental Sociology 4 Credit(s)

Student Leadership Development

SLD 103 - Post-Racial America: Challenges & Opportunities 4 Credit(s) CL
SLD 111 - Chicano/Latino Leadership 1: Quien Soy? Quienes 4 Credit(s) CL
SLD 112 - Chicano/Latino Leadership 2: Cultural Heroes 4 Credit(s) CL
SLD 113 - Chicano/Latino Leadership 3: Affirmative & Resistance 4 Credit(s) CL
SLD 121 - African American Leadership: History, Philosophy, & Practice 4 Credit(s) CL

Women's Studies

WS 101 - Introduction to Women's Studies 4 Credit(s) CL

Science/Math/Computer Science

The lab and non-lab courses on the lists below are approved to meet requirements for these degree and transfer programs:

Although these courses are listed under categories, they may satisfy a different general education category at a receiving institution. Work with an Academic Advisor to determine transferability.

Lab Science Courses

Cultural Literacy note: Courses marked with CL are approved to meet the Cultural Literacy requirement.

Astronomy

ASTR 121 - Astronomy of the Solar System 4 Credit(s)
ASTR 122 - Stellar Astronomy 4 Credit(s)
ASTR 123 - Cosmology and the Large-Scale Structure of the Universe 4 Credit(s)

Biology

NOTE: Students may only use one BI 101, one BI 102, and one BI 103 to meet requirements for any Lane degree, regardless of letter option.

BI 101 - General Biology 4 Credit(s)
BI 101_H - General Biology-Honors 4 Credit(s)
BI 101E - General Biology-Ocean Life Foundations 4 Credit(s)
BI 101F - General Biology-Survey of Biology 4 Credit(s)
BI 101I - General Biology-Botanical Beginnings 4 Credit(s)
BI 101J - General Biology-Unseen Life on Earth 4 Credit(s)
BI 101K - General Biology: Introduction to Genetics 4 Credit(s)
BI 102 - General Biology 4 Credit(s)
BI 102C - General Biology-Marine Biology 4 Credit(s)
BI 102D - General Biology-Survey of Biology 4 Credit(s)
BI 102E - General Biology-Animal Biology 4 Credit(s)
BI 102G - General Biology: Genetics and Society 4 Credit(s)
BI 102H - General Biology-Forest Biology 4 Credit(s)
BI 102I - General Biology-Human Biology 4 Credit(s)
BI 103 - General Biology 4 Credit(s)
BI 103A - General Biology-Birds of Oregon 4 Credit(s)
BI 103D - General Biology: Sea Birds and Mammals 4 Credit(s)
BI 103E - General Biology: Survey of Biology 4 Credit(s)
BI 103F - General Biology-Wildflowers of Oregon 4 Credit(s)
BI 103G - General Biology: Global Ecology 4 Credit(s) CL
BI 103H - General Biology-Mushrooms 4 Credit(s)
BI 103J - General Biology: Forest Ecology 4 Credit(s)
BI 103L - General Biology: Evolution and Diversity 4 Credit(s)
BI 103M - General Biology: Biodiversity and Sustainability 4 Credit(s)
BI 112 - Cell Biology for Health Occupations 4 Credit(s)
BI 211 - Principles of Biology 4 Credit(s)
BI 212 - Principles of Biology 4 Credit(s)
BI 213B - Principles of Botany 4 Credit(s)
BI 213Z - Principles of Zoology 4 Credit(s)
BI 231 - Human Anatomy and Physiology 1 4 Credit(s)
BI 232 - Human Anatomy and Physiology 2 4 Credit(s)
BI 233 - Human Anatomy and Physiology 3 4 Credit(s)
BI 234 - Introductory Microbiology 4 Credit(s)

Chemistry

NOTE: General and Organic Chemistry courses have separate labs. To meet an AAOT laboratory science requirement, you must complete both the lecture and accompanying lab (example: CH 221 + CH 227).

CH 104 - Introduction to General Chemistry 5 Credit(s)
CH 106 - Introduction to Organic and Biological Chemistry 5 Credit(s)
CH 114 - Introduction to Forensic Chemistry 4 Credit(s)
CH 170 - Introduction to Environmental Chemistry 4 Credit(s)

General Chemistry

CH 221 - General Chemistry 1 4 Credit(s) + CH 227 2 Credit(s)
CH 222 - General Chemistry 2 4 Credit(s) + CH 228 2 Credit(s)
CH 223 - General Chemistry 3 4 Credit(s) + CH 229 2 Credit(s)

Organic Chemistry

CH 241 - Organic Chemistry 4 Credit(s) + CH 247 2 Credit(s)
CH 242 - Organic Chemistry 4 Credit(s) CH 248 2 Credit(s)
CH 243 - Organic Chemistry 4 Credit(s) CH 248 2 Credit(s)

Criminal Justice

CJA 214 - Introduction to Forensic Science 4 Credit(s)

Environmental Science

ENSC 181 - Terrestrial Environment 4 Credit(s)
ENSC 182 - Atmospheric Environment and Climate Change 4 Credit(s)
ENSC 182_H - Atmospheric Environment and Climate Change-Honors 4 Credit(s)
ENSC 183 - Aquatic Environment 4 Credit(s)
ENSC 183_H - Aquatic Environment-Honors 4 Credit(s)
ENSC 265 - Environmental Science Field Methods 4 Credit(s)

General Science

GS 101 - General Science (Nature of the Northwest) 4 Credit(s)
GS 106 - Earth, Sea, Sky 4 Credit(s)
GS 108 - Oceanography 4 Credit(s)
GS 142 - Earth Science: Earth Revealed 4 Credit(s)

Geology

G 101 - Earth's Dynamic Interior 4 Credit(s)
G 102 - Earth's Dynamic Surface 4 Credit(s)
G 103 - Evolving Earth 4 Credit(s)
G 146 - Rocks and Minerals 4 Credit(s)

G 147 - National Parks Geology 4 Credit(s)
G 148 - Geologic Hazards 4 Credit(s)
G 201 - Earth Materials and Plate Tectonics 4 Credit(s)
G 202 - Earth's Surface Systems 4 Credit(s)
G 203 - Evolution of the Earth 4 Credit(s)

Geographic Information Science

GIS 151 - Digital Earth 4 Credit(s)
GIS 245 - GIS 1 4 Credit(s)
GIS 246 - GIS 2 4 Credit(s)

Physics

PH 101 - Fundamentals of Physics 4 Credit(s)
PH 102 - Fundamentals of Physics 4 Credit(s)
PH 103 - Fundamentals of Physics 4 Credit(s)
PH 201 - General Physics 5 Credit(s)
PH 202 - General Physics 5 Credit(s)
PH 203 - General Physics 5 Credit(s)
PH 211 - General Physics with Calculus 5 Credit(s)
PH 212 - General Physics with Calculus 5 Credit(s)
PH 213 - General Physics with Calculus 5 Credit(s)

Soil Science

SOIL 205 - Introduction to Soil Science 4 Credit(s)

Watershed Science

WST 230 - Watersheds and Hydrology 4 Credit(s)

Non-Lab Science Courses

Cultural Literacy note: Courses marked with CL are approved to meet the Cultural Literacy requirement.

Anthropology

ANTH 101 - Physical Anthropology 4 Credit(s)
ANTH 102 - World Archaeology 4 Credit(s) CL
ANTH 102_H - World Archaeology-Honors 4 Credit(s) CL

Chemistry

CH 112 - Chemistry for Health Occupations 4 Credit(s)
CH 221 - General Chemistry 1 4 Credit(s)
CH 222 - General Chemistry 2 4 Credit(s)
CH 223 - General Chemistry 3 4 Credit(s)
CH 241 - Organic Chemistry 4 Credit(s)
CH 242 - Organic Chemistry 4 Credit(s)
CH 243 - Organic Chemistry 4 Credit(s)

Computer Science

NOTE: Students taking their first programming language (C++, .NET, or Python) will take CS 161 and 162. Because CS 161 and 162 are not repeatable courses, students taking a second programming language must use the CS 133 and 233 course numbers. Please contact the department or your academic advising team for details.

CS 160 - Orientation to Computer Science 4 Credit(s)
CS 161C - Computer Science 1 4 Credit(s)
CS 133C - Beginning Programming: C++ 4 Credit(s)
CS 161N - Computer Science 1 4 Credit(s)
CS 133N - Beginning Programming: C# 4 Credit(s)
CS 161P - Computer Science 1 4 Credit(s)
CS 133P - Beginning Programming: Python 4 Credit(s)
CS 162C - Computer Science 2 4 Credit(s)
CS 233C - Intermediate Programming: C++ 4 Credit(s)
CS 162N - Computer Science 2 4 Credit(s)
CS 233N - Intermediate Programming C# 4 Credit(s)
CS 162P - Computer Science 2 4 Credit(s)
CS 233P - Intermediate Programming: Python 4 Credit(s)
CS 260 - Data Structures 1 4 Credit(s)

Dance

D 256 - Anatomy of the Moving Body 4 Credit(s)

Geography

GEOG 141 - Natural Environment 4 Credit(s)

General Science

GS 201 - Scientific Skepticism - Someone is Wrong on the Internet! 4 Credit(s)

Mathematics

MTH 105 - Math in Society 4 Credit(s)
MTH 106 - Math in Society 2 4 Credit(s)
MTH 107 - Math in Society 3 4 Credit(s)
MTH 111 - College Algebra 5 Credit(s)
MTH 112 - Trigonometry 5 Credit(s)
MTH 211 - Fundamentals of Elementary Mathematics 1 4 Credit(s)
MTH 212 - Fundamentals of Elementary Mathematics 2 4 Credit(s)
MTH 213 - Fundamentals of Elementary Mathematics 3 4 Credit(s)
MTH 231 - Discrete Mathematics 1 4 Credit(s)
MTH 232 - Discrete Mathematics 2 4 Credit(s)
MTH 241 - Elementary Calculus 1 4 Credit(s)
MTH 242 - Elementary Calculus 2 4 Credit(s)
MTH 243 - Introduction to Probability and Statistics 4 Credit(s)
MTH 251 - Calculus 1 (Differential Calculus) 5 Credit(s)
MTH 252 - Calculus 2 (Integral Calculus) 5 Credit(s)
MTH 253 - Calculus 3 (Infinite Series and Sequences) 5 Credit(s)
MTH 254 - Vector Calculus 1 (Introduction to Vectors and Multidimensions) 4 Credit(s)
MTH 255 - Vector Calculus 2 (Introduction to Vector Analysis) 4 Credit(s)
MTH 256 - Applied Differential Equations 4 Credit(s)
MTH 260 - Linear Algebra 4 Credit(s)
MTH 265 - Statistics for Scientists and Engineers 4 Credit(s)

Psychology

PSY 212 - Learning and Memory 3 Credit(s)

Oral Communication

COMM 100 - Basic Communication 4 Credit(s)
COMM 111 - Fundamentals of Public Speaking 4 Credit(s)
COMM 111_H - Fundamentals of Public Speaking-Honors 4 Credit(s)
COMM 112 - Persuasive Speech 4 Credit(s)
COMM 130 - Business and Professional Communication 4 Credit(s)
COMM 218 - Interpersonal Communication 4 Credit(s)
COMM 219 - Small Group Communication 4 Credit(s)

Health/Wellness/Fitness

Physical Education

Students may use courses from any of the following categories to meet Health/Wellness/Fitness degree requirements:

Physical Education (PE)
Physical Education - Athletics (PEAT)
Physical Education - Outdoor Education (PEO)

Dance

D 152 - Dance Basics 2 Credit(s)
D 153 - Pilates Workout 2 Credit(s)
D 160 - Dance Composition 3 Credit(s)
D 172 - Dancing the Fluid Body 2 Credit(s)
D 176 - Fluid Yoga 2 Credit(s)
D 177 - Contemporary Dance 1 2 Credit(s)
D 178 - Contemporary Dance 2 2 Credit(s)
D 179 - Contemporary Dance 3 2 Credit(s)
D 183 - Meditation in Motion 2 Credit(s)
D 184 - Hip Hop 1 2 Credit(s)
D 185 - Ballet 1 2 Credit(s)
D 186 - Ballet 2 2 Credit(s)
D 187 - Ballet 3 2 Credit(s)
D 188 - Jazz Dance 1 2 Credit(s)

D 194 - Hip Hop 2 2 Credit(s)
D 257 - Dance Improvisation 2 Credit(s)
D 260 - Group Choreography 3 Credit(s)

Health

FLS 214 - Physical Exercise and Healthy Aging 3 Credit(s)
FN 225 - Nutrition 4 Credit(s)
HE 152 - Drugs, Society and Behavior 3 Credit(s)
HE 209 - Human Sexuality 3 Credit(s)
HE 212 - Women's Health 3 Credit(s)
HE 240 - Holistic Health 3 Credit(s)
HE 250 - Personal Health 3 Credit(s)
HE 252 - First Aid 3 Credit(s)
HE 255 - Global Health and Sustainability 4 Credit(s)
HE 262 - First Aid 2: Beyond the Basics 3 Credit(s)
HE 275 - Lifetime Health and Fitness 3 Credit(s)

Associate of Science (AS)

For students intending to transfer, the Associate of Science (AS) degree may best match general education requirements of some four-year colleges or universities. A student selecting this transfer option still must meet the receiving university's admission requirements, including course standing, grade-point average and foreign language requirement.

The Associate of Science is not a block transfer degree and does not guarantee that a student will have met the lower-division general education requirements for baccalaureate degree programs. Students are encouraged to work with an academic advisor to match career goals with an appropriate major and to select appropriate courses for their intended transfer institution.

Estimated Cost: $14,634.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fees: if applicable; $10.00 per course, maximum of $50.00 per course
- Books / Course Materials: $1,500.00***

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

General Education degrees costs are based on 90 credits and 6 terms

***** Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

***Books and materials will vary by class. Please refer to your program or course for specific information on book and material charges. Open Educational Resources (OER) may be available to 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*

Learning Outcomes

This degree is aligned with Lane's Institutional Learning Outcomes and the State General Education Learning Outcomes.

Guidelines

Complete a total of 90 credits of college-level coursework (see notes).

Complete at least 24 credits at Lane.

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.

All Elective courses may be any number of credits.

Complete all Foundational Skills with a grade of "C-" or better, or Pass.

Complete all Discipline Studies and Elective courses with a grade of "D-" or better, or Pass.

Maximum 16 credits "P" may be used toward degree. This limit does not include courses only offered P/NP.

Cumulative GPA must be at least 2.0 at the time the Associate of Science degree is awarded.

Foundational Skills

Foundational Skills must be completed with a grade of "C-" or better, or Pass.

Writing

Complete two courses from the following:

- WR 115 - Introduction to College Composition 4 Credit(s)
- WR 121_H / WR 121 - Academic Composition 4 Credit(s)
- WR 122_H / WR 122 - Argument, Research and Multimodal Composition 4 Credit(s)
- WR 123 - Composition: Research Writing 4 Credit(s)
- WR 227_H / WR 227 - Technical Writing 4 Credit(s)

Mathematics

Complete one course in college-level mathematics:

- MTH 105 - Math in Society 4 Credit(s)
- MTH 106 - Math in Society 2 4 Credit(s)
- MTH 107 - Math in Society 3 4 Credit(s)
- MTH 111 - College Algebra 5 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)
- Any 200-level mathematics course

Health/PE/Dance

- Complete one or more courses, totaling at least three credits, from the Health/Physical Education/Dance (AS) list.

Discipline Studies

Discipline Studies must be completed with a grade of "D-" or better, or Pass.

Arts and Letters

- Complete three courses from the Arts and Letters (AS) list.

Social Science

- Complete three courses from the Social Science (AS) list.

Science/Math/Computer Science

- Complete nine courses from the Science/Math/CS (AS) list.

Notes:

-Biology: 100-level Biology courses are not repeatable. Students may only use one BI 101, one BI 102, and one BI 103 to meet requirements for any Lane degree, regardless of letter option. BI 213B - Principles of Botany and BI 213Z - Principles of Zoology are considered repeats at some four-year universities. Students will only receive credit for one course. Please contact your academic advising team for details.
-Chemistry: General and Organic Chemistry series have separate lab courses. It is highly recommended students take lecture and lab courses together.
-Computer Programming: Students taking their first programming language (C++, .NET, or Python) will take CS 161 and 162. Because CS 161 and 162 are not repeatable courses, students taking a second programming language must use the CS 133 and 233 course numbers. Please contact the department or your academic advising team for details.

Electives

- Any college-level courses that bring total credits to 90 credits including:
- Up to 12 credits of Career Technical Education. See the list of Course Types by Prefix. Policies on accepting career technical credits vary at four-year institutions in Oregon. Consult an academic advisor about taking these courses within the degree.
- Up to 18 credits of Cooperative Education may be included as electives. Cooperative Education courses identified as Career Technical Education courses count toward the 12-credit maximum for Career Technical Education.
- Up to 12 credits of Individual Music Lessons (MUP).
- 12 credits of Physical Education activity (PE, PEAT, PEO) may be included within the entire degree.
- Transfer institution requirements. Consult Lane's Academic Advising department for a list of recommended coursework. Transfer institution requirements may change without notice.

Notes

- 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 also considered developmental.
- Foundational Skills are open to demonstration of proficiency. For information on waiver testing or credit for prior learning, contact an academic advisor. Waiver testing is not the same as placement testing.
- University second language admission requirements for transfer students graduating high school 1997 or later include one of the following:

- Two terms of the same college-level second language with an average grade of C- or above.
- Two years of the same high school-level second language with an average grade of C- or above.
- Satisfactory performance on an approved second language assessment of proficiency.
- Demonstrated proficiency in American Sign Language meets second language admission requirements.
- Credit-by-Exam and Credit-by-Assessment may comprise no more than 25% of total degree credits.
- Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
- Some courses are included on more than one Discipline Studies list. These courses may be used only once to meet a specific Discipline Studies requirement. Please contact your academic advisor for details.
- Lower-division college-level courses taken at Lane will not always meet the same requirements an upper-division college-level course with similar content does at a four-year transfer institution. In such cases, the course(s) in question will generally transfer as an elective. Please contact specific four-year schools for details.
- Courses numbered 197, 198, 199, 280, 297, 298, or 299 count as electives and do not meet Foundational Skills or Discipline Studies requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved to meet Discipline Studies requirements.
- The AS is not a block transfer degree. However, some science majors may benefit from using the AS framework to complete transfer requirements. Students planning to transfer should work closely with their academic advisor.
- General Information on in transferring credits in from a prior institution: lanecc.edu/esfs/general-information-transferring-credits

Approved Courses for the Associate of Science (AS) degree

Arts and Letters (AS)

These courses may be used to satisfy the Arts and Letters requirement for the Associate of Science, AS. Some programs may have specific requirements. See program information and work with an academic advisor to determine which course(s) to take.

Although these courses are listed under categories, they may satisfy a different general education category at a receiving institution.

Courses must be a minimum of 3 credits to be used to meet this requirement.

American Sign Language

ASL 101 - 1st Year American Sign Language 4 Credit(s)
ASL 102 - 1st Year American Sign Language 4 Credit(s)
ASL 103 - 1st Year American Sign Language 4 Credit(s)

Art

ART 111 - Introduction to Visual Arts 3 Credit(s)
ART 115 - Basic Design: Fundamentals 3 Credit(s)
ART 115_H - Basic Design: Fundamentals-Honors 3 Credit(s)
ART 116 - Basic Design: Color 3 Credit(s)
ART 117 - Basic Design: 3-Dimensional 3 Credit(s)
ART 118 - Artist Books and Pop-up 4 Credit(s)
ART 119 - Typography 1 3 Credit(s)
ART 120 - Intermediate Artist Books and Pop-up 4 Credit(s)
ART 131 - Introduction to Drawing 3 Credit(s)
ART 216 - Digital Design Tools 3 Credit(s)
ART 220 - Documentary Photography 3 Credit(s)
ART 221 - Graphic Design 1 4 Credit(s)
ART 222 - Graphic Design 2 4 Credit(s)
ART 223 - Graphic Design 3 4 Credit(s)
ART 225 - Digital Illustration 3 Credit(s)
ART 227 - Graphic Design Production 1 3 Credit(s)
ART 228 - Graphic Design Production 2 4 Credit(s)
ART 229 - Graphic Design Production 3 4 Credit(s)
ART 231 - Drawing: Intermediate 3 Credit(s)
ART 234 - Drawing: Figure 3 Credit(s)
ART 237 - Illustration 1 3 Credit(s)
ART 240 - Natural Science Drawing 3 Credit(s)
ART 245 - Drawing for Media 4 Credit(s)
ART 248 - Stone Sculpture 3 Credit(s)
ART 250 - Ceramics: Hand Building 3 Credit(s)
ART 251 - Ceramics: Wheel Throwing 3 Credit(s)
ART 253 - Ceramics: Intermediate 3 Credit(s)
ART 255 - Alchemy of Ceramics: Materiality, Chemistry, and Kiln Firing 3 Credit(s)
ART 261 - Photography 1 3 Credit(s)
ART 266 - Off-Loom Fibers 3 Credit(s)
ART 270 - Printmaking: Traditional and Digital Etching 3 Credit(s)
ART 271 - Printmaking; Woodcut and Linocut 3 Credit(s)
ART 272 - Printmaking: Experimental Processes 3 Credit(s)
ART 273 - Printmaking: Intermediate Traditional and Digital Etching 3 Credit(s)
ART 274 - Printmaking: Intermediate Woodcut and Linocut 3 Credit(s)
ART 275 - Screen Printing 3 Credit(s)
ART 276 - Sculpture: Introduction 3 Credit(s)
ART 277 - Sculpture: Welding 3 Credit(s)
ART 278 - Sculpture: Wood 3 Credit(s)
ART 281 - Painting: Introduction 3 Credit(s)
ART 282 - Landscape and Architectural Photography 4 Credit(s)
ART 284 - Painting: Intermediate 3 Credit(s)
ART 285 - Advanced Screen Printing 3 Credit(s)
ART 286 - Sculpting for Animators 3 Credit(s)
ART 288 - Introduction to Web Design and Social Media 3 Credit(s)
ART 289 - Web Production 3 Credit(s)
ART 290 - Design Concepts for the Web 3 Credit(s)
ART 291 - Sculpture: Metal Casting 5 Credit(s)
ART 292 - Design Art for Public Places 4 Credit(s)
ART 293 - Sculpture: Figure 3 Credit(s)
ART 294 - Watercolor: Introduction 3 Credit(s)
ART 295 - Watercolor: Intermediate 3 Credit(s)
ART 296 - Mural Painting Class 4 Credit(s)

Art History

ARH 200 - History of Design Arts 3 Credit(s)
ARH 203 - Survey of American Indian Art and Architecture: North and Central America 4 Credit(s)
ARH 204 - History of Western Art 1 3 Credit(s)
ARH 205 - History of Western Art 2 3 Credit(s)
ARH 206 - History of Western Art 3 3 Credit(s)
ARH 207 - History of Indian Art 3 Credit(s)
ARH 208 - History of Chinese Art 3 Credit(s)
ARH 209 - History of Japanese Art 3 Credit(s)
ARH 211 - Early Modern Art: 1850-1910 3 Credit(s)
ARH 212 - Twentieth-Century Art 3 Credit(s)
ARH 214 - Arts of the United States 3 Credit(s)
ARH 217 - History of Middle Eastern and Islamic Art 3 Credit(s)
ARH 218 - History of Photography:1700-1910 3 Credit(s)
ARH 219 - History of Photography: 1910-1950 3 Credit(s)
ARH 220 - History of Photography: 1950-Present 3 Credit(s)

Business

BA 214 - Business Communications 4 Credit(s)

Chinuk Wawa

CW 101 - Chinuk Wawa 4 Credit(s)
CW 102 - Chinuk Wawa 4 Credit(s)
CW 103 - Chinuk Wawa 4 Credit(s)
CW 201 - Chinuk Wawa 4 Credit(s)
CW 202 - Chinuk Wawa 4 Credit(s)
CW 203 - Chinuk Wawa 4 Credit(s)

Cinema Studies

CINE 265 - Film History 1-The Silent Era to Early Sound 4 Credit(s)
CINE 266 - Film History 2-The Sound Era through the 1960s 4 Credit(s)
CINE 267 - Film History 3-1960s-the present 4 Credit(s)

Communication

COMM 100 - Basic Communication 4 Credit(s)

COMM 105 - Listening and Critical Thinking 4 Credit(s)
COMM 111 - Fundamentals of Public Speaking 4 Credit(s)
COMM 111_H - Fundamentals of Public Speaking-Honors 4 Credit(s)
COMM 112 - Persuasive Speech 4 Credit(s)
COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
COMM 130 - Business and Professional Communication 4 Credit(s)
COMM 218 - Interpersonal Communication 4 Credit(s)
COMM 219 - Small Group Communication 4 Credit(s)
COMM 220 - Communication, Gender and Culture 4 Credit(s)
COMM 260 - Introduction to Conflict Management 4 Credit(s)
COMM 265 - Environmental Communication 4 Credit(s)
COMM 285 - Mediated Communication 4 Credit(s)

Creative Writing

CRWR 240 - Creative Writing: Nonfiction 4 Credit(s)
CRWR 241 - Creative Writing: Fiction 4 Credit(s)
CRWR 242 - Creative Writing: Poetry 4 Credit(s)
CRWR 242_H - Creative Writing: Poetry-Honors 4 Credit(s)

Dance

D 160 - Dance Composition 3 Credit(s)
D 251 - Looking at Dance 4 Credit(s)
D 260 - Group Choreography 3 Credit(s)

Effective Learning

EL 110 - Effective College Reading 1-3 Credit(s)
EL 113 - Connections: Specific Study Skills 3 Credit(s)
EL 115 - Effective Learning 3 Credit(s)
EL 115R - Critical Thinking for College Reading 3 Credit(s)
EL 116 - Critical Thinking for Paragraph Writing 3 Credit(s)
EL 117 - Critical Thinking for Essay Writing 3 Credit(s)
EL 121 - Effective Digital Learning 1-3 Credit(s)

English

ENG 100 - Children's Literature 4 Credit(s)
ENG 104 - Introduction to Literature: Fiction 4 Credit(s)
ENG 104_H - Introduction to Literature: Fiction-Honors 4 Credit(s)
ENG 105 - Introduction to Literature: Drama 4 Credit(s)
ENG 105_H - Introduction to Literature: Drama-Honors 4 Credit(s)
ENG 106 - Introduction to Literature: Poetry 4 Credit(s)
ENG 106_H - Introduction to Literature: Poetry-Honors 4 Credit(s)
ENG 107 - Survey of World Literature 4 Credit(s)
ENG 109 - Survey of World Literature 4 Credit(s)
ENG 151 - Black American Literature 4 Credit(s)
ENG 194 - Literature of Comedy 4 Credit(s)
ENG 201 - Shakespeare 4 Credit(s)
ENG 203 - Shakespeare 4 Credit(s)
ENG 204 - Survey of British Literature 4 Credit(s)
ENG 205 - Survey of British Literature 4 Credit(s)
ENG 215 - Latino/a Literature 4 Credit(s)
ENG 217 - Reading, Writing and Digital Culture 4 Credit(s)
ENG 222 - Literature and Gender 4 Credit(s)
ENG 232 - Native American Literature, Myth and Folklore 4 Credit(s)
ENG 240 - Nature Literature 4 Credit(s)
ENG 243 - Native American Autobiography 4 Credit(s)
ENG 244 - Asian American Literature 4 Credit(s)
ENG 250 - Introduction to Folklore and Mythology 4 Credit(s)
ENG 253 - Survey of American Literature 4 Credit(s)
ENG 254 - Survey of American Literature 4 Credit(s)
ENG 257 - The American Working Class in Fiction and Non-Fiction 4 Credit(s)
ENG 260 - Introduction to Women Writers 4 Credit(s)
ENG 261 - Science Fiction 4 Credit(s)
ENG 270 - Bob Dylan: American Poet 4 Credit(s)
ENG 282 - Introduction to Comics-Graphic Novels 4 Credit(s)

Ethnic Studies

ES 244 - Native American Leadership 1: Building Leadership Through Indigenous Oratory 4 Credit(s)

Film Arts

FA 221 - Computer Animation 4 Credit(s)
FA 222 - Computer Animation 2 4 Credit(s)
FA 250 - Concepts of Visual Literacy 3 Credit(s)
FA 254 - Fundamentals of Lighting 3 Credit(s)
FA 255 - Understanding Movies: American Cinema 3 Credit(s)
FA 256 - Lighting for Photography 3 Credit(s)
FA 261 - Writing and Interactive Design 3 Credit(s)
FA 264 - Women Make Movies 4 Credit(s)
FA 270C - Film Genres: Comedy 4 Credit(s)
FA 270H - Film Genres: Horror 4 Credit(s)
FA 270N - Film Genres: Noir 4 Credit(s)
FA 276 - Gender, Race, and Class in U.S. Cinema 4 Credit(s)

French

FR 101 - First-Year French 5 Credit(s)
FR 102 - First-Year French 5 Credit(s)
FR 103 - First-Year French 5 Credit(s)
FR 188 - Study Abroad: French Language and Culture in Normandy 6 Credit(s)
FR 201 - Second-Year French 4 Credit(s)
FR 202 - Second-Year French 4 Credit(s)
FR 203 - Second-Year French 4 Credit(s)
FR 211 - Conversational French 2 Credit(s)
FR 288 - Study Abroad: French Language and Culture in Normandy 6 Credit(s)

Humanities

HUM 100 - Humanities Through the Arts 4 Credit(s)

Journalism

J 134 - Photojournalism 3 Credit(s)
J 216 - Newswriting 1 3 Credit(s)

Mandarin Chinese

CHN 101 - 1st Year Mandarin Chinese 4 Credit(s)
CHN 102 - 1st Year Mandarin Chinese 4 Credit(s)
CHN 103 - 1st Year Mandarin Chinese 4 Credit(s)

Music

MUS 101 - Music Fundamentals 3 Credit(s)
MUS 103 - Songwriting Techniques and Analysis 1 3 Credit(s)
MUS 107 - Audio Engineering 1 3 Credit(s)
MUS 109 - Audio Engineering 2 4 Credit(s)
MUS 110 - Audio Engineering 3 4 Credit(s)
MUS 111 - Music Theory 1 (First Term) 4 Credit(s)
MUS 112 - Music Theory 1 (Second Term) 4 Credit(s)
MUS 113 - Music Theory 1 (Third Term) 4 Credit(s)
MUS 118 - Music Technology MIDI/Audio 1 4 Credit(s)
MUS 119 - Music Technology MIDI/Audio 2 4 Credit(s)
MUS 201 - Exploring Music: Introduction to Music History 3 Credit(s)
MUS 202 - Exploring Music: Introduction to Music History 3 Credit(s)
MUS 203 - Exploring Music: Introduction to Music History 3 Credit(s)
MUS 205 - Introduction to Jazz History 3 Credit(s)
MUS 211 - Music Theory 2: (First Term) 3 Credit(s)
MUS 212 - Music Theory 2 (Second Term) 3 Credit(s)
MUS 213 - Music Theory 2 (Third Term) 3 Credit(s)
MUS 260 - History of Hip-Hop and Rap Music 3 Credit(s)
MUS 264 - Roots of Rock (Roots-1963) 4 Credit(s)
MUS 265 - Golden Age of Rock & Roll (1964-1974) 4 Credit(s)
MUS 266 - Rockin' the New Millennium (1974-2006) 4 Credit(s)
MUS 268 - History of Electronic Music 3 Credit(s)

Philosophy

PHL 201 - Ethics 4 Credit(s)

PHL 202 - Theories of Knowledge 4 Credit(s)
PHL 203 - Theories of Reality 4 Credit(s)
PHL 221 - Critical Thinking 4 Credit(s)

Spanish

SPAN 101 - Spanish, First-Year 5 Credit(s)
SPAN 102 - Spanish, First-Year 5 Credit(s)
SPAN 103 - Spanish, First-Year 5 Credit(s)
SPAN 201 - Spanish, Second-Year 4 Credit(s)
SPAN 202 - Spanish, Second-Year 4 Credit(s)
SPAN 203 - Spanish, Second-Year 4 Credit(s)
SPAN 218 - Spanish for Spanish-Speakers 4 Credit(s)
SPAN 221 - Spanish for Health Professions 1 4 Credit(s)

Theatre Arts

TA 121 - Introduction to Costume Design 3 Credit(s)
TA 140 - Acting Shakespeare 4 Credit(s)
TA 141 - Acting 1 4 Credit(s)
TA 142 - Acting 2 4 Credit(s)
TA 143 - Acting 3 4 Credit(s)
TA 144 - Improv 4 Credit(s)
TA 150 - Technical Production 3 Credit(s)
TA 153 - Theatre Rehearsal and Performance 1-3 Credit(s)
TA 227 - Stage Makeup 3 Credit(s)
TA 241 - Intermediate Acting 1 4 Credit(s)
TA 242 - Intermediate Acting 2 4 Credit(s)
TA 243 - Acting for the Camera 4 Credit(s)
TA 253 - Theatre Rehearsal and Performance 1-3 Credit(s)
TA 272 - Introduction to Theatre 4 Credit(s)
TA 272_H - Introduction to Theatre-Honors 4 Credit(s)

Writing

WR 115 - Introduction to College Composition 4 Credit(s)
WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
WR 121 - Academic Composition 4 Credit(s)
WR 121_H - Academic Composition-Honors 4 Credit(s)
WR 122 - Argument, Research and Multimodal Composition 4 Credit(s)
WR 122_H - Argument, Research and Multimodal Composition-Honors 4 Credit(s)
WR 123 - Composition: Research Writing 4 Credit(s)
WR 227 - Technical Writing 4 Credit(s)
WR 227_H - Technical Writing-Honors 4 Credit(s)

Health/Physical Education/Dance (AS)

These courses may be used to satisfy the Health/PE/Dance requirement for the Associate of Science, AS. Although these courses are listed under categories, they may satisfy a different general education category at a receiving institution. **Any combination of courses may be completed to meet this requirement.**

Physical Education

Students may use courses from any of the following categories to meet Health/Physical Education/Dance degree requirements:

Physical Education (PE)

Physical Education - Athletics (PEAT)

Physical Education - Outdoor Education (PEO)

Dance

D 152 - Dance Basics 2 Credit(s)
D 153 - Pilates Workout 2 Credit(s)
D 160 - Dance Composition 3 Credit(s)
D 172 - Dancing the Fluid Body 2 Credit(s)
D 176 - Fluid Yoga 2 Credit(s)
D 177 - Contemporary Dance 1 2 Credit(s)
D 178 - Contemporary Dance 2 2 Credit(s)
D 179 - Contemporary Dance 3 2 Credit(s)
D 183 - Meditation in Motion 2 Credit(s)
D 184 - Hip Hop 1 2 Credit(s)
D 185 - Ballet 1 2 Credit(s)
D 186 - Ballet 2 2 Credit(s)
D 187 - Ballet 3 2 Credit(s)
D 188 - Jazz Dance 1 2 Credit(s)
D 194 - Hip Hop 2 2 Credit(s)
D 195 - Pointe 1 Credit(s)
D 251 - Looking at Dance 4 Credit(s)
D 257 - Dance Improvisation 2 Credit(s)
D 260 - Group Choreography 3 Credit(s)
D 261 - Dance Rehearsal and Performance 1-3 Credit(s)

Health

FLS 214 - Physical Exercise and Healthy Aging 3 Credit(s)
FN 225 - Nutrition 4 Credit(s)
HE 152 - Drugs, Society and Behavior 3 Credit(s)
HE 209 - Human Sexuality 3 Credit(s)
HE 212 - Women's Health 3 Credit(s)
HE 240 - Holistic Health 3 Credit(s)
HE 250 - Personal Health 3 Credit(s)
HE 251 - Wilderness First Aid 3 Credit(s)
HE 252 - First Aid 3 Credit(s)
HE 255 - Global Health and Sustainability 4 Credit(s)
HE 262 - First Aid 2: Beyond the Basics 3 Credit(s)
HE 275 - Lifetime Health and Fitness 3 Credit(s)

Science/Math/CS (AS)

These courses may be used to satisfy the Science/Math/Computer Science requirement for the Associate of Science, AS. Although these courses are listed under categories, they may satisfy a different general education category at a receiving institution.

Courses must be a minimum of 3 credits to be used to meet this requirement.

Anthropology

ANTH 101 - Physical Anthropology 4 Credit(s)
ANTH 102 - World Archaeology 4 Credit(s)
ANTH 102_H - World Archaeology-Honors 4 Credit(s)

Astronomy

ASTR 121 - Astronomy of the Solar System 4 Credit(s)
ASTR 122 - Stellar Astronomy 4 Credit(s)
ASTR 123 - Cosmology and the Large-Scale Structure of the Universe 4 Credit(s)

Biology

NOTE: Only one BI 101, one BI 102, and one BI 103 to meet requirements for any Lane degree, regardless of letter option.

BI 101 - General Biology 4 Credit(s)
BI 101_H - General Biology-Honors 4 Credit(s)
BI 101E - General Biology-Ocean Life Foundations 4 Credit(s)
BI 101F - General Biology-Survey of Biology 4 Credit(s)
BI 101I - General Biology-Botanical Beginnings 4 Credit(s)
BI 101J - General Biology-Unseen Life on Earth 4 Credit(s)
BI 101K - General Biology: Introduction to Genetics 4 Credit(s)
BI 102 - General Biology 4 Credit(s)
BI 102C - General Biology-Marine Biology 4 Credit(s)
BI 102D - General Biology-Survey of Biology 4 Credit(s)
BI 102E - General Biology-Animal Biology 4 Credit(s)
BI 102G - General Biology: Genetics and Society 4 Credit(s)
BI 102H - General Biology-Forest Biology 4 Credit(s)
BI 102I - General Biology-Human Biology 4 Credit(s)
BI 103 - General Biology 4 Credit(s)
BI 103A - General Biology-Birds of Oregon 4 Credit(s)
BI 103D - General Biology: Sea Birds and Mammals 4 Credit(s)
BI 103E - General Biology: Survey of Biology 4 Credit(s)
BI 103F - General Biology-Wildflowers of Oregon 4 Credit(s)
BI 103G - General Biology: Global Ecology 4 Credit(s)
BI 103H - General Biology-Mushrooms 4 Credit(s)
BI 103J - General Biology: Forest Ecology 4 Credit(s)
BI 103L - General Biology: Evolution and Diversity 4 Credit(s)
BI 103M - General Biology: Biodiversity and Sustainability 4 Credit(s)
BI 112 - Cell Biology for Health Occupations 4 Credit(s)

BI 211 - Principles of Biology 4 Credit(s)
BI 212 - Principles of Biology 4 Credit(s)
BI 213B - Principles of Botany 4 Credit(s)
BI 213Z - Principles of Zoology 4 Credit(s)
BI 231 - Human Anatomy and Physiology 1 4 Credit(s)
BI 232 - Human Anatomy and Physiology 2 4 Credit(s)
BI 233 - Human Anatomy and Physiology 3 4 Credit(s)
BI 234 - Introductory Microbiology 4 Credit(s)

Chemistry

NOTE: General and Organic Chemistry series have separate lab courses (CH 227, CH 228, CH 229 and CH 247, CH 248, CH 249. It is highly recommended students take lecture and lab together.
CH 104 - Introduction to General Chemistry 5 Credit(s)
CH 106 - Introduction to Organic and Biological Chemistry 5 Credit(s)
CH 112 - Chemistry for Health Occupations 4 Credit(s)
CH 114 - Introduction to Forensic Chemistry 4 Credit(s)
CH 150 - Preparatory Chemistry 3 Credit(s)
CH 170 - Introduction to Environmental Chemistry 4 Credit(s)
CH 201 - Chemistry for Engineering Majors I 4 Credit(s)
CH 202 - Chemistry for Engineering Majors 2 4 Credit(s)
CH 221 - General Chemistry 1 4 Credit(s)
CH 222 - General Chemistry 2 4 Credit(s)
CH 223 - General Chemistry 3 4 Credit(s)
CH 241 - Organic Chemistry 4 Credit(s)
CH 242 - Organic Chemistry 4 Credit(s)
CH 243 - Organic Chemistry 4 Credit(s)

Computer Science

NOTE: Students taking their first programming language (C++, .NET, or Python) will take CS 161 and 162. Because CS 161 and 162 are not repeatable courses, students taking a second programming language must use the CS 133 and 233 course numbers. Please contact the department or your academic advising team for details.
CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
CS 133C - Beginning Programming: C++ 4 Credit(s)
CS 133JS - Beg. Programming: JavaScript 4 Credit(s)
CS 133N - Beginning Programming: C# 4 Credit(s)
CS 133P - Beginning Programming: Python 4 Credit(s)
CS 160 - Orientation to Computer Science 4 Credit(s)
CS 161C - Computer Science 1 4 Credit(s)
CS 161N - Computer Science 1 4 Credit(s)
CS 161P - Computer Science 1 4 Credit(s)
CS 162C - Computer Science 2 4 Credit(s)
CS 162N - Computer Science 2 4 Credit(s)
CS 162P - Computer Science 2 4 Credit(s)
CS 179 - Introduction to Computer Networks 4 Credit(s)
CS 233C - Intermediate Programming: C++ 4 Credit(s)
CS 233JS - Intermediate Programming: JavaScript 4 Credit(s)
CS 233N - Intermediate Programming C# 4 Credit(s)
CS 233P - Intermediate Programming: Python 4 Credit(s)
CS 234N - Advanced Programming: C# 4 Credit(s)
CS 260 - Data Structures 1 4 Credit(s)
CS 284 - Network Security Fundamentals 4 Credit(s)

Criminal Justice

CJA 214 - Introduction to Forensic Science 4 Credit(s)

Dental Assisting

DA 110 - Dental Health Sciences 3 Credit(s)

Drafting

DRF 205 - Drafting: Structures 4 Credit(s)
DRF 207 - Drafting: Strength of Materials 4 Credit(s)

Electronics

ET 129 - Electrical Theory 1 4 Credit(s)

Engineering

ENGR 101 - Engineering Orientation 3 Credit(s)
ENGR 102 - Engineering Orientation 2 4 Credit(s)
ENGR 115 - Engineering Graphics 3 Credit(s)
ENGR 211 - Statics 4 Credit(s)
ENGR 212 - Dynamics 4 Credit(s)
ENGR 213 - Strength of Materials 4 Credit(s)
ENGR 221 - Electrical Fundamentals 1 4 Credit(s)

Environmental Science

ENSC 181 - Terrestrial Environment 4 Credit(s)
ENSC 182 - Atmospheric Environment and Climate Change 4 Credit(s)
ENSC 182_H - Atmospheric Environment and Climate Change-Honors 4 Credit(s)
ENSC 183 - Aquatic Environment 4 Credit(s)
ENSC 183_H - Aquatic Environment-Honors 4 Credit(s)
ENSC 265 - Environmental Science Field Methods 4 Credit(s)

General Science

GS 101 - General Science (Nature of the Northwest) 4 Credit(s)
GS 106 - Earth, Sea, Sky 4 Credit(s)
GS 108 - Oceanography 4 Credit(s)
GS 109 - Meteorology 5 Credit(s)
GS 142 - Earth Science: Earth Revealed 4 Credit(s)
GS 201 - Scientific Skepticism - Someone is Wrong on the Internet! 4 Credit(s)

Geography

GEOG 141 - Natural Environment 4 Credit(s)

Geographic Information Science

GIS 151 - Digital Earth 4 Credit(s)
GIS 245 - GIS 1 4 Credit(s)
GIS 246 - GIS 2 4 Credit(s)

Geology

G 101 - Earth's Dynamic Interior 4 Credit(s)
G 102 - Earth's Dynamic Surface 4 Credit(s)
G 103 - Evolving Earth 4 Credit(s)
G 146 - Rocks and Minerals 4 Credit(s)
G 147 - National Parks Geology 4 Credit(s)
G 148 - Geologic Hazards 4 Credit(s)
G 201 - Earth Materials and Plate Tectonics 4 Credit(s)
G 202 - Earth's Surface Systems 4 Credit(s)
G 203 - Evolution of the Earth 4 Credit(s)

Health Professions

HP 150 - Human Body Systems 1 3 Credit(s)
HP 152 - Human Body Systems 2 3 Credit(s)

Mathematics

MTH 105 - Math in Society 4 Credit(s)
MTH 106 - Math in Society 2 4 Credit(s)
MTH 107 - Math in Society 3 4 Credit(s)
MTH 111 - College Algebra 5 Credit(s)
MTH 112 - Trigonometry 5 Credit(s)
MTH 211 - Fundamentals of Elementary Mathematics 1 4 Credit(s)
MTH 212 - Fundamentals of Elementary Mathematics 2 4 Credit(s)
MTH 213 - Fundamentals of Elementary Mathematics 3 4 Credit(s)
MTH 231 - Discrete Mathematics 1 4 Credit(s)
MTH 232 - Discrete Mathematics 2 4 Credit(s)
MTH 241 - Elementary Calculus 1 4 Credit(s)
MTH 242 - Elementary Calculus 2 4 Credit(s)
MTH 243 - Introduction to Probability and Statistics 4 Credit(s)
MTH 251 - Calculus 1 (Differential Calculus) 5 Credit(s)
MTH 252 - Calculus 2 (Integral Calculus) 5 Credit(s)
MTH 253 - Calculus 3 (Infinite Series and Sequences) 5 Credit(s)
MTH 254 - Vector Calculus 1 (Introduction to Vectors and Multidimensions) 4 Credit(s)
MTH 255 - Vector Calculus 2 (Introduction to Vector Analysis) 4 Credit(s)
MTH 256 - Applied Differential Equations 4 Credit(s)
MTH 260 - Linear Algebra 4 Credit(s)
MTH 265 - Statistics for Scientists and Engineers 4 Credit(s)

Psychology

PSY 212 - Learning and Memory 3 Credit(s)

Physics

PH 101 - Fundamentals of Physics 4 Credit(s)
PH 102 - Fundamentals of Physics 4 Credit(s)
PH 103 - Fundamentals of Physics 4 Credit(s)
PH 201 - General Physics 5 Credit(s)
PH 202 - General Physics 5 Credit(s)
PH 203 - General Physics 5 Credit(s)
PH 211 - General Physics with Calculus 5 Credit(s)
PH 212 - General Physics with Calculus 5 Credit(s)
PH 213 - General Physics with Calculus 5 Credit(s)

Soil Science

SOIL 205 - Introduction to Soil Science 4 Credit(s)

Watershed Science

WST 230 - Watersheds and Hydrology 4 Credit(s)

Social Science (AS)

These courses may be used to satisfy the Social Science requirement for the Associate of Science, AS. Although these courses are listed under categories, they may satisfy a different general education category at a receiving institution.

Courses must be a minimum of 3 credits to be used to meet this requirement.

Anthropology

ANTH 101 - Physical Anthropology 4 Credit(s)
ANTH 102 - World Archaeology 4 Credit(s)
ANTH 102_H - World Archaeology-Honors 4 Credit(s)
ANTH 103 - Cultural Anthropology 4 Credit(s)
ANTH 227 - Prehistory of Mexico 4 Credit(s)
ANTH 228 - Chicano Cultures 4 Credit(s)
ANTH 231 - American Indian Studies 3 Credit(s)
ANTH 232 - American Indian Studies 3 Credit(s)
ANTH 233 - American Indian Studies 3 Credit(s)

Business

BA 101 - Introduction to Business 4 Credit(s)

Criminal Justice

CJA 100 - Introduction to Criminal Justice 4 Credit(s)
CJA 200 - Introduction to Criminology 4 Credit(s)
CJA 201 - Juvenile Delinquency 3 Credit(s)
CJA 207 - Gender, Crime and Justice 4 Credit(s)
CJA 210 - Criminal Investigation 1 3 Credit(s)
CJA 212 - Criminal Justice Documentation and Reporting 3 Credit(s)
CJA 213 - Interviewing and Interrogation 3 Credit(s)
CJA 214 - Introduction to Forensic Science 4 Credit(s)
CJA 220 - Introduction to Criminal Law 3 Credit(s)
CJA 222 - Criminal Law: Procedural Issues 3 Credit(s)

College Success | Career Development

CG 100 - College Success 1-3 Credit(s)
CG 140 - Career and Life Planning 1-3 Credit(s)
CG 203 - Human Relations at Work 1-3 Credit(s)
CG 213 - Improving Parent Child Relations 3 Credit(s)

Economics

ECON 200 - Principles of Economics: Introduction to Economics 3 Credit(s)
ECON 201 - Principles of Economics: Introduction to Microeconomics 3 Credit(s)
ECON 202 - Principles of Economics: Introduction to Macroeconomics 3 Credit(s)
ECON 204 - Introduction to International Economics 4 Credit(s)
ECON 260 - Introduction to Environmental and Natural Resource Economics 4 Credit(s)

Education

ED 100 - Introduction to Education 3 Credit(s)
ED 216 - Foundations of Education 3 Credit(s)
ED 230 - Language and Literacy 3 Credit(s)
ED 233 - Adolescent Learning and Development 3 Credit(s)
ED 258 - Multicultural Education 3 Credit(s)
ED 269 - Inclusion and Special Needs 3 Credit(s)

Ethnic Studies

ES 101 - Historical Racial and Ethnic Issues 4 Credit(s)
ES 102 - Contemporary Racial and Ethnic Issues 4 Credit(s)
ES 212 - Chicano/Latino Studies: Political and Ideological Perspectives 4 Credit(s)
ES 213 - Chicano/Latino Studies: Contemporary Identity and Cultural Issues 4 Credit(s)
ES 221 - African American Studies: Down from the Pyramids, Up from Slavery 4 Credit(s)
ES 223 - African American Studies: A Luta Continua: The Struggle Continues 4 Credit(s)
ES 224 - Black Male Studies: Lies, Literature, and Legacy 4 Credit(s)
ES 241 - Native American Studies: Consequences of Native American and European Contact 4 Credit(s)
ES 243 - Native American Studies: Contemporary Indigenous Issues 4 Credit(s)
ES 244 - Native American Leadership 1: Building Leadership Through Indigenous Oratory 4 Credit(s)

Geography

GEOG 141 - Natural Environment 4 Credit(s)
GEOG 142 - Introduction to Human Geography 4 Credit(s)
GEOG 201 - World Regional Geography 4 Credit(s)

Geographic Information Science

GIS 151 - Digital Earth 4 Credit(s)
GIS 245 - GIS 1 4 Credit(s)
GIS 246 - GIS 2 4 Credit(s)

Health

HE 212 - Women's Health 3 Credit(s)
HE 255 - Global Health and Sustainability 4 Credit(s)

Human Services

HS 102 - Psychopharmacology 4 Credit(s)
HS 107 - Aging: A Social and Developmental Perspective 3 Credit(s)
HS 150 - Personal Effectiveness for Human Service Workers 3 Credit(s)
HS 155 - Interviewing Theory and Techniques 3 Credit(s)
HS 201 - Introduction to Human Services 3 Credit(s)
HS 209 - Crisis Intervention and Prevention 3 Credit(s)
HS 220 - Prevention 1: Preventing Substance Abuse and Other Social Problems 3 Credit(s)
HS 221 - Co-occurring Disorders 3 Credit(s)
HS 222 - Best Practices in Human Services: Interventions 4 Credit(s)
HS 224 - Group Counseling Skills 3 Credit(s)
HS 226 - Ethics and Law 3 Credit(s)
HS 229 - Grief and Loss Across Life Span 3 Credit(s)
HS 231 - Advanced Interviewing and Counseling 3 Credit(s)
HS 232 - Cognitive-Behavioral Strategies 3 Credit(s)
HS 265 - Casework Interviewing 3 Credit(s)

History

HST 101 - Western Civilization: Ancient Mediterranean 4 Credit(s)
HST 102 - Western Civilization: Making of Modern Europe 4 Credit(s)
HST 103 - Western Civilization: Europe and the World 4 Credit(s)
HST 104 - World History 4 Credit(s)
HST 105 - World History 4 Credit(s)
HST 106 - World History 4 Credit(s)
HST 195 - History of the Vietnam War 4 Credit(s)
HST 201 - History of the United States 4 Credit(s)
HST 202 - History of the United States 4 Credit(s)
HST 203 - History of the United States 4 Credit(s)
HST 208 - US History Since 1945 4 Credit(s)
HST 209 - American History: The Civil War 4 Credit(s)
HST 266 - US Women's History 4 Credit(s)

Philosophy

PHL 201 - Ethics 4 Credit(s)
PHL 202 - Theories of Knowledge 4 Credit(s)
PHL 203 - Theories of Reality 4 Credit(s)

PHL 221 - Critical Thinking 4 Credit(s)

Political Science

PS 101 - Modern World Governments 4 Credit(s)
PS 201 - U.S. Government and Politics 3 Credit(s)
PS 202 - U.S. Government and Politics 3 Credit(s)
PS 203 - State and Local Government and Politics 3 Credit(s)
PS 205 - International Relations 3 Credit(s)
PS 208 - Introduction to Political Theory 4 Credit(s)
PS 211 - Peace and Conflict Studies: Global 4 Credit(s)
PS 225 - Political Ideology 4 Credit(s)
PS 275 - Legal Processes Through Civil Rights and Liberties 4 Credit(s)
PS 297 - Environmental Politics 4 Credit(s)
PS 297_H - Environmental Politics-Honors 4 Credit(s)

Psychology

PSY 110 - Exploring Psychology 3 Credit(s)
PSY 201 - General Psychology 4 Credit(s)
PSY 201_H - General Psychology-Honors 4 Credit(s)
PSY 202 - General Psychology 4 Credit(s)
PSY 203 - General Psychology 4 Credit(s)
PSY 215 - Lifespan Developmental Psychology 4 Credit(s)
PSY 231 - Human Sexual Behavior 4 Credit(s)
PSY 239 - Introduction to Abnormal Psychology 3 Credit(s)

Student Leadership Development

SLD 101 - Native Circles: It's Your Life 3 Credit(s)
SLD 103 - Post-Racial America: Challenges & Opportunities 4 Credit(s)
SLD 111 - Chicano/Latino Leadership 1: Quien Soy? Quienes 4 Credit(s)
SLD 112 - Chicano/Latino Leadership 2: Cultural Heroes 4 Credit(s)
SLD 113 - Chicano/Latino Leadership 3: Affirmative & Resistance 4 Credit(s)
SLD 121 - African American Leadership: History, Philosophy, & Practice 4 Credit(s)

Sociology

SOC 108A - Selected Topics in Women's Studies, Women's Bodies, Women's Selves 3 Credit(s)
SOC 204 - Introduction to Sociology 4 Credit(s)
SOC 204_H - Introduction to Sociology-Honors 4 Credit(s)
SOC 205 - Social Stratification and Social Systems 4 Credit(s)
SOC 206 - Institutions and Social Change 4 Credit(s)
SOC 208 - Sport and Society 4 Credit(s)
SOC 210 - Marriage, Family, and Intimate Relations 4 Credit(s)
SOC 211 - Social Deviance 3 Credit(s)
SOC 213 - Race and Ethnicity 4 Credit(s)
SOC 218 - Sociology of Gender 4 Credit(s)
SOC 225 - Social Problems 4 Credit(s)
SOC 228 - Introduction to Environmental Sociology 4 Credit(s)

Women's Studies

WS 101 - Introduction to Women's Studies 4 Credit(s)

Associate of Applied Science (AAS)

All AAS programs follow the Associate of Applied Science (AAS) Requirements unless otherwise specified. Go to individual AAS degrees to see specific program requirements.

Associate of Applied Science (AAS) Requirements

AAS degrees are intended to prepare graduates for direct entry into the workforce. AAS degrees may also help to prepare students for career advancement, occupational licensure, or further study at the baccalaureate level. These are general requirements for all Associate of Applied Science (AAS) degrees. See individual AAS programs for specific requirements.

Learning Outcomes

Lane degrees and certificates are aligned with Lane's Institutional Learning Outcomes. Associate of Applied Science degrees also have program-specific learning outcomes. See individual programs for details.

Degree Requirements

- This degree will be awarded based on the following criteria. Students in specific AAS programs must also meet any program-specific criteria for degree completion.
- Complete a minimum of 90 credits.
- Complete a minimum of 24 credits at Lane.
- Unless otherwise specified by individual programs, complete all courses with a grade of C- or better, or Pass.
- Maximum 16 credits "Pass" may be used toward degree. This limit does not include courses only offered P/NP.
- Cumulative GPA must be at least 2.0 when the Associate of Applied Science degree is awarded.

General Education

General Education courses must be a minimum of 3 credits each. AAS degree programs must contain general education instruction in the areas of communication (writing), computation (mathematics), and human relations. Students in AAS degree programs must complete one course from each of the following categories.

Writing

Students who complete the Writing requirement will be able to:

Apply effective communication skills

Identify appropriate communication style (face-to-face, written, digital, etc.) for specific audiences

See your program for specific required courses. If not specified, take one course, minimum 3 credits, selected from the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- WR 115 - Introduction to College Composition 4 Credit(s) or higher-level WR course

Math

Students who complete the Mathematics requirement will be able to:

- Apply appropriate mathematical concepts or quantitative reasoning to solve problems
- Recognize which mathematical concepts are applicable to specific industry or organizational contexts

See your program for specific required MTH courses. If not specified, take one course, minimum 3 credits, selected from the following:

- MTH 025 - Basic Mathematics Applications or higher-level MTH course

Human Relations

Students who complete the Human Relations requirement will be able to:

- Communicate effectively with others in industry or organizational contexts
- Identify barriers to communication and how to overcome them
- Demonstrate characteristics of an effective team member
- Apply ethical decision-making in the workplace
- Demonstrate honesty and respect for other viewpoints

Three credits minimum, as specified by program, or if not specified, select from the following list:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Requirements

AAS degree programs include core courses that are aligned with program learning outcomes and are designed to prepare students with the knowledge, skills, and abilities needed to enter into a specific career or industry. See individual program information for specific course requirements.

Notes

- College-level courses are numbered 100 or higher. Courses numbered 001-099 are considered skills based/developmental.
- Courses numbered 180, 197, 199, 280, 297, 298, or 299 count as electives, and do not meet General Education requirements. Courses numbered 199 and 299 are experimental, and may later be reviewed and approved for this program.
- Credit-by-Exam and Credit-by-Assessment may comprise up to 25% of total degree credits.
- See the list of Course Types by Prefix. Policies on accepting career technical credits vary at four-year institutions in Oregon. Consult an academic advisor if considering transferring after earning an AAS.

- Only the Academic Requirements Review Committee (ARRC) may waive a college-related instruction requirement. Petitions are available from Enrollment Services at lanecc.edu/esfs/general-education-substitution-and-waiver-petition.
- Students may use up to 18 credits of Cooperative Education toward a degree/certificate at Lane Community College. Cooperative Education may be used as part of Program Core Courses, not as General Education.
- HE 252 can be used in the Health/Wellness/Fitness category if taken in Summer 1997 or after. Prior to this, HE 252 would be considered an elective.
- Students may only use one BI 101, one BI 102, and one BI 103 to meet requirements for any Lane degree, regardless of letter option.

Accounting, AAS

Length: 91 credits

Program Contacts

Offered by the Business Department

Program Coordinators: Jill Gillett (*gillettj@lanecc.edu*, 541-463-5766) and Jeff Lanz (*lanzj@lanecc.edu*)

Business Academic Advising Team: *BusinessAdvising@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $17,644.00

- Resident Tuition: $11,466.00*
- Technology Fees: $1,001.00
- General Student Fees: $804.00**
- Online Course Fee: $990.00 (if applicable)
- Books / Materials: $1,963.00
- Other Costs / Expenses: $1500.00***

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare graduates to enter the field of accounting.

Students who complete this program will be able to:

PLO 1 - Operate effectively within time constraints to meet the accounting needs of financial, tax, payroll, and legal compliance requirements
PLO 2 - Use computerized and manual systems to record accounting data and prepare accounting statements and reports
PLO 3 - Perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations
PLO 4 - Use accounting and financial information to make informed and timely planning and budgeting decisions to promote organizational goals
PLO 5 - Utilize current software technologies, including word processing, spreadsheets, and document management systems to input, organize, create, and present professional documents, workpapers, and presentations for both internal and external users
PLO 6 - Use research and analytical skills to gather and interpret data to support business decisions

Program Requirements

General Education

General Education courses must be completed with a letter grade of C- or better, or Pass.

Writing (4 credits):

- WR 121_H / WR 121 - Academic Composition 4 Credit(s)

Mathematics (8-9 credits) - Complete two courses:

Math Course #1 (4-5 credits) - Complete one of the following:

- MTH 098 - Math Literacy 5 Credit(s)
- MTH 095 - Intermediate Algebra 5 Credit(s)
- Any MTH course higher than MTH 095

Math Course #2 (4-5 credits) - Complete one of the following:

- MTH 105 - Math in Society 4 Credit(s)
- Any MTH course higher than MTH 105

Health / PE / Dance (3 credits):

- Complete any Health (HE), Physical Education (PE, PEAT, PEO), or Dance (D) course or any combination of these courses.

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted. BA 278 meets the Human Relations requirement.

- EL 121 - Effective Digital Learning 1-3 Credit(s) (complete 1 credit; recommended to take business focused section)
- BA 101 - Introduction to Business 4 Credit(s)
- BA 211 - Financial Accounting 4 Credit(s)
- BA 214 - Business Communications 4 Credit(s)
- BA 226 - Business Law 4 Credit(s)
- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- BA 281 - Personal Finance 4 Credit(s)
- BT 108 - Business Proofreading and Editing 4 Credit(s)
- BT 120 - MS WORD for Business 4 Credit(s)
- BT 123 - MS EXCEL for Business 4 Credit(s)
- BT 163 - QuickBooks 4 Credit(s)
- BT 165 - Introduction to the Accounting Cycle 4 Credit(s)
- BT 170 - Payroll Records and Accounting 4 Credit(s)
- BT 221 - Budgeting for Managers 4 Credit(s)
- BT 223 - MS EXCEL for Business-Expert 4 Credit(s)
- BT 230 - Sustainable Paperless Practices using Adobe Acrobat 4 Credit(s)
- BT 272 - Tax concepts and Preparation 4 Credit(s)
- BT 286 - Professional Bookkeeping 4 Credit(s)

Cooperative Education

Cooperative Education and Seminar courses must be completed with a grade of C- or better. P/NP is not accepted.

- **Cooperative Education (5 credits) - Complete both of the following:**
- Seminar - BT 206 - Co-op Ed: Business Seminar 2 Credit(s)
- Co-op Ed - BA 280AC - Co-op Ed: Accounting 3 Credits

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified
- 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.
- These courses may only be offered once per year: BT 170; BT 223; BT 272; BT 221; BT 286. Contact the department or academic advisors for a class schedule.
- BT 206 - Co-op Ed: Business Seminar is preferred. Students may substitute the online seminar course COOP 206 for BT 206.
- Students using lower-credit courses to meet General Education requirements may need to take additional Electives to meet the 90 credit minimum.

Automotive Technology, AAS

Length: 90 credits

Program Contacts

Offered by: Advanced Technology Division

Program Coordinator: Egan Riordon, *riordone@lanecc.edu*, 541-463-5092

Advanced Technology Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $ 18,601.00

- Resident Tuition: $ 11,340.00*
- Technology Fees: $ 990.00
- General Student Fees: $ 804.00**
- Online Course Fee (if applicable)
- Books / Course Materials: $ 1,293.00
- Program Specific Fees: $ 1,057.00 (Class Fees and Materials)
- Differential Fees: $ 3,117.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students for employment as an Automotive Service Technician working at company-owned repair stations, fleets, independent garages, gas stations, or new car dealerships.

Students who complete this program will be able to:

PLO 1 - 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
PLO 2 - 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
PLO 3 - Diagnose and repair current vehicles using advanced diagnostic tools and equipment
PLO 4 - Demonstrate and use industry safety standards
PLO 5 - Access library, computing, and communications services and obtain information and data from regional and national networks
PLO 6 - Interpret the concepts of a problem-solving task and translate them into mathematical equations

Program Requirements

General Education

GENERAL EDUCATION courses must be completed with a grade of C- or better, or Pass.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- WR 115 - Introduction to College Composition 4 Credit(s)
- Any WR course higher than WR 115

Math (4-5 credits) - Complete one of the following:

- MTH 085 - Applied Geometry for Technicians 4 Credit(s)
- MTH 097 - Geometry 4 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Open Elective (1 credit):

- Complete any 100- or 200-level course to meet this requirement

Program Core Courses

PROGRAM CORE courses must be completed with a grade of C- or better, or Pass. Students must complete the maximum credits listed for all core courses. Enrollment in core courses by consent only. See an Academic Advisor or Program Coordinator about enrollment.

- AM 143 - Brakes 1-8 Credit(s)
- AM 145 - Engine Repair 1-12 Credit(s)
- AM 147 - Suspension and Steering 1-6 Credit(s)
- AM 149 - Manual Drive Trains and Axles 1-6 Credit(s)
- AM 242 - Automatic Transmissions/ Transaxles 1-12 Credit(s)
- AM 243 - Electrical and Electronic Systems 1-12 Credit(s)
- AM 244 - Engine Performance 1-12 Credit(s)
- AM 246 - Heating and Air Conditioning 1-4 Credit(s)
- **Welding (4 credits) - Complete one of the following:** WLD 121 - Shielded Metal Arc Welding 1 1-4 Credit(s) WLD 143 - Wire Drive Welding 1 1-4 Credit(s)

Cooperative Education

- Take 3 credits of AM 280 - Co-op Ed: Automotive

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified
- A high school diploma or equivalent is recommended for all to 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. 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. For more information please see your Academic Advisor or Program Coordinator.
- This program is articulated with Oregon Institute of Technology, which requires a higher-level math course than is required for the program. Contact your Academic Advisor for help with transfer to OIT.

Certification

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

Aviation Maintenance Technician, AAS

Length: 104 credits

Program Contacts

Offered by Lane Aviation Academy

Program Coordinator: Neal Gallagher, Chief Instructor, *gallaghern@lanecc.edu*, 541-463-4351

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $20,502.00

- Resident Tuition: $13,104.00*
- Technology Fees: $1,144.00
- General Student Fees: $804.00**
- Online Course Fee: $ (if applicable)
- Books / Course Materials: $300.00
- Program Specific Fees: $4,650.00 (Course Fees and Exams/Licensure)
- Other Cost / Expenses: $500.00*** (Tool and Supplies)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

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 Mechanic Certificate with Airframe and Powerplant Ratings.

Students who complete this program will be able to:

PLO 1 - Troubleshoot, inspect, repair, and maintain aircraft to airworthy standards, and provide documented Return to Service.
PLO 2 - Apply industry-specific test-taking and time management skills to the requirements of the FAA written, oral, and practical certification exams in the areas of Airframe and Powerplant ratings
PLO 3 - Demonstrate and use industry safety and professionalism standards
PLO 4 - Navigate aviation libraries, databases, and publications in English to access data and procedures relating to aircraft maintenance processes and best practices
PLO 5 - Utilize mathematical processes to understand and ensure compliance with manufacturers' limits
PLO 6 - Explain the importance and steps of -- and thoroughly execute -- specific, complex multi-step processes

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass. MTH 075 (or equivalent) must be completed by the end of the Year One. MTH 085 (or equivalent) must be completed by the end of Winter Term, Year Two.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- WR 115 - Introduction to College Composition 4 Credit(s)
- Any WR course higher than WR 115

Math (8 credits) - Complete both of the following courses:

- MTH 075 - Applied Algebra for Technicians 4 Credit(s)
- MTH 085 - Applied Geometry for Technicians 4 Credit(s)

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- AV 251 - General 101 6 Credit(s)
- AV 252 - General 102 6 Credit(s)
- AV 253 - General 103 6 Credit(s)
- AV 254 - General 104 6 Credit(s)
- AV 255 - General 105 6 Credit(s)
- AV 261 - Airframe 1 6 Credit(s)
- AV 262 - Airframe 2 6 Credit(s)
- AV 263 - Airframe 3 6 Credit(s)
- AV 264 - Airframe 4 6 Credit(s)
- AV 271 - Powerplant 1 6 Credit(s)
- AV 272 - Powerplant 2 6 Credit(s)
- AV 273 - Powerplant 3 6 Credit(s)
- AV 274 - Powerplant 4 6 Credit(s)
- AV 282 - Airframe Return to Service 6 Credit(s)
- AV 283 - Powerplant Return to Service 6 Credit(s)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- This is the parent program for the Aviation Maintenance Technician, 2-yr Certificate.
- Required for admission: Placement into WR 097 or WR 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.
- General Education courses (except mathematics) are not required for two-year FAA Airframe and Powerplant airman's certificate exams.
- MTH 075 - Applied Algebra for Technicians must be completed by the end of Year One.
- One of the following options may be substituted for MTH 075: 1) MTH 070 or 2) MTH 060 + MTH 065 or 3) MTH 095 or higher Algebra course or 4) Any 200-level math course (except MTH 243 and MTH 261).
- MTH 085 - Applied Geometry for Technicians must be completed by the end of Winter Term, Year Two.
- One of the following options may be substituted for MTH 085: 1) MTH 097 or 2) MTH 112.
- Writing requirement must be completed by the end of Year Two.
- Graduates hoping to transfer to a four-year institution should meet with their Academic Advisor or Program Coordinator.
- **Cooperative Education:** Under the supervision of the Aviation Maintenance Co-op Coordinator and as approved by the AMT Chief Instructor 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.

Licensing and Certification

Accreditation: Aviation Maintenance, approved under Part 147 of the Federal Aviation Regulations of the Federal Aviation Administration.

Licensing and Certification: AMTS EM8T117Q Airframe and Powerplant Ratings.

Aviation Professional Pilot, AAS

Length: 91 credits

Program Contacts

Offered by Lane Aviation Academy

Program Coordinator: Paul Lancaster, Director of Flight Training, *LancasterP@lanecc.edu*, 541-463-4316

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $90,319.00 (Track A)

This track includes students under 180 lbs, under 6'2", under 39" sitting height.

- Technology Fees: $1,001.00
- General Student Fees: $984.00**
- Online Course Fee: $450.00 (if applicable)
- Books / Course Materials: $1,800.00
- Program Specific Fees: $74,118.00 (Application Fee, Course Fees and Exams/Licensure)
- Other Cost / Expenses: $500.00*** (Tools and Supplies)

Estimated Cost: $92,446.00 (Track B)

This track includes students at or above 180 lbs, over 6'2", over 39" sitting height

- Resident Tuition: $11,466.00*
- Technology Fees: $1,001.00
- General Student Fees: $984.00**
- Online Course Fee: $450.00 (if applicable)
- Books / Course Materials: $1,800.00
- Program Specific Fees: $76,245.00 (Application Fee, Course Fees and Exams/Licensure)
- Other Cost / Expenses: $500.00*** (Tools and Supplies)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

This program provides students training, certificates, and ratings needed to start a career as a commercial pilot. Students will receive the following:

Private Pilot Certificate Instrument Rating

Commercial Pilot Certificate

Multi Engine Rating

Certified Flight Instructor Certificate/Rating (CFI, CFII).

Students who complete this program will be able to:

PLO 1 - Explore and critically appraise various aviation careers and businesses
PLO 2 - Conduct safe and legal flight operations in accordance with FAA regulations
PLO 3 - Use a variety of avionics and navigation aids for both Visual (VFR) and Instrument (IFR) flight operations
PLO 4 - Apply the Aeronautical Decision Making model (ADM) with particular attention to the human element and its integration with technology, addressing FAA guidelines on hazardous attitudes
PLO 5 - Identify, assess, and respond to hazards to flight operations including weather, mechanical, medical, physiological, and psychological issues, in order to make sound go/no-go and in-flight decisions in normal and emergency circumstances
PLO 6 - Explain the functions and interactions of aerodynamics, aircraft systems, navigation, communications, regulations, and meteorology
PLO 7 - Develop and/or modify training course outlines, lesson plans, and teaching styles to meet the needs of the individual through application of FAA Fundamentals of Instruction (FOI)

Admission Information

This will be a limited enrollment program. Please visit the Aviation Academy web page for more information and to apply. There is a $75.00 fee to apply. lanecc.edu/aviationacademy

The program starts in Fall 2021 and only runs once per year. Note - program will switch to start summer term beginning Summer 2022.

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- WR 115 - Introduction to College Composition 4 Credit(s)
- Any WR course higher than WR 115

Math (4-5 credits) - Complete one of the following:

- MTH 060 - Beginning Algebra 4 Credit(s)
- MTH 098 - Math Literacy 5 Credit(s)
- Any Math Course higher than MTH 060

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass. AP 225 satisfies the Human Relations requirement.

Track A courses designed for students at or above 180 lbs, over 6'2", over 39" sitting height
Track B courses designed for students under 180 lbs, under 6'2", under 39" sitting height

- AP 110A - Flight Lab - Pre-Solo 1 Credit(s) or AP 110B
- AP 112 - Private Pilot Ground School 5 Credit(s)
- AP 113 - Airman Certification Standards and Maneuvers 1 Credit(s)
- AP 115 - Intro to Aviation and Careers 1 Credit(s)
- AP 116 - Aviation History 4 Credit(s)
- AP 120A - Flight Lab - Private Pilot Certificate 1 Credit(s) or AP 120B

- AP 121 - Simulator Lab - Private 1 Credit(s)
- AP 125 - Aircraft Systems & Structures 1 2 Credit(s)
- AP 126 - Aviation Weather Services 2 Credit(s)
- AP 127 - Aerodynamics 3 Credit(s)
- AP 130 - Flight lab - Attitude Control 1 Credit(s)
- AP 132 - Instrument Ground School 5 Credit(s)
- AP 135 - Advanced Avionics 1 Credit(s)
- AP 140 - Flight Lab - Instrument Rating 1 Credit(s)
- AP 141 - Simulator Lab - Instrument 1 Credit(s)
- AP 210 - Flight Lab - Cross-Country 1 Credit(s)
- AP 212 - Commercial Pilot Ground School 5 Credit(s)
- AP 215 - Aircraft Systems & Structures 2 2 Credit(s)
- AP 220 - Flight Lab - Maneuvers 1 Credit(s)
- AP 221 - Simulator Lab - Commercial 1 Credit(s)
- AP 222 - CFI/CFII Ground School 3 Credit(s)
- AP 225 - FOI & Human Factors 3 Credit(s)
- AP 230 - Flight Lab - Commercial Pilot Certificate 1 Credit(s)
- AP 232 - Multi-Engine Ground School 2 Credit(s)
- AP 235 - Accident Investigations 3 Credit(s)
- AP 240 - Flight Lab - Multi-Engine Rating & CFI/CFII Certificate 1 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- BA 254 - General Aviation Management 3 Credit(s)
- FT 123 - Commercial UAS Ground School 1 Credit(s)
- GS 109 - Meteorology 5 Credit(s)

Electives

Program Electives courses must be completed with a grade of C- or better, or Pass. **Complete 17 credits from the following list:**

- AP 280 - Co-op Ed: Pro Pilot 3-12 Credit(s)
- FT 121 - UA Platforms and Systems 4 Credit(s)
- FT 122 - UA Ground Control Systems 4 Credit(s)
- FT 124A - UAS Flight Lab 1 Credit(s)
- FT 124B - UAS Flight Lab 1 Credit(s)
- FT 124C - UAS Flight Lab 1 Credit(s)
- FT 124D - UAS Flight Lab 1 Credit(s)
- FT 124E - UAS Flight Lab 1 Credit(s)
- FT 124F - UAS Flight Lab 1 Credit(s)
- FT 231 - UAS Advanced Sensor 4 Credit(s)
- BA 206 - Management Fundamentals 4 Credit(s)
- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- COMM 100 - Basic Communication 4 Credit(s)
- COMM 105 - Listening and Critical Thinking 4 Credit(s)
- COMM 111 - Fundamentals of Public Speaking 4 Credit(s)
- COMM 111_H - Fundamentals of Public Speaking-Honors 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- PH 101 - Fundamentals of Physics 4 Credit(s)
- PH 102 - Fundamentals of Physics 4 Credit(s)
- PH 103 - Fundamentals of Physics 4 Credit(s)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- This is the parent program for the Aviation Commercial Pilot, CPC, Aviation Instrument Rating, CPC, and Aviation Private Pilot, CPC.

Certifications

FAA Private Pilot Certificate

FAA Instrument Rating

FAA Commercial Pilot Certificate

FAA Multi-Engine Rating

FAA Certified Flight Instructor Certificate

FAA Certified Flight Instructor – Instrument Certificate

Students must pass an FAA written test and meet FAA Airman Certification Standards before taking an FAA Practical Test for certificates and ratings listed above. Test are administered by the FAA or FAA Designated Pilot Examiners at the cost of the student.

Business Management, AAS

Length: 90 credits

Program Contacts

Offered by the Business Department

Program Coordinators: LuAnne Johnson (*johnsonlm@lanecc.edu*, 541-463-5767) and Tim Hovet (*hovett@lanecc.edu*, 541-463-5537)

Business Advising Team: *BusinessAdvising@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $17,232.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fee: $900.00 (if applicable)
- Books / Materials: $1,704.00
- Other Cost / Expenses: $1,500.00***

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare graduates for positions in management, sales and marketing, human resources, administration, and project management. The program includes electives to enable students to focus on one business area or develop a general background prior to assuming management positions.

Students who complete this program will be able to:

PLO 1 - Apply adaptive marketing, financial, managerial, and leadership theories in a business context
PLO 2 - Demonstrate an understanding of the functions of leading, planning, organizing, and controlling in an organization
PLO 3 - Perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations
PLO 4 - Use accounting and financial information to make informed and timely planning and budgeting decisions to promote organizational goals
PLO 5 - Utilize current software technologies, including word processing, spreadsheets, and document management systems to input, organize, create, and present professional documents, workpapers, and presentations for both internal and external users
PLO 6 - Use research and analytical skills to gather and interpret data to support business decisions

Program Requirements

General Education

General Education courses must be completed with a letter grade of C- or better, or Pass.

Writing (4 credits):

- WR 121_H / WR 121 - Academic Composition 4 Credit(s)

Mathematics (8-9 credits) - Complete two courses:

Math Course #1 (4-5 credits) - Complete one of the following:

- MTH 098 - Math Literacy 5 Credit(s)
- MTH 095 - Intermediate Algebra 5 Credit(s)
- Any MTH course higher than MTH 095

Math Course #2 (4-5 credits) - Complete one of the following:

- MTH 105 - Math in Society 4 Credit(s)
- Any MTH course higher than MTH 105

Health / PE / Dance (3 credits):

- Complete any Health (HE), Physical Education (PE, PEAT, PEO), or Dance (D) course or any combination of these courses.

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP not accepted. BA 278 meets the Human Relations requirement.

- EL 121 - Effective Digital Learning 1-3 Credit(s) (complete 1 credit; recommended to take business focused section)
- BA 101 - Introduction to Business 4 Credit(s)
- BA 206 - Management Fundamentals 4 Credit(s)
- BA 214 - Business Communications 4 Credit(s)
- BA 222 - Financial Management 4 Credit(s)
- BA 226 - Business Law 4 Credit(s)
- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- BA 281 - Personal Finance 4 Credit(s)
- BT 108 - Business Proofreading and Editing 4 Credit(s)
- BT 120 - MS WORD for Business 4 Credit(s)
- BT 123 - MS EXCEL for Business 4 Credit(s)

- BT 223 - MS EXCEL for Business-Expert 4 Credit(s)
- BT 291 - Operations Management 4 Credit(s)

Accounting (4 credits) - Complete one of the following:

- BA 211 - Financial Accounting 4 Credit(s)
- BT 165 - Introduction to the Accounting Cycle 4 Credit(s)

Cooperative Education

Cooperative Education and Seminar courses must be completed with a grade of C- or better. P/NP is not accepted.

- **Cooperative Education (5 credits) - Complete both of the following:**
- Seminar - BT 206 - Co-op Ed: Business Seminar 2 Credit(s)
- Co-op Ed - BA 280AC - Co-op Ed: Accounting 3 Credits

Directed Electives

Directed Electives must be completed with a letter grade of C or better. P/NP not accepted. **14-16 credits; choose one group of electives.** Students may also choose to mix and match from different lists. Please see your Academic Advisor for more information.

Small Business Management

By completing all the courses within Small Business Management group, students would qualify to apply for the Business Management: Small Business Ownership, CPC.

- BA 250 - Small Business Management 4 Credit(s)
- BT 150 - Business Web Pages with WordPress 3 Credit(s)
- BT 163 - QuickBooks 4 Credit(s)
- BT 221 - Budgeting for Managers 4 Credit(s)

Sales and Marketing

- BA 238 - Sales 3 Credit(s)
- BT 150 - Business Web Pages with WordPress 3 Credit(s)
- BT 181 - Customer Service 4 Credit(s)
- BT 253 - Digital Marketing 4 Credit(s)

Data Specialist

- CIS 276R - Data Integration, Analytics and Reporting 4 Credit(s)
- BT 223 - MS EXCEL for Business-Expert 4 Credit(s)
- CS 275 - Basic Database SQL 4 Credit(s)
- MTH 243 - Introduction to Probability and Statistics 4 Credit(s)

Project Management

- BT 230 - Sustainable Paperless Practices using Adobe Acrobat 4 Credit(s)
- BT 221 - Budgeting for Managers 4 Credit(s)
- BT 270 - Project Management 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)

Human Resources

- BT 170 - Payroll Records and Accounting 4 Credit(s)
- BA 224 - Human Resource Management 4 Credit(s)
- BT 230 - Sustainable Paperless Practices using Adobe Acrobat 4 Credit(s)
- **Complete one of the following:**
  - CG 203 - Human Relations at Work 1-3 Credit(s)
  - COMM 260 - Introduction to Conflict Management 4 Credit(s)
  - COMM 285 - Mediated Communication 4 Credit(s)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- These courses may only be offered once per year. Check with the department for course schedule. BA 224; BA 250; BT 144; BT 170; BT 181; BT 221; BT 270; BT 291.
- BT 206 - Co-op Ed: Business Seminar is preferred. Students may substitute the online seminar course COOP 206 for BT 206.
- Students using lower-credit courses to meet General Education and Directed Elective requirements may need to take additional Electives to meet the 90-credit minimum.

Commercial Unmanned Aerial Systems, AAS

Length: 90 credits

Program Contacts

Offered by Lane Aviation Academy

Program Coordinator: Walter (Sean) Parrish, Chief Flight Instructor, *parrishw@lanecc.edu*, 541-463-4323

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $23,253.00 (with Drafting Electives)

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $1,500.00
- Program Specific Fees: $8,619.00 (course fees and exams/licensure)

Estimated Cost: $36,115.00 (with Private Pilot Electives)

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $1,500.00
- Program Specific Fees: $21,481.00 (course fees and exams/licensure)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students for successful careers as commercial Unmanned Aerial Systems (UAS) operators.

Students who complete this program will be able to:

PLO 1 - Integrate unmanned flights into the NAS safely and effectively
PLO 2 - Safely and effectively plan and execute field missions in a variety of situations utilizing current unmanned aircraft systems
PLO 3 - Design, assemble, build, program, and fly hobby and commercial grade unmanned equipment
PLO 4 - Work safely and effectively within a crew/team environment utilizing current unmanned technology
PLO 5 - Safely pilot multi-copters and fixed wings in normal and simulated emergency flight operations
PLO 6 - Successfully obtain and utilize Federal Aviation Administration waivers
PLO 7 - Apply the principles of photography and videography in unmanned operations
PLO 8 - Utilize spatial data and GIS technology to make or inform appropriate decisions and create deliverable geospatial products

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- WR 115 - Introduction to College Composition 4 Credit(s)
- Any WR course higher than WR 115

Math (5 credits) - Complete the following:

- MTH 095 - Intermediate Algebra 5 Credit(s)
- Any MTH course from the following: MTH 097, MTH 111, MTH 112, all 200-level MTH (except MTH 243 and MTH 261)

Human Relations (3-4 credits) - Complete one of the following:

- AP 225 - FOI & Human Factors 3 Credit(s) (recommended)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

AP, **FT** and **GS** courses must be completed with a letter grade of C- or better. P/NP is not accepted. All other **Program Core** courses must be completed with a grade of C- or better, or Pass.

- ART 261 - Photography 1 3 Credit(s)
- BA 254 - General Aviation Management 3 Credit(s)
- GIS 151 - Digital Earth 4 Credit(s)
- GIS 245 - GIS 1 4 Credit(s)
- GIS 246 - GIS 2 4 Credit(s)
- GS 109 - Meteorology 5 Credit(s)
- MUL 105 - Digital Photography 4 Credit(s)

UAS and Flight Courses (32 Credits)

- AP 112 - Private Pilot Ground School 5 Credit(s)
- AP 116 - Aviation History 4 Credit(s)
- AP 127 - Aerodynamics 3 Credit(s)
- FT 121 - UA Platforms and Systems 4 Credit(s)
- FT 122 - UA Ground Control Systems 4 Credit(s)

- FT 123 - Commercial UAS Ground School 1 Credit(s)
- FT 230 - UAS Data Acquisition and Analysis 3 Credit(s)
- FT 231 - UAS Advanced Sensor 4 Credit(s)
- FT 235 - UAS Capstone Project 4 Credit(s)

UAS Flight Labs (6 Credits)

- FT 124A - UAS Flight Lab 1 Credit(s)
- FT 124B - UAS Flight Lab 1 Credit(s)
- FT 124C - UAS Flight Lab 1 Credit(s)
- FT 124D - UAS Flight Lab 1 Credit(s)
- FT 124E - UAS Flight Lab 1 Credit(s)
- FT 124F - UAS Flight Lab 1 Credit(s)

Program Electives

Program Electives must be completed with a grade of C- or better, or Pass.

Complete ONE of the following elective options:

Option 1 (12 credits):

- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- DRF 220 - Building Information Modeling 4 Credit(s)
- ART 282 - Landscape and Architectural Photography 4 Credit(s)

Option 2 (12 credits) choose from the following list:

- AV 251 - General 101 6 Credit(s)
- CIS 101 - Computer Fundamentals 4 Credit(s)
- CIS 125A - Software Tools: App Development 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- CS 160 - Orientation to Computer Science 4 Credit(s)
- DRF 121 - Mechanical Drafting 4 Credit(s)
- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- DRF 245 - Solid Modeling 4 Credit(s)
- MFG 101 - Safety and Basic Shop Practice 3 Credit(s)
- MUL 215 - Digital Photography 2 3 Credit(s)

Complete additional credits (1-3) to meet 90 total credits:

- Complete any course(s), 100-level or higher.

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- This is the parent program for the Commercial Unmanned Aerial Systems: Aerial Photography, CPC and Commercial Unmanned Aerial Systems: Geographic Information Science, CPC
- Students are encouraged to complete the Human Relations requirement prior to program entry.
- AP 110A and AP 120A are flown in a 4-seat aircraft (W=Warrior), which has a higher rental cost than the 2-seat aircraft used for AP 110B and AP 120B.
- By completing DRF 121, DRF 160, and DRF 245 in program electives, students would earn the Drafting for Manufacturing, CPC.
- Students considering transfer to a 4-year college or university should contact their Academic Advisor.

Licensing and Certification

FT 123 — prepares the students to sit for the FAA Part 107 Remote Pilot License

FT 230 — prepares students to obtain an optional PIX4D certificate (a GIS and mapping computer program)

FT 122 — prepares and licenses students with an Amateur Radio Technician License

Computer Network Operations, AAS

Length: 90 credits

Program Contacts

Offered by the Computer and Information Technology department

Program Coordinator: Joseph Colton, *coltonj@lanecc.edu*, 541-463-5249

CIT Academic Advising Team: *CITPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $15,899.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fee: $900.00 (if applicable)
- Books / Materials: $209.00
- Program Specific Fees: $156.00 (data fee)
- Other Cost / Expenses: $1,500.00**** (Computer / Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program will be able to:

PLO 1 - Explain established and emerging network technologies
PLO 2 - Access and utilize remote network resources with various software and hardware
PLO 3 - Build and configure Windows and Linux clients and servers
PLO 4 - Design, build, and optimize IP networks using routers, switches, and other network appliances
PLO 5 - Design, implement, test, and debug programs using one or more relevant programming language(s)
PLO 6 - Design and configure computer systems and networks with attention to current security needs

Program Requirements

General Education

General Education courses must be completed with a letter grade of C- or better, or Pass.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition
- WR 121 - Academic Composition (or WR 121_H) (Recommended)
- Any Writing course higher than WR 121

Math (4-5 credits) - Complete one of the following:

- MTH 082 - Math for Network Operations 4 Credit(s)
- MTH 111 - College Algebra 5 Credit(s)
- Any Math course higher than MTH 111

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Open Elective (13 credits):

- Complete any 100- or 200-level courses to meet this requirement.

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted, with the exception of CIS 100, CS 179, CS 189, and CS 279, which may be completed with a Pass grade.

- CIS 100 - Computing Careers Exploration 1 Credit(s)
- CIS 140U - Introduction to Unix/Linux 4 Credit(s)
- CS 179 - Introduction to Computer Networks 4 Credit(s)
- CS 189 - Routing and Switching Essentials 4 Credit(s)
- CS 240U - Advanced Unix/Linux: Server Management 4 Credit(s)
- CS 240W - Advanced Windows: Server Management 4 Credit(s)
- CS 273 - Introduction to Virtualization and Cloud Computing 4 Credit(s)
- CS 275 - Basic Database SQL 4 Credit(s)
- CS 279 - Scaling Networks 4 Credit(s)
- CS 284 - Network Security Fundamentals 4 Credit(s)
- CS 288 - Network Monitoring and Management 4 Credit(s)

Programming Sequence

Programming courses must be completed with a letter grade of C- or better. P/NP is not accepted. Complete two courses including an introductory and advanced course.

Introductory Programming (4 credits) - Complete one of the following:

- CS 161P - Computer Science 1 4 Credit(s) (Python) (Recommended)
- CS 161C - Computer Science 1 4 Credit(s) (C++)
- CS 161N - Computer Science 1 4 Credit(s) (C#)
- CS 133JS - Beg. Programming: JavaScript 4 Credit(s)

Advanced Programming (4 credits) - Complete one of the following:

- CS 233S - Python for Systems Administrators 4 Credit(s) (Recommended)
- CS 162P - Computer Science 2 4 Credit(s) (Python)
- CS 162C - Computer Science 2 4 Credit(s) (C++)

- CS 162N - Computer Science 2 4 Credit(s) (C#)
- CS 233JS - Intermediate Programming: JavaScript 4 Credit(s)

Cooperative Education

Cooperative Education must be completed with a letter grade of C- or better. P/NP is not accepted. **Seminar** must be completed with a grade of C- or better, or Pass. **Complete 3 credits of Cooperative Education.**

- CS 206 - Co-op Ed: Computer Information Technology Seminar 2 Credit(s)
- CS 280CN - Co-op Ed: Computer Network Operations 3-12 Credit(s)

Program Electives

Program Electives must be completed with a letter grade of C- or better. P/NP is not accepted. **Complete 12 credits from the following:**

Recommended:

- CIS 140W - Introduction to Operating Systems: Windows Clients 4 Credit(s)
- CS 188 - Wireless Networking 4 Credit(s)
- CS 285 - Cybersecurity Operations 4 Credit(s)
- CS 286 - Firewalls and VPNs 4 Credit(s)
- CS 290 - Ethical Hacking Fundamentals 4 Credit(s)
- And / or choose courses from any of the following subjects:
- CS - Computer Science (except CS 120)
- CIS - Computer Information Systems (except CIS 101)
- MTH - Mathematics (100-level or higher)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- This is the parent program for the Computer Network Monitoring and Management, CPC.
- Students using lower-credit courses to meet General Education requirements may need to take additional Electives to meet the 90-credit minimum.
- First-year students: A personal laptop is strongly recommended for students in this program. Please contact the Program Coordinator for options and system requirements.
- 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
- Students planning to pursue a bachelor's degree in Computer Science are advised to also complete the following courses in mathematics: MTH 111, MTH 231, MTH 232, and MTH 260.
- Students who have a CCNA certificate can get credit for the following courses: CS 179, CS 189, CS 279. Contact Program Coordinator for information.
- Computer programming languages: Students' taking their first programming language (C, N, or P) will take CS 161/162. Because CS 161/162 are not repeatable courses, upon taking a second programming language, students must use the CS 133/233 course numbers. CS 161/162 are the courses listed in catalog degree requirements but CS 133/233 will be accepted as well. For help with this, contact the department or academic advisors.

Computer Programming, AAS

Length: 91 credits

Program Contacts

Offered by the Computer and Information Technology department

Program Coordinator: Brian Bird, *birdb@lanecc.edu*, 541-463-3024

CIT Academic Advising Team: *CITPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $16,169.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fee: $900.00 (if applicable)
- Books / Materials: $479.00
- Program Specific Fees: $156.00 (data fee)
- Other Cost / Expenses: $1,500.00*** (computer, Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare technicians for entry-level positions as software developers.

Students who complete this program will be able to:

PLO 1 - Design, implement, test, debug and document web based computer programs using a variety of current tools and technologies
PLO 2 - Design, implement, test, debug and document at least one other type of computer program such as: game program, database program, object-oriented program
PLO 3 - Explain and model the relationship between computer programs and organizational processes
PLO 4 - Interpret the mathematical concepts of a programming related problem-solving task and translate them into programming logic and expressions
PLO 5 - Use appropriate library and information resources to research programming tools and technologies and support lifelong technical learning

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (8 credits) - Complete both of the following:

- WR 121 - Academic Composition (or WR 121_H)
- WR 227 - Technical Writing (or WR 227_H)

Math (4-5 credits) - Complete one of the following:

- MTH 095 - Intermediate Algebra 5 Credit(s)
- MTH 111 - College Algebra 5 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)
- or any 200-level MTH course (MTH 243 not accepted)

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)
- **Health/PE/Dance (3 credits):** Complete any Health (HE), Physical Education (PE, PEAT, PEO), or Dance (D) course or any combination of these courses.
- **Open Elective (1 credit):** Complete any 100- or 200-level course to meet this requirement.

Program Core Courses

All of the following courses must be completed with a letter grade of B- or better. P/NP is not accepted.

- CS 161N - Computer Science 1 4 Credit(s)
- CS 162N - Computer Science 2 4 Credit(s)
- CS 234N - Advanced Programming: C# 4 Credit(s)
- CS 246 - System Design 4 Credit(s)
- CS 295N - Web Development 1: ASP.NET 4 Credit(s)
- CS 296N - Web Development 2: ASP.NET 4 Credit(s)
- CS 297 - Programming Capstone 4 Credit(s)

All of the following courses, except CIS 100, must be completed with a letter grade of C- or better. P/NP is not accepted. CIS 100 may be completed with a Pass grade.

- CIS 100 - Computing Careers Exploration 1 Credit(s)
- CIS 195 - Web Authoring 1 4 Credit(s)
- CS 133JS - Beg. Programming: JavaScript 4 Credit(s)
- CS 233JS - Intermediate Programming: JavaScript 4 Credit(s)
- CS 275 - Basic Database SQL 4 Credit(s)
- CS 276 - Database Systems and Modeling 4 Credit(s)

Complete one of the following:

- CS 160 - Orientation to Computer Science 4 Credit(s) (recommended)
- CIS 125A - Software Tools: App Development 4 Credit(s) (recommended)
- CIS 125D - Software Tools 1: Databases 4 Credit(s)
- CIS 125G - Software Tools 1: Game Development 4 Credit(s)

Cooperative Education

Seminar must be completed with a grade of C- or better, or Pass.

- CS 206 - Co-op Ed: Computer Information Technology Seminar 2 Credit(s)

Cooperative Education must be completed with a letter grade of C- or better. P/NP is not accepted. **Complete 4 credits of Cooperative Education.**

- CS 280PR - Co-op Ed: Computer Programming 3-12 Credit(s)

Program Electives

Program Electives must be completed with a letter grade of C- or better. P/NP is not accepted. **Complete 12 credits from the following list:**

Programming majors are strongly advised to take CS 235AM and CS 235IM.

- CS 235AM - Intermediate Mobile Application Development: Android 4 Credit(s)
- CS 235IM - Intermediate Mobile Applications Development: IOS 4 Credit(s)
- CIS 140U - Introduction to Unix/Linux 4 Credit(s)
- CS 161C - Computer Science 1 4 Credit(s)
- CS 162C - Computer Science 2 4 Credit(s)
- CS 161P - Computer Science 1 4 Credit(s)
- CS 162P - Computer Science 2 4 Credit(s)
- CS 240U - Advanced Unix/Linux: Server Management 4 Credit(s)
- CS 260 - Data Structures 1 4 Credit(s)

Notes

- This is the parent program for the Computer Programming: Database Specialist, CPC, Computer Programming: Front End Web Development, CPC, and Computer Programming: Mobile Application Development, CPC.
- Students who complete the Computer Programming Degree will have completed all of the coursework to earn the Computer Programming: Database Specialist, CPC and the Computer Programming: Front End Web Development, CPC.
- This program follows the Associate of Applied Science (AAS) Requirements unless otherwise specified.
- Second-year requirements: A personal laptop is recommended for second-year students in the degree program. Please contact the Program Coordinator for options and system requirements.
- Programming majors are strongly advised to take as electives CS 235AM and CS 235IM.
- Students using lower-credit courses to meet General Education requirements may need to take additional Electives to meet the 90-credit minimum.
- For more specific information about the Fall/Winter/Spring CS/CIS elective sequences please contact the Program Coordinator to help determine which elective sequence best fits your goals.
- Computer programming languages: Students' taking their first programming language (C, N, or P) will take CS 161/162. Because CS 161/162 are not repeatable courses, upon taking a second programming language, students must use the CS 133/233 course numbers. CS 161/162 are the courses listed in catalog degree requirements but CS 133/233 will be accepted as well. For help with this, contact the department or academic advisors.

Certifications

By completing CS 275 and CS 276 students can take the Oracle Certified Foundations Associate Exam.

Construction Technology, AAS

Length: 90 credits

Program Contacts

Offered by: Advanced Technology Division

Program Coordinator: Paul Rea, *reap@lanecc.edu*, 541-463-5504

Advanced Technology Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $15,576.00

- Resident Tuition: $11,340.00*
- Technology Fees $990.00
- General Student Fees: $804.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $1,974.00
- Program Specific Fees: $468.00 (course fees, materials)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program will be able to:

PLO 1 - Cut, fit, and assemble wood and other materials for building construction
PLO 2 - Recognize and explain the importance of the relationships among building components in the process of assembling a structure
PLO 3 - Demonstrate and use industry safety standards
PLO 4 - Use blueprint reading skills necessary to the profession
PLO 5 - Establish field elevations and develop building layouts through the use of various surveying tools
PLO 6 - Use appropriate library and information resources to research professional issues
PLO 7 - Use mathematics and interpretive skills to solve construction problems
PLO 8 - Acknowledge the various areas of the construction industry and explain how different occupations integrate into the field as a whole

Program Requirements

General Education

GENERAL EDUCATION courses must be completed with a grade of C- or better, or Pass.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis
- WR 115 - Introduction to College Composition
- Any WR course higher than WR 115

Math (4-5 credits) - Complete one of the following:

- MTH 085 - Applied Geometry for Technicians
- MTH 097 - Geometry
- MTH 112 - Trigonometry

Human Relations (3-4 credits) - Complete one of the following:

- 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 Communication
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Health/PE/Dance (3 credits):

- Complete any Health (HE), Physical Education (PE, PEAT, PEO), or Dance (D) course or any combination of these courses.

Open Elective (6 credits):

- Complete any 100- or 200-level courses to meet this requirement.

Program Core Courses

PROGRAM CORE courses must be completed with a grade of C- or better, or Pass. Students must complete 5 credits each of CST 118A, 118B and 118C for a total of 15 credits.

- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- CST 110 - Blueprint Reading 1 3 Credit(s)
- CST 111 - Construction Orientation and Environment 2 Credit(s)
- CST 116 - Construction Estimating 4 Credit(s)
- CST 118A - Building Construction A 1 to 5 Credit(s)
- CST 118B - Building Construction B 1 to 5 Credit(s)
- CST 118C - Building Construction C 1 to 5 Credit(s)
- CST 119 - Building Construction Surveying 3 Credit(s)
- CST 122 - Construction Codes 2 Credit(s)
- CST 211 - Blueprint Reading 2 3 Credit(s)
- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- DRF 137 - Architectural Plans 4 Credit(s) or DRF 211 - Sustainable Building Systems

Cooperative Education

- Complete 9 credits of CST 280 - Co-op Ed: Construction

Program Electives

Program Electives must be completed with a grade of C- or better, or Pass. **Complete 18 credits, selected from the following:**

- APR 101 - Trade Skills Fundamentals 4 Credit(s)
- APR 105 - Electrical Wiring for the Trades 4 Credit(s)
- APR 106 - Plumbing Trade Introduction 2 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- BT 165 - Introduction to the Accounting Cycle 4 Credit(s)
- COOP 206 - Co-op Ed: Internship Seminar 1-2 Credit(s)
- CST 201 - Sustainable Building Practices 3 Credit(s)

- DRF 205 - Drafting: Structures 4 Credit(s)
- DRF 207 - Drafting: Strength of Materials 4 Credit(s)
- DRF 210 - Commercial Buildings 4 Credit(s)
- DRF 220 - Building Information Modeling 4 Credit(s)
- ET 129 - Electrical Theory 1 4 Credit(s)
- ET 130 - Electrical Theory 2 1-4 Credit(s)
- G 101 - Earth's Dynamic Interior 4 Credit(s)
- G 102 - Earth's Dynamic Surface 4 Credit(s)
- G 103 - Evolving Earth 4 Credit(s)
- G 146 - Rocks and Minerals 4 Credit(s)
- MTH 075 - Applied Algebra for Technicians 4 Credit(s)
- MTH 095 - Intermediate Algebra 5 Credit(s)
- WLD 121 - Shielded Metal Arc Welding 1 1-4 Credit(s)
- WLD 122 - Shielded Metal Arc Welding 2 1-4 Credit(s)
- WLD 143 - Wire Drive Welding 1 1-4 Credit(s)
- SPAN 101 - Spanish, First-Year 5 Credit(s)
- SPAN 102 - Spanish, First-Year 5 Credit(s)
- SPAN 103 - Spanish, First-Year 5 Credit(s)
- SPAN 201 - Spanish, Second-Year 4 Credit(s)
- SPAN 202 - Spanish, Second-Year 4 Credit(s)
- SPAN 203 - Spanish, Second-Year 4 Credit(s)

Notes

- This program is the parent program for the Construction Technology, 1-yr Certificate
- A high school diploma or equivalent is recommended for all applicants to this program.
- This program follows the Associate of Applied Science (AAS) Requirements unless otherwise specified.
- Cooperative Education (Co-op): In certain circumstances, Co-op experience may be substituted for major coursework. For more information, please see your Academic Advisor or Program Coordinator.
- This program is articulated with Oregon Institute of Technology, which requires a higher-level math course than is required for the program. Contact your Academic Advisor for help with transfer to OIT.

Construction Trades, General Apprenticeship, AAS

Length: 90 credits

Program Contacts

Offered by the Advanced Technology department

Program Coordinator: Joy Crump, *crumpj@lanecc.edu*, 541-463-5496

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $13,129.00

- Resident Tuition: $8,568.00*
- Technology Fees: $748.00
- General Student Fees: $1,608.00** (if applicable)
- Online Course Fee: $110.00
- Books / Course Materials: $1,800.00
- Program Specific Fees: $295.00 (Additional Welding, Construction and Apprenticeship class fees)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program will be able to:

PLO 1 - Perform the duties and responsibilities of the individual construction trade/occupation
PLO 2 - Apply theory as it relates to trade competencies
PLO 3 - Demonstrate and use industry safety standards
PLO 4 - Utilize recognized standard building codes guidelines as applicable
PLO 5 - Prepare and utilize isometric sketching and detailed drawings per individual trade
PLO 6 - Develop attitudes conducive to improved customer relations skills in the construction trades
PLO 7 - Demonstrate communication and critical thinking skills necessary for job advancement
PLO 8 - Use appropriate library and information resources to research professional issues and support lifelong learning
PLO 9 - Access library, computing, and communications services, and appropriately select information and data from regional, national, and international networks
PLO 10 - Represent, analyze and determine rules for finding patterns relating to linear functions, non-linear functions and arithmetic sequences with tables, graphs, and symbolic rules
PLO 11 - Adapt to new job requirements to qualify for advancement in becoming lead supervisors

Admission Information

Students must be registered apprentices with the State of Oregon Bureau of Labor and Industries (BOLI) and accepted by a Joint Apprenticeship Training Committee. Information is available at boli.state.or.us.

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits):

- WR 115 - Introduction to College Composition 4 Credit(s) or higher

Mathematics (4 credits):

- MTH 060 - Beginning Algebra 4 Credit(s) or higher

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s) COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Complete all courses listed in one of the following trades. Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted.

Carpenter (36 credits)

- APR 115 - Carpentry Skill Fundamentals 3 Credit(s)
- APR 116 - Carpentry Framing Fundamentals 3 Credit(s)
- APR 117 - Carpentry Framing and Introduction to Concrete 3 Credit(s)
- APR 118 - Carpentry Framing and Finishing 3 Credit(s)
- APR 119 - Carpentry Commercial Plans and Exterior Finish 3 Credit(s)
- APR 120 - Carpentry Interior Finish 3 Credit(s)
- APR 201 - Carpentry Basic Rigging and Practices 3 Credit(s)
- APR 202 - Carpentry Concrete Practices 3 Credit(s)
- APR 203 - Carpentry Forms and Tilt-up Panels 3 Credit(s)
- APR 204 - Carpentry Advanced Layout and Building Systems 3 Credit(s)
- APR 205 - Carpentry Advanced Planning and Management 3 Credit(s)
- APR 206 - Carpentry Equipment and Site Layout 3 Credit(s)

HVAC Technician/Installer (44 credits)

- APR 101A - Trade Skills Fundamentals 4 Credit(s)
- APR 140 - Electrical Systems Installation Methods 4 Credit(s)
- APR 141 - Limited Voltage Electrical Circuits 4 Credit(s)
- APR 142 - Devices, Testing Equipment and Code 4 Credit(s)
- APR 143 - Limited Voltage Cabling 4 Credit(s)
- APR 144 - Communications 4 Credit(s)
- APR 190 - Electrical Theory 1 1-4 Credit(s) (take 4 credits of APR 190)
- APR 210 - HVAC Systems 1 4 Credit(s)
- APR 211 - HVAC Systems 2 4 Credit(s)
- APR 212 - HVAC Systems 3 4 Credit(s)
- APR 213 - HVAC Systems 4 4 Credit(s)

Plumber (40 credits)

- APR 160 - Plumbing Skill Fundamentals 4 Credit(s)
- APR 161 - Plumbing Materials and Fixtures 4 Credit(s)
- APR 162 - Plumbing Basic Waste Water Systems 2 Credit(s)
- APR 163 - Plumbing Calculations and Print Reading 4 Credit(s)

- APR 164 - Plumbing Basic Installation 1 4 Credit(s)
- APR 165 - Plumbing Basic Installation 2 2 Credit(s)
- APR 260 - Plumbing Water Supply Systems 4 Credit(s)
- APR 261 - Plumbing Piping Sizing and Systems 4 Credit(s)
- APR 262 - Plumbing Advanced Waste Systems 2 Credit(s)
- APR 263 - Plumbing Code and Test Preparation 2-4 Credit(s) (take 10 credits of APR 263)

Sheet Metal Worker (45 credits)

- APR 101A - Trade Skills Fundamentals 4 Credit(s)
- APR 170 - Introduction to Sheet Metal Apprenticeship 4 Credit(s)
- APR 171 - Sheet Metal Basic Layout 4 Credit(s)
- APR 173 - Sheet Metal Formulas 4 Credit(s)
- APR 270 - Architectural Sheet Metal 4 Credit(s)
- APR 271 - Sheet Metal Building Codes and Installation 4 Credit(s)
- APR 272 - Sheet Metal Duct Design 4 Credit(s)
- APR 273 - General Sheet Metal Fabrication 4 Credit(s)
- APR 274 - Sheet Metal Shop Fabrication 4 Credit(s)
- APR 275 - Sheet Metal Project Supervision 4 Credit(s)
- CST 110 - Blueprint Reading 1 3 Credit(s)

Wire Drive Welding (2 credits). Complete one course:

- APR 186 - Wire Drive Welding 1 1-4 Credit(s)
- WLD 143 - Wire Drive Welding 1 1-4 Credit(s)

Program Electives

Program Electives must be completed with a grade of C- or better, or Pass. Elective credits will be different depending on which trade students choose to pursue. **Complete credits to meet 90 total credits for the program. Select courses from the list below. Contact your Academic Advisor or Program Coordinator for help determining the number of elective credits required.**

- APR 101 - Trade Skills Fundamentals 4 Credit(s)
- APR 106 - Plumbing Trade Introduction 2 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- CST 110 - Blueprint Reading 1 3 Credit(s)
- CST 111 - Construction Orientation and Environment 2 Credit(s)
- CST 116 - Construction Estimating 4 Credit(s)
- CST 118 - Building Construction 1-5 Credit(s)
- CST 119 - Building Construction Surveying 3 Credit(s)
- CST 211 - Blueprint Reading 2 3 Credit(s)
- HE 152 - Drugs, Society and Behavior 3 Credit(s)
- HE 252 - First Aid 3 Credit(s)
- MTH 085 - Applied Geometry for Technicians 4 Credit(s)
- MTH 095 - Intermediate Algebra 5 Credit(s)
- NRG 103 - Sustainability in The Built Environment 3 Credit(s)
- NRG 121 - Air Conditioning System Analysis 3 Credit(s)
- NRG 124 - Energy Efficiency Methods 4 Credit(s)
- WATR 101 - Introduction to Water Resources 3 Credit(s)
- WLD 121 - Shielded Metal Arc Welding 1 1-4 Credit(s)
- WLD 122 - Shielded Metal Arc Welding 2 1-4 Credit(s)
- WLD 139 - Welding Lab 1-3 Credit(s)
- WLD 143 - Wire Drive Welding 1 1-4 Credit(s)
- Any course(s), 100-level or higher, selected from the Approved Discipline Studies Courses for Associate Degrees and Oregon Transfer Module lists.

Journey Level Card from Oregon BOLI (22 credits)

Students who obtain a State of Oregon Apprenticeship Training Journey Level Card or Oregon Bureau of Labor and Industries Apprenticeship and Training Division (BOLI-ATD) Certificate of Completion will be awarded 22 Credits.

Notes

This program follows Associate of Applied Science (AAS) Requirements.

This is the parent program for the Construction Trades, General Apprenticeship: Trade Worker Apprenticeship Technologies, CPC.

Complete 8000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Cert of Completion.

This program is articulated with Oregon Institute of Technology, which requires a higher-level math course than is required for the program. Contact your Academic Advisor for help with transfer to OIT.

Students using lower-credit courses to meet General Education requirements may need to take additional Electives to meet the 90-credit minimum.

Licensing and 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.

Criminal Justice, AAS

Length: 91 credits

Program Contacts

Offered by the Social Science Division

Program Coordinator: Caoimhin OFearghail, *ofearghailc@lanecc.edu*, 541-463-5361

Academic Advising Team: *socsci-llcprograms@lanecc.edu*, contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $16,271.00

- Resident Tuition: $11,466.00*
- Technology Fee: $1001.00
- General Student Fees: $804.00**
- Online Course Fees: $500.00 (if applicable)
- Books/Course Materials: $2,500.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program will be able to:

PLO 1 - Apply theories of crime and criminal behavior to describe crime and deviance at individual, community, and societal levels

PLO 2 - Discuss and apply the established practices and methods of criminal investigation

PLO 3 - Explain the philosophy, organization, and function of the criminal justice system and justice processes

PLO 4 - Analyze criminal justice issues through the perspective of differing theories and/or disciplines

PLO 5 - Locate and navigate information resources and apply the information to specific professional criminal justice contexts

PLO 6 - Evaluate the influence of humanistic philosophies and principles on the nature and development of substantive and procedural criminal law in the United States

Program Requirements

General Education

GENERAL EDUCATION courses must be completed with a letter grade of C- or better, or Pass. Only one BI 101, BI 102, and BI 103 counts toward the completion of this degree.

Writing (8 credits) - Complete both of the following:

- WR 121 - Academic Composition or WR 121_H
- WR 122 - Argument, Research and Multimodal Composition or WR 122_H

Math (4-5 credits) - Complete one of the following:

- MTH 105 - Math in Society 4 Credit(s)
- or higher-level Math course

Health (3 credits) - Complete one of the following:

- HE 250 - Personal Health
- HE 252 - First Aid
- HE 275 - Lifetime Health and Fitness

Communications (8 credits) - Complete two courses:

- COMM 218 - Interpersonal Communication (satisfies the Human Relations requirement) (required)

And complete one additional course from the following:

- COMM 111 - Fundamentals of Public Speaking
- COMM 111_H - Fundamentals of Public Speaking-Honors
- COMM 112 - Persuasive Speech

Cultural Literacy (4 credits) - Complete one of the following:

- ANTH 103 - Cultural Anthropology
- ES 101 - Historical Racial and Ethnic Issues
- ES 102 - Contemporary Racial and Ethnic Issues
- HST 203 - History of the United States
- SOC 213 - Race and Ethnicity

Social Science - Complete ONE of the following tracks:

Political Science Track (6 credits) - 2 courses:

- PS 202 - U.S. Government and Politics 3 Credit(s)
- PS 203 - State and Local Government and Politics 3 Credit(s)

Psychology Track (7 credits) - 2 courses:

- PSY 201 - General Psychology 4 Credit(s)
- PSY 239 - Introduction to Abnormal Psychology 3 Credit(s)

Sociology Track (8 credits) - 2 courses:

- SOC 205 - Social Stratification and Social Systems 4 Credit(s)
- SOC 206 - Institutions and Social Change 4 Credit(s)

Open Social Science Track (6-8 credits) - 2 courses:

- Complete **two courses** from the Social Science list

Science - Complete ONE of the following tracks:

- **Forensics Track (12 credits) - 3 courses:**
  - ANTH 101 - Physical Anthropology 4 Credit(s)
  - BI 101K - General Biology: Introduction to Genetics 4 Credit(s)
  - CH 114 - Introduction to Forensic Chemistry 4 Credit(s)
- **GIS Track (12 credits) - 3 courses:**
  - GIS 151 - Digital Earth 4 Credit(s)
  - GIS 245 - GIS 1 4 Credit(s)
  - GIS 246 - GIS 2 4 Credit(s)

Open Science Track (11-18 credits) - 3 courses:

- Complete two courses with labs and a third course with or without lab, selected from this list: Science/Math/Computer Science

Program Core Courses

PROGRAM CORE courses must be completed with a letter grade of C or better. P/NP not accepted.

- CJA 100 - Introduction to Criminal Justice 4 Credit(s)
- CJA 200 - Introduction to Criminology 4 Credit(s)
- CJA 210 - Criminal Investigation 1 3 Credit(s)
- CJA 212 - Criminal Justice Documentation and Reporting 3 Credit(s)
- CJA 213 - Interviewing and Interrogation 3 Credit(s)
- CJA 214 - Introduction to Forensic Science 4 Credit(s)
- CJA 220 - Introduction to Criminal Law 3 Credit(s)
- CJA 222 - Criminal Law: Procedural Issues 3 Credit(s)
- PHL 201 - Ethics 4 Credit(s)

Complete one of the following:

- PHL 221 - Critical Thinking 4 Credit(s)
- COMM 105 - Listening and Critical Thinking 4 Credit(s)

Program Electives

PROGRAM ELECTIVES must be completed with a letter grade of C or better. P/NP is not accepted. **Complete 12 credits, selected from the following:**

- CJA 201 - Juvenile Delinquency 3 Credit(s)
- CJA 207 - Gender, Crime and Justice 4 Credit(s)
- CJA 280 - Co-op Ed: Criminal Justice (repeatable up to 9 credits; see note)
- HS 102 - Psychopharmacology 4 Credit(s)
- HS 209 - Crisis Intervention and Prevention 3 Credit(s)
- SOC 211 - Social Deviance 3 Credit(s)

Notes

- This program follows Associate of Applied Science (AAS) Requirements.
- COMM 218 - Interpersonal Communication meets the AAS Human Relations requirement
- Co-op internship placements may require a term or more to coordinate. Students who are interested in enrolling in CJA 280 must contact the program coordinator no later than the beginning of the prior term. For example: For a spring-term co-op, the student should contact the program coordinator at the beginning of winter term.
- For questions about transferring to a four-year university, contact your Academic Advisors for help.
- Students using lower-credit courses to meet General Education requirements may need to take additional Electives to meet the 90-credit minimum.

Cybersecurity, AAS

Length: 90 credits

Program Contacts

Offered by the Computer Information Technology Department

Program Coordinator: Don Easton, eastond@lanecc.edu, 541-463-5532

CIT Academic Advising Team: *CITPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $15,908.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fee: $900.00 (if applicable)
- Books / Materials: $218.00
- Program Specific Fees: $156.00 (Data Fee)
- Other Cost / Expenses: $1,500.00*** (Computer / Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students with the knowledge and applicable skills necessary for entry-level careers in cybersecurity. Students will acquire foundational knowledge in computer science and information technology, in order to build solution-oriented skills in infrastructure security, enterprise risk and risk management, cloud computing, cryptography, information assurance, digital forensics, penetration testing, and business continuity. Students will apply this knowledge both in a hands-on lab curriculum and through required internships supporting the local community. In addition, this degree will provide the core foundational knowledge to continue on to a bachelor's degree in cybersecurity and related areas for even further opportunities for career advancement.

Students who complete this program will be able to:

PLO 1 - Defend systems against unauthorized access, modification, and/or destruction
PLO 2 - Perform vulnerability and networking scanning assessments
PLO 3 - Monitor network traffic for unusual activity
PLO 4 - Configure and support security tools such as firewalls, anti-virus software, patch management systems, etc.
PLO 5 - Implement network security policies, application security, access control and corporate data safeguards
PLO 6 - Analyze and establish security requirements for your networks using key compliance frameworks
PLO 7 - Explain the implications of security awareness and procedures
PLO 8 - Develop and update business continuity and disaster recovery protocols
PLO 9 - Conduct security audits and make policy and technical recommendations based on best practices

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits):

- WR 121 - Academic Composition or WR 121_H

Mathematics (5 credits):

- MTH 111 - College Algebra 5 Credit(s) or higher

Math/CS/CIS Elective (4-5 credits) - Complete one of the following:

- Any CS course higher than CS 120
- Any CIS course higher than CIS 101
- Any MTH course higher than MTH 111

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)

- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

The following Program Core courses must be completed with a letter grade of B- or better. P/NP not accepted.

- CS 284 - Network Security Fundamentals 4 Credit(s)
- CS 285 - Cybersecurity Operations 4 Credit(s)
- CS 286 - Firewalls and VPNs 4 Credit(s)

The following Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted.

- CIS 100 - Computing Careers Exploration 1 Credit(s)
- CIS 140U - Introduction to Unix/Linux 4 Credit(s)
- CIS 140W - Introduction to Operating Systems: Windows Clients 4 Credit(s)
- CS 179 - Introduction to Computer Networks 4 Credit(s)
- CS 184 - Introduction to Cybersecurity 4 Credit(s)
- CS 188 - Wireless Networking 4 Credit(s)
- CS 189 - Routing and Switching Essentials 4 Credit(s)
- CS 240U - Advanced Unix/Linux: Server Management 4 Credit(s)
- CS 240W - Advanced Windows: Server Management 4 Credit(s)
- CS 273 - Introduction to Virtualization and Cloud Computing 4 Credit(s)
- CS 275 - Basic Database SQL 4 Credit(s)
- CS 279 - Scaling Networks 4 Credit(s) or CS 290 - Ethical Hacking Fundamentals 4 Credit(s)
- CS 288 - Network Monitoring and Management 4 Credit(s)

Programming Sequence

Programming courses must be completed with a letter grade of C- or better. P/NP is not accepted. Complete two courses including an introductory and advanced course.

Introductory Programming (4 credits) - Complete one of the following:

- CS 161P - Computer Science 1 4 Credit(s) (Python) (Recommended)
- CS 161C - Computer Science 1 4 Credit(s) (C++)

Advanced Programming (4 credits) - Complete one of the following:

- CS 162P - Computer Science 2 4 Credit(s) (Python) (Recommended)
- CS 233S - Python for Systems Administrators 4 Credit(s)
- CS 162C - Computer Science 2 4 Credit(s) (C++)

Cooperative Education

CS 206 must be completed with a grade of C- or better, or Pass. CS 280CN must be completed with a letter grade of C- or better. P/NP is not accepted.

- Complete 2 credits of CS 206 - Co-op Ed: Computer Information Technology Seminar
- Complete 3 credits of CS 280CN - Co-op Ed: Computer Network Operations

Notes

- This program follows the Associate of Applied Science (AAS) Requirements unless otherwise specified.
- A personal laptop is required for all first year students in the degree program. Please contact the Program Coordinator for options and system requirements.
- 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 field.
- Students using lower-credit courses to meet General Education requirements may need to take additional Electives to meet the 90-credit minimum.
- Students planning to pursue a bachelor's degree in Computer Science are advised to consult with their academic advisor for additional program requirements at the school they will be transferring to.
- Computer programming languages: Students' taking their first programming language (C, N, or P) will take CS 161/162. Because CS 161/162 are not repeatable courses, upon taking a second programming language, students must use the CS 133/233 course numbers. CS 161/162 are the courses listed in catalog degree requirements but CS 133/233 will be accepted as well. For help with this, contact the department or academic advisors.

Certifications

By completing CS 273, students can take the exam for the Amazon Web Services Cloud Practitioner certification

By completing CS 273, students can take the exam for the VMWare Certified Associate (VCA) certification

By completing CS 179, CS 189, and CS 279, students can take the exam for the Cisco Certified Network Associate (CCNA) certification

By completing CS 285, students can take the exam for the Cisco Certified CyberOps Associate (CCCA) certification

By completing CS 286, students can take the exam for the Palo Alto Networks Certified Cybersecurity Entry-level Technician (PCCET) certification

Dental Hygiene, AAS

Length: Program 91 credits

Program Prerequisites: 41-44 credits

Program Contacts

Offered by Health Professions

Program Coordinator: Sharon Hagan RDH, M.S., *hagans@lanecc.edu*, 541-463-5616

Health Professions Academic Advising Team: *DHProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost for Program: $40,846.00

- Resident Tuition: $11,466.00*
- Technology Fees: $1,001.00
- General Student Fees: $804.00** (if applicable)
- Online Course Fee: $330.00
- Books / Course Materials: $1,600.00
- Program Specific Fees: $3,984.00 (certifications-licensure-exams, health Insurance, application fee, background check, drug/alcohol screening, meds record tracker and industry student membership)
- Other Cost / Expenses: $8,200.00*** (computer/internet, uniforms/shoes, instruments/tools
- Differential Fees: $13,461.00****

Estimated Cost for Program Prerequisites: $6,430.00

- Resident Tuition: $5,544.00*
- Technology Fees: $484.00
- General Student Fees: $402.00**
- Online Course Fee: $ (if applicable)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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

Students who complete this program will be able to:

PLO 1 - 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
PLO 2 - Demonstrate critical thinking, problem solving and self-evaluation in the provision of comprehensive care, selection of patient management strategies, and professional competence development
PLO 3 - 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
PLO 4 - Access, critically appraise, apply and communicate evidence based practices for all periodontal classifications within diverse patient populations
PLO 5 - Demonstrate interpersonal communication and collaborative skills to effectively interact with diverse population groups, health care providers, dental professionals and community groups
PLO 6 - Demonstrate application of refined instrumentation skills for periodontal, restorative and therapeutic interventions for individuals at all stages of life
PLO 7 - Demonstrate application of behavioral sciences and patient centered approaches to promote, improve and maintain oral health
PLO 8 - 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
PLO 9 - Demonstrate use of mathematical and statistical concepts in the application of clinical and preventive dental care strategies
PLO 10 - 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, Implementation 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.

Admission Information

See lanecc.edu/hp/dental/dental-hygiene for program information and the admission application packet.

Program Requirements

Prerequisites

Program Prerequisites must be completed with a letter grade of C or better. P/NP is not accepted. All prerequisites except BI 233, BI 234 and the second writing requirement must be completed prior to applying for the program. BI 233, BI 234 and the second writing course must be completed prior to beginning the program.

Writing (4 credits) - Complete the following:

- WR 121 - Academic Composition (or WR 121_H)

Math (4 credits) - Complete one of the following:

- MTH 052 - Math for Health and Physical Sciences 4 Credit(s)
- Any Mathematics course higher than MTH 052

Biobonds or Chemistry (5-8 credits) - Complete one of the following options:

- **Option 1: Biobonds (required for Anatomy and Physiology at Lane):**
  - BI 112 - Cell Biology for Health Occupations 4 Credit(s)
  - CH 112 - Chemistry for Health Occupations 4 Credit(s)
- **Option 2:**
  - 5 Credits of any Chemistry course 100-level or higher

Anatomy and Physiology (12 credits) - Complete the following:

- BI 231 - Human Anatomy and Physiology 1 4 Credit(s)
- BI 232 - Human Anatomy and Physiology 2 4 Credit(s)
- BI 233 - Human Anatomy and Physiology 3 4 Credit(s) (BI 233 must be completed prior to beginning program.)

Sociology (4 credits) - Complete one of the following:

- SOC 204 - Introduction to Sociology 4 Credit(s) (or SOC 204_H)
- SOC 205 - Social Stratification and Social Systems 4 Credit(s)
- SOC 206 - Institutions and Social Change 4 Credit(s)
- Any 100- or 200-level Sociology course

Psychology (4 credits) - Complete one of the following:

- PSY 201 - General Psychology 4 Credit(s)
- PSY 202 - General Psychology 4 Credit(s)
- PSY 203 - General Psychology 4 Credit(s)
- Any 100- or 200-level Psychology course

Oral Communications (4 credits) - Complete one of the following:

- COMM 100 - Basic Communication 4 Credit(s)
- COMM 111 - Fundamentals of Public Speaking 4 Credit(s) (or COMM 111_H)

Health (4 credits) - Complete the following:

- FN 225 - Nutrition 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted. DH 120A satisfies the Human Relations requirement and may not be substituted.

BI 234 and writing must be completed prior to beginning program.

- BI 234 - Introductory Microbiology 4 Credit(s)
- WR 123 - Composition: Research Writing 4 Credit(s) or WR 227 / WR 227_H
- DH 107 - Dental Infection Control and Safety 1 Credit(s)
- DH 113 - Dental Anatomy and Histology 2 Credit(s)
- DH 132 - Dental Materials for the Dental Hygienist 2 Credit(s)
- DH 139 - Special Needs Patient and Dental Emergencies 2 Credit(s)
- DH 228 - Oral Biology 1 4 Credit(s)
- DH 229 - General and Oral Pathology 3 Credit(s)
- DH 233 - Anesthesia/Analgesia for Dental Hygiene Therapy 3 Credit(s)
- DH 234 - Trends and Issues in Dental Hygiene 2 Credit(s)
- DH 254 - Pharmacology 3 Credit(s)

Clinical Dental Hygiene (42 credits):

- DH 118A - Clinical Dental Hygiene 1 4 Credit(s)
- DH 118B - Clinical Dental Hygiene 1 Lab 2 Credit(s)
- DH 119A - Clinical Dental Hygiene 2 3 Credit(s)
- DH 119B - Clinical Dental Hygiene 2 Lab 4 Credit(s)
- DH 120A - Clinical Dental Hygiene 3 Lecture/seminar 3 Credit(s)
- DH 120B - Clinical Dental Hygiene 3 Clinic Lab 4 Credit(s)
- DH 220A - Clinical Dental Hygiene 4 Lecture/seminar 2 Credit(s)
- DH 220B - Clinical Dental Hygiene 4 Lab 5 Credit(s)
- DH 221A - Clinical Dental Hygiene 5 2 Credit(s)
- DH 221B - Clinical Dental Hygiene 5 Lab 6 Credit(s)
- DH 222A - Clinical Dental Hygiene 6 2 Credit(s)
- DH 222B - Clinical Dental Hygiene 6 Lab 5 Credit(s)

Community Dental Health (3 credits):

- DH 237 - Community Dental Health 3 Credit(s)
- DH 238 - Community Dental Health 1 Credit(s)

Oral Radiology (5 credits):

- DH 243A - Oral Radiology 2 Credit(s)
- DH 243B - Oral Radiology 1 Credit(s)
- DH 244A - Oral Radiology 1 Credit(s)
- DH 244B - Oral Radiology 1 Credit(s)

Periodontology (4 credits):

- DH 270 - Periodontology 1 2 Credit(s)
- DH 271 - Periodontology 2 1 Credit(s)

Restorative Dentistry (7 credits):

- DH 275 - Restorative Dentistry 1 3 Credit(s)
- DH 276 - Restorative Dentistry 2 3 Credit(s)
- DH 277 - Restorative Dentistry 3 1 Credit(s)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- Students must be accepted in Dental Hygiene Program to enroll in DH courses.

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.

Diesel Technology, AAS

Length: 93 credits

Program Contacts

Offered by: Advanced Technology Division

Program Coordinator: Steve Webb, *webbs@lanecc.edu*, 541-463-5708

Advanced Technology Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $20,967.00

- Resident Tuition: $11,718.00*
- Technology Fees: $1,023.00
- General Student Fees: $804.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $2,205.00
- Program Specific Fees: $1,691.00 (class fees and materials)
- Other Cost / Expenses: $400.00*** (instruments & tools)
- Differential Fees: $3,126.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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, construction companies, OEM dealerships, road construction contractors, parts sales, general heavy equipment repair shops, agriculture fleets and marine repair shops.

Students who complete this program will be able to:

PLO 1 - Access library, computing, and communications services to obtain information and data
PLO 2 - Demonstrate math skills to find force, pressure, area, volume, horse power, torque, gear ratios and precision measurement
PLO 3 - Identify and explain technologies used in trucking, construction, logging, agriculture equipment, generators and marine applications in the following subjects:

Diesel Fuel Systems

Diesel Brake Systems

Diesel Powertrain and Chassis Systems

Diesel Hydraulic Systems

Diesel Electrical/Electronic Systems

Diesel HVAC Systems

Diesel Engines

PLO 4 - Identify and apply industry safety standards in a work environment
PLO 5 - Use industry tools and equipment to demonstrate, diagnose, service, repair, testing, disassembly, failure analysis, assembly and operation

Program Requirements

General Education

GENERAL EDUCATION courses must be completed with a grade of C- or better, or Pass.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- WR 115 - Introduction to College Composition 4 Credit(s)
- Any WR course higher than WR 115

Math (4-5 credits) - Complete one of the following:

- MTH 085 - Applied Geometry for Technicians 4 Credit(s)
- MTH 097 - Geometry 4 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

PROGRAM CORE courses must be completed with a grade of C- or better, or Pass. Students must complete the maximum credits listed for all DS and WLD courses. Enrollment in core courses by consent only. See an Academic Advisor or Program Coordinator about enrollment.

- DS 154 - Heavy Duty Braking Systems 1-12 Credit(s)
- DS 155 - Heavy Equipment Hydraulics 1-12 Credit(s)
- DS 158 - Heavy Equipment Chassis and Power Trains 1-12 Credit(s)
- DS 256 - Diesel and Auxiliary Fuel Systems 1-12 Credit(s)
- DS 257 - Diesel Electrical Systems 1-12 Credit(s)
- DS 259 - Diesel Engines and Engine Overhaul 1-12 Credit(s)

Welding or CO-OP - Complete one of the following options:

- **Welding (11-12 credits) - 3 courses:**
  - WLD 121 - Shielded Metal Arc Welding 1 and
  - WLD 143 - Wire Drive Welding 1 and
  - WLD 122 - Shielded Metal Arc Welding 2 or MFG 101 - Safety and Basic Shop Practice
- **Cooperative Education (12 credits):**
  - DS 280 - Co-op Ed: Diesel (must have consent for this option)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- Students who complete this program will be prepared to take the AED Foundation exam for the AED Foundation Certified Technician designation.
- Co-op experience may be substituted for major coursework. For more information, please see your Academic Advisor or Program Coordinator.
- This program is articulated with Oregon Institute of Technology, which requires a higher-level math course than is required for the program. Contact your Academic Advisor for help with transfer to OIT.

Accreditation

Diesel Technology, evaluated and accredited by the Association of Equipment Distributors Foundation (AEDF). Membership: Northwest Diesel Industry Council (NDIC) and Oregon Trucking Association (OTA).

Drafting, AAS

Length: 90 credits

Program Contacts

Offered by: Advanced Technology, lanecc.edu/advtech

Program Coordinator: Margaret Robertson, *robertsonm@lanecc.edu*

Advanced Technology Academic Advising: *AdvTechPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $16,798.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00** (if applicable)
- Online Course Fee: $580.00
- Books / Course Materials: $1,834.00
- Other Cost / Expenses: $1,250.00 *** (Computer/Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Hardware: In order to run AutoCAD, Revit, and SolidWorks software, students need a computer with Windows 10 or newer operating system; CPU of 3.3 GHz or higher; 8 GB of RAM, with 16 GB recommended; 30 GB free disk space for download and installation, plus 500 GB or more storage; graphics card capable of 24-bit color and DirectX 11 compliant, such as Nvidia Quadro series, AMD FirePro series, or AMD Radeon series; at least two USB ports; and an external mouse. (A computer with Mac OS can run AutoCAD software, but not Revit or SolidWorks.) A limited number of laptops are available on loan from the LCC Student Helpdesk. In addition, students need a way to store backup copies of all files, such as a flash drive, external hard drive, or cloud service.

Connectivity: Students need a reliable internet connection; a browser such as Google Chrome or Firefox; and a robust antivirus and firewall product such as McAfee or Norton, kept up to date.

Software: Students need Microsoft Office, with Word, Excel, & PowerPoint, available free to LCC students. Students will need the current version of AutoCAD, Revit, and SolidWorks software and will get instructions in classes for downloading free educational versions.

Program Learning Outcomes

The purpose of this program is to train and prepare 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.

Students who complete this program will be able to:

PLO 1 - Effectively and independently use CAD, solid modeling, and building information modeling software in alignment with industry standards.
PLO 2 - Visualize three-dimensional objects from multiple viewing directions and translate three-dimensional objects into two-dimensional drawings.
PLO 3 - Create mechanical and architectural drawings which follow recognized national standards for format, annotation, lines, and symbols.
PLO 4 - Produce documents which accurately represent building systems, materials, methods, and building codes.
PLO 5 - Produce documents which accurately represent physical mechanisms and mechanical design strategies.
PLO 6 - Conduct research to solve basic design problems as an individual and/or part of a team.
PLO 7 - Use quantitative analysis of data as the basis for solving problems and making decisions.

Program Requirements

General Education

General Education courses can be completed with a grade of C- or better, or Pass.

Writing (8 credits) - Complete both of the following:

- WR 121 - Academic Composition 4 Credit(s) or WR 121_H **and**
- WR 227 - Technical Writing 4 Credit(s) or WR 227_H

Algebra (4 credits) - Complete one of the following:

- MTH 075 - Applied Algebra for Technicians 4 Credit(s)
- MTH 095 - Intermediate Algebra 5 Credit(s)
- MTH 098 - Math Literacy 5 Credit(s)
- MTH 105 - Math in Society 4 Credit(s)
- MTH 106 - Math in Society 2 4 Credit(s)
- MTH 107 - Math in Society 3 4 Credit(s)
- MTH 111 - College Algebra 5 Credit(s)
- Any 200-level Math course

Geometry (4-5 credits) - Complete one of the following:

- MTH 085 - Applied Geometry for Technicians 4 Credit(s)
- MTH 097 - Geometry 4 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Computer Literacy (4 credits):

- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- OR HIGHER CS course

Open Elective (3 credits):

- Complete any 100- or 200-level course to meet this requirement

Program Core Courses

PROGRAM CORE courses must be completed with a grade of C- or better, or Pass.

- CST 122 - Construction Codes 2 Credit(s)
- DRF 121 - Mechanical Drafting 4 Credit(s)
- DRF 137 - Architectural Plans 4 Credit(s)
- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- DRF 203 - Electrical Drafting 2 Credit(s)
- DRF 205 - Drafting: Structures 4 Credit(s)
- DRF 207 - Drafting: Strength of Materials 4 Credit(s)
- DRF 210 - Commercial Buildings 4 Credit(s)
- DRF 211 - Sustainable Building Systems 4 Credit(s)
- DRF 220 - Building Information Modeling 4 Credit(s)
- DRF 235 - Mechanical Design Skills 4 Credit(s)
- DRF 236 - Machine Elements 4 Credit(s)
- DRF 245 - Solid Modeling 4 Credit(s)
- DRF 248 - Hydraulics Drafting 1 Credit(s)

Cooperative Education

Cooperative Education courses must be completed with a grade of C- or better, or Pass.
Complete the following:

- Complete 2 credits of COOP 206 - Co-op Ed: Internship Seminar
- Complete 3 credits of ENGR 280D - Co-op Ed: Drafting

Program Electives

Program Electives must be completed with a grade of C- or better, or Pass. **Complete 10 credits selected from the following:**

- ART 117 - Basic Design: 3-Dimensional 3 Credit(s)
- ART 216 - Digital Design Tools 3 Credit(s)
- CH 150 - Preparatory Chemistry 3 Credit(s)
- CIS 140W - Introduction to Operating Systems: Windows Clients 4 Credit(s)
- CIS 195 - Web Authoring 1 4 Credit(s)
- CS 179 - Introduction to Computer Networks 4 Credit(s)
- CST 116 - Construction Estimating 4 Credit(s)
- CST 201 - Sustainable Building Practices 3 Credit(s)
- DS 154 - Heavy Duty Braking Systems 1-12 Credit(s)
- DS 257 - Diesel Electrical Systems 1-12 Credit(s)
- DS 259 - Diesel Engines and Engine Overhaul 1-12 Credit(s)
- GIS 151 - Digital Earth 4 Credit(s)
- GIS 245 - GIS 1 4 Credit(s)
- MFG 101 - Safety and Basic Shop Practice 3 Credit(s)
- MUL 101 - Introduction to Media Arts 3 Credit(s)
- MUL 212 - Digital Imaging 4 Credit(s)
- PH 101 - Fundamentals of Physics 4 Credit(s)
- PH 102 - Fundamentals of Physics 4 Credit(s)
- PH 103 - Fundamentals of Physics 4 Credit(s)
- PH 201 - General Physics 5 Credit(s)
- PH 202 - General Physics 5 Credit(s)
- PH 203 - General Physics 5 Credit(s)
- WLD 143 - Wire Drive Welding 1 1-4 Credit(s)
- WLD 151 - Fundamentals of Metallurgy 1-3 Credit(s)

Notes

- This is the parent program for: Drafting, 1-yr Certificate, Drafting for Commercial Construction, CPC, Drafting for Manufacturing, CPC, and Drafting for Residential Construction, CPC.
- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- 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. For more information please see your Academic Advisor or Program Coordinator.
- This program is articulated with Oregon Institute of Technology, which requires a higher-level math course than is required for the program. Contact your Academic Advisor for help with transfer to OIT.
- Students using lower-credit courses to meet General Education requirements may need to take additional Electives to meet the 90 credit minimum.

Early Childhood Education, AAS

Length: 90 credits

Program Contacts

Offered by the Social Science Division

Program Coordinator: Kathleen Lloyd, *lloydk@lanecc.edu*, 541-463-5287

Academic Advising Team: *EducationAdvising@lanecc.edu;* contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: Kathleen Lloyd, *lloydk@lanecc.edu*, 541-463-5287; lanecc.edu/cooped

Estimated Cost: $15,504.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fee: $ 450.00 (if applicable)
- Books / Course Materials: $1,800.00
- Program Specific Fees: $120.00*** (MMR immunization if needed)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to develop skilled professionals who will care for and educate young children. Graduates work in a variety of private and public child care settings and in family child care and early intervention programs. Graduates may also work with families and community organizations as parenting coaches, policy makers and advocates.

Students who complete this program will be able to:
PLO 1 - Design and implement a Reggio-inspired curriculum approach for children to learn to make appropriate choices and actively participate in their own learning
PLO 2 - Apply age-appropriate guidance strategies so children develop empathy, moral autonomy, self-worth and the ability to self-regulate in challenging situations
PLO 3 - Use basic mathematics in everyday life and business transactions, including measurement, introduction of probability and statistics, reading graphs and tables, and signed numbers
PLO 4 - Develop and apply research skills to access information using print and on-line resources, including the library catalog and reference sources
PLO 5 - Examine ways to administer and manage the successful operations of child care programs

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition 4 Credit(s)
- or higher-level Writing course

Math (3 credits) - Complete one of the following:

- MTH 025 - Basic Mathematics Applications 3 Credit(s)
- or higher-level Math course

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)

- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Health/PE/Dance (3 credits):

- Complete any combination of Health (HE), Physical Education (PE/PEAT/PEO) or Dance (D) courses to meet this requirement

Open Elective (6 credits):

- Complete any 100- or 200-level courses to meet this requirement.

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- ECE 105 - Health and Safety Issues in Early Childhood Education 2 Credit(s)
- ECE 110 - Observing Young Children's Behavior 1 Credit(s)
- ECE 120 - Introduction to Early Childhood 2 Credit(s)
- ECE 130 - Guidance of Young Children 3 Credit(s)
- ECE 150 - Creative Activities for Children 3 Credit(s)
- ECE 160 - Exploring Early Childhood Curriculum 4 Credit(s)
- ECE 170 - Infants and Toddlers Development 4 Credit(s)
- ECE 210 - Applying Early Childhood Curriculum 4 Credit(s)
- ECE 230 - Family, School, Community Relations 3 Credit(s)
- ECE 250 - Infant and Toddler Environments 3 Credit(s)
- ECE 260 - Administration of Child Care Programs 3 Credit(s)
- FN 130 - Family Food and Nutrition 3 Credit(s)
- HDFS 226 - Child Development 3 Credit(s)
- HDFS 227 - Children Under Stress 3 Credit(s)

Multicultural / Diversity (3 credits). Complete one course:

- ECE 253 - Diversity Issues in Early Childhood Education 3 Credit(s)
- ED 258 - Multicultural Education 3 Credit(s)

Inclusion / Special Needs (3 credits). Complete one course:

- HDFS 228 - Young Children with Special Needs 3 Credit(s)
- ED 269 - Inclusion and Special Needs 3 Credit(s)

Supervised Teaching & Cooperative Education

Supervised Teaching and Cooperative Education must be completed with a grade of C- or better, or Pass.

Supervised Teaching - Complete 12 credits of the following:

- ECE 240 - Supervised Student Teaching 4 Credit(s)

Cooperative Education - Complete 6 credits of the following:

- ED 280EC - Co-op Ed: Early Childhood Education 1-7 Credit(s)

Program Electives

Electives must be completed with a grade of C- or better, or Pass. **Complete 6 credits.** Choose any combination of courses from the following list. In the subject areas listed, any course from that subject is accepted (100-level or higher, exception for math). Course options recommended by the Program Coordinator are listed in parentheses.

- ANTH - Anthropology
- ARH - Art History
- ART - Art *(recommended: ART 111, ART 250, ART 261)*
- ASL - American Sign Language *(recommended: ASL 101, ASL 102, ASL 103)*
- ASTR - Astronomy
- BA - Business
- BT - Business Technology
- BI - Biology *(recommended: BI 101E, BI 101I, BI 102E, BI 103A, BI 103F)*
- CG - Career Guidance
- CH - Chemistry
- CHN - Mandarin Chinese
- CIS - Computer Information Technology *(recommended: CIS 101)*
- COMM - Communication *(recommended: COMM 111, COMM 218)*
- CRWR - Creative Writing
- CS - Computer Science *(recommended: CS 120)*
- CW - Chinuk Wawa
- ED - Education *(recommended: ED 100, ED 216, ED 258, ED 269)*
- EI - Effective Learning (EL 115R, EL 116, EL 117 only)
- ENG - English *(recommended: ENG 100)*
- ES - Ethnic Studies *(recommended: ES 101, ES 244)*
- FN - Nutrition
- FR - French
- G - Geology
- GEOG - Geography *(recommended: GEOG 141)*
- GIS - Geographic Information Science
- HE - Health
- HS - Human Services
- HST - History *(recommended: HST 266)*
- HUM - Humanities *(recommended: HUM 100)*
- MTH - Math (MTH 060 or higher only)
- MUS - Music *(recommended: MUS 101, MUS 131, MUS 134)*
- PH - Physics
- PHL - Philosophy *(recommended: PHL 201, PHL 221)*
- PSY - Psychology *(recommended: PSY 110, PSY 201, PSY 215)*
- SLD - Student Leadership Development *(recommended: SLD 111)*
- SOC - Sociology *(recommended: SOC 204, SOC 205, SOC 210)*
- SPAN - Spanish
- TA - Theatre Arts
- WR - Writing (WR 121 or higher only)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- This is the parent program for Early Childhood Education, 1-yr Certificate, Early Childhood Teacher Aide, CPC, Early Childhood Education: Guidance and Curriculum, CPC, and Early Childhood Education: Infant and Toddler, CPC.
- Immunization is required prior to enrolling in ECE 240 - Supervised Student Teaching. More information at lanecc.edu/socialscience/early-childhood-education.
- Some ECE and HDFS courses are offered through College Now at high schools in Lane County and outlying areas. For more information, see lanecc.edu/hsconnections/collegenow/courses-high-school.
- Students seeking support with Reading / Writing / Math or English Language skills while transitioning to Early Childhood classes may apply to PASS Lane ECE. Contact Marcia Koenig (*koenigm@lanecc.edu*) 541-463-5818, Bldg 4/215
- Students receiving SNAP food stamp benefits who are completing ECE Certificates may contact STEP at Lane program for coaching and access to financial resources.
- Transfer Credit for Prior Learning may be granted based on OCCD Oregon Registry Steps. Please contact the Program Coordinator, Kathleen Lloyd.
- Students seeking the AAS, ECE degree must complete a total of 270 hours (90 hours per term, for a total of three terms) of supervised student teaching. Please contact the Program Coordinator, Kathleen Lloyd.
- Cooperative Education (Co-op). Contact Kathleen Lloyd. Early Childhood Education (ECE) majors are required to complete 6 credits of ED 280EC - Co-op Ed: Early Childhood Education 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.

Credential

ECE students are encouraged to enroll in the Oregon Registry (pdx.edu/occd), a statewide professional recognition program that records and recognizes the growth and achievements of early childhood care and education professionals. Step 7 provides the Child Development Associate (CDA) Credential. College credit is also available for individuals at Step 7 or higher on the Oregon Registry, based on community training hours. Child Development Associate (CDA).

Electrician Apprenticeship Technologies, AAS

Length: 90 credits

Program Contacts

Offered by the Advanced Technology department

Program Coordinator: Joy Crump, *crumpj@lanecc.edu*, 541-463-5496

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $13,713.00

- Resident Tuition: $8,568.00*
- Technology Fees: $748.00
- General Student Fees: $1211.00** (if applicable)
- Online Course Fee: $490.00
- Books / Course Materials: $2,268.00
- Program Specific Fees: $428.00 (Apprenticeship Dept fees, Additional class specific fees, Fabrication/Welding Program fee)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program will be able to:

PLO 1 - Perform the duties and responsibilities of the electrician trade/occupation
PLO 2 - Apply theory to electrical wiring
PLO 3 - Demonstrate and use industry safety standards
PLO 4 - Develop attitudes conducive to improve customer relations skills in the electrician trade
PLO 5 - Develop communication and critical thinking skills necessary for job advancement
PLO 6 - Use appropriate library and information resources to research professional issues and support lifelong learning
PLO 7 - Access library, computing, and communications services, and appropriately select information and data from regional, national, and international networks
PLO 8 - Represent, analyze and determine rules for finding patterns relating to linear functions, non-linear functions and arithmetic sequences with tables, graphs, and symbolic rules
PLO 9 - Adapt to new job requirements to qualify for advancement in becoming lead supervisors
PLO 10 - 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

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 C grade or higher (or equivalent).

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits):

- WR 115 - Introduction to College Composition 4 Credit(s) or higher

Math (4 credits):

- MTH 060 - Beginning Algebra 4 Credit(s) or higher

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s) COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Complete all courses listed in one of the following trades. Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted.

Inside Wire Electrician (47 credits)

- APR 130 - Electrical Principles 5 Credit(s)
- APR 131 - Electrical Principles/Residential Wiring 5 Credit(s)
- APR 132 - Electrical Residential Wiring Lab 3 Credit(s)
- APR 133 - Electrical Generators, Transformers, and Motors 1 5 Credit(s)
- APR 134 - Electrical Generators, Transformers and Motors 2 5 Credit(s)
- APR 135 - Electrical, Generators, Transformers, and Motors Lab 3 Credit(s)
- APR 220 - Electrical Apprenticeship Code and Exam Preparation 2-3 Credit(s) (take 8 credits of APR 220)
- APR 225 - Electrical Motor Controls 5 Credit(s)
- APR 226 - Electrical Grounding/Bonding and Blueprint Reading 5 Credit(s)
- APR 227 - Electrical System Troubleshooting 3 Credit(s)

Limited Energy Technician License A (38 credits)

- APR 101A - Trade Skills Fundamentals 4 Credit(s)
- APR 140 - Electrical Systems Installation Methods 4 Credit(s)
- APR 141 - Limited Voltage Electrical Circuits 4 Credit(s)
- APR 142 - Devices, Testing Equipment and Code 4 Credit(s)
- APR 143 - Limited Voltage Cabling 4 Credit(s)
- APR 144 - Communications 4 Credit(s)
- APR 220 - Electrical Apprenticeship Code and Exam Preparation 2-3 Credit(s) (take 2 credits of APR 220)
- APR 240 - Audio and Intrusion Systems 4 Credit(s)
- APR 241 - Fire Alarm Systems and Nurse Call 4 Credit(s)
- APR 242 - Limited Voltage System Integration 4 Credit(s)

Limited Energy Technician License B (26 credits)

- APR 101A - Trade Skills Fundamentals 4 Credit(s)
- APR 140 - Electrical Systems Installation Methods 4 Credit(s)
- APR 141 - Limited Voltage Electrical Circuits 4 Credit(s)
- APR 142 - Devices, Testing Equipment and Code 4 Credit(s)
- APR 143 - Limited Voltage Cabling 4 Credit(s)
- APR 144 - Communications 4 Credit(s)
- APR 220 - Electrical Apprenticeship Code and Exam Preparation 2-3 Credit(s) (take 2 credits of APR 220)

Limited Maintenance Electrician (20 credits)

- APR 189 - Shop Practices 2 Credit(s)
- APR 190 - Electrical Theory 1 1-4 Credit(s) (take 4 credits of APR 190)
- APR 191 - Electrical Theory 2 1-4 Credit(s) (take 4 credits of APR 191)
- APR 220 - Electrical Apprenticeship Code and Exam Preparation 2-3 Credit(s) (take 2 credits of APR 220)
- APR 285 - Motors 1-4 Credit(s) (take 4 credits of APR 285)
- APR 286 - Motors 2 1-4 Credit(s) (take 4 credits of APR 286)

Manufacturing Plant Electrician (40 credits)

- APR 185 - Shielded Metal Arc Welding 1 1-4 Credit(s) (take 2 credits of APR 185)
- APR 189 - Shop Practices 2 Credit(s)
- APR 190 - Electrical Theory 1 1-4 Credit(s) (take 4 credits of APR 190)
- APR 191 - Electrical Theory 2 1-4 Credit(s) (take 4 credits of APR 191)
- APR 220 - Electrical Apprenticeship Code and Exam Preparation 2-3 Credit(s) (take 8 credits of APR 220)
- APR 285 - Motors 1-4 Credit(s) (take 4 credits of APR 285)
- APR 286 - Motors 2 1-4 Credit(s) (take 4 credits of APR 286)
- APR 290 - Programmable Controllers 1 1-4 Credit(s) (take 4 credits of APR 290)
- APR 291 - Programmable Controllers 2 1-4 Credit(s) (take 4 credits of APR 291)
- APR 292 - Programmable Controllers 3 4 Credit(s)

Program Electives

Directed Electives must be completed with a grade of C- or better, or Pass. Elective credits will be different depending on which trade students choose to pursue. **Complete credits to meet 90 total credits for the program. Select courses from the list below. Contact your Academic Advisor or Program Coordinator for help determining the number of elective credits required.**

- APR 101 - Trade Skills Fundamentals 4 Credit(s)
- APR 105 - Electrical Wiring for the Trades 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- CST 110 - Blueprint Reading 1 3 Credit(s)
- CST 111 - Construction Orientation and Environment 2 Credit(s)
- CST 118 - Building Construction 1-5 Credit(s)
- CST 211 - Blueprint Reading 2 3 Credit(s)
- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- HE 152 - Drugs, Society and Behavior 3 Credit(s)
- HE 252 - First Aid 3 Credit(s)
- MTH 085 - Applied Geometry for Technicians 4 Credit(s)
- MTH 111 - College Algebra 5 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)
- WLD 121 - Shielded Metal Arc Welding 1 1-4 Credit(s)
- Any course(s), 100-level or higher, selected from the Approved Discipline Studies Courses for Associate Degrees and Oregon Transfer Module lists.

Journey Level Card from Oregon BOLI (22 credits)

- Students who obtain a State of Oregon Apprenticeship Training Journey Level Card or Oregon Bureau of Labor and Industries Apprenticeship and Training Division (BOLI-ATD) Certificate of Completion will be awarded 22 Credits.

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- This is the parent program for the Electrician Apprenticeship Technologies: Trade Worker Apprenticeship Technologies, CPC, Electrician Apprenticeship

Technologies, 1-yr Certificate, and Limited Electrician Apprenticeship Technologies, Certificate of Completion.
- 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.
- This program is articulated with Oregon Institute of Technology, which requires a higher-level math course than is required for the program. Contact your Academic Advisor for help with transfer to OIT. Students using lower-credit courses to meet General Education requirements may need to take additional Electives to meet the 90-credit minimum.

Licensing and 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.

Energy Management Technician (online), AAS (suspended)

Program Change

Energy Management is a growing industry, and current industry trends are in the Building Controls sector with employers are seeking applicants for this industry. As such, the Energy Management program has decided to focus curriculum in the Building Controls direction because of the overwhelming employment opportunities.

For the 2021-22 academic year, the Energy Management program will only be accepting applicants for the Energy Management Technician: Building Controls Technician Option (online), AAS program.

Please contact the program coordinator or academic advisors for more information:

Program Coordinator: Roger Ebbage, *ebbager@lanecc.edu,* 541-556-7724

Academic Advising Team: *Sci-MathPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Energy Management Technician: Building Controls Technician Option (online), AAS

Length: 96 credits

Program Contacts

Offered by the Science Division

Program Coordinator: Roger Ebbage, ebbager@lanecc.edu, 541-556-7724

Academic Advising Team: *Sci-MathPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $15,114.00

- Resident Tuition: $12,096.00*
- Technology Fees: $1,056.00
- General Student Fees: $**(if applicable)
- Online Course Fee: $960.00
- Books / Course Materials: $250.00
- Other Cost / Expenses: $350.00***(controls building kit)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

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.

Students who complete this program will be able to:

PLO 1 - Evaluate the energy use patterns for residential and commercial buildings and recommend energy efficiency measures and renewable energy solutions for high energy consuming buildings
PLO 2 - Understand the interaction between energy consuming building systems and make energy use reduction recommendations based on that understanding
PLO 3 - Construct energy evaluation technical reports and make presentations for potential project implementation
PLO 4 - Collect and display data as lists, tables, and plots using appropriate technology (e.g., excel and other computer software)
PLO 5 - Develop and evaluate inferences and predictions that are based on collected data
PLO 6 - Interpret the concepts of a problem-solving task, and, using mathematics, translate concepts into energy related projects
PLO 7 - Read and analyze building blue prints including floor, mechanical, and electrical plans
PLO 8 - Analyze a variety of commercial HVAC and lighting systems from a controls perspective
PLO 9 - Become familiar with modules and electronics commonly used to implement building automation schemes
PLO 10 - Write building control systems schemes
PLO 11 - Understand control system management software
PLO 12 - Diagnose and troubleshoot existing building control systems

Admission Information

Apply online at lanecc.edu/science/energy-management. Applicants must have completed MTH 065 or MTH 070 prior to enrollment. Individual courses may be taken with department/instructor approval.

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass. It is recommended that General Education requirements be completed prior to entering the program.

Writing (8 credits) - Complete both of the following:
- WR 121_H / WR 121 - Academic Composition 4 Credit(s) or higher
- WR 227_H / WR 227 - Technical Writing 4 Credit(s)

Math (5 credits) - Complete one of the following:
- MTH 095 - Intermediate Algebra 5 Credit(s)
- MTH 111 - College Algebra 5 Credit(s)
- Any MTH course higher than MTH 111

Human Relations (3-4 credits) - Complete one of the following:
- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Physics (8 credits) - Complete one of the following sequences:
- **Sequence 1 - Complete both of the following:**
  - PH 101 - Fundamentals of Physics 4 Credit(s)
  - PH 102 - Fundamentals of Physics 4 Credit(s)
- **Sequence 2 - Complete both of the following:**
  - PH 102 - Fundamentals of Physics 4 Credit(s)
  - PH 103 - Fundamentals of Physics 4 Credit(s)
- **Other accepted sequences:**
  - PH 201 - General Physics 5 Credit(s) + PH 202 - General Physics 5 Credit(s)
  - PH 202 - General Physics 5 Credit(s) + PH 203 - General Physics 5 Credit(s)
  - PH 211 - General Physics with Calculus 5 Credit(s) + PH 212 - General Physics with Calculus 5 Credit(s)
  - PH 212 - General Physics with Calculus 5 Credit(s) + PH 213 - General Physics with Calculus 5 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

NOTE: BT 123, CS 133JS, and CS 275 have prerequisites that are not embedded into the program but must be completed prior to completing the required program course. Work with your academic advisor on when to take these prerequisites. Students who have previous computer experience may be able to waive the prerequisite for BT 123. Please contact the Business Department for information about waiving prerequisites.

- BT 123 - MS EXCEL for Business 4 Credit(s)
- CS 179 - Introduction to Computer Networks 4 Credit(s)
- CST 110 - Blueprint Reading 1 3 Credit(s)
- NRG 101 - Introduction to Energy Management 3 Credit(s)
- NRG 103 - Sustainability in The Built Environment 3 Credit(s)
- NRG 110 - Energy Efficiency Industry Software Applications 4 Credit(s)
- NRG 111 - Residential/Light Commercial Energy Analysis 3 Credit(s)
- NRG 112 - Commercial Energy Use Analysis 4 Credit(s)
- NRG 121 - Air Conditioning System Analysis 3 Credit(s)
- NRG 122 - Commercial Air Conditioning System Analysis 3 Credit(s)
- NRG 123 - Energy Control Strategies 4 Credit(s)
- NRG 124 - Energy Efficiency Methods 4 Credit(s)
- NRG 131 - Lighting Fundamentals 3 Credit(s)
- NRG 142 - Energy Accounting 3 Credit(s)
- NRG 181 - Direct Digital Controls 1 4 Credit(s)
- NRG 182 - Commercial HVAC Controls 4 Credit(s)
- NRG 183 - Controls Retuning and Troubleshooting 4 Credit(s)
- NRG 184 - Direct Digital Controls 2 4 Credit(s)
- NRG 185 - Lighting Controls 4 Credit(s)

Beginning Programming (4 credits) - Complete one of the following:

- CS 133JS - Beg. Programming: JavaScript 4 Credit(s)
- CS 161C - Computer Science 1 4 Credit(s)
- CS 161N - Computer Science 1 4 Credit(s)
- CS 161P - Computer Science 1 4 Credit(s)
- CS 275 - Basic Database SQL 4 Credit(s)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- Completion of MTH 065 or MTH 070 (or Program Coordinator permission) must be obtained prior to enrolling in the program.
- MTH 095 or higher may be taken any term but must be completed by the end of the first year.
- WR 121, WR 227, and Human Relations may be taken any term.
- All NRG courses are offered fully online.
- LCC may not offer Physics online. To learn more and for alternative options, please check with your Academic Advisor.
- Deviation from the prescribed course sequence will impact a student's ability to complete the program in a two year time frame. Please contact Program Coordinator and/or Academic Advisor to determine prescribed course sequence.
- For transfer opportunities and university partnerships, check with your Academic Advisor. There may be variations in courses needed.

Licensing and Certification

Association of Energy Engineers Certified Energy Manager In Training (EMIT).

Fabrication/Welding Technology, AAS

Length: 90 credits

Program Contacts:

Offered by: Advanced Technology, lanecc.edu/advtech

Program Coordinator: Doug Ford, *forddo@lanecc.edu*, 541-463-5498

Advanced Technology Academic Advising: *AdvTechPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $18,949.00

- Resident Tuition: $ 11,340.00*
- Technology Fees: $ 990.00
- General Student Fees: $ 804.00**
- Online Course Fee: $ (if applicable)
- Books / Course Materials: $ 1,550.00
- Program Specific Fees: $ 3,288.00 (course fees)
- Other Cost / Expenses: $ 845.00*** (tools)
- Differential Fees: $ 132.00**** (if applicable)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare graduates 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.

Students who complete this program will be able to:

PLO 1 - Apply knowledge of forming, fitting, and welding processes

PLO 2 - Demonstrate entry-level fabrication techniques and multiple welding processes including GTAW, SMAW, GMAW, FCAW, PAC, OAC structural and pipefitting, metallurgy, and quality control procedures. Use appropriate library and information resources to research professional issues and support lifelong learning

PLO 3 - Use blueprint-reading skills, cost estimating, applied science of materials, and mathematics necessary to the profession

PLO 4 - Demonstrate and use industry safety standards

PLO 5 - Use mathematical formulas to calculate area, volume, and weight of metal objects

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis
- WR 115 - Introduction to College Composition
- Any WR course higher than WR 115

Math (4-5 credits) - Complete one of the following:

- MTH 085 - Applied Geometry for Technicians
- MTH 097 - Geometry
- MTH 112 - Trigonometry

Human Relations (3-4 credits) - Complete one of the following:

- 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 Communication
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better, P/NP is not accepted. It is recommended students complete the math requirement prior to taking core courses.

- WLD 112 - Fabrication/Welding 1 12 Credit(s)
- WLD 113 - Fabrication/Welding 2 12 Credit(s)
- WLD 114 - Fabrication/Welding 3 12 Credit(s)
- WLD 215 - Fabrication/Welding 4 12 Credit(s)
- WLD 216 - Fabrication/Welding 5 12 Credit(s)
- WLD 217 - Fabrication/Welding 6 12 Credit(s)

Welding Lab or Co-op (3 credits) - Complete one of the following:

- WLD 142 - Pipe Welding Lab: Carbon Steel 3 Credit(s)
- ENGR 280W - Co-op Ed: Welding 3-12 Credit(s)

Program Electives

Complete 5 credits of Program Electives, selected from the list below. WLD courses must be completed with a letter grade of C- or better. P/NP is not accepted. WLD 139 is only offered P/NP, and must be completed with a Pass grade. All other ELECTIVES must be completed with a grade of C- or better, or Pass.

- COOP 206 - Co-op Ed: Internship Seminar 1-2 Credit(s)
- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- MFG 101 - Safety and Basic Shop Practice 3 Credit(s)
- MTH 060 - Beginning Algebra 4 Credit(s)
- MTH 075 - Applied Algebra for Technicians 4 Credit(s)
- Any Math course higher than MTH 075

- WLD 111 - Blueprint Reading for Welders 3 Credit(s)
- WLD 121 - Shielded Metal Arc Welding 1 1-4 Credit(s)
- WLD 122 - Shielded Metal Arc Welding 2 1-4 Credit(s)
- WLD 139 - Welding Lab 1-3 Credit(s)
- WLD 140 - Welder Qualification (Cert): Wire Drive Processes 3 Credit(s)
- WLD 141 - Welder Qualification (Cert): SMAW 3 Credit(s)
- WLD 143 - Wire Drive Welding 1 1-4 Credit(s)
- WLD 154 - Wire Drive Welding 2 1-4 Credit(s)
- WLD 159 - Wire Drive Welding 3 1-4 Credit(s)
- WLD 160 - Wire Drive Welding 4 1-4 Credit(s)
- WLD 242 - Gas Tungsten Arc Welding 1 3 Credit(s)
- WLD 256 - Gas Tungsten Arc Welding 2 3 Credit(s)

Notes

- This is the parent program for the Fabrication/Welding Technology, 1-yr Certificate.
- This program follows the Associate of Applied Science (AAS) Requirements unless otherwise specified.
- A high school diploma or equivalent is recommended for all applicants to 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. In certain circumstances, co-op experience may be substituted for major course work. For more information, see your Academic Advisor or Program Coordinator.
- This program is articulated with Oregon Institute of Technology, which requires a higher-level math course than is required for the program. Contact your Academic Advisor for help with transfer to OIT.

Graphic Design, AAS

Length: 90 credits

Program Contacts

Offered by the Arts & Humanities Division

Faculty Coordinator: Media Arts Department, *artshumanities-office@lanecc.edu*

Media Arts Academic Advising Team: *ArtsPrograms@lanecc.edu*; lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $ 17,534.00

- Resident Tuition: $ 11,340.00*
- Technology Fees: $ 990.00
- General Student Fees: $ 804.00**
- Online Course Fee: $ 180.00 (if applicable)
- Books / Course Materials: $ 1,700.00
- Program Specific Fees: $ 1,020.00 (course fees)
- Other Cost / Expenses: $ 1,500.00*** (computer / Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare graduates for entry-level positions in the fields of graphic and digital design.

Students who complete this program will be able to:

PLO 1 - Design a variety of graphic materials including advertising, corporate identity, publications, packaging, signage, marketing, and web graphics
PLO 2 - Solve graphic communication problems through the use of computer technology used in the field
PLO 3 - Demonstrate understanding of fundamental art, communication, and marketing principles in the development of design solutions
PLO 4 - Demonstrate understanding of professional business standards and practices
PLO 5 - Demonstrate ability to design and produce materials that will meet professional standards for reproduction
PLO 6 - Use appropriate library and information resources to research design problems, issues, and technology, as well as, to support lifelong technical learning

Admission Information

This program is open admission for the first year, but admission is limited for second year. For more information, go to lanecc.edu/mediaarts/graphicdesign/second-year-graphic-design-program.

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits) - Complete the following:

- WR 121 - Academic Composition (or WR 121_H)

Math (4-5 credits) - Complete one of the following:

- MTH 098 - Math Literacy
- MTH 060 - Beginning Algebra
- Any Mathematics course higher than MTH 060

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

All of the following courses must be completed with a letter grade of B- or better. P/NP is not accepted.

- ART 115 - Basic Design: Fundamentals 3 Credit(s)
- ART 116 - Basic Design: Color 3 Credit(s)
- ART 119 - Typography 1 3 Credit(s)
- ART 216 - Digital Design Tools 3 Credit(s)
- ART 225 - Digital Illustration 3 Credit(s)
- ART 289 - Web Production 3 Credit(s)
- GD 110 - Introduction to Graphic Design 1 Credit(s)
- MUL 212 - Digital Imaging 4 Credit(s)

Drawing 1 (3 credits) - Complete the following:

- ART 131 - Introduction to Drawing 3 Credit(s)

Graphic Design and Production (15 credits):

- ART 221 - Graphic Design 1 4 Credit(s)
- ART 222 - Graphic Design 2 4 Credit(s)
- ART 227 - Graphic Design Production 1 3 Credit(s)
- ART 228 - Graphic Design Production 2 4 Credit(s)

All of the following courses must be completed with a letter grade of C- or better. P/NP is not accepted.

- ART 290 - Design Concepts for the Web 3 Credit(s)
- MUL 105 - Digital Photography 4 Credit(s)
- MUL 205 - Design Studio 3 Credit(s)
- MUL 220 - Intermediate Typography 3 Credit(s)
- MUL 227 - Graphic Design Literacy 3 Credit(s)

Drawing 2 (3-4 credits) - Complete one of the following:

- ART 231 - Drawing: Intermediate 3 Credit(s)
- ART 234 - Drawing: Figure 3 Credit(s)
- ART 237 - Illustration 1 3 Credit(s)
- ART 245 - Drawing for Media 4 Credit(s)

Graphic Design and Production (8 credits):

- ART 223 - Graphic Design 3 4 Credit(s)
- ART 229 - Graphic Design Production 3 4 Credit(s)

Cooperative Education

Cooperative Education must be completed with a letter grade of C- or better. P/NP is not accepted. **Complete 6 credits of Cooperative Education.**

- ART 280GD - Co-op Ed: Graphic Design 3-12 Credit(s)

Electives

Electives must be completed with a letter grade of C- or better. P/NP is not accepted. **Complete 5 credits of Electives**. Choose any combination of courses from the following subject list (see complete course listing for information about specific courses):

- ARH - Art History
- ART - Art
- AUD - Audio Production
- CINE - Cinema Studies
- FA - Film Arts
- J - Journalism

- MDP - Multimedia Production
- MUL - Multimedia
- VP - Video Production

Notes

- This program follows the Associate of Applied Science (AAS) Requirements unless otherwise specified.
- Cooperative Education (Co-op) offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Contact Teresa Hughes, Graphic Design Cooperative Education Coordinator, Bldg. 17, Rm. 106, 541-463-3179, *hughest@lanecc.edu*
- Students using lower-credit courses to meet General Education requirements may need to take additional credits to meet the 90-credit minimum.

Health Information Management (online), AAS

Length: Program 90 credits

Program Prerequisites: 21 credits

Program Contacts

Offered by Health Professions

Health Information Management Academic Advising Team: *HIMProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Project Specialist: Kathy Torvik; *torvikk@lanecc.edu*

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost for Program: $18,488.00 (90 credits)

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: **(if applicable)
- Online Course Fee: $900.00
- Books / Course Materials: $3,204.00
- Program Specific Fees: $554.00 (certifications-licensure-exams, application fee, background check, drug/alcohol screening, COMPLIO account and AHIMA student membership)
- Other Cost / Expenses: $1,500.00*** (computer/internet)

Estimated Cost for Prerequisites: $3,087.00 (21 credits)

- Resident Tuition: $2,646.00*
- Technology Fees: $231.00
- General Student Fees: $ ** (if applicable)
- Online Course Fee: $210.00 (if applicable)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program, which can be completed entirely online, is to prepare 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.

Students who complete this program will be able to:

PLO 1 - Apply critical and creative thinking, problem solving, and effective inter-professional communication skills related to health information management
PLO 2 - Apply principles of healthcare privacy, confidentiality, legal, ethical issues and data security
PLO 3 - Apply quantitative and qualitative methodologies to process healthcare information
PLO 4 - Demonstrate knowledge of dynamic healthcare delivery systems and regulatory environments
PLO 5 - Demonstrate knowledge of healthcare billing, coding and reimbursement policies
PLO 6 - Demonstrate knowledge of healthcare terminology and medical conditions
PLO 7 - Evaluate, use, and integrate information technology to support medical decision making and processes
PLO 8 - Demonstrate the application of information technology in the HIM environment
PLO 9 - Demonstrate the principles of leadership and management in the HIM environment

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 see the admissions and application information at lanecc.edu/hp/him/admissions-and-application

Program Requirements

Prerequisites

Prerequisites must be completed with a letter grade of C or better. P/NP is not accepted.

The following courses must be completed prior to applying for the Health Information Management program.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition 4 Credit(s)
- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- Any WR course higher than WR 115

Mathematics (4 credits):

- MTH 052 - Math for Health and Physical Sciences 4 Credit(s) or higher

Medical Terminology (3 credits):

- HP 100 - Medical Terminology 1 3 Credit(s)

Computer Literacy (4 credits) - Complete one of the following:

- CIS 101 - Computer Fundamentals 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)

Human Body Systems (6 credits) - Complete both of the following:

- HP 150 - Human Body Systems 1 3 Credit(s)
- HP 152 - Human Body Systems 2 3 Credit(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted. HP 110 satisfies the Human Relations requirement.

- CIS 125D - Software Tools 1: Databases 4 Credit(s)
- HIM 107 - Integrated Electronic Health Records 4 Credit(s)
- HIM 114 - Introduction to Medical Coding 4 Credit(s)
- HIM 120 - Introduction to Health Information Management 3 Credit(s)
- HIM 154 - Introduction to Disease Processes 4 Credit(s)
- HIM 160 - Healthcare Insurance and Billing 4 Credit(s)
- HIM 183 - Introduction to Health Information Systems 4 Credit(s)
- HIM 200 - Healthcare Statistics 3 Credit(s)
- HIM 210 - Leadership for Health Information Management 4 Credit(s)
- HIM 222 - Reimbursement Methodologies 4 Credit(s)
- HIM 230 - Quality Improvement in Healthcare 4 Credit(s)
- HIM 241 - Health Information Management Applications 1 4 Credit(s)
- HIM 242 - Health Information Management Applications 2 4 Credit(s)
- HIM 260 - Medical Record Auditing 4 Credit(s)
- HIM 270 - ICD-10 Coding 5 Credit(s)
- HIM 271 - ICD-10-PCS Coding 5 Credit(s)
- HIM 273 - CPT and HCPCS Coding 5 Credit(s)
- HP 105 - EHR for the Provider Office 3 Credit(s)
- HP 110 - Health Office Procedures 3 Credit(s)
- HP 220 - Legal and Ethical Aspects of Healthcare 3 Credit(s)

Cooperative Education

Cooperative Education and Seminar must be completed with a letter grade of C or better. P/NP is not accepted.

Seminar (2 credits):

- COOP 206 - Co-op Ed: Internship Seminar

Cooperative Education (3 credits):

- HIM 280 - Co-op Ed: Health Information Management

Electives

Electives must be completed with a letter grade of C or better. P/NP is not accepted.

Open Elective (3 credits):

Complete any 100- or 200-level courses to meet this requirement. (HIM faculty recommend other courses within HIM or another health professions field.)

Program Elective (4 credits):

- WR 121 - Academic Composition 4 Credit(s) or WR 121_H
- WR 227 - Technical Writing 4 Credit(s) or WR 227_H
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 220 - Communication, Gender and Culture 4 Credit(s)

If using WR 121 to complete a program prerequisite, please complete an additional course from the list above.

Notes

- This is the parent program for Health Information Management: Medical Coding (online), CPC.
- This program follows the Associate of Applied Science (AAS) Requirements unless otherwise specified.
- Students can take all Program Core courses prior to admission except COOP 206, HIM 222, HIM 270, HIM 271, HIM 273, and HIM 280.
- All program prerequisites with the subject prefix CIS, CS, and HP must be completed no more than five years prior to HIM program acceptance. The prerequisites with CIS, CS, and HP prefixes can possibly be waived with current work experience in an HIM related field.
- All program prerequisites can be completed online.
- Coding and Reimbursement classes (HIM 270, HIM 271, HIM 273, and HIM 222) must be completed within five years of the start of the governing catalog
- Students who have completed the Health Information Management: Medical Coding (online), CPC may use the HIM coding sequence (HIM 270, HIM 271, and HIM 273) plus one Computer Literacy course (CIS 101 or CS 120) to meet the HIM 114 - Introduction to Medical Coding requirement. See your Academic Advising team or Program Coordinator for more details about course substitutions and/or waivers.
- Completion of BI 231, BI 232, and BI 233 with a C or higher is an acceptable equivalent for HP 150 and HP 152.
- BT 120 - MS WORD for Business can be used to meet the Computer Literacy requirement if completed prior to Summer 2020 (when the program's prerequisites changed).
- Students who do not meet reading and/or math requirements may apply to PASS Lane Summer programming for alternative admission process. PASS Lane contact is Marcia Koenig (*koenigm@lanecc.edu*), Bldg. 11/244, 541-463-5818.
- Cooperative Education is required to earn a HIM AAS 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.

Accreditation

The Associate Degree Health Information Management Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)

Hotel, Restaurant, and Tourism Management, AAS

Length: 90 credits

Program Contacts

Offered by the Culinary Arts and Hotel/Restaurant/Tourism Management department

Program Coordinator: Lisa Benson, *bensonl@lanecc.edu*, 541-463-3504

Academic Advising Team: *CulinaryHospPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $14,240.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00** (if applicable)
- Books / Course Materials: $1,066.00
- Program Specific Fees: $40.00 (course fee)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to train future 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 be prepared for challenging and rewarding careers that can take them around the world.

Students who complete this program will be able to:
PLO 1 - Demonstrate an understanding of lodging operations and financial transactions
PLO 2 - Describe the legal and ethical responsibilities of hospitality professionals
PLO 3 - Identify and describe the various elements of restaurant management
PLO 4 - Use knowledge of best practices to further sustainability (economic, environmental, and social) in the hospitality industry
PLO 5 - Understand OSHA, safety regulations, and sanitation procedures in the hospitality industry
PLO 6 - Identify and describe the various sectors within the hospitality industry
PLO 7 - Describe the fundamental principles of customer service and guest relations
PLO 8 - Demonstrate the ability to practice concepts of hospitality sales and marketing
PLO 9 - Describe the various safety and security risks in the hospitality industry

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits):

- WR 115 - Introduction to College Composition 4 Credit(s) or higher

Math (3 credits):

- MTH 025C - Basic Mathematics Applications 3 Credit(s) (Recommended)
- MTH 025 - Basic Mathematics Applications 3 Credit(s)
- Any Math course higher than MTH 025

Human Relations (4 credits):

- BA 278 - Leadership and Team Dynamics 4 Credit(s)

Program Core Courses

Program Core Courses must be completed with a letter grade of C- or better, or Pass.

- BA 101 - Introduction to Business 4 Credit(s)
- BA 223 - Marketing 4 Credit(s) or BT 253 - Digital Marketing 4 Credit(s)
- CA 175 - Foodservice Sanitation and Safety 2 Credit(s)
- HRTM 100 - Introduction to Culinary and Hospitality 3 Credit(s)
- HRTM 104 - Introduction to Travel and Tourism 3 Credit(s)
- HRTM 105 - Restaurant Operations 3 Credit(s)
- HRTM 109 - Principles of Meetings and Convention Management 3 Credit(s)
- HRTM 140 - Hospitality Law and Ethics 3 Credit(s)
- HRTM 205 - Managing the Restaurant Operation 3 Credit(s)
- HRTM 220 - Sustainability in the Hospitality Industry 2 Credit(s)
- HRTM 230 - Hotel Operations 1 3 Credit(s)
- HRTM 231 - Hotel Operations 2 3 Credit(s)
- HRTM 260 - Hospitality Human Resources and Supervision 3 Credit(s)
- HRTM 265 - Food and Beverage Cost controls 3 Credit(s)
- HRTM 286 - Bar and Beverage Management 3 Credit(s)
- HRTM 292 - Dining Room and Kitchen Lab 4 Credit(s)

Cooperative Education

Cooperative Education courses must be completed with a grade of C- or better, or Pass.

- Complete **9 credits** of: HRTM 280 - Co-op Ed: Hospitality Management

Electives

Electives courses must be completed with a grade of C- or better, or Pass.

Complete 21 credits from the following list:

- ANTH 103 - Cultural Anthropology 4 Credit(s)
- ANTH 228 - Chicano Cultures 4 Credit(s)
- BI 103H - General Biology-Mushrooms 4 Credit(s)
- BA 206 - Management Fundamentals 4 Credit(s)
- BA 211 - Financial Accounting 4 Credit(s)
- BA 214 - Business Communications 4 Credit(s)
- BA 250 - Small Business Management 4 Credit(s)
- BA 281 - Personal Finance 4 Credit(s)
- BT 120 - MS WORD for Business 4 Credit(s)
- BT 123 - MS EXCEL for Business 4 Credit(s)
- BT 163 - QuickBooks 4 Credit(s)
- BT 221 - Budgeting for Managers 4 Credit(s)
- CIS 101 - Computer Fundamentals 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- COMM 105 - Listening and Critical Thinking 4 Credit(s)
- COMM 111 - Fundamentals of Public Speaking 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- ENSC 182 - Atmospheric Environment and Climate Change 4 Credit(s)
- FN 105 - Nutrition for Foodservice Professionals 3 Credit(s)
- HE 252 - First Aid 3 Credit(s)

- Any additional Math courses, MTH 065 or higher
- Any language courses, 100-level or higher, including American Sign Language (ASL), Chinuk Wawa (CW), Mandarin Chinese (CHN), French (FR), or Spanish (SPAN)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.

Human Services, AAS

Length: 90 credits

Program Contacts

Offered by the Social Science Division

Program Coordinator: Susan Shipp, *shipps@lanecc.edu*, 541-463-5231

Academic Advising Team: *socsci-llcprograms@lanecc.edu*, contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $15,034.00

- Resident Tuition: $ 11,340.00*
- Technology Fee: $ 990.00
- General Student Fees: $804.00**
- Books/Course Materials: $1,900.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to provide education and internship to prepare students for entry level employment in the human services field. 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. Embedded within the AAS degree is a Career Pathway Certificate in Addiction Studies which prepares students for state certification in addiction counseling through Mental Health and Addiction Certification Board (MHACBO). For information on the certification process visit the MHACBO website: mhacbo.org/en.

Students enrolled in Human Services courses may continue their education and transfer to bachelor programs in related helping fields such as family and human services, psychology, or social work. Students interested in transfer options and/or state certification options should work closely with program advising staff to select appropriate courses to reach their education and career goals.

Students who complete this program will be able to:

PLO 1 - Practice professional and ethical standards inherent in the human services field
PLO 2 - Utilize skills of attending behavior, active listening, effective questioning techniques that align with theoretical orientations in the helping fields, while working with both individuals and groups
PLO 3 - Exhibit competence in working with people from diverse backgrounds
PLO 4 - Conduct various assessments with regard to eligibility, service needs and problem resolution, commonly used in the human services field
PLO 5 - Develop a plan of action for clients using a strengths-based approach to link people with community resources
PLO 6 - Utilize technology and digital resources for educational and career purposes
PLO 7 - Communicate effectively with others, both verbally and in writing
PLO 8 - Describe current best practices in the field of human services and demonstrate the ability to implement these practices at the entry level

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (8 credits) - Complete both of the following:

- WR 121_H / WR 121 - Academic Composition
- WR 122_H / WR 122 - Argument, Research and Multimodal Composition

Mathematics (3 credits):

- MTH 025 - Basic Mathematics Applications or higher

Science / Math / Computer Science (3-4 credits) - Complete one course from the following list:

- Science/Math/Computer Science

Communications (4 credits) - Complete one of the following:

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

Health (3-4 credits) - Complete one of the following:

- HE 152 - Drugs, Society and Behavior 3 Credit(s)
- HE 209 - Human Sexuality 3 Credit(s)
- HE 240 - Holistic Health 3 Credit(s)
- HE 250 - Personal Health 3 Credit(s)
- HE 252 - First Aid 3 Credit(s)
- HE 255 - Global Health and Sustainability 4 Credit(s)
- HE 275 - Lifetime Health and Fitness 3 Credit(s)

Psychology and Sociology (9 credits) - Complete three courses from the following:

- PSY 110 - Exploring Psychology 3 Credit(s)
- PSY 201 - General Psychology 4 Credit(s)
- PSY 202 - General Psychology 4 Credit(s)
- PSY 203 - General Psychology 4 Credit(s)
- PSY 215 - Lifespan Developmental Psychology 4 Credit(s)
- PSY 231 - Human Sexual Behavior 4 Credit(s)
- PSY 239 - Introduction to Abnormal Psychology 3 Credit(s)
- SOC 108A - Selected Topics in Women's Studies, Women's Bodies, Women's Selves 3 Credit(s)
- SOC 204_H / SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - Social Stratification and Social Systems 4 Credit(s)
- SOC 206 - Institutions and Social Change 4 Credit(s)
- SOC 208 - Sport and Society 4 Credit(s)
- SOC 210 - Marriage, Family, and Intimate Relations 4 Credit(s)
- SOC 211 - Social Deviance 3 Credit(s)
- SOC 213 - Race and Ethnicity 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 225 - Social Problems 4 Credit(s)
- SOC 228 - Introduction to Environmental Sociology 4 Credit(s)
- Any lower-division PSY or SOC transfer course (3-credit minimum), with the exception of courses numbered 199/299, 198/298, or 280.

Program Core Courses

- Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted. HS 150 satisfies the Human Relations requirement.
- HS 102 - Psychopharmacology 4 Credit(s)
- HS 150 - Personal Effectiveness for Human Service Workers 3 Credit(s)
- HS 155 - Interviewing Theory and Techniques 3 Credit(s)
- HS 201 - Introduction to Human Services 3 Credit(s)
- HS 224 - Group Counseling Skills 3 Credit(s)
- HS 226 - Ethics and Law 3 Credit(s)
- HS 231 - Advanced Interviewing and Counseling 3 Credit(s)
- HS 232 - Cognitive-Behavioral Strategies 3 Credit(s)
- HS 265 - Casework Interviewing 3 Credit(s)
- HS 266 - Case Management 3 Credit(s)
- HS 267 - Cultural Competence in Human Services 3 Credit(s)

Cooperative Education

Cooperative Education must be completed with a grade of C- or better. P/NP is not accepted. HS 150 - Personal Effectiveness for Human Service Workers is required, and HS 226 - Ethics and Law is recommended, prior to enrollment in Cooperative Education.

Cooperative Education (18 credits):

HS 280 - Cooperative Education: Human Services

Program Electives

Program Electives must be completed with a letter grade of C- or better. P/NP is not accepted.

Program Electives (8 credits) - Complete courses from the following:

Human Services

- HS 158 - Trauma: Theory to Practice 2 Credit(s)
- HS 209 - Crisis Intervention and Prevention 3 Credit(s)
- HS 220 - Prevention 1: Preventing Substance Abuse and Other Social Problems 3 Credit(s)
- HS 221 - Co-occurring Disorders 3 Credit(s)
- HS 222 - Best Practices in Human Services: Interventions 4 Credit(s)
- HS 228 - HIV/AIDS and other Infectious Diseases: Risk Assessment and Intervention 2 Credit(s)

- HS 229 - Grief and Loss Across Life Span 3 Credit(s)

Criminal Justice

- CJA 200 - Introduction to Criminology 4 Credit(s)
- CJA 201 - Juvenile Delinquency 3 Credit(s)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- This is the parent program for the Human Services: Addiction Studies, CPC.
- HS 155 - Interviewing Theory and Techniques must be completed prior to enrollment in HS 231, HS 232, HS 265, and HS 266.
- A total of 18 credits of Cooperative Education are required to complete this degree. Students may use any of the following toward meeting this requirement: HS 280 - Cooperative Education: Human Services (preferred), PSY 280 - Co-op Ed: Psychology and / or SOC 280 - Co-op Ed: Sociology. Additionally, COOP 280SL - Co-op Ed: Service Learning may be considered on a case-by-case basis. Please speak with your Co-op Coordinator prior to enrolling.
- HS 150 - Personal Effectiveness for Human Service Workers *must* be completed prior to enrollment in Cooperative Education. HS 226 - Ethics and Law is recommended prior to enrollment in Cooperative Education.
- **Cooperative Education:** Students are required to attend a co-op orientation prior to beginning their field placement. Contact Christina Salter, Co-op Coordinator at *salterc@lanecc.edu* or 541-463-5813.

Industrial Mechanics and Maintenance Technology Apprenticeship, AAS

Length: 90 credits

Program Contacts

Offered by the Advanced Technology department

Program Coordinator: Joy Crump, *crumpj@lanecc.edu*, 541-463-5496

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $13,123.00

- Resident Tuition: $8,568.00*
- Technology Fees: $748.00
- General Student Fees: $804.00**
- Online Course Fee: $40.00 (if applicable)
- Books / Course Materials: $2,000
- Program Specific Fees: $963.00 (Fabrication-Welding Program fee, Electronics Class fee)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

***** Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

****** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

******* Any special info about program costs or expenses.

******** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program will be able to:

PLO 1 - Perform the duties and responsibilities of the millwright trade
PLO 2 - Develop machine shop skills in troubleshooting
PLO 3 - Demonstrate and use industry safety standards
PLO 4 - Identify mechanical and/or electrical industrial systems
PLO 5 - Develop attitudes conducive to improved customer relations skills in the millwright trade
PLO 6 - Develop communication and critical thinking skills necessary for job advancement
PLO 7 - Use appropriate library and information resources to research professional issues and support lifelong learning
PLO 8 - Access library, computing, and communications services, and appropriately select information and data from regional, national, and international networks
PLO 9 - Apply appropriate formulas to mathematical situations
PLO 10 - Adapt to new job requirements to qualify for advancement in becoming lead supervisors

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.

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits):

- WR 115 - Introduction to College Composition 4 Credit(s) or higher

Math (4 credits):

- MTH 085 - Applied Geometry for Technicians

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s) COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted.

Millwright (39 credits)

- APR 150 - The Millwright and Shop Safety 5 Credit(s)
- APR 151 - Millwright Machine Theory and Trade Calculations 5 Credit(s)
- APR 152 - Millwright: Power Transmissions and Boilers-Steam 5 Credit(s)
- APR 185 - Shielded Metal Arc Welding 1 1-4 Credit(s) (take 2 credits of APR 185)
- APR 186 - Wire Drive Welding 1 1-4 Credit(s) (take 2 credits of APR 186)
- APR 250 - Millwright: Industrial Print Reading, Schematics, and Estimating 5 Credit(s)
- APR 251 - Millwright: Pneumatics and Lubrications 5 Credit(s)
- APR 252 - Hydraulics for Millwrights 5 Credit(s)
- APR 253 - Millwright Piping Systems 5 Credit(s)

Journey Level Card from Oregon BOLI (22 credits)

Students who obtain a State of Oregon Apprenticeship Training Journey Level Card or Oregon Bureau of Labor and Industries Apprenticeship and Training Division (BOLI-ATD) Certificate of Completion will be awarded 22 Credits.

Program Electives

Program Electives must be completed with a grade of C- or better, or Pass. **Complete credits to meet 90 total credits for the program (17-19 credits). Select courses from the list below. Contact your Academic Advisor or Program Coordinator for help determining electives.**

- APR 190 - Electrical Theory 1 1-4 Credit(s)
- APR 101 - Trade Skills Fundamentals 4 Credit(s)
- CNC 101 - CNC Concepts 3 Credit(s)
- CNC 102 - CNC Setup and Operation 3 Credit(s)
- CNC 103 - CNC Programming 3 Credit(s)
- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- HE 252 - First Aid 3 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)
- WLD 151 - Fundamentals of Metallurgy 1-3 Credit(s)
- WLD 154 - Wire Drive Welding 2 1-4 Credit(s)
- WLD 122 - Shielded Metal Arc Welding 2 1-4 Credit(s)
- WLD 139 - Welding Lab 1-3 Credit(s)
- WLD 140 - Welder Qualification (Cert): Wire Drive Processes 3 Credit(s)
- WLD 141 - Welder Qualification (Cert): SMAW 3 Credit(s)
- Any course(s), 100-level or higher, selected from the Approved Discipline Studies Courses for Associate Degrees and Oregon Transfer Module lists.

Notes

- This program follows Associate of Applied Science (AAS) Requirements.
- This is the parent program for the Industrial Mechanics and Maintenance Technology Apprenticeship, 1-yr Certificate and Industrial Mechanics and Maintenance Technology Apprenticeship: Trade Worker Apprenticeship Technologies, CPC.
- Complete 8000 hours State of Oregon-approved on-the-job training and provide a State of Oregon Apprenticeship Training Journey-level card or BOLI-ATD Certificate of Completion.

- This program is articulated with Oregon Institute of Technology, which requires a higher-level math course than is required for the program. Contact your Academic Advisor for help with transfer to OIT.
- Students using lower-credit courses to meet General Education requirements may need to take additional Electives to meet the 90-credit minimum.

Licensing and 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.

Manufacturing Technology Computer Numerical Control Technician Option, AAS

Length: 93 credits

Program Contacts

Offered by: Advanced Technology Division

Program Coordinator: Steve Caffey, *caffeys@lanecc.edu*, 541-463-3145

Advanced Technology Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $20,668.00

- Resident Tuition: $11,718.00*
- Technology Fees: $1023.00
- General Student Fees: $804.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $941.00
- Program Specific Fees: $1,326.00 (course fees, materials)
- Other Cost / Expenses: $1,425.00*** (instruments, tools)
- Differential Fees: $3431.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students for the challenging technicalities of CNC Manufacturing. This program focuses heavily on CNC operation, especially CNC-specific safety procedures, CAD, CAM, and g-code.

Manufacturing Technology has long been a staple in any modern economy. Since the 1960s, CNC Manufacturing has been increasing rapidly. Everything around you, from your car to your cell phone, medical equipment to construction tools, has been designed in CAM software, had each piece prototyped and finally mass produced on CNC machines.

CNC Technology is better for producing many parts from the same print than manual manufacturing. Almost every modern field has parts that require incredibly small and precise measurements. In these fields measuring, designing, and manufacturing parts must be done with extreme accuracy, sometimes down to 0.1 microns. A human hair is 700x as thick as 0.1 micron.

Students who complete this program will be able to:

PLO 1 - Operate safely in a manufacturing environment using industrial safety standards and an appreciation for the importance of personal health and safety

PLO 2 - Read prints, use precision measuring tools, and apply mathematical skills to accomplish shop tasks

PLO 3 - Safely and efficiently set up and operate all standard machine tools employed by the modern machine shop

PLO 4 - Perform G-Code programming, set up and operation of CNC equipment using familiarity with manual machinery, CAD, CAM and verification software

PLO 5 - Use the internet to access information pertaining to shop techniques and tool use

Program Requirements

General Education

General Education courses must be completed with a letter grade of C- or better, or Pass.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- WR 115 - Introduction to College Composition 4 Credit(s)
- Any WR course higher than WR 115

Geometry (4-5 credits) - Complete one of the following:

- MTH 085 - Applied Geometry for Technicians 4 Credit(s)
- MTH 097 - Geometry 4 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Computer Science / Algebra (4 credits) - Complete one of the following:

- CIS 101 - Computer Fundamentals 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- Any CS course higher than CS 120
- MTH 060 - Beginning Algebra 4 Credit(s)
- Any Algebra course higher than MTH 065 (MTH 065, 070, 075, 095, 111)

Electives (4 credits):

- Complete 4 credits of any 100-level or higher course(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted. It is recommended students complete math and computer science prior to registering for CNC 101. Enrollment in MFG and CNC courses by consent only. See your Academic Advisor or Program Coordinator about enrollment.

- CNC 101 - CNC Concepts 3 Credit(s)
- CNC 102 - CNC Setup and Operation 3 Credit(s)
- CNC 103 - CNC Programming 3 Credit(s)
- CNC 108 - CNC Projects 3 Credit(s)
- CNC 201 - CNC Mill 3 Credit(s)
- CNC 202 - CNC Lathe 3 Credit(s)
- CNC 208 - CNC Advanced Projects 6 Credit(s)
- MFG 101 - Safety and Basic Shop Practice 3 Credit(s)
- MFG 102 - Shop Measurement and Coordinate System 3 Credit(s)
- MFG 103 - Metal Cutting Basics 3 Credit(s)

Manufacturing (21 Credits) - Complete all of the following:

- MFG 151 - Manufacturing 1 6 Credit(s)
- MFG 152 - Manufacturing 2 4 Credit(s)
- MFG 153 - Manufacturing 3 5 Credit(s)
- MFG 254 - Manufacturing 4 6 Credit(s)

Solid Modeling (6 Credits) - Complete both of the following:

- MFG 241 - Solid Modeling 1 3 Credit(s)
- MFG 242 - Solid Modeling 2 3 Credit(s)

Computer Aided Manufacturing (6 Credits) - Complete both of the following:

- MFG 243 - CAM 1 6 Credit(s)
- MFG 244 - CAM 2 6 Credit(s)

Cooperative Education or Advanced Concepts

Complete one of the following (3-6 credits):

- ENGR 280M - Co-op Ed: Manufacturing Technology 3-12 Credit(s)
- CNC 209 - Advanced CNC Concepts 6 Credit(s)

Notes

- This program follows the Associate of Associate of Applied Science (AAS) Requirements unless otherwise specified.
- A high school diploma or equivalent is recommended for all applicants to this program.
- This program is articulated with Oregon Institute of Technology, which requires a higher-level math course than is required for the program. Contact your Academic Advisor for help with transfer to OIT.
- Co-op experience may be substituted for major coursework. For more information, please see your Academic Advisor or Program Coordinator.

Manufacturing Technology, AAS

Length: 90 credits

Program Contacts

Offered by: Advanced Technology Division

Program Coordinator: Steve Caffey, *caffeys@lanecc.edu*, 541-463-3145

Advanced Technology Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $19,387.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $941.00
- Program Specific Fees: $1,244.00 (course fees, materials)
- Other Cost / Expenses: $1,430.00*** (instruments, tools)
- Differential Fees: $2638.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to provide fundamental training in the manufacturing field. Manufacturing Technology is a great choice for anyone who enjoys working with their hands or building things themselves. The work is challenging, engaging, and technical. At the end of the day, there is satisfaction in being able to see the results of your skills and effort.

Students are exposed to aspects of machining such as metrology, part print creation, prototyping, and manufacturing components for industry. These skills are an excellent choice for a pre-engineering student. Students are introduced to a wide variety of advanced technology, including 3D printing, 5-axis CNC milling, 4-axis CNC turning with live tooling and Electrical Discharge Machining.

Instruction is derived of hands-on projects, lectures and online learning to facilitate working while attending school. Many students obtain employment while attending this program. Graduates qualify for a wide range of entry level positions such as CNC Operator or Manual Machinist, some of the fastest growing career options in Oregon and Lane County. Graduates have gone on to build custom vehicles, make custom auto, motorcycle and aviation parts, gunsmithing, knifemaking, old vehicle restoration, machinery repair, and fields such as aerospace, automotive, engineering and industrial maintenance.

Students who complete this program will be able to:

PLO 1 - Operate safely in a manufacturing environment using industrial safety standards and an appreciation for the importance of personal health and safety
PLO 2 - Read prints, use precision measuring tools, and apply mathematical skills to accomplish shop tasks
PLO 3 - Safely and efficiently set up and operate all standard machine tools employed by the modern machine shop
PLO 4 - Describe major concepts associated with the setup and operation of CNC equipment and integrate that basic knowledge in guided projects
PLO 5 - Use the internet to access information pertaining to shop techniques and tool use

Program Core Requirements

General Education

General Education courses must be completed with a letter grade of C- or better, or Pass.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- WR 115 - Introduction to College Composition 4 Credit(s)
- Any WR course higher than WR 115

Geometry (4-5 credits) - Complete one of the following:

- MTH 085 - Applied Geometry for Technicians 4 Credit(s)
- MTH 097 - Geometry 4 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Computer Science / Algebra (4 credits) - Complete one of the following:

- CIS 101 - Computer Fundamentals 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- Any CS course higher than CS 120
- MTH 060 - Beginning Algebra 4 Credit(s)
- Any Algebra course higher than MTH 060 (MTH 065, 070, 075, 095, 111)

Electives (4 credits):

- Complete 4 credits of any 100-level or higher course(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted. It is recommended students complete math and computer science prior to registering for CNC 101. Enrollment in MFG and CNC courses by consent only. See your Academic Advisor or Program Coordinator about enrollment.

- CNC 101 - CNC Concepts 3 Credit(s)
- CNC 102 - CNC Setup and Operation 3 Credit(s)
- CNC 103 - CNC Programming 3 Credit(s)
- CNC 108 - CNC Projects 3 Credit(s)
- MFG 101 - Safety and Basic Shop Practice 3 Credit(s)
- MFG 102 - Shop Measurement and Coordinate System 3 Credit(s)
- MFG 103 - Metal Cutting Basics 3 Credit(s)
- MFG 209 - Advanced Manufacturing Processes 6 Credit(s)

Manufacturing (33 Credits) - Complete all of the following:

- MFG 151 - Manufacturing 1 6 Credit(s)
- MFG 152 - Manufacturing 2 4 Credit(s)
- MFG 153 - Manufacturing 3 5 Credit(s)
- MFG 254 - Manufacturing 4 6 Credit(s) (12 credits required)
- MFG 255 - Manufacturing 5 6 Credit(s)

Solid Modeling (6 Credits) - Complete both of the following:

- MFG 241 - Solid Modeling 1 3 Credit(s)
- MFG 242 - Solid Modeling 2 3 Credit(s)

Drafting / Welding (3-4 credits) - Complete one of the following:

- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- WLD 121 - Shielded Metal Arc Welding 1 1-4 Credit(s)
- WLD 151 - Fundamentals of Metallurgy 1-3 Credit(s)

Cooperative Education

- ENGR 280M - Co-op Ed: Manufacturing Technology 3 Credits

Notes

- This is the parent program for the Manufacturing Technician 1, CPC and Manufacturing Technician 2, CPC certificates.
- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- If math is taken in the self-paced format through the Math Resource Center, then all credits must be completed to meet math requirements.
- A high school diploma or equivalent is recommended for all applicants to this program.
- Co-op experience may be substituted for major coursework. For more information, please see your Academic Advisor or Program Coordinator.
- Students using lower credit courses to meet General Education requirements may need to take additional Electives to meet the 90 credit minimum.
- This program is articulated with Oregon Institute of Technology, which requires a higher-level math course than is required for the program. Contact your Academic Advisor for help with transfer to OIT.

Multimedia Design and Production: Animation Option, AAS

Length: 94 credits

Offered by the Arts & Humanities Division

Faculty Coordinator: Media Arts Department, *artshumanities-office@lanecc.edu*

Arts Academic Advising Team: *ArtsPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $ 17,847.00

- Resident Tuition: $ 11,844.00*
- Technology Fees: $ 1,034.00
- General Student Fees: $ 804.00**

- Online Course Fee: $ 170.00 (if applicable)
- Books / Course Materials: $ 1,700.00
- Program Specific Fees: $ 795.00
- Other Cost / Expenses: $ 1,500.00*** (computer/Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Tuition and fee estimates are based on the prior academic year's rates. Course tuition and fees may change during the year. Learn more and view updated tuition and fee information at lanecc.edu/esfs/credit-tuition.

Program Learning Outcomes

The purpose of this program is to prepare graduates for entry-level positions in media arts industries and careers in multimedia design and animation.

Students who complete this program will be able to:

PLO 1 - Develop and apply effective visual design and production strategies for time based media: Use established and evolving industry standard methods and technologies to produce, manipulate, and process digital animation content for business, education, and entertainment
PLO 2 - Use effective time management and communication /collaboration strategies, as an individual and as a team member to create and produce animation and multimedia projects from conception to final product
PLO 3 - Draw using traditional methods and digital technology and software
PLO 4 - Ethically and responsibly create media, with attention to professional standards for copyright, fair use, and documentation
PLO 5 - Use appropriate resources to research animation tools and technologies, media and design innovations, and support lifelong technical and conceptual learning

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits) - Complete the following:

- WR 121 - Academic Composition (or WR 121_H)

Math (4-5 credits) - Complete one of the following:

- MTH 098 - Math Literacy
- MTH 060 - Beginning Algebra
- Any Mathematics course higher than MTH 060

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- ART 115 - Basic Design: Fundamentals 3 Credit(s)
- ART 131 - Introduction to Drawing 3 Credit(s)
- ART 216 - Digital Design Tools 3 Credit(s)
- ART 234 - Drawing: Figure 3 Credit(s) or ART 286 - Sculpting for Animators 3 Credit(s)
- ART 245 - Drawing for Media 4 Credit(s)
- FA 221 - Computer Animation 4 Credit(s)
- FA 222 - Computer Animation 2 4 Credit(s)
- FA 250 - Concepts of Visual Literacy 3 Credit(s)
- FA 261 - Writing and Interactive Design 3 Credit(s)
- MDP 246 - Multimedia Production 1 4 Credit(s)
- MDP 247 - Multimedia Production 2 4 Credit(s)
- MUL 101 - Introduction to Media Arts 3 Credit(s)
- MUL 103 - Time-Based Tools 4 Credit(s)
- MUL 119 - Introduction to Animation 3 Credit(s)
- MUL 208 - Motion Capture for Animation 4 Credit(s)
- MUL 210 - Multimedia Design 3 Credit(s)
- MUL 212 - Digital Imaging 4 Credit(s)
- MUL 218 - Business Practices for Media Arts 3 Credit(s)
- MUL 223 - Digital Sculpting and Texture 3 Credit(s)
- MUL 224 - Digital Painting 3 Credit(s)

Cooperative Education

Cooperative Education must be completed with a grade of C- or better, or Pass. **Complete 6 credits of Cooperative Education.**

- MDP 280 - Co-op Ed: Multimedia 3-12 Credit(s)

Electives

Program Electives must be completed with a grade of C- or better, or Pass. **Complete 9 credits of program electives**. Choose any combination of courses from the following list (see complete course listing for information about specific courses):

- CIS 125G - Software Tools 1: Game Development 4 Credit(s)
- CIS 135G - Software Tools 2: Game Development 4 Credit(s)
- ART 116 - Basic Design: Color 3 Credit(s)
- ART 225 - Digital Illustration 3 Credit(s)
- ART 231 - Drawing: Intermediate 3 Credit(s)
- ART 237 - Illustration 1 3 Credit(s)
- ART 281 - Painting: Introduction 3 Credit(s)
- ART 284 - Painting: Intermediate 3 Credit(s)
- ART 286 - Sculpting for Animators 3 Credit(s)
- ART 294 - Watercolor: Introduction 3 Credit(s)
- ART 295 - Watercolor: Intermediate 3 Credit(s)

Or any course(s) from the following subject areas:

- CINE - Cinema Studies
- FA - Film Arts
- GD - Graphic Design
- MUL - Multimedia
- VP - Video Production

Notes

- This degree is 70% contained in the Multimedia Design, AAS.
- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- Cooperative Education (Co-op) Opportunities to work directly in media industries as interns are provided by the Co-op program. 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*.
- Students using lower-credit courses to meet General Education requirements may need to take additional credits to meet the 90-credit minimum.
- Students have access to state-of-the-art digital labs and equipment, but many students elect to purchase personal technology such as computers, cameras, digital drawing tools, and software.

Multimedia Design, AAS

Length: 91 credits

Offered by the Arts & Humanities Division

Faculty Coordinator: Media Arts Department, *artshumanities-office@lanecc.edu*

Arts Academic Advising Team: *ArtsPrograms@lanecc.edu*; lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $ 17,666.00

- Resident Tuition: $ 11,466.00*
- Technology Fees: $ 1,001.00
- General Student Fees: $ 804.00**
- Online Course Fee: $ 210.00 (if applicable)
- Books / Course Materials: $ 1,700.00
- Program Specific Fees: $ 985.00 (Course Fees)
- Other Cost / Expenses: $ 1,500.00*** (Computer/Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare graduates for entry-level positions in media arts industries and careers in multimedia design and production.

Students who complete this program will be able to:

PLO 1 - Research, develop, and create effective content in a variety of digital media specialties
PLO 2 - Demonstrate innovative use of concepts, techniques and tools in one or more media disciplines
PLO 3 - Work productively, independently and as a team member, in the creation, pre-production, production, post-production, and distribution of multimedia projects from conception to final product
PLO 4 - Demonstrate an understanding of the issues related to ethical and responsible media creation, including professional standards for copyright, fair use, and documentation
PLO 5 - Research, evaluate, and use evolving media tools and technologies and sustain on-going technical and conceptual learning
PLO 6 - Produce, organize, and present creative content to demonstrate the requisite knowledge, skills, and abilities for professional and/or educational advancement

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits) - Complete the following:

- WR 121 - Academic Composition (or WR 121_H)

Math (4-5 credits) - Complete the following:

- MTH 098 - Math Literacy 5 Credit(s)
- MTH 060 - Beginning Algebra 4 Credit(s)
- Any Mathematics course higher than MTH 060

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- ART 115 - Basic Design: Fundamentals 3 Credit(s)
- ART 216 - Digital Design Tools 3 Credit(s)
- ART 245 - Drawing for Media 4 Credit(s)
- ART 288 - Introduction to Web Design and Social Media 3 Credit(s)
- AUD 120 - Audio Production 4 Credit(s)
- FA 221 - Computer Animation 4 Credit(s)
- FA 250 - Concepts of Visual Literacy 3 Credit(s)
- FA 261 - Writing and Interactive Design 3 Credit(s)
- MDP 246 - Multimedia Production 1 4 Credit(s)
- MDP 247 - Multimedia Production 2 4 Credit(s)
- MUL 101 - Introduction to Media Arts 3 Credit(s)
- MUL 103 - Time-Based Tools 4 Credit(s)
- MUL 105 - Digital Photography 4 Credit(s)
- MUL 210 - Multimedia Design 3 Credit(s)
- MUL 212 - Digital Imaging 4 Credit(s)
- MUL 218 - Business Practices for Media Arts 3 Credit(s)
- VP 151 - Video Production 1: Camera 3 Credit(s)

Choose one focus area and complete two courses (6 credits):

- **Audio/Video Focus**
  - FA 254 - Fundamentals of Lighting 3 Credit(s)
  - VP 152 - Video Production 2: Editing 3 Credit(s)
- **Photography Focus**
  - FA 256 - Lighting for Photography 3 Credit(s)
  - MUL 215 - Digital Photography 2 3 Credit(s)

Cooperative Education

Cooperative Education must be completed with a grade of C- or better, or Pass. **Complete 6 credits of Cooperative Education.**

- MDP 280 - Co-op Ed: Multimedia 3-12 Credit(s)

Electives

Program Electives must be completed with a grade of C- or better, or Pass. **Complete 9 credits of program electives.** Choose any combination of courses from the following list (see complete course listing for information about specific courses):

- CIS 125G - Software Tools 1: Game Development 4 Credit(s)
- CIS 195 - Web Authoring 1 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- CS 133JS - Beg. Programming: JavaScript 4 Credit(s)
- CS 161C - Computer Science 1 4 Credit(s)
- CS 161N - Computer Science 1 4 Credit(s)
- CS 161P - Computer Science 1 4 Credit(s)
- CS 162C - Computer Science 2 4 Credit(s)
- CS 162N - Computer Science 2 4 Credit(s)
- CS 162P - Computer Science 2 4 Credit(s)
- CS 295N - Web Development 1: ASP.NET 4 Credit(s)
- CS 295P - Web Development 1: PHP 4 Credit(s)
- **Or any course(s) from the following subject areas:**
- ARH - Art History
- ART - Art
- CINE - Cinema Studies
- FA - Film Arts
- GD - Graphic Design
- J - Journalism
- MDP - Multimedia Production
- MUL - Multimedia

Notes

- This is the parent program for Multimedia Design, 1-yr Certificate and Multimedia Design and Production: Animation Option, AAS
- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- Cooperative Education (Co-op) Opportunities to work directly in media industries as interns are provided by the Co-op program. 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*.
- Students using lower-credit courses to meet General Education requirements may need to take additional credits to meet the 90-credit minimum.
- Computer programming languages: Students taking their first programming language (C, N, or P) will take CS 161/162. Because CS 161/162 are not repeatable courses, upon taking a second programming language, students must use the CS 133/233 course numbers. CS 161/162 are the courses listed in catalog degree requirements but CS 133/233 will be accepted as well. For help with this, contact the department or academic advisors.

Music Technology and Sound Engineering, AAS

Length: 90 credits

Offered by the Division of the Arts

Program Coordinators: Matthew Svoboda, *svobodam@lanecc.edu*, 541-463-5736; Hisao Watanabe, *watanabeh@lanecc.edu*, 541.-63-5019; Seth Mulvihill, *mulvihills@lanecc.edu*, 541-463-5184; Doug Doerfert, *doerfertd@lanecc.edu*, 541-463-5045

Arts Academic Advising Team: *ArtsPrograms@lanecc.edu*; lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $ 15,822.00

- Resident Tuition: $ 11,340.00*
- Technology Fees: $ 990.00
- General Student Fees: $ 804.00**
- Books / Materials: $ 1,200.00
- Program Specific Fees: $ 1,488.00 (Music, Music Tech and Individual Music Lessons Fees)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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 Bushnell University.

Students who complete this program will be able to:

PLO 1 - Utilize MIDI networks and MIDI sequencers
PLO 2 - Utilize software and hardware for recording, editing, and processing music and audio for commercial and artistic purposes
PLO 3 - Communicate using technical vocabulary associated with MIDI, audio, and synthesis of sound
PLO 4 - Select appropriate microphones, preamplifiers, and other outboard signal processors for various recording techniques and microphone placement
PLO 5 - Analyze audio recordings in terms of frequency, stereo field, phase cancellation, and dynamic range
PLO 6 - Engineer and produce high quality recording sessions for music, advertising, voiceovers, video and film soundtracks, and other types of projects
PLO 7 - Do creative work through working with deadlines and scheduling time with clients and artists
PLO 8 - Apply knowledge of music theory and musicianship using keyboards, and/or other instruments, in the context of music making and/or the recording studio

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition
- Any WR course higher than WR 115

Math (4-5 credits) - Complete one of the following:

- MTH 060 - Beginning Algebra
- Any MTH course higher than MTH 060

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

All Music Fundamentals, Music Core, and MIDI/Sound Engineering courses must be completed with a grade of C- or better. P/NP not accepted. Students must take a music theory placement test prior to enrollment in the Music Core. The music theory placement test is offered by the Music Department. Depending on music theory placement, some students may skip MUS 101 - Music Fundamentals and MUS 131 - Group Piano and replace them with Electives.

Music Fundamentals (5 credits) - Complete both of the following:

- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 131 - Group Piano 2 Credit(s)

Music Core 1, Fall (8 credits) - Complete all of the following:

- MUS 111 - Music Theory 1 (First Term) 4 Credit(s)
- MUS 114 - Sight-reading and Ear Training (First Term) 2 Credit(s)
- MUS 127 - Keyboard Skills 1 (First Term) 2 Credit(s)

Music Core 2, Winter (8 credits) - Complete all of the following:

- MUS 112 - Music Theory 1 (Second Term) 4 Credit(s)
- MUS 115 - Sight-reading and Ear Training (Second Term) 2 Credit(s)
- MUS 128 - Keyboard Skills 1 (Second Term) 2 Credit(s)

Music Core 3, Spring (8 credits) - Complete all of the following:

- MUS 113 - Music Theory 1 (Third Term) 4 Credit(s)
- MUS 116 - Sight-reading and Ear Training (Third Term) 2 Credit(s)
- MUS 129 - Keyboard Skills 1 (Third Term) 2 Credit(s)

MIDI / Audio Engineering (19 credits) - Complete all of the following:

- MUS 118 - Music Technology MIDI/Audio 1 4 Credit(s) (MUS 118 must be completed prior to enrollment in MUS 119 & MUS 107)
- MUS 119 - Music Technology MIDI/Audio 2 4 Credit(s) (MUS 119 must be completed prior to, or concurrently with MUS 107)
- MUS 107 - Audio Engineering 1 3 Credit(s) *Fall (MUS 107 must be completed prior to enrollment in MUS 109)
- MUS 109 - Audio Engineering 2 4 Credit(s) *Winter (MUS 109 must be completed prior to enrollment in MUS 110)
- MUS 110 - Audio Engineering 3 4 Credit(s) *Spring

Ensemble

Ensemble courses must be completed with a grade of C- or better, or Pass.

Complete 12 credits from the following:

- MUS 291 - Chamber Choir 2 Credit(s)
- MUS 293 - Jazz Combos 2 Credit(s)
- MUS 294 - Jazz Ensemble 2 Credit(s)
- MUS 295 - Symphonic Band 2 Credit(s)
- MUS 297 - Concert Choir 2 Credit(s)

Music Lessons

Individual Lessons must be completed with a letter grade of C- or better. P/NP is not accepted. Group Lessons must be completed with a letter grade of C- or better, or Pass.

Required - Individual Lessons (3 credits):

- All students must complete 3 credits of Individual Lessons (MUP 100- or 200-level). See course listings for options.

Required - Individual / Group Lessons (3-4 credits):

- All students must complete an additional 3-4 credits of Individual Lessons (MUP 100- or 200-level), Group Lessons (options listed below), or a combination of both.

Group Lesson Options:

- MUS 134 - Group Voice 2 Credit(s)
- MUS 137 - Group Guitar 2 Credit(s)
- MUS 138 - Group Guitar 2 2 Credit(s)

Program Electives

Program Electives must be completed with a grade of C- or better, or Pass. Note: Students may use up to 3 credits of General Electives (any course 100-level or higher) toward meeting the Program Elective requirement.

Program Electives (13 credits) - Choose from the following:

Recommended:

- AUD 120 - Audio Production 4 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- BA 281 - Personal Finance 4 Credit(s)
- BT 165 - Introduction to the Accounting Cycle 4 Credit(s)
- Program Elective Options:
- MUS 103 - Songwriting Techniques and Analysis 1 3 Credit(s)
- MUS 134 - Group Voice 2 Credit(s)
- MUS 137 - Group Guitar 2 Credit(s)
- MUS 138 - Group Guitar 2 2 Credit(s)
- MUS 161 - Jazz Improvisation: Instrumental 2 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 3 Credit(s)
- MUS 202 - Exploring Music: Introduction to Music History 3 Credit(s)
- MUS 203 - Exploring Music: Introduction to Music History 3 Credit(s)
- MUS 205 - Introduction to Jazz History
- MUS 211 - Music Theory 2: (First Term) 3 Credit(s)
- MUS 212 - Music Theory 2 (Second Term) 3 Credit(s)
- MUS 213 - Music Theory 2 (Third Term) 3 Credit(s)
- MUS 214 - Keyboard Skills 2 (First Term) 2 Credit(s)
- MUS 215 - Keyboard Skills 2 (Second Term) 2 Credit(s)
- MUS 216 - Keyboard Skills 2 (Third Term) 2 Credit(s)
- MUS 224 - Sight-reading and Ear Training (First Term) 2 Credit(s)
- MUS 225 - Sight-reading and Ear Training (Second Term) 2 Credit(s)
- MUS 226 - Sight-reading and Ear Training (Third Term) 2 Credit(s)
- MUS 260 - History of Hip-Hop and Rap Music 3 Credit(s)
- MUS 264 - Roots of Rock (Roots-1963) 4 Credit(s)
- MUS 265 - Golden Age of Rock & Roll (1964-1974) 4 Credit(s)
- MUS 266 - Rockin' the New Millennium (1974-2006) 4 Credit(s)
- MUS 268 - History of Electronic Music 3 Credit(s)

Notes

- This program follows the Associate of Applied Science (AAS) Requirements unless otherwise specified.
- This is the parent program for the Music Technology and Sound Engineering: MIDI and Audio Production, CPC and Music Technology and Sound Engineering: MIDI Production, CPC.
- Students must take a music theory placement test prior to enrollment in the Music Core. The music theory placement test is offered by the Music Department. Depending on music theory placement, some students may skip MUS 101 - Music Fundamentals and MUS 131 - Group Piano and replace them with Electives.
- The following courses are limited to the total number of credits listed:
- MUP 100- and 200-level - 6 credits

- MUS 134 - Group Voice - 6 credits
- MUS 137 - Group Guitar - 6 credits
- MUS 138 - Group Guitar 2 - 6 credits
- There is a limit of 12 credits total for MUS 134 - Group Voice, MUS 137 - Group Guitar, and MUS 138 - Group Guitar 2, or any combination of the three.

Nursing, AAS

Length: Program 90 credits

Program Prerequisites: 45 credits

Program Contacts

Offered by the Health Professions Division

Program Coordinator: Maggie Kruit, *kruitm@lanecc.edu*, 541-463-5753

Academic Advising Team: *NursingProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost for Program: $31,257.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00** (if applicable)
- Online Course Fee: (if applicable)
- Books / Course Materials: $800.00
- Program Specific Fees: $3,437.00 (certifications-licensure-exams, health insurance, application fee, background check, drug/alcohol screening, CPR, Kaplan/DocuCare/ELNEC learning modules, American Data Bank account and industry student membership)
- Other Cost / Expenses: $1,995.00 *** (nursing kit, uniforms/stethoscope/shoes, uniform laundry, ID badge, computer)
- Differential Fees: $11,891.00****

Estimated Cost for Prerequisites: $6,567.00

- Resident Tuition: $5,670.00*
- Technology Fees: $495.00
- General Student Fees: $402.00** (if applicable)
- Online Course Fee: (if applicable)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program will be able to:

PLO 1 - Patient-centered Care: Incorporate novice level management skills while providing patient-centered care
PLO 2 - Quality and Safety: Execute nursing care that minimize risk or harm to patients, self, and others, and use data to monitor outcomes of patient-centered care
PLO 3 - Clinical Decision-Making: Formulate clinical judgments when providing nursing care based on current evidence, clinical expertise, and patient preferences, needs and values
PLO 4 - Professionalism: Execute nursing care that reflects integrity, accountability, and legal and ethical practice while modeling the professional roles of coordinator-of-care, educator, advocate and leader
PLO 5 - Informatics and Technology: Execute nursing care using current technology and patient information to maximize safety and optimize health
PLO 6 - Teamwork and Collaboration: Communicate effectively and collaboratively in a self-directed manner with patients, families and members of the healthcare team

Admission Information

For information about the Nursing program, available options, and application packet, please see the following:

Main website: lanecc.edu/hp/nursing

RN application: lanecc.edu/hp/nursing/registered-nursing-application-information

LPN to RN Bridge information: lanecc.edu/hp/nursing/pin-rn-bridge-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: secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3929

Program Requirements

Program Prerequisites

Program Prerequisites must be completed with a letter grade of C or better. P/NP is not accepted.
Completion of all prerequisites (45 credits) with a continuing GPA of 3.00 or higher by the end of Summer term in the year of acceptance is required for Fall entry.

Required Prerequisites

The following courses are prerequisites required for the Nursing program.

Writing (8 credits) - Complete both of the following:

- WR 121 - Academic Composition 4 Credit(s) (or WR 121_H)
- WR 122 - Argument, Research and Multimodal Composition 4 Credit(s) (or WR 122_H)

NOTE: If students have taken WR 121 and / or WR 122 as 3-credit courses, they must take an additional Writing course to equal a minimum of 8 credits. Take the following three-course, alternative writing sequence:

- WR 121 (or WR 121_H)
- WR 122 (or WR 122_H)
- WR 123 or WR 227 (or WR 227_H)

Mathematics (5 credits)

- MTH 095 - Intermediate Algebra 5 Credit(s)
- (or higher-level Math course)

Anatomy & Physiology (12 credits) - Complete all of the following:

- BI 231 - Human Anatomy and Physiology 1 4 Credit(s)
- BI 232 - Human Anatomy and Physiology 2 4 Credit(s)
- BI 233 - Human Anatomy and Physiology 3 4 Credit(s)

Additional Prerequisites (12 or more credits) - Complete all of the following:

- BI 234 - Introductory Microbiology 4 Credit(s)
- FN 225 - Nutrition 4 Credit(s)
- PSY 215 - Lifespan Developmental Psychology 4 Credit(s)
- Electives, as needed, to reach 45 credits. Choose courses from the list of Approved Electives found below.

Recommended Prerequisites

Students are encouraged to take approved electives to enhance their application and prepare to pursue a BSN.

- Courses can be taken from Arts and Letters, Social Science and Science/Math/Computer Science. Work with your Academic Advisor to determine courses to take.

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted. Clinical Labs are only offered P/NP and must be completed with a Pass. In order to receive a passing grade in clinicals, students must complete course work at a C- grade level or higher. NRS 110A and NRS 115 meet the Human Relations requirement and cannot be substituted.

Biology with Genetics (4 credits) - Complete one of the following:

- BI 101F - General Biology-Survey of Biology 4 Credit(s)
- BI 101K - General Biology: Introduction to Genetics 4 Credit(s)
- BI 112 - Cell Biology for Health Occupations 4 Credit(s)
- BI 211 - Principles of Biology 4 Credit(s)

Foundations of Nursing:

- NRS 110A - Foundations of Nursing-Health Promotion 4 Credit(s)
- NRS 110B - Foundations of Nursing-Health Promotion Clinical Lab 5 Credit(s)
- NRS 111A - Foundations of Nursing in Chronic Illness 1 2 Credit(s)
- NRS 111B - Foundations of Nursing in Chronic Illness 1- Clinical Lab 4 Credit(s)
- NRS 112A - Foundations of Nursing in Acute Care 1 2 Credit(s)
- NRS 112B - Foundations of Nursing in Acute Care 1 Clinical Lab 4 Credit(s)
- NRS 221A - Foundations of Nursing in Chronic Illness 2 and End of Life 4 Credit(s)

- NRS 221B - Foundations of Nursing in Chronic Illness 2 and End-of-Life Clinical Lab 5 Credit(s)
- NRS 222A - Foundations of Nursing in Acute Care 2 and End-of-Life 4 Credit(s)
- NRS 222B - Foundations of Nursing in Acute Care 2 and End-of-Life Clinical Lab 5 Credit(s)

Integrative Practicum:

- NRS 224A - Integrative Practicum 1 2 Credit(s)
- NRS 224B - Integrative Practicum 1 Lab 7 Credit(s)

Clinical Pharmacology:

- NRS 230 - Clinical Pharmacology 1 3 Credit(s)
- NRS 231 - Clinical Pharmacology 2 3 Credit(s)

Pathophysiological Processes:

- NRS 232 - Pathophysiological Processes 1 3 Credit(s)
- NRS 233 - Pathophysiological Process 2 3 Credit(s)

NOTE: LPN to RN Bridge students take NRS 115 - LPN Transition to OCNE (6 credits) in place of NRS 112A and NRS 112B. Taught Spring Term only to LPN Bridge students. Meets Human Relations requirement.

Electives

Approved Electives must be completed with a letter grade of C or better. P/NP is not accepted.
Take electives as needed to complete 90 credits for the Nursing AAS. Work with an Academic Advisor to determine if additional electives are needed.

Can use any 100- or 200-level courses offered by Lane from the following subject areas. Students may also transfer in equivalent 300- to 400- level courses to meet these requirements.

Arts & Humanities -

- Art History, Communications, Effective Learning (when not taken as part of a developmental writing class), English, Film Arts, Foreign Language, Humanities, Literature, Journalism, Music (non-performance), Philosophy, Religion, Theater Arts (non-performance), Writing (WR 123 or higher)

Social Sciences -

- Anthropology, BA 101, Economics, Ethnic Studies, Geography, History, Philosophy, Human Development (HD prefix, not HDFS), Political Science, Psychology, Sociology, Women's Studies

Science, Math, Computer Science -

- Astronomy, Biology, Botany, Chemistry, Computer Science (CS prefix, not CIS), Engineering, General Science, Geology, Mathematics 100+ level (MTH 243 Statistics for extra points on the application), Physical Science, Physics, Zoology

Limitations:

- Studio and performing art courses are not accepted as Approved Electives
- Career-technical education (CTE) courses are not accepted as Approved Electives. See Course Types by Prefix for a list of CTE courses.
- HP/HO 100 Medical Terminology and Health courses are not accepted as Approved Electives. However, HP/HO 100 Medical Terminology is worth extra points on the application
- Graduate (500-600) level courses are not accepted as Approved Electives

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- BI 233 and BI 234 course must have been completed within 7 years prior to starting the nursing program.
- Students must be enrolled in the Nursing Program to register for any NRS courses.
- **Cooperative Education:** Co-op internships may be taken as an optional elective any of the last four terms of the program. Contact Tricia Tully, (Cooperative Education Coordinator for Nursing), tullyt@lanecc.edu.

Licensing and Certification

Nursing Approval: 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. OCNE is a partnership of Oregon nursing programs dedicated to educating future nurses. Faculty from eleven community colleges and six university campuses created - and continue to develop – a shared curriculum taught on all consortium campuses.

Licensing and 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.

Paramedicine, AAS

Length: Program 100 credits

Program Contacts

Offered by the Health Professions Division

Program Coordinator: Kris Siewert, *siewertk@lanecc.edu*, 541-463-3297

Health Professions Academic Advising Team: *EMSProgram@lanecc.edu,* contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $28,604.00

- Resident Tuition: $12,100.00*
- Technology Fees: $1,100.00
- General Student Fees: $938.00** (if applicable)
- One Time Student Fee: $30.00
- Online Course Fee: $660.00 (if applicable)
- Books / Course Materials: $1,050.00
- Program Specific Fees: $5,853.00 (lab/program application fees, EMT & Paramedic licensure/exams, background check/fingerprinting, medical requirements, American DataBank)

Other Cost / Expenses: $2,275.00*** (instrument/tools, uniform/boots, computer)

Differential Fees: $ 4,098.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. The program assists students in mastering patient assessment and intervention for pre-hospital healthcare providers. Cognitive and psychomotor domains are measured for competency by a combination of written exams, skill demonstration, simulation, scenarios, and clinical and internship experiences. The affective domain is measured for competency using published professional standards. Students must demonstrate a proficient understanding of the Emergency Medical System, medical and traumatic emergencies, anatomy and physiology of the human body, and be able to outline proper interventions for specific emergencies. Additionally, students will be able to function as a member of team, learn and apply leadership techniques, and demonstrate proficiency and understanding of the Department of Transportation objectives for Paramedics.

Students who complete this program will be able to:
PLO 1: Demonstrate personal behaviors consistent with public and employer expectations of professional EMS providers
PLO 2: Demonstrate technical proficiency in the performance of EMS skills
PLO 3: Demonstrate technical proficiency with the operation of EMS equipment
PLO 4: Understand, interpret, apply, evaluate and effectively communicate EMS and general medical knowledge, including anatomy and physiology, necessary to function in a healthcare setting
PLO 5: Communicate effectively and treat the patient with respect, maintain confidentiality, and comply with healthcare laws and ethics

Admission Information

Students are encouraged to consult the Academic Advising Team (*EMSProgram@lanecc.edu*) before applying for admission. Program application and information about the point allocation system is available at lanecc.edu/hp/emt.

Program Requirements

General Education

General Education courses must be completed with a letter grade of C- or better, or Pass.

Writing (4 credits):

- WR 115 - Introduction to College Composition 4 Credit(s) or higher

Math (4 credits):

- MTH 052 - Math for Health and Physical Sciences 4 Credit(s) or higher

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted. EMS 102 satisfies the Human Relations requirement.

Note: BI 231 has prerequisites of CH 112 - Chemistry for Health Occupations and BI 112 - Cell Biology for Health Occupations at Lane. Transfer students should contact the Academic Advising team for more information.

Medical Terminology (3 credits):

- HP 100 - Medical Terminology 1 3 Credit(s)

Human Anatomy & Physiology (12 credits):

- BI 231 - Human Anatomy and Physiology 1 4 Credit(s)
- BI 232 - Human Anatomy and Physiology 2 4 Credit(s)
- BI 233 - Human Anatomy and Physiology 3 4 Credit(s)

Emergency Services (23 credits):

- EMS 101 - Introduction to Emergency Services 4 Credit(s)
- EMS 102 - Crisis Intervention 3 Credit(s)
- EMS 103 - Emergency Services Rescue 4 Credit(s)
- EMS 111 - Emergency Medical Technician 8 Credit(s)
- EMS 112 - Emergency Medical Technician Lab 3 Credit(s)
- EMS 113 - Emergency Medical Technician Clinical 1 Credit(s)

Pathophysiology (3 credits):

- EMS 201 - Pathophysiology 3 Credit(s)

Pharmacology (4 credits):

- EMS 211 - Pharmacology 1 2 Credit(s)
- EMS 212 - Pharmacology 2 2 Credit(s)

Paramedic Emergencies (14 credits):

- EMS 221 - Trauma Emergencies 1 3 Credit(s)
- EMS 222 - Trauma Emergencies 2 3 Credit(s)
- EMS 231 - Medical Emergencies 1 3 Credit(s)
- EMS 232 - Medical Emergencies 2 3 Credit(s)
- EMS 233 - Medical Emergencies 3 2 Credit(s)

Electrocardiography (6 credits):

- EMS 241 - Electrocardiography 1 3 Credit(s)
- EMS 242 - Electrocardiography 2 3 Credit(s)

Paramedic Lab (9 credits):

- EMS 251 - Paramedic Lab 1 1-3 Credit(s)
- EMS 252 - Paramedic Lab 2 1-3 Credit(s)
- EMS 253 - Paramedic Lab 3 1-3 Credit(s)

Paramedic Clinical (8 credits):

- EMS 261 - Paramedic Clinical 1 1 Credit(s)
- EMS 262 - Paramedic Clinical 2 3 Credit(s)
- EMS 263 - Paramedic Clinical 3 4 Credit(s)

Cooperative Education

Cooperative Education courses must be completed with a letter grade of C- or better. P/NP is not accepted.

Cooperative Education (10 credits):

- EMS 280P1 - Co-op Ed: Paramedic Internship P1 3 Credit(s)
- EMS 280P2 - Co-op Ed: Paramedic Internship P2 7 Credit(s)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- Students pursuing a bachelor's degree need to complete a college level, transferable math course (MTH 105 or higher).
- Students who hold current EMT licenses from the Oregon Health Authority (OHA) should contact Academic Advising or the Health Professions office about receiving credit for prior learning towards Lane's Paramedicine program. Credit for current EMT licenses may be awarded for EMS 111, EMS 112, and EMS 113.

Accreditation

The Paramedic Program is nationally accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Licensing and Certification

Students will be eligible to test for national certification and Oregon State licensure following completion of EMT and/or Paramedic training.

Physical Therapist Assistant, AAS

Length Program: 94 credits

Program Prerequisites: 11-16 credits

Program Contacts

Offered by Health Professions

Program Coordinator: Christina Howard, PT, MPT, Ed.D., *howardc@lanecc.edu,* 541-463-5764

Academic Advising Team: *PTAProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Eugene Campus - Estimated Cost for Program: $21,002.00 (94 credits)

- Resident Tuition: $11,844.00*
- Technology Fees: $1,034.00
- General Student Fees: $804.00** (if applicable)
- One Time Student Fee: $30.00
- Online Course Fee: $790.00 (if applicable)
- Books / Course Materials: $1,100.00
- Program Specific Fees: $2,114.00 (certifications-licensure-exams, application fee ($50.00), background check, drug/alcohol screening, industry student membership)
- Other Cost / Expenses: $938.00*** (instruments/tools, uniforms/shoes, etc.)
- Travel: $500.00
- Differential Fees: $1,1848.00 ****

Estimated Cost for Prerequisites: $2,460.00 (16 credits)

- Resident Tuition: $2,016.00*
- Technology Fees: $176.00
- General Student Fees: $268.00** (if applicable)
- Online Course Fee: $ (if applicable)

Rogue Community College Campus - Estimated Cost for Program: $26,002.00 (94 credits)

- Resident Tuition: $11,844.00*
- Technology Fees: $1,034.00
- General Student Fees: $804.00** (if applicable)
- One Time Student Fee: $30.00
- Online Course Fee: $790.00 (if applicable)
- Books / Course Materials: $1,100.00
- Program Specific Fees: $2,114.00 (certifications-licensure-exams, application fee ($50.00), background check, drug/alcohol screening, industry student membership)
- Other Cost / Expenses: $ 938.00*** (instruments/tools, uniforms/shoes, etc.)
- Travel: $500.00
- Distance Campus Fee: $5,000.00
- Differential Fees: $1,848.00****

Estimated Cost for Prerequisites: $2,460.00 (16 credits)

- Resident Tuition: $2,016.00*
- Technology Fees: $176.00
- General Student Fees: $268.00**(if applicable)
- Online Course Fee: $ (if applicable)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to 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 promoting wellness, health, and recovery from health conditions that affect the movement system.

Students who complete this program will be able to:

PLO 1 - Communicate verbally and non-verbally with the patient, the physical therapist, health care delivery personnel, and others in an effective, appropriate, and capable manner

PLO 2 - Recognize individual and cultural differences and responds appropriately in all aspects of physical therapy services

PLO 3 - Exhibit 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

PLO 4 - Exhibit conduct that reflects safe practice standards that are legal, ethical and safe
PLO 5 - Communicate an understanding of the plan of care developed by the physical therapist to achieve short and long term goals and intended outcomes
PLO 6 - Demonstrate 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
PLO 7 - Demonstrate 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
PLO 8 - Recognize and initiates clarifications with the supervising physical therapist when indicated
PLO 9 - Adjust treatment interventions within the plan of care to optimize patient safety, progress, and comfort; reports outcomes to the supervising physical therapist
PLO 10 - Instruct and educates patients, family members, and caregivers as directed by the supervising physical therapist
PLO 11 - Instruct members of the health care team as directed by the supervising physical therapist, using appropriate instructional materials and approaches
PLO 12 - Demonstrate a commitment to meeting the needs of the patients and consumers
PLO 13 - Interact with other members of the health care team in patient care and non-patient care activities
PLO 14 - Provide accurate and timely information for billing and reimbursement purposes
PLO 15 - Participate in quality assurance activities
PLO 16 - Demonstrate an awareness of social responsibility, citizenship and advocacy, including participation in community and service organizations and activities
PLO 17 - Identify career and lifelong learning opportunities

Admission Information

Students are admitted once a year. Admission is restricted and is based on a program application. Please consult lanecc.edu/hp/pta.

Program Requirements

Program Prerequisites

Program Prerequisites must be completed with a grade of C- or better, or Pass. Program Prerequisites must be completed prior to applying for the program. Additionally, application requires documentation of 16 clinical observation/experience hours with a PT or PTA.

Human Biology (4 credits)
NOTE: Students who complete BI 102I as a prerequisite do not need to take another Human Biology course. If BI 102I is not completed as a prerequisite, students must complete another option prior to the end of Fall Term of Year 1 in the program. (For other options, see Human Biology requirement under General Education on this page.)

- BI 102I - General Biology-Human Biology

Medical Terminology (3 credits)

- HP 100 - Medical Terminology 1 3 Credit(s)

Physics (4-5 credits) - Complete one of the following:

- PH 101 - Fundamentals of Physics 4 Credit(s)
- PH 102 - Fundamentals of Physics 4 Credit(s)
- PH 201 - General Physics 5 Credit(s)
- GS 104 - Physical Science 4 Credit(s) (no longer offered at Lane) will also be accepted to meet this requirement

Writing (4 credits) - Complete one of the following:
Prior bachelor's degree, verified by transcript from US accredited institution or higher, may be used to meet the Writing requirement.

- WR 121_H / WR 121 - Academic Composition 4 Credit(s)
- WR 122_H / WR 122 - Argument, Research and Multimodal Composition 4 Credit(s)
- WR 123 - Composition: Research Writing 4 Credit(s)
- WR 227_H / WR 227 - Technical Writing 4 Credit(s)

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Mathematics (4 credits)

- MTH 065 - Elementary Algebra 4 Credit(s) or higher

Communication (4 credits) - Complete one of the following:

- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)

Psychology (4 credits) - Complete one of the following:

- PSY 201 - General Psychology 4 Credit(s)
- PSY 202 - General Psychology 4 Credit(s)
- PSY 203 - General Psychology 4 Credit(s)
- PSY 215 - Lifespan Developmental Psychology 4 Credit(s)

Human Biology - Complete one of the following options:
NOTE: Students who complete BI 102I as a prerequisite do not need to take another Human Biology course. This requirement must be completed by the end of Fall Term of Year 1 in the program.

- **Option 1: Human Biology (4 credits)** - Complete the following course:
  - BI 102I - General Biology-Human Biology 4 Credit(s)
- **Option 2: Human Body Systems (6 credits)** - Complete both of the following courses:
  - HP 150 - Human Body Systems 1 3 Credit(s)
  - HP 152 - Human Body Systems 2 3 Credit(s)
- **Option 3: Anatomy & Physiology (12 credits)** - Complete all of the following courses:
  - BI 231 - Human Anatomy and Physiology 1 4 Credit(s)
  - BI 232 - Human Anatomy and Physiology 2 4 Credit(s)
  - BI 233 - Human Anatomy and Physiology 3 4 Credit(s)

Program Core Courses

HP 153 must be completed with a grade of C- or better, or Pass. All other **Program Core** courses must be completed for a letter grade of C or better. P/NP is not accepted. PTA 200 meets the Human Relations requirement and cannot be substituted.

- HP 153 - Introduction to Pharmacology 3 Credit(s)
- PTA 100 - Introduction to Physical Therapy 3 Credit(s)
- PTA 101 - Introduction to Clinical Practice 1 5 Credit(s)
- PTA 101L - Introduction to Clinical Practice 1 Lab 2 Credit(s)
- PTA 103 - Introduction to Clinical Practice 2 5 Credit(s)
- PTA 103L - Introduction to Clinical Practice 2 Lab 2 Credit(s)
- PTA 104 - PT Interventions-Orthopedic Dysfunctions 5 Credit(s)
- PTA 104L - PT Interventions-Orthopedic Dysfunctions Lab 2 Credit(s)
- PTA 132 - Applied Kinesiology 1 3 Credit(s)
- PTA 132L - Applied Kinesiology 1 Lab 2 Credit(s)
- PTA 133 - Applied Kinesiology 2 3 Credit(s)
- PTA 133L - Applied Kinesiology 2 Lab 2 Credit(s)
- PTA 200 - Professionalism, Ethics, and Exam Preparation 4 Credit(s)
- PTA 201 - Physical Therapy and the Older Adult 2 Credit(s)
- PTA 203 - Contemporary Topics in Physical Therapy 2 Credit(s)
- PTA 204 - PT Interventions - Neurological Dysfunctions 5 Credit(s)
- PTA 204L - PT Interventions - Neurological Dysfunctions Lab 2 Credit(s)
- PTA 205 - PT Interventions - Complex Medical Dysfunctions 4 Credit(s)
- PTA 205L - PT Interventions - Complex Medical Disfunctions Lab 2 Credit(s)

Cooperative Education

Cooperative Education courses must be completed for a letter grade of C or better. P/NP is not accepted.

Seminar (2 credits)

- PTA 206 - Physical Therapist Assistant Seminar 2 Credit(s)

Cooperative Education (18 credits; 6 credits of each clinical experience)

- PTA 280A - Co-op Ed: Physical Therapist Assistant - First Clinical Experience 4-8 Credit(s)
- PTA 280B - Co-op Ed: Physical Therapist Assistant - Second Clinical Experience 4-8 Credit(s)
- PTA 280C - Co-op Ed: Physical Therapist Assistant - Third Clinical Experience 4-8 Credit(s)

Pandemic Adjustment - students can earn a minimum of 13 credits of clinical experience (of the 18 required) and still meet graduation standards, provided they demonstrate entry-level practice standards. Please connect with Beth Thorpe, PTA Cooperative Education Coordinator for more information.

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- 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
- Cooperative Education (Co-op) is required for second year students enrolled in the Physical Therapist Assistant Program. Students must complete Co-op at a program-designated co-op site. Contact Beth Thorpe, PTA Cooperative Education Coordinator, Bldg. 30, Rm. 126, 541-463-3274, *thorpeb@lanecc.edu*.

Licensing and Certification

Graduates meet education eligibility for the National Physical Therapist Assistant Examination administered by the Federation of State Boards of Physical Therapy.

Accreditation

The Physical Therapist Assistant program at Lane Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE).
CAPTE Address: 13030 Potomac Ave., Suite 100, Alexandria, Virginia 22305-3085
Telephone: 703-706-3245
Email: *accreditation@apta.org*
Website: capteonline.org

Sustainability Coordinator, AAS

Length: 90 credits

Program Contacts

Offered by the Science Division

Program Coordinator: Luis Maggiori, *maggioril@lanecc.edu*, 541-463-5884

Academic Advising Team: *Sci-MathPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $16,134.00lanecc.edu/cooped/contact

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $804.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $3,000.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students for careers as sustainability professionals in resource management, corporate social responsibility, environmental protection, recycling, pollution prevention and energy, water or waste reduction analysis. Graduates may work for public agencies, school districts, colleges or universities, non-governmental organizations, nonprofit organizations, private businesses or corporations.

Students who complete this program will be able to:

PLO 1 - 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
PLO 2 - Develop policies that support the triple bottom line of sustainability: healthy economy, healthy environment, and healthy communities
PLO 3 - Obtain information from public and research libraries, online sources, and regional, national, and international networks
PLO 4 - Demonstrate skills in data collection and analysis, statistical analysis, and basic mathematics
PLO 5 - Perform environmental audits, perform laboratory and field tests, conduct and coordinate research, and prepare written reports for internal and external stakeholders
PLO 6 - 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
PLO 7 - Apply practical and technical strategies to objectives including pollution prevention, climate change reduction, energy conservation and use of alternative energy, efficient resource use, waste reduction and recycling, LEED and other green building tools, water conservation, stormwater and wastewater management, indoor air quality, transportation, closed loop production and life cycle analysis
PLO 8 - Articulate verbal and written understanding of laws and regulations related to sustainable environment, business and community
PLO 9 - Develop and implement action plans based on best practices; coordinate project management goals and tasks
PLO 10 - Conduct public relations and social marketing efforts; develop educational materials; and create community networks and resources to support sustainability practices in business and community
PLO 11 - Demonstrate the ability to organize events, meetings, workshops, conferences and fundraising
PLO 12 - Utilize collaborative team skills in the design and implementation of sustainable practices

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing & Communication (8 credits) - Complete WR 121 and one additional course:

- WR 121 - Academic Composition 4 Credit(s) or WR 121_H
- And complete one additional course from the following:
  - COMM 265 - Environmental Communication 4 Credit(s) **(Recommended)**
  - COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
  - ENG 240 - Nature Literature 4 Credit(s)
  - WR 227 - Technical Writing 4 Credit(s) or WR 227_H

Math (4-5 credits) - Complete one of the following:

- MTH 098 - Math Literacy 5 Credit(s) **(**Recommended)
- MTH 095 - Intermediate Algebra 5 Credit(s)

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- CST 201 - Sustainable Building Practices 3 Credit(s)
- DRF 211 - Sustainable Building Systems 4 Credit(s)
- HE 255 - Global Health and Sustainability 4 Credit(s)
- BT 120 - MS WORD for Business 4 Credit(s)
- BT 123 - MS EXCEL for Business 4 Credit(s)

Biology (4 credits) - Complete one of the following:

- BI 103M - General Biology: Biodiversity and Sustainability 4 Credit(s) (Recommended)
- BI 103G - General Biology: Global Ecology 4 Credit(s)
- BI 103J - General Biology: Forest Ecology 4 Credit(s)

Chemistry (4-5 credits) - Complete one of the following:

- CH 170 - Introduction to Environmental Chemistry 4 Credit(s**)** (Recommended)
- CH 104 - Introduction to General Chemistry 5 Credit(s)

Environmental Science (12 credits)

Terrestrial Environment - Complete one of the following:

- ENSC 181 - Terrestrial Environment 4 Credit(s)
- GS 106 - Earth, Sea, Sky 4 Credit(s)
- SOIL 205 - Introduction to Soil Science 4 Credit(s)

Atmospheric Environment - Complete the following:

- ENSC 182 - Atmospheric Environment and Climate Change 4 Credit(s)

Aquatic Environment - Complete one of the following:

- ENSC 183 - Aquatic Environment 4 Credit(s) or ENSC 183_H
- GS 108 - Oceanography 4 Credit(s)

Earth Science and Geography (8 credits)

Complete one of the following:

- G 102 - Earth's Dynamic Surface 4 Credit(s)
- G 202 - Earth's Surface Systems 4 Credit(s)
- GEOG 141 - Natural Environment 4 Credit(s)

And complete one additional course from the following:

- GEOG 142 - Introduction to Human Geography 4 Credit(s)
- GIS 151 - Digital Earth 4 Credit(s)
- GS 101 - General Science (Nature of the Northwest) 4 Credit(s)

Social Change and Economics (15 credits)

Complete one course from each of the following focus areas: Economics, Health, Political Science, and Sociology.

Economics - Complete one of the following:

- ECON 260 - Introduction to Environmental and Natural Resource Economics 4 Credit(s)
- GEOG 201 - World Regional Geography 4 Credit(s)

Health - Complete one of the following:

- HE 240 - Holistic Health 3 Credit(s)
- HE 250 - Personal Health 3 Credit(s)

Political Science - Complete one of the following:

- PS 211 - Peace and Conflict Studies: Global 4 Credit(s)
- PS 297 - Environmental Politics 4 Credit(s)

Sociology - Complete one of the following:

- SOC 205 - Social Stratification and Social Systems 4 Credit(s)
- SOC 206 - Institutions and Social Change 4 Credit(s)
- SOC 225 - Social Problems 4 Credit(s)

- SOC 228 - Introduction to Environmental Sociology 4 Credit(s)

Cooperative Education (5 credits)

Cooperative Education courses must be completed with a grade of C- or better, or Pass.

- Complete 2 credits of COOP 206 - Co-op Ed: Internship Seminar
- Complete 3 credits of IDS 280S - Co-op Ed: Sustainability Coordinator

Program Electives (8-10 credits)

Electives must be completed with a grade of C- or better, or Pass.

It is strongly recommended students choose WATR 202 **as one of their electives.**

- ART 288 - Introduction to Web Design and Social Media 3 Credit(s)
- BT 230 - Sustainable Paperless Practices using Adobe Acrobat 4 Credit(s)
- GIS 151 - Digital Earth 4 Credit(s)
- GIS 245 - GIS 1 4 Credit(s)
- GIS 246 - GIS 2 4 Credit(s)
- GS 201 - Scientific Skepticism - Someone is Wrong on the Internet! 4 Credit(s)
- HE 275 - Lifetime Health and Fitness 3 Credit(s)
- HRTM 220 - Sustainability in the Hospitality Industry 2 Credit(s)
- MTH 105 - Math in Society 4 Credit(s)
- MTH 111 - College Algebra 5 Credit(s)
- MTH 243 - Introduction to Probability and Statistics 4 Credit(s)
- NRG 111 - Residential/Light Commercial Energy Analysis 3 Credit(s)
- NRG 112 - Commercial Energy Use Analysis 4 Credit(s)
- NRG 121 - Air Conditioning System Analysis 3 Credit(s)
- NRG 122 - Commercial Air Conditioning System Analysis 3 Credit(s)
- PH 101 - Fundamentals of Physics 4 Credit(s)
- PH 102 - Fundamentals of Physics 4 Credit(s)
- SOIL 205 - Introduction to Soil Science 4 Credit(s)
- WATR 101 - Introduction to Water Resources 3 Credit(s)
- WATR 202 - Fostering Sustainable Practices 3 Credit(s)
- Any language courses, 100-level or higher, including American Sign Language (ASL), Chinuk Wawa (CW), Mandarin Chinese (CHN), French (FR), or Spanish (SPAN)
- Any course or combination of courses from the General Education or Program Core Course categories not used to meet other program requirements

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- Students who complete GIS 151 to meet the Earth Science and Geography requirement, and GIS 245 and GIS 246 to meet the Elective requirement, will earn the Geographic Information Science, Certificate of Completion.

Water Conservation Technician (online), AAS

Length: 90 credits

Program Contacts

Offered by the Science Division

Program Coordinator: Roger Ebbage, *ebbager@lanecc.edu,* 541-556-7724

Academic Advising Team: *Sci-MathPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $14,234.00

- Resident Tuition: $11,340.00*
- Technology Fees: $990.00
- General Student Fees: $ ** (if applicable)
- Online Course Fees: $900.00
- Books / Course Materials: $200.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students for a career in Water Conservation. Through this online program individuals learn 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 use 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.

Students who complete this program will be able to:

PLO 1 - Evaluate indoor and outdoor water use patterns for rural, urban, residential and commercial sites
PLO 2 - Recommend water efficiency measures, wise water landscapes and efficient plumbing solutions
PLO 3 - Design, implement and evaluate and market water conservation programs to a broad audience
PLO 4 - Convey water conservation strategies to a broad audience using multiple communication methods
PLO 5 - Understand regional regulatory context and international code trends as they pertain to water conservation
PLO 6 - Develop basic knowledge of water resource economics and how economics relates to supply and demand
PLO 7 - Understand water distribution, flow and elimination systems; basic hydraulics; quality issues; balance and time of use
PLO 8 - Create technical reports and collect, interpret, display and explain data
PLO 9 - Perform systems analysis using water bills, meters and other evidence to solve problems

Admission Information

For information or to apply, go to lanecc.edu/science/water-conservation-technician

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass. It is recommended that General Education requirements be completed prior to entering the program.

Writing (8 credits) - Complete both of the following:

- WR 121_H / WR 121 - Academic Composition 4 Credit(s)
- WR 227_H / WR 227 - Technical Writing 4 Credit(s)

Math (5 credits) - Complete one of the following:

- MTH 098 - Math Literacy 5 Credit(s) (recommended)
- MTH 095 - Intermediate Algebra 5 Credit(s)
- Any MTH course higher than MTH 095

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

NOTE: BT 123 has prerequisites of CIS 101 or CS 120 or BT 120, and MTH 065 or higher. Students who have previous computer experience may be able to waive the prerequisite for BT 123. Please check with the Business Department for information about waiving prerequisites for this course.

- BT 123 - MS EXCEL for Business 4 Credit(s)
- ENSC 183 - Aquatic Environment 4 Credit(s)
- GIS 151 - Digital Earth 4 Credit(s)
- GIS 245 - GIS 1 4 Credit(s)
- WATR 101 - Introduction to Water Resources 3 Credit(s)
- WATR 102 - Water Careers Exploration 4 Credit(s)
- WATR 105 - Water Conservation: Residential 4 Credit(s)
- WATR 110 - Codes and Policies of Water 3 Credit(s)
- WATR 154 - Alternative Water Sources 3 Credit(s)
- WATR 202 - Fostering Sustainable Practices 3 Credit(s)
- WATR 210 - Water Conservation: Industrial / Commercial 3 Credit(s)
- WATR 215 - Integrated Water Management 4 Credit(s)
- WATR 220 - Water Conservation: Program Development 4 Credit(s)
- WATR 222 - Stormwater Best Management Practices 4 Credit(s)
- WATR 261 - Regional Water Policy 3 Credit(s)

Environment (4 credits) - Complete one of the following:

- GS 101 - General Science (Nature of the Northwest) 4 Credit(s)
- ENSC 181 - Terrestrial Environment 4 Credit(s)
- ENSC 182 - Atmospheric Environment and Climate Change 4 Credit(s)

Resource Economics (4 credits) - Complete one of the following:

- WATR 150 - Water Resource Economics 4 Credit(s)

- ECON 260 - Introduction to Environmental and Natural Resource Economics 4 Credit(s)

(Note: WATR 150 and ECON 260 do not run every year. Please contact Program Coordinator or Academic Advisor to explore options.)

Cooperative Education

Cooperative Education must be completed with a grade of C- or better, or Pass.

Cooperative Education (6 credits):

- WATR 280 - Co-op Ed: Water Conservation Technician

Program Electives

Program Electives must be completed with a grade of C- or better, or Pass. May be completed online, on campus, or transferred from another institution. Note: Students may use 1 credit of General Elective (any course 100-level or higher) toward meeting the Program Elective requirement.

Program Electives (6 credits) - Choose from the following:

- ECON 200 - Principles of Economics: Introduction to Economics 3 Credit(s)
- ECON 201 - Principles of Economics: Introduction to Microeconomics 3 Credit(s)
- ECON 202 - Principles of Economics: Introduction to Macroeconomics 3 Credit(s)
- ED 100 - Introduction to Education 3 Credit(s)
- ENSC 181 - Terrestrial Environment 4 Credit(s)
- ENSC 182 - Atmospheric Environment and Climate Change 4 Credit(s)
- GD 110 - Introduction to Graphic Design 1 Credit(s)
- GIS 246 - GIS 2 4 Credit(s)
- SOC 206 - Institutions and Social Change 4 Credit(s)
- Any Business course 100-level or higher (see Courses for BA and BT options)
- Any Communication course 100-level or higher (see Courses for COMM options)
- Any Multimedia course 100-level or higher (see Courses for MDP and MUL options)
- Any Energy Management course 100-level or higher (see Courses for NRG options)
- Any Spanish course 100-level or higher (see Courses for SPAN options)

Notes

- This program follows Associate of Applied Science (AAS) Requirements unless otherwise specified.
- MTH 098 or MTH 095 may be taken any term but must be completed by the end of the first year.
- WR 121, WR 122, Human Relations, and Electives may be taken any term.
- By completing GIS 246 (as one of the required Directed Electives), students would be eligible for Geographic Information Science, Certificate of Completion.
- Cooperative Education (WATR 280) may be taken summer term.
- All WATR courses are offered fully online.
- Lane Community College does not offer GS 101 online. This course must be taken on campus or transferred from another institution.
- Deviation from the prescribed course sequence will impact a student's ability to complete the program in a two-year time frame. Please contact Program Coordinator and/or Academic Advisor to determine prescribed course sequence.
- **Cooperative Education** provides related field experience to integrate theory and practice while developing skills and exploring career options. Students must complete a minimum of six Co-op credits. Please contact the Cooperative Education Coordinator, Gerry Meenaghan at meenaghang@lanecc.edu

Certificates of Completion

Certificate of Completion Requirements

Certificates of Completion are connected to occupational and/or industry standards and are meant to provide job skills, career training, or occupational readiness. These requirements are meant to be a guide. Individual certificate programs may have specific requirements beyond those listed here, and students must meet the specified requirements in order to receive an award.

Certificates of Completion may be aligned with associate degrees. Each student is strongly encouraged to work with a Lane academic advisor or career counselor to match career goals with an appropriate program.

Learning Outcomes

Lane degrees and certificates are aligned with Lane's Core Learning Outcomes and Oregon learning outcomes. View our State General Education Learning Outcomes. Certificates of completion have program-specific outcomes. See Programs (A-Z) for details.

Certificate Requirements

All courses must be completed with a grade of "C-" or better or Pass, unless specified by individual programs.

If a program has designated a core course as meeting the Human Relations requirement, that course may not be substituted.

Cumulative GPA must be at least 2.0 when the certificate is awarded.

Certificates may be 12-108 credits.

Certificates of less than 45 credits do not require General Education.

General Education: Foundational

Students must complete all requirements with a letter grade of C- or P (Pass), unless otherwise noted in the student's specific certificate program.

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.

BA 278 - Leadership and Team Dynamics 4 Credit(s)

CG 100 - College Success 1-3 Credit(s)

CG 203 - Human Relations at Work 1-3 Credit(s)

COMM 130 - Business and Professional Communication 4 Credit(s)

COMM 218 - Interpersonal Communication 4 Credit(s)

COMM 219 - Small Group Communication 4 Credit(s)

COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Core coursework varies from program to program and may include a combination of transfer courses and Course Types by Prefix. See individual program information for specific requirements and limitations.

Notes

College-level courses are numbered 100 or higher. Courses numbered 001-099 are considered skills based/developmental.

Courses numbered 180, 197, 199, 280, 297, 298, or 299 count as electives, and do not meet Foundational or Discipline Studies requirements. Courses numbered 199 and 299 are experimental, and may later be reviewed and approved for this program.

Credit-by-Exam & Credit-by-Assessment may comprise up to 25% of total degree credits.

See the list of Course Types by Prefix. Policies on accepting career technical credits vary at four-year institutions in Oregon. Consult an academic advisor if considering transferring after earning an AAS.

Only the Academic Requirements Review Committee (ARRC) may waive a college General Education requirement. Petitions are available from Enrollment Services at lanecc.edu/esfs/general-education-substitution-and-waiver-petition

Students may use up to 18 credits of Cooperative Education toward a degree/certificate, with the exception of Occupational Skills programs, which require a minimum of 20 credits of cooperative education. Cooperative Education may be used as part of Program Core Courses, not as General Education.

2-Year Certificates of Completion

All certificate programs follow Certificate of Completion Requirements unless otherwise specified. Go to individual certificates to see specific program requirements.

Aviation Maintenance Technician, 2-yr Certificate

Length: 104 credits

Program Contacts

Offered by Lane Aviation Academy

Program Coordinator: Neal Gallagher, Chief Instructor, *gallaghern@lanecc.edu*, 541-463-4351

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $20,502.00

- Resident Tuition: $13,104.00*

- Technology Fees: $1,144.00
- General Student Fees: $804.00**
- Online Course Fee: $ (if applicable)
- Books / Course Materials: $300.00
- Program Specific Fees: $4,650.00 (Course Fees, and Exams/Licensure)
- Other Cost / Expenses: $500.00*** (Tools and Supplies)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare technicians to repair and maintain aircraft in operating condition, and qualify for Federal Aviation Administration (FAA) certification exams (written, oral and practical) for the Mechanic Certificate with Airframe and Powerplant Ratings.

Students who complete this program will be able to:

PLO 1 - Troubleshoot, inspect, repair, and maintain aircraft to airworthy standards, and provide documented Return to Service
PLO 2 - Apply industry-specific test-taking and time management skills to the requirements of the FAA written, oral, and practical certification exams in the areas of Airframe and Powerplant ratings
PLO 3 - Demonstrate and use industry safety and professionalism standards
PLO 4 - Navigate aviation libraries, databases, and publications in English to access data and procedures relating to aircraft maintenance processes and best practices
PLO 5 - Utilize mathematical processes to understand and ensure compliance with manufacturers' limits
PLO 6 - Explain the importance and steps of -- and thoroughly execute -- specific, complex multi-step processes

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass. MTH 075 (or equivalent) must be completed by the end of the Year One. MTH 085 (or equivalent) must be completed by the end of Winter Term, Year Two.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- WR 115 - Introduction to College Composition 4 Credit(s)
- Any WR course higher than WR 115

Math (8 credits) - Complete both of the following:

- MTH 075 - Applied Algebra for Technicians 4 Credit(s)
- MTH 085 - Applied Geometry for Technicians 4 Credit(s) or higher

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- AV 251 - General 101 6 Credit(s)
- AV 252 - General 102 6 Credit(s)
- AV 253 - General 103 6 Credit(s)
- AV 254 - General 104 6 Credit(s)
- AV 255 - General 105 6 Credit(s)
- AV 261 - Airframe 1 6 Credit(s)
- AV 262 - Airframe 2 6 Credit(s)
- AV 263 - Airframe 3 6 Credit(s)
- AV 264 - Airframe 4 6 Credit(s)
- AV 271 - Powerplant 1 6 Credit(s)
- AV 272 - Powerplant 2 6 Credit(s)
- AV 273 - Powerplant 3 6 Credit(s)
- AV 274 - Powerplant 4 6 Credit(s)
- AV 282 - Airframe Return to Service 6 Credit(s)
- AV 283 - Powerplant Return to Service 6 Credit(s)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- Required for admission: Placement into WR 097 or WR 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.
- General Education courses (except mathematics) are not required for two-year FAA Airframe and Powerplant airman's certificate exams.
- MTH 075 - Applied Algebra for Technicians must be completed by the end of the Year One.
- One of the following options may be substituted for MTH 075: 1) MTH 070 or 2) MTH 060 + MTH 065 or 3) MTH 095 or higher Algebra course or 4) Any 200-level math course (except MTH 243 and MTH 261).
- MTH 085 - Applied Geometry for Technicians must be completed by the end of Winter Term, Year Two.
- One of the following options may be substituted for MTH 085: 1) MTH 097 or 2) MTH 112.
- Writing requirement must be completed by the end of Year Two.
- Graduates hoping to transfer to a four-year institution should meet with their Academic Advisor or Program Coordinator.
- **Cooperative Education:** Under the supervision of the Aviation Maintenance Co-op Coordinator and as approved by the AMT Chief Instructor 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. Learn more about Cooperative Education at lanecc.edu/cooped

Licensing and Certification

Accreditation: Aviation Maintenance, approved under Part 147 of the Federal Aviation Regulations of the Federal Aviation Administration.

Licensing and Certification: AMTS EM8T117Q Airframe and Powerplant Ratings.

Automotive Technology, 2-yr Certificate (suspended)

Program Change

This program is no longer offered as of Spring 2021. This change is due to updates to Associate of Applied Science degree requirements that have made the 2-year certificate the same as the Automotive Technology, AAS degree. Students previously pursuing the 2-year certificate can change to the AAS without any change in course requirements. Students interested in this program should contact the Advanced Technology department or academic advisors at advtechprograms@lanecc.edu for assistance.

Diesel Technology, 2-yr Certificate (suspended)

Program Change

This program is no longer offered as of Spring 2021. This change is due to updates to Associate of Applied Science degree requirements that have made the 2-year certificate the same as the Diesel Technology, AAS degree. Students previously pursuing the 2-year certificate can change to the AAS without any change in course requirements. Students interested in this program should contact the Advanced Technology department or academic advisors at advtechprograms@lanecc.edu for assistance.

1-Year Certificates of Completion

All certificate programs follow the Certificate of Completion Requirements unless otherwise specified. Go to individual certificates to see specific program requirements.

Business Assistant, 1-yr Certificate

Length: 54 credits

Program Contacts

Offered by the Business Department

Program Coordinators: LuAnne Johnson (*johnsonlm@lanecc.edu*, 541-463-5767) and Tim Hovet (*hovett@lanecc.edu*, 541-463-5537)

Business Advising Team: *BusinessAdvising@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $10,335.00

- Resident Tuition: $6,804.00*
- Technology Fees: $594.00

- General Student Fees: $402.00**
- Online Course Fee: $540.00 (if applicable)
- Books / Materials: $995.00
- Other Cost / Expenses: $1,000.00***

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program will be able to:

PLO 1 - Perform on the job in ways that reflect professional ethics, legal standards, and organizational expectations

PLO 2 - Use accounting and financial information to make informed and timely planning and budgeting decisions to promote organizational goals

PLO 3 - Utilize current software technologies, including word processing, spreadsheets, and document management systems to input, organize, create, and present professional documents, workpapers, and presentations for both internal and external users

PLO 4 - Use research and analytical skills to gather and interpret data to support business decisions

Program Requirements

General Education

General Education courses must be completed with a letter grade of C- or better, or Pass.

Writing (4 credits):

- WR 121_H / WR 121 - Academic Composition

Math (4 credits):

- MTH 065 - Elementary Algebra or higher

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP not accepted.

- BA 101 - Introduction to Business 4 Credit(s)
- BA 206 - Management Fundamentals 4 Credit(s)
- BA 214 - Business Communications 4 Credit(s)
- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- BT 108 - Business Proofreading and Editing 4 Credit(s)
- BT 120 - MS WORD for Business 4 Credit(s)
- BT 123 - MS EXCEL for Business 4 Credit(s)
- BT 165 - Introduction to the Accounting Cycle 4 Credit(s)
- BT 206 - Co-op Ed: Business Seminar 2 Credit(s)
- BT 230 - Sustainable Paperless Practices using Adobe Acrobat 4 Credit(s)
- BT 270 - Project Management 4 Credit(s)

Computer Literacy (4 credits) - Complete one of the following:

- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- CIS 101 - Computer Fundamentals 4 Credit(s)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- 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.

Commercial Baking and Pastry, 1-yr Certificate

Length: 45 credits

Program Contacts

Offered by the Culinary Arts and Hotel/Restaurant/Tourism Management department

Program Coordinator: Clive Wanstall, wanstallc@lanecc.edu, 541-462-3507

Academic Advising Team: *CulinaryHospPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $8,749.00

- Resident Tuition: $5,670.00*
- Technology Fees: $495.00
- General Student Fees: $402.00**
- Online Course Fee (if applicable)
- Books / Course Materials: $115.00
- Program Specific Fees: $686.00 (culinary course fees)
- Other Cost / Expenses: $430.00 ***(knife, baker kit, uniform & shoes)
- Differential Fees: $951.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

This program is for students who wish to gain entry into the food service industry as a beginning baking and pastry cook. It is also for those currently employed in the industry who wish to have greater knowledge and experience than what is provided in some industry settings.

Students who complete this program will be able to:

PLO 1 - Independently produce a wide range of baked goods employing current technologies and traditional baking methods

PLO 2 - Safely and effectively operate current standard commercial bakery equipment including cook tops, food processors, ovens (baking, convection, and conventional), dough mixers, and a variety of kitchen hand tools

PLO 3 - Perform basic math functions, measure and scale ingredients and portions, and convert recipes to higher and lower yields

PLO 4 - Consistently employ sanitation concepts including high standards of personal hygiene, appropriate cleaning and sanitizing of equipment, and correct processing and storage of potentially hazardous foods according to the HACCP concept

PLO 5 - Evaluate and adjust recipes using dietary guidelines and recommendations, food guides, and food labels

PLO 6 - Describe and articulate preferences for various roles in the bakery profession in the retail, hotel, restaurant, and tourism industries

Admission Information

Selective-entry admission; there is a separate program application located at lanecc.edu/culinary/baking-and-pastry.

There are non-refundable program fees to cover tools and uniforms. There is a uniform fitting around four weeks prior to classes commencing.

Must obtain Oregon Health Authority Food Handlers Certification before being accepted into the program.

Show readiness for MTH 025C or higher and WR 097 or higher.

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass; and may be completed prior to program entry or during any program term.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition 4 Credit(s)
- Any Writing course higher than WR 115

Math (3-5 credits) - Complete one of the following:

- MTH 025C - Basic Mathematics Applications 3 Credit(s) (Recommended)
- MTH 025 - Basic Mathematics Applications 3 Credit(s)
- Any Math course higher than MTH 025

Human Relations (3-4 credits) - Complete one of the following:

- CG 100 - College Success 1-3 Credit(s) (Recommended)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted

- CA 163A - Beginning Baking and Pastry 3 Credit(s)
- CA 163B - Intermediate Baking and Pastry 2 Credit(s)

- CA 163C - Advanced Baking and Pastry 2 Credit(s)
- CA 121 - Composition of Cake 2 Credit(s)
- CA 122 - Artisan Breads 2 Credit(s)
- CA 123 - International Baking and Pastry 2 Credit(s)
- CA 124 - Seasonal Baking and Pastry 1 2 Credit(s)
- CA 125 - Seasonal Baking and Pastry 2 2 Credit(s)
- CA 175 - Foodservice Sanitation and Safety 2 Credit(s)
- FN 105 - Nutrition for Foodservice Professionals 3 Credit(s) (FN 225 may be substituted; contact advisors)
- HRTM 100 - Introduction to Culinary and Hospitality 3 Credit(s)
- HRTM 105 - Restaurant Operations 3 Credit(s)

Cooperative Education

Cooperative Education must be completed with a letter grade of C- or better. P/NP is not accepted. **Complete 5 credits of Cooperative Education.**

- CA 280 - Co-op Ed: Culinary Arts 1-7 Credit(s)

Program Electives

Program Electives must be completed with a letter grade of C- or better. P/NP is not accepted. **Complete a minimum of 2 credits of Program Electives from the following:**

- ART 115 - Basic Design: Fundamentals 3 Credit(s)
- BI 103H - General Biology-Mushrooms 4 Credit(s)
- BT 120 - MS WORD for Business 4 Credit(s)
- BT 123 - MS EXCEL for Business 4 Credit(s)
- BT 163 - QuickBooks 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- FN 110 - Personal Nutrition 3 Credit(s)
- HE 252 - First Aid 3 Credit(s)
- HRTM 104 - Introduction to Travel and Tourism 3 Credit(s)
- HRTM 109 - Principles of Meetings and Convention Management 3 Credit(s)
- HRTM 140 - Hospitality Law and Ethics 3 Credit(s)
- HRTM 205 - Managing the Restaurant Operation 3 Credit(s)
- HRTM 230 - Hotel Operations 1 3 Credit(s)
- HRTM 231 - Hotel Operations 2 3 Credit(s)
- HRTM 286 - Bar and Beverage Management 3 Credit(s)
- HST 104 - World History 4 Credit(s)
- HST 105 - World History 4 Credit(s)
- HST 106 - World History 4 Credit(s)
- PHL 201 - Ethics 4 Credit(s)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- A Lane County Food Handlers card is required for entry into the program.
- Students must complete college placement tests showing readiness for MTH 025 / MTH 025C or higher and WR 097 or higher to be accepted into the program. Students who do not meet reading and/or math requirements may apply to PASS Lane Summer programming for alternative admission process. PASS Lane contact is Marcia Koenig (*koenigm@lanecc.edu*), 541-463-5818, Bldg 11/244.
- This certificate is a fall term start only.

Commercial Cooking, 1-yr Certificate

Length: 45 credits

Program Contacts

Offered by the Culinary Arts and Hotel/Restaurant/Tourism Management department

Program Coordinator: Clive Wanstall, wanstallc@lanecc.edu, 541-462-3507

Academic Advising Team: *CulinaryHospPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $9,677.00

- Resident Tuition: $5,670.00*
- Technology Fees: $495.00
- General Student Fees $402.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $235.00
- Program Specific Fees: $836.00 (culinary course fees)
- Other Cost / Expenses: $430.00*** (knife, baker kit, uniform & shoes)
- Differential Fees: $ 1,609.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

**** Any special info about computer needs or specifications.

Program Learning Outcomes

Prepare commercial cooks with practical skills and safe food preparation technical knowledge to enable successful entry and potentially accelerated upward mobility in a wide range of kitchens and food production facilities.

Students who complete this program will be able to:

PLO 1 - Safely and effectively operate current standard commercial cooking equipment including cook tops, food processors, ovens (baking, convection, and conventional), dough mixers, meat slicers, and a variety of kitchen hand tools

PLO 2 - Apply fundamental theory, culinary skills and techniques, and time management principles to prepare industry standard food products

PLO 3 - Consistently employ sanitation concepts including high standards of personal hygiene, appropriate cleaning and sanitizing of equipment, and correct processing and storage of potentially hazardous foods according to the HACCP concept

PLO 4 - Perform basic math functions, measure and scale ingredients and portions, and convert recipes to higher and lower yields

PLO 5 - Evaluate and adjust recipes and menus using dietary guidelines and recommendations, food guides, and food labels

PLO 6 - Plan an appropriate restaurant menu that incorporates the key elements of purchasing, receiving, costing, and food and beverage controls

Admission Information

Selective-entry admission; there is a separate program application located at lanecc.edu/culinary.

There are non-refundable program fees to cover tools and uniforms. There is a uniform fitting around four weeks prior to classes commencing.

Must obtain Oregon Health Authority Food Handlers Certification before being accepted into the program.

Show readiness for MTH 025C or higher and WR 097 or higher.

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass; and may be completed prior to program entry or during any program term.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition 4 Credit(s)
- Any Writing course higher than WR 115

Math (3 credits) -

- MTH 025C - Basic Mathematics Applications 3 Credit(s) (Recommended)
- MTH 025 - Basic Mathematics Applications 3 Credit(s)
- Any Math higher than MTH 025

Human Relations (3-4 credits) - Complete one of the following:

- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better. P/NP is not accepted.

- CA 160 - Introduction to Cooking Theories 1 7 Credit(s)
- CA 162 - Introduction to Cooking Theories 2 7 Credit(s)
- CA 294 - Advanced Cooking Theories 3 8 Credit(s)
- CA 175 - Foodservice Sanitation and Safety 2 Credit(s)
- HRTM 100 - Introduction to Culinary and Hospitality 3 Credit(s)
- HRTM 105 - Restaurant Operations 3 Credit(s)
- FN 105 - Nutrition for Foodservice Professionals 3 Credit(s) (FN 225 or FN 110 may be substituted; contact advisors)

Cooperative Education

Cooperative Education courses must be completed with a grade of C- or better. P/NP is not accepted. **Complete 2 credits of Cooperative Education.**

- CA 280 - Co-op Ed: Culinary Arts 1-7 Credit(s)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- A Lane County Food Handlers card is required for entry into the program.
- Students may choose to pursue Baking & Pastry or Hotel/Tourism fields which have some overlapping courses currently with Lane.

Construction Technology, 1-yr Certificate

Length: 46 credits

Program Contacts

Offered by: Advanced Technology Division

Program Coordinator: Paul Rea, reap@lanecc.edu, 541-463-5504

Advanced Technology Academic Advising Team: advtechprograms@lanecc.edu; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $7,778.00

- Resident Tuition: $5,796.00*
- Technology Fees: $506.00
- General Student Fees: $402.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $849.00
- Program Specific Fees: $225.00 (Course Fees and Materials)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program will be able to:

PLO 1 - Cut, fit, and assemble wood and other materials for building construction
PLO 2 - Recognize and explain the importance of the relationships among building components in the process of assembling a structure
PLO 3 - Demonstrate and use industry safety standards
PLO 4 - Use blueprint reading skills necessary to the profession
PLO 5 - Establish field elevations and develop building layouts through the use of various surveying tools
PLO 6 - Acknowledge the various areas of the construction industry and explain how different occupations integrate into the field as a whole

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis
- WR 115 - Introduction to College Composition
- Any WR course higher than WR 115

Math (4-5 credits) - Complete one of the following:

- MTH 085 - Applied Geometry for Technicians
- MTH 097 - Geometry
- MTH 112 - Trigonometry

Human Relations (3-4 credits) - Complete one of the following:

- 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 Communication
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

PROGRAM CORE courses must be completed with a grade of C- or better, or Pass. Students must complete 5 credits each of CST 118A, 118B and 118C, for a total of 15 credits.

- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- CST 110 - Blueprint Reading 1 3 Credit(s)
- CST 111 - Construction Orientation and Environment 2 Credit(s)
- CST 116 - Construction Estimating 4 Credit(s)
- CST 118A - Building Construction A 1 to 5 Credit(s)
- CST 118B - Building Construction B 1 to 5 Credit(s)
- CST 118C - Building Construction C 1 to 5 Credit(s)
- CST 119 - Building Construction Surveying 3 Credit(s)
- CST 122 - Construction Codes 2 Credit(s)
- CST 211 - Blueprint Reading 2 3 Credit(s)

Notes

- This program is fully contained in the Construction Technology, AAS degree.
- This program follows the Certificate of Completion Requirements unless otherwise specified.
- A high school diploma or equivalent is recommended for all applicants to this program.
- Cooperative Education (Co-op): In certain circumstances, co-op experience may be substituted for major coursework. For more information, please see your Academic Advisor or Program Coordinator.

Construction Trades, General Apprenticeship, 1-yr Certificate

Length: Varies depending on trade area

Program Contacts

Offered by the Advanced Technology department

Program Coordinator: Joy Crump, *crumpj@lanecc.edu*, 541-463-5496

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $10,672.00

- Resident Tuition: $7,182.00*
- Technology Fees: $627.00
- General Student Fees: $1,608.00**
- Online Course Fee: $80.00 (if applicable)
- Books / Course Materials: $1,175.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to provide a structured system of training in construction trades or occupations, leading to certification status. Students may earn a Certificate of Completion in Construction Trades, General Apprenticeship by successfully completing 36-45 core related training credits with a grade of C or better in all courses, and completing related instruction in communications, computation, and human relations.

Students who complete this program will be able to:

PLO 1 - Apply theory as it relates to trade competencies
PLO 2 - Perform the duties and responsibilities of the individual construction trade/occupation

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.

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits):

- WR 115 - Introduction to College Composition 4 Credit(s) or higher

Math (4 credits):

- MTH 060 - Beginning Algebra 4 Credit(s) or higher

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
  COMM 130 - Business and Professional Communication 4 Credit(s)

- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Complete all courses listed in one of the following trades. Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted.

Carpenter (36 credits)

- APR 115 - Carpentry Skill Fundamentals 3 Credit(s)
- APR 116 - Carpentry Framing Fundamentals 3 Credit(s)
- APR 117 - Carpentry Framing and Introduction to Concrete 3 Credit(s)
- APR 118 - Carpentry Framing and Finishing 3 Credit(s)
- APR 119 - Carpentry Commercial Plans and Exterior Finish 3 Credit(s)
- APR 120 - Carpentry Interior Finish 3 Credit(s)
- APR 201 - Carpentry Basic Rigging and Practices 3 Credit(s)
- APR 202 - Carpentry Concrete Practices 3 Credit(s)
- APR 203 - Carpentry Forms and Tilt-up Panels 3 Credit(s)
- APR 204 - Carpentry Advanced Layout and Building Systems 3 Credit(s)
- APR 205 - Carpentry Advanced Planning and Management 3 Credit(s)
- APR 206 - Carpentry Equipment and Site Layout 3 Credit(s)

HVAC (44 credits)

- APR 101A - Trade Skills Fundamentals 4 Credit(s)
- APR 140 - Electrical Systems Installation Methods 4 Credit(s)
- APR 141 - Limited Voltage Electrical Circuits 4 Credit(s)
- APR 142 - Devices, Testing Equipment and Code 4 Credit(s)
- APR 143 - Limited Voltage Cabling 4 Credit(s)
- APR 144 - Communications 4 Credit(s)
- APR 190 - Electrical Theory 1 1-4 Credit(s) (take 4 credits of APR 190)
- APR 210 - HVAC Systems 1 4 Credit(s)
- APR 211 - HVAC Systems 2 4 Credit(s)
- APR 212 - HVAC Systems 3 4 Credit(s)
- APR 213 - HVAC Systems 4 4 Credit(s)

Plumber (40 credits)

- APR 160 - Plumbing Skill Fundamentals 4 Credit(s)
- APR 161 - Plumbing Materials and Fixtures 4 Credit(s)
- APR 162 - Plumbing Basic Waste Water Systems 2 Credit(s)
- APR 163 - Plumbing Calculations and Print Reading 4 Credit(s)
- APR 164 - Plumbing Basic Installation 1 4 Credit(s)
- APR 165 - Plumbing Basic Installation 2 2 Credit(s)
- APR 260 - Plumbing Water Supply Systems 4 Credit(s)
- APR 261 - Plumbing Piping Sizing and Systems 4 Credit(s)
- APR 262 - Plumbing Advanced Waste Systems 2 Credit(s)
- APR 263 - Plumbing Code and Test Preparation 2-4 Credit(s) (take 10 credits of APR 263)

Sheet Metal Worker (45 credits)

- APR 101A - Trade Skills Fundamentals 4 Credit(s)
- APR 170 - Introduction to Sheet Metal Apprenticeship 4 Credit(s)
- APR 171 - Sheet Metal Basic Layout 4 Credit(s)
- APR 173 - Sheet Metal Formulas 4 Credit(s)
- APR 270 - Architectural Sheet Metal 4 Credit(s)
- APR 271 - Sheet Metal Building Codes and Installation 4 Credit(s)
- APR 272 - Sheet Metal Duct Design 4 Credit(s)
- APR 273 - General Sheet Metal Fabrication 4 Credit(s)
- APR 274 - Sheet Metal Shop Fabrication 4 Credit(s)
- APR 275 - Sheet Metal Project Supervision 4 Credit(s)
- CST 110 - Blueprint Reading 1 3 Credit(s)
- **Wire Drive Welding (2 credits). Complete one course:**
  - APR 186 - Wire Drive Welding 1 1-4 Credit(s)
  - WLD 143 - Wire Drive Welding 1 1-4 Credit(s)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- This program is contained in the Construction Trades, General Apprenticeship, AAS.

Licensing and 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.

Dental Assisting, 1-yr Certificate

Length: 49 credits

Program Prerequisites: 19 credits

Program Contacts

Offered by Health Professions

Program Coordinator: Leslie Greer, *greerl@lanecc.edu*, 541-463-5683

Health Professions Academic Advising Team: *DAProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost for Core Program: $13,882.00

- Resident Tuition: $6,174.00*
- Technology Fees: $539.00
- General Student Fees: $402.00** (if applicable)
- Online Course Fee: $160.00
- Books / Course Materials: $600.00
- Program Specific Fees: $2,289.00 (certifications-licensure-exams, health insurance, application fee, background check, drug/alcohol screening, physical exams and immunizations)
- Other Cost / Expenses: $2,271.00 *** (instruments/tools, uniforms and shoes)
- Differential Fees: $1,447.00****

Estimated Cost for Prerequisites: $2,997.00

- Resident Tuition: $2,394.00*
- Technology Fees: $275.00
- General Student Fees: $268.00** (if applicable)
- Online Course Fee: $60.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare 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.

Students who complete this program will be able to:

PLO 1 - Write/edit multiple types of professional communications
PLO 2 - Accurately expose, develop and mount diagnostic radiographs using multiple systems
PLO 3 - Compute mixing amounts and calculate formulas utilized in dental procedures
PLO 4 - Apply knowledge and skills required for business office procedures
PLO 5 - Access information via dental journals and web sites
PLO 6 - Identify classifications of anatomical structures and Systematically collect diagnostic data
PLO 7 - Maintain a professional working environment
PLO 8 - Provide an aseptic environment and prevent disease transmission
PLO 9 - Apply principles of ethical reasoning, decision making and professional responsibility
PLO 10 - Apply interpersonal communication and collaborative skills to effectively interact with diverse population groups, health care providers, dental professionals and community groups
PLO 11 - Perform or assist with a variety of clinical treatments used in all areas of dentistry

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 include possible exposure to blood borne pathogens and infectious diseases. Training is included to minimize risk to students and patients.

Program Requirements

Program Prerequisites

Program Prerequisites must be completed with a letter grade of C or better. P/NP not accepted.

Prerequisites for Admission

Writing (4 credits) - Complete one of the following: Prior bachelor's degree, verified by transcript from US accredited institution or higher, may be used to meet the Writing requirement.

- WR 115 - Introduction to College Composition
- WR 121 - Academic Composition (or WR 121_H)

Math (4 credits) - Complete the following:

- MTH 052 - Math for Health and Physical Sciences or higher

Human Relations (3-4 credits) - Complete one of the following:

- HP 110 - Health Office Procedures 3 Credit(s) (Recommended)
- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Computer Literacy (4 credits) - Complete one of the following:

- CS 120 - Concepts of Computing: Information Processing (Recommended)
- CIS 101 - Computer Fundamentals

Human Body Systems - Complete one of the following sequences:

- **Dental Health Sciences (3 credits) - Complete the following:**
  - DA 110 - Dental Health Sciences 3 Credit(s) (Recommended)
- **Human Body Systems (6 credits) - Complete both of the following:**
  - HP 150 - Human Body Systems 1 3 Credit(s)
  - HP 152 - Human Body Systems 2 3 Credit(s)
- **Anatomy and Physiology (8 credits) - Complete both of the following:**
  - BI 231 - Human Anatomy and Physiology 1 4 Credit(s)
  - BI 232 - Human Anatomy and Physiology 2 4 Credit(s)

Recommended Prerequisites

The following courses are recommended, but not required for program entry.

- HP 100 - Medical Terminology 1 3 Credit(s)
- HP 110 - Health Office Procedures 3 Credit(s) (Meets Human Relations requirement)
- EL 115 - Effective Learning 3 Credit(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted.

- DA 102 - Advanced Clinical Experiences 3 Credit(s)
- DA 103 - Dentistry Law and Ethics 2 Credit(s)
- DA 105 - Infection Control 2 Credit(s)
- DA 115 - Dental Anatomy 3 Credit(s)
- DA 194 - Dental Office Procedures 3 Credit(s)

Dental Health Education (4 credits):

- DA 107 - Dental Health Education 1 1 Credit(s)
- DA 108 - Dental Health Education 2 3 Credit(s)

Dental Materials (6 credits):

- DA 192 - Dental Materials 3 Credit(s)
- DA 193 - Dental Materials 2 3 Credit(s)

Chairside Procedures (12 credits):

- DA 195 - Chairside Procedures 1 5 Credit(s)
- DA 196 - Chairside Procedures 2 7 Credit(s)

Dental Radiology (7 credits):

- DA 210 - Dental Radiology 1 4 Credit(s)
- DA 211 - Dental Radiology 2 3 Credit(s)

Cooperative Education

Cooperative Education and **Seminar** must be completed with a letter grade of C or better. P/NP is not accepted. **Complete 6 credits of Cooperative Education.**

- DA 206 - Co-op Ed: Dental Assisting Seminar 1 Credit(s)
- DA 280 - Co-op Ed: Dental Assisting 6-12 Credit(s)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- 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.)
- 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 prerequisite 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.
- WR 122 / WR 122_H / WR 123 may also be used to meet the Writing requirement. Contact an advisor or the program coordinator for more information.
- Cooperative Education (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.

Licensing and 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).

Accreditation

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 800.621.8099 or 312.440.4653 or 211 East Chicago Avenue, Chicago, Illinois 60611. This accreditation allows for credentialing via Pathway I through the Dental Assisting National Board (DANB).

Drafting, 1-yr Certificate

Length: 45 credits

Program Contacts

Offered by: Advanced Technology, lanecc.edu/advtech

Program Coordinator: Margaret Robertson, *robertsonm@lanecc.edu*

Advanced Technology Academic Advising: *AdvTechPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $9,197.00

- Resident Tuition: $5,670.00*
- Technology Fees: $495.00
- General Student Fees: $402.00** (if applicable)
- Online Course Fee: $260.00
- Books / Course Materials: $1,120.00
- Other Cost / Expenses 1,250.00*** (computer/Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Hardware: In order to run AutoCAD, Revit, and SolidWorks software, students need a computer with Windows 10 or newer operating system; CPU of 3.3 GHz or higher; 8 GB of RAM, with 16 GB recommended; 30 GB free disk space for download and installation, plus 500 GB or more storage; graphics card capable of 24-bit color and DirectX 11 compliant, such as Nvidia Quadro series, AMD FirePro series, or AMD Radeon series; at least two USB ports; and an external mouse. (A computer with Mac OS can run AutoCAD software, but not Revit or SolidWorks.) A limited number of laptops are available on loan from the LCC Student Helpdesk. In addition, students need a way to store backup copies of all files, such as a flash drive, external hard drive, or cloud service.

Connectivity: Students need a reliable internet connection; a browser such as Google Chrome or Firefox; and a robust antivirus and firewall product such as McAfee or Norton, kept up to date.

Software: Students need Microsoft Office, with Word, Excel, and PowerPoint, available free to LCC students. Students will need the current version of AutoCAD, Revit, and

SolidWorks software and will get instructions in classes for downloading free educational versions.

Program Learning Outcomes

The purpose of this program is to train and prepare 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.

Students who complete this program will be able to:

PLO 1 - Effectively and independently use CAD and solid modeling software in alignment with industry standards
PLO 2 - Visualize three-dimensional objects from multiple viewing directions and translate three-dimensional objects into two-dimensional drawings
PLO 3 - Create mechanical and architectural drawings which follow recognized national standards for format, annotation, lines, and symbols

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits) - Complete one of the following:

- WR 121 - Academic Composition 4 Credit(s)
- WR 121_H - Academic Composition-Honors

Algebra Requirement (4 credits) - Complete one of the following:

- MTH 075 - Applied Algebra for Technicians 4 Credit(s)
- MTH 095 - Intermediate Algebra 5 Credit(s)
- MTH 098 - Math Literacy 5 Credit(s)
- MTH 105 - Math in Society 4 Credit(s)
- MTH 106 - Math in Society 2 4 Credit(s)
- MTH 107 - Math in Society 3 4 Credit(s)
- MTH 111 - College Algebra 5 Credit(s)
- Any 200-level Math course

Geometry Requirement (4-5 credits) - Complete one of the following:

- MTH 085 - Applied Geometry for Technicians 4 Credit(s)
- MTH 097 - Geometry 4 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)

Human Relations Requirement (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Computer Literacy (4 credits):

- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)
- OR HIGHER CS course

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better, or Pass.

- CST 122 - Construction Codes 2 Credit(s)
- DRF 121 - Mechanical Drafting 4 Credit(s)
- DRF 137 - Architectural Plans 4 Credit(s)
- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- DRF 203 - Electrical Drafting 2 Credit(s)
- DRF 245 - Solid Modeling 4 Credit(s)

Cooperative Education Seminar (2 credits):

- Complete 2 credits of COOP 206 - Co-op Ed: Internship Seminar 1-2 Credit(s

Program Electives

Electives must be completed with a grade of C- or better, or Pass. **Complete 4-6 credits. Choose from the following:**

- ART 117 - Basic Design: 3-Dimensional 3 Credit(s)
- ART 216 - Digital Design Tools 3 Credit(s)
- CH 150 - Preparatory Chemistry 3 Credit(s)
- CIS 140W - Introduction to Operating Systems: Windows Clients 4 Credit(s)
- CIS 195 - Web Authoring 1 4 Credit(s)
- CS 179 - Introduction to Computer Networks 4 Credit(s)
- CST 116 - Construction Estimating 4 Credit(s)
- CST 201 - Sustainable Building Practices 3 Credit(s)
- DS 154 - Heavy Duty Braking Systems 1-12 Credit(s)
- DS 257 - Diesel Electrical Systems 1-12 Credit(s)
- DS 259 - Diesel Engines and Engine Overhaul 1-12 Credit(s)
- GIS 151 - Digital Earth 4 Credit(s)
- GIS 245 - GIS 1 4 Credit(s)
- MFG 101 - Safety and Basic Shop Practice 3 Credit(s)
- MUL 101 - Introduction to Media Arts 3 Credit(s)
- MUL 212 - Digital Imaging 4 Credit(s)
- PH 101 - Fundamentals of Physics 4 Credit(s)
- PH 102 - Fundamentals of Physics 4 Credit(s)
- PH 103 - Fundamentals of Physics 4 Credit(s)
- PH 201 - General Physics 5 Credit(s)
- PH 202 - General Physics 5 Credit(s)
- PH 203 - General Physics 5 Credit(s)
- WLD 143 - Wire Drive Welding 1 1-4 Credit(s)
- WLD 151 - Fundamentals of Metallurgy 1-3 Credit(s)

Notes

- This program is embedded in the Drafting, AAS degree.
- This program follows Certificate of Completion Requirements unless otherwise specified.

Early Childhood Education, 1-yr Certificate

Length: 45 credits

Program Contacts

Offered by the Social Science Division

Program Coordinator: Kathleen Lloyd, *lloydk@lanecc.edu*, 541-463-5287

Academic Advising Team: *EducationAdvising@lanecc.edu;* contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: Kathleen Lloyd, *lloydk@lanecc.edu*, 541-463-5287; lanecc.edu/cooped/contact

Estimated Cost: $8,407.00

- Resident Tuition: $5,670.00*
- Technology Fees: $495.00
- General Student Fees: $402.00**
- Online Course Fee: $320.00 (if applicable)
- Books / Course Materials: $1,400.00
- Program Specific Fees: $120.00 (MMR immunization if needed)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program should be able to:

PLO 1 - Design and implement a Reggio-inspired curriculum approach for children to learn to make appropriate choices and actively participate in their own learning
PLO 2 - Apply age-appropriate guidance strategies so children develop empathy, moral autonomy, self-worth and the ability to self-regulate in challenging situations
PLO 3 - Use basic mathematics in everyday life and business transactions, including measurement, introduction of probability and statistics, reading graphs and tables, and signed numbers
PLO 4 - Develop and apply research skills to access information using print and on-line resources, including the library catalog and reference sources

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition 4 Credit(s)
- or higher-level Writing course

Math (3 credits) - Complete one of the following:

- MTH 025 - Basic Mathematics Applications 3 Credit(s)
- or higher-level Math course

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- ECE 105 - Health and Safety Issues in Early Childhood Education 2 Credit(s)
- ECE 110 - Observing Young Children's Behavior 1 Credit(s)
- ECE 120 - Introduction to Early Childhood 2 Credit(s)
- ECE 130 - Guidance of Young Children 3 Credit(s)
- ECE 150 - Creative Activities for Children 3 Credit(s)
- ECE 160 - Exploring Early Childhood Curriculum 4 Credit(s)
- ECE 170 - Infants and Toddlers Development 4 Credit(s)
- FN 130 - Family Food and Nutrition 3 Credit(s)
- HDFS 226 - Child Development 3 Credit(s)

Multicultural / Diversity Requirement - Complete one of the following:

- ECE 253 - Diversity Issues in Early Childhood Education 3 Credit(s)
- ED 258 - Multicultural Education 3 Credit(s)

Inclusion / Special Needs Requirement - Complete one of the following:

- HDFS 228 - Young Children with Special Needs 3 Credit(s)
- ED 269 - Inclusion and Special Needs 3 Credit(s)

Supervised Teaching - Complete 4 credits of the following:

- ECE 240 - Supervised Student Teaching 4 Credit(s)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Early Childhood Education, AAS degree.
- Immunization is required prior to enrolling in ECE 240 - Supervised Student Teaching. More info at lanecc.edu/socialscience/early-childhood-education
- Some ECE and HDFS courses are offered through College Now at high schools in Lane County and outlying areas. For more information, see lanecc.edu/hsconnections/collegenow/courses-high-school
- Students seeking support with Reading/Writing/Math or English Language skills while transitioning to Early Childhood classes may apply to PASS Lane ECE. Contact Marcia Koenig (*koenigm@lanecc.edu*) 541-463-5818, Bldg 4/215
- Students receiving SNAP food stamp benefits who are completing ECE Certificates may contact STEP at Lane program for coaching and access to financial resources.
- Prerequisites are not required for most ECE and HDFS courses.
- Transfer Credit for Prior Learning may be granted based on OCCD Oregon Registry Steps. See Program Coordinator for details.
- Students seeking a one-year certificate will complete 90 hours of student teaching (ECE 240). See the Program Coordinator for further information and to schedule your hours.

Credential

ECE students are encouraged to enroll in the Oregon Registry (pdx.edu/occd), a statewide professional recognition program that records and recognizes the growth and achievements of early childhood care and education professionals. Step 7 provides the Child Development Associate (CDA) Credential. College credit is also available for individuals at Step 7 or higher on the Oregon Registry, based on community training hours. Child Development Associate (CDA).

Electrician Apprenticeship Technologies, 1-yr Certificate

Length: Varies depending on trade area

Program Contacts

Offered by the Advanced Technology department

Program Coordinator: Joy Crump, *crumpj@lanecc.edu*, 541-463-5496

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $8,704.00

- Resident Tuition: $5,922.00*
- Technology Fees: $517.00
- General Student Fees: $437.00**
- Online Course Fee: $460.00 (if applicable)
- Books / Course Materials: $1,143.00
- Program Specific Fees: $225.00 (Apprenticeship Dept Fees)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to entry of the program will be listed separately

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

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.

Students who complete this program will be able to:

PLO 1 - Apply theory to electrical wiring
PLO 2 - 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

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 a minimum of a C grade for one year of high school algebra (or equivalent).

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits):

- WR 115 - Introduction to College Composition 4 Credit(s) or higher

Math (4 credits):

- MTH 060 - Beginning Algebra 4 Credit(s) or higher

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
  COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted. Complete all courses listed in one of the following trades:

Limited Energy Technician License A (38 credits)

- APR 101A - Trade Skills Fundamentals 4 Credit(s)
- APR 140 - Electrical Systems Installation Methods 4 Credit(s)
- APR 141 - Limited Voltage Electrical Circuits 4 Credit(s)
- APR 142 - Devices, Testing Equipment and Code 4 Credit(s)
- APR 143 - Limited Voltage Cabling 4 Credit(s)
- APR 144 - Communications 4 Credit(s)
- APR 220 - Electrical Apprenticeship Code and Exam Preparation 2-3 Credit(s) (Take 2 credits of APR 220)
- APR 240 - Audio and Intrusion Systems 4 Credit(s)
- APR 241 - Fire Alarm Systems and Nurse Call 4 Credit(s)
- APR 242 - Limited Voltage System Integration 4 Credit(s)

Manufacturing Plant Electrician (40 credits)

- APR 185 - Shielded Metal Arc Welding 1 1-4 Credit(s) (take 2cr of APR 185)
- APR 189 - Shop Practices 2 Credit(s)
- APR 190 - Electrical Theory 1 1-4 Credit(s) (take 4 credits of APR 190)
- APR 191 - Electrical Theory 2 1-4 Credit(s) (take 4 credits of APR 191)
- APR 220 - Electrical Apprenticeship Code and Exam Preparation 2-3 Credit(s) (take 8 credits of APR 220)
- APR 285 - Motors 1-4 Credit(s) (take 4 credits of APR 285)
- APR 286 - Motors 2 1-4 Credit(s) (take 4 credits of APR 286)
- APR 290 - Programmable Controllers 1 1-4 Credit(s) (take 4cr of APR 290)
- APR 291 - Programmable Controllers 2 1-4 Credit(s) (take 4cr of APR 291)
- APR 292 - Programmable Controllers 3 4 Credit(s)

Inside Wire Electrician (47 credits)

- APR 130 - Electrical Principles 5 Credit(s)
- APR 131 - Electrical Principles/Residential Wiring 5 Credit(s)
- APR 132 - Electrical Residential Wiring Lab 3 Credit(s)
- APR 133 - Electrical Generators, Transformers, and Motors 1 5 Credit(s)
- APR 134 - Electrical Generators, Transformers and Motors 2 5 Credit(s)
- APR 135 - Electrical, Generators, Transformers, and Motors Lab 3 Credit(s)
- APR 220 - Electrical Apprenticeship Code and Exam Preparation 2-3 Credit(s) (take 8 credits of APR 220)
- APR 225 - Electrical Motor Controls 5 Credit(s)
- APR 226 - Electrical Grounding/Bonding and Blueprint Reading 5 Credit(s)
- APR 227 - Electrical System Troubleshooting 3 Credit(s)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- This program is embedded in Electrician Apprenticeship Technologies, AAS.

Licensing and 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.

Energy Management Technician, 1-yr Certificate (suspended)

Program Change

Energy Management is a growing industry, and current industry trends are in the Building Controls sector with employers are seeking applicants for this industry. As such, the Energy Management program has decided to focus curriculum in the Building Controls direction because of the overwhelming employment opportunities.

For the 2021-22 academic year, the Energy Management program will only be accepting applicants for the Energy Management Technician: Building Controls Technician Option (online), AAS program.

Please contact the program coordinator or academic advisors for more information:

Program Coordinator: Roger Ebbage, *ebbager@lanecc.edu*, 541-556-7724

Academic Advising Team: *Sci-MathPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Fabrication/Welding Technology, 1-yr Certificate

Length: 46

Program Contacts

Offered by: Advanced Technology, lanecc.edu/advtech

Program Coordinator: Doug Ford, *forddo@lanecc.edu*, 541-463-5498

Advanced Technology Academic Advising: *AdvTechPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $ 9,469.00

- Resident Tuition: $ 5,796.00*
- Technology Fees: $ 506.00
- General Student Fees: $ 402.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $ 823.00
- Program Specific Fees: $ 1,642.00 (course fees)
- Other Cost / Expenses: $ 300.00*** (tools)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare graduates for employment as Welders/Fabricators.

Students who complete this program will be able to:

PLO 1 - Read and build metal products from simple blueprints
PLO 2 - Use blueprints and other reference materials to calculate cost of materials necessary to the building of metal products
PLO 3 - Apply mathematics necessary to fabricate metal products
PLO 4 - Perform at entry-level typical industrial welding processes
PLO 5 - Demonstrate at entry-level use of certain machine tools commonly found in industry
PLO 6 - Demonstrate and use industry safety standards
PLO 7 - Use appropriate library and information resources to research professional issues and support lifelong learning

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis
- WR 115 - Introduction to College Composition
- Any WR course higher than WR 115

Math (4-5 credits) - Complete one of the following:

- MTH 085 - Applied Geometry for Technicians
- MTH 097 - Geometry
- MTH 112 - Trigonometry

Human Relations (3-4 credits) - Complete one of the following:

- 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 Communication
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

PROGRAM CORE courses must be completed with a letter grade of C- or better. P/NP is not accepted.

- WLD 112 - Fabrication/Welding 1 12 Credit(s)
- WLD 113 - Fabrication/Welding 2 12 Credit(s)
- WLD 114 - Fabrication/Welding 3 12 Credit(s)

Notes

- This program is fully contained in the Fabrication/Welding Technology, AAS degree.
- This program follows the Certificate of Completion Requirements unless otherwise specified.
- A high school diploma or equivalent is recommended for all applicants.

Fitness and Lifestyle Specialist, 1-yr Certificate

Length: 45 credits

Program Contacts

Offered by: Health and Physical Education

Program Coordinator: Wendy Simmons, simmonsws@lanecc.edu, 541-463-5551

Fitness Lifestyle Specialist Advising Team: *FLSProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $8,010.00

- Resident Tuition: $5,670.00*
- Technology Fee: $495.00
- General Student Fees: $402.00**
- Online Course Fee: $20.00 (if applicable)
- Books: $1,343.00
- Program Specific Fee: $45.00
- Other Costs / Expenses: $35.00*** (Equipment)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students for various careers in the fitness industry, including personal training, group exercise instruction, coaching, wellness coaching.

Students who complete this program will be able to:

PLO 1 - Administer various basic fitness assessments including the measurement of cardiovascular endurance, body composition, flexibility, muscular strength and endurance in gym or health club settings

PLO 2 - Apply and interpret basic algebraic formulas to fitness assessment data and exercise programming

PLO 3 - Demonstrate interpersonal skills in the areas of leadership, motivation, and communication

PLO 4 - Design and demonstrate safe and effective exercise programs for apparently healthy individuals and groups within current fitness industry standards and best practices

PLO 5 - Respond to the needs of a diverse clientele and demonstrate inclusive practices

PLO 6 - Apply basic behavior modification strategies to enhance exercise and health behavior change with clients

PLO 7 - Apply basic exercise principles related to applied kinesiology, physiology, injury prevention, conditioning, resistance training, and functional training

PLO 8 - Apply nationally recognized standards for fitness and overall health and communicate the benefits and precautions associated with exercise

PLO 9 - Communicate their scope of practice and role within the health and fitness field and the allied health care system and practice appropriate & ethical professional conduct

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits) - Complete the following:

- WR 121 - Academic Composition or WR 121_H

Math (4 credits) - Complete one of the following:

- MTH 020 - Math Renewal
- or higher MTH course

Human Relations Requirement (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)
- EMS 102 - Crisis Intervention 3 Credit(s)
- HP 110 - Health Office Procedures 3 Credit(s)

Program Core Courses

FLS and PE 280F must be completed with a letter grade of C- or better. P/NP is not accepted. HE courses must be completed with a grade of C- or better, or Pass.

- FLS 110 - Coaching Healthy Eating 2 Credit(s)
- FLS 120 - Fitness Assessment & Exercise Prescription - Field Techniques 3 Credit(s)
- FLS 130 - Principles of Strength Training and Conditioning Instruction 2 Credit(s)
- FLS 140 - Applied Exercise Physiology 1 3 Credit(s)
- FLS 150 - Techniques of Group Exercise Leadership 2 Credit(s)
- FLS 160 - Applied Anatomy and Kinesiology 3 Credit(s)
- FLS 170 - Mental Dynamics of Exercise and Sport 3 Credit(s)
- FLS 185 - Career Preparation 3 Credit(s)
- FLS 190 - Injury Prevention and Management 3 Credit(s)

CPR (1-3 credits) - Complete one of the following:

- HE 161 - Cardiopulmonary Resuscitation 1 Credit(s)
- HE 252 - First Aid 3 Credit(s)
- Students with a current CPR Certification may substitute the CPR requirement. Contact Program Coordinator for details.
- **Personal or Global Health (3-4 credits) - Complete one of the following:**
- FLS 214 - Physical Exercise and Healthy Aging 3 Credit(s)
- FN 225 - Nutrition 4 Credit(s)
- HE 250 - Personal Health 3 Credit(s)
- HE 255 - Global Health and Sustainability 4 Credit(s)
- HE 275 - Lifetime Health and Fitness 3 Credit(s)

Cooperative Education

- Complete 4 credits of PE 280F - Co-op Ed: Fitness

Electives

Electives must be completed with a grade of C- or better, or Pass. Complete two different PE courses, selected from the following:

- PE 101 - Cardio Core Conditioning 1 Credit(s)
- PE 104 - Body Sculpt 1 Credit(s)
- PE 106 - Yogilates 1 Credit(s)
- PE 107 - Zumba Fitness 1 Credit(s)
- PE 108 - Conditioning 1 Credit(s)
- PE 111 - Group Cycling 1 Credit(s)
- PE 113 - Fitness Education: Introduction 1 Credit(s)
- PE 117 - Strength Training 1 Credit(s)
- PE 119 - Strength Training for Women 1 Credit(s)
- PE 134 - Tai Chi Chuan 1 Credit(s)
- PE 137 - Gentle Yoga 1 Credit(s)

Notes

- This is the parent program for the Fitness and Lifestyle Specialist: Group Exercise Instructor, CPC
- This program follows the Certificate of Completion Requirements unless otherwise specified.
- Program application must be completed prior to enrollment in PE 280F - Co-op Ed: Fitness. Apply at lanecc.edu/healthpe/fitness-specialist-information
- FLS 160 - Applied Anatomy and Kinesiology offered Winter Term. Students must pass FLS 160 to register for FLS 190 - Injury Prevention and Management.

Certifications

The FLS program is an ACE, American Council on Exercise, educational partner, acefitness.org/education-and-resources/business/partners/find-partners/, such that the FLS curriculum aligns with ACE.

Thus, students are better prepared to sit for the following certifications:

- ACE Health Coach
- Group Fitness Instructor
- Personal Trainer
- Students can receive discounts on exams and study materials.

Health Information Management (online), 1-yr Certificate

Length: Program 45 credits

Program Prerequisites: 21 credits

Program Contacts

Offered by Health Professions

Health Information Management Academic Advising Team: *HIMProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Project Specialist: Kathy Torvik; torvikk@lanecc.edu

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost for Program: $9,189.00 (45 credits)

- Resident Tuition: $5,670.00*
- Technology Fees: $495.00
- General Student Fees: $ ** (if applicable)
- Online Course Fee: $450.00
- Books / Course Materials: $1,425.00
- Program Specific Fees: $149.00 (certifications-licensure-exams, application fee, background check, drug/alcohol screening, Castlebranch/Complio account and industry student membership)
- Other Cost / Expenses: $1,000.00 *** (computer/internet)

Estimated Cost for Prerequisites: $3,087.00 (21 credits)

Resident Tuition: $2,646.00*

- Technology Fees: $231.00
- General Student Fees: $ ** (if applicable)
- Online Course Fee: $210.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program, which can be completed entirely online, is to prepare 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

Student who complete this program will be able to:

PLO 1 - Demonstrate ability to organize, input, process, analyze, secure, and distribute healthcare information
PLO 2 - Demonstrate the organization, analysis, and evaluation of health record content for completeness and accuracy
PLO 3 - 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
PLO 4 - Apply principles of healthcare privacy, confidentiality, legal, ethical issues and data security
PLO 5 - Demonstrate knowledge of healthcare terminology and medical conditions
PLO 6 - Demonstrate knowledge of healthcare delivery systems and regulatory environments
PLO 7 - 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
PLO 8 - Apply critical and creative thinking, problem solving, and effective inter-professional communication skills related to health information management

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 see the admissions and application information at lanecc.edu/hp/him/admissions-and-application.

Program Requirements

Prerequisites

Prerequisites must be completed with a letter grade of C or better. P/NP is not accepted.

The following courses must be completed prior to applying for the Health Information Management program.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition 4 Credit(s)
- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- Any WR course higher than WR 115

Mathematics (4 credits):

- MTH 052 - Math for Health and Physical Sciences 4 Credit(s) or higher

Medical Terminology (3 credits):

- HP 100 - Medical Terminology 1 3 Credit(s)

Computer Literacy (4 credits) - Complete one of the following:

- CIS 101 - Computer Fundamentals 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)

Human Body Systems (6 credits) - Complete both of the following:

- HP 150 - Human Body Systems 1 3 Credit(s)
- HP 152 - Human Body Systems 2 3 Credit(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted. HP 110 satisfies the Human Relations requirement.

- HIM 107 - Integrated Electronic Health Records 4 Credit(s)
- HIM 114 - Introduction to Medical Coding 4 Credit(s)
- HIM 120 - Introduction to Health Information Management 3 Credit(s)
- HIM 154 - Introduction to Disease Processes 4 Credit(s)
- HIM 160 - Healthcare Insurance and Billing 4 Credit(s)
- HIM 183 - Introduction to Health Information Systems 4 Credit(s)
- HIM 222 - Reimbursement Methodologies 4 Credit(s)
- HP 105 - EHR for the Provider Office 3 Credit(s)
- HP 110 - Health Office Procedures 3 Credit(s)
- HP 220 - Legal and Ethical Aspects of Healthcare 3 Credit(s)

Cooperative Education

Cooperative Education courses must be completed with a letter grade of C or better. P/NP is not accepted. HIM 280 may be used to meet the Cooperative Education requirement.

Seminar (2 credits):

- COOP 206 - Co-op Ed: Internship Seminar

Cooperative Education (3 credits):

- HIT 280 - Co-op Ed: Health Records

Program Electives

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted.

Program Elective (4 credits):

- WR 121 - Academic Composition 4 Credit(s) or WR 121_H
- WR 227 - Technical Writing 4 Credit(s) or WR 227_H
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 220 - Communication, Gender and Culture 4 Credit(s)

If using WR 121 to complete a program prerequisite, please complete an additional course from the list above.

Notes

- This is the parent program for the Health Information Management: Basic Health Care, CPC.
- This program follows the Certificate of Completion Requirements unless otherwise specified.
- Students can take all HIM program courses prior to admission except COOP 206, HIM 222, and HIT 280.
- All program prerequisites with the subject prefix CIS, CS, and HP must be completed no more than five years prior to HIM program acceptance. The prerequisites with CIS, CS, and HP prefixes can possibly be waived with current work experience in an HIM related field.
- All program prerequisites can be completed online.
- HIM 222 - Reimbursement Methodologies must be completed within five years of the start of the governing catalog.
- Students who have completed the Health Information Management: Medical Coding (online), CPC may use the HIM coding sequence (HIM 270, HIM 271, and HIM 273) plus one Computer Literacy course (CIS 101, or CS 120) to meet the HIM 114 - Introduction to Medical Coding requirement. See your Academic Advising team or Program Coordinator for more details about course substitutions and/or waivers.
- Completion of BI 231, BI 232, and BI 233 with a letter grade of C or better is an acceptable equivalent for HP 150 and HP 152.
- BT 120 - MS WORD for Business can be used to meet the Computer Literacy requirement if completed prior to Summer 2020 (when the program's prerequisites changed).
- Students who do not meet reading and/or math requirements may apply to PASS Lane Summer programming for alternative admission process. PASS Lane contact is Marcia Koenig (*koenigm@lanecc.edu*), Bldg. 11/244, 541-463-5818.
- Cooperative Education 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. 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.

Industrial Mechanics and Maintenance Technology Apprenticeship, 1-yr Certificate

Length: 51 credits

Program Contacts

Offered by the Advanced Technology department

Program Coordinator: Joy Crump, *crumpj@lanecc.edu*, 541-463-5496

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $9,927.00

- Resident Tuition: $6,426.00*
- Technology Fees: $561.00
- General Student Fees: $1,072.00**
- Online Course Fee: $40.00 (if applicable)
- Books / Course Materials: $1,500.00

Program Specific Fees: $328.00 (Fabrication-Welding program fee)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

Students may earn a Certificate of Completion in Industrial Mechanics and Maintenance Technology Apprenticeship by successfully completing core courses with a C grade or better in all courses, and completing related instruction in communications, computation, and human relations.

Students who complete this program will be able to:

PLO 1 - Perform the duties and responsibilities of the millwright trade
PLO 2 - Identify mechanical and/or electrical industrial systems

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.

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits):

- WR 115 - Introduction to College Composition 4 Credit(s) or higher

Math (4 credits):

- MTH 085 - Applied Geometry for Technicians

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s) COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Complete all courses listed in the following trade. Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted.

Millwright (39 credits)

- APR 150 - The Millwright and Shop Safety 5 Credit(s)
- APR 151 - Millwright Machine Theory and Trade Calculations 5 Credit(s)
- APR 152 - Millwright: Power Transmissions and Boilers-Steam 5 Credit(s)
- APR 185 - Shielded Metal Arc Welding 1 1-4 Credit(s) (Complete 2 credits of APR 185)
- APR 186 - Wire Drive Welding 1 1-4 Credit(s) (Complete 2 credits of APR 186)
- APR 250 - Millwright: Industrial Print Reading, Schematics, and Estimating 5 Credit(s)
- APR 251 - Millwright: Pneumatics and Lubrications 5 Credit(s)
- APR 252 - Hydraulics for Millwrights 5 Credit(s)
- APR 253 - Millwright Piping Systems 5 Credit(s)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Industrial Mechanics and Maintenance Technology Apprenticeship, AAS.

Licensing and 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.

Medical Assistant, 1-yr Certificate

Length: Program 49 credits

Program Prerequisites: 23 credits

Program Contacts

Offered by Health Professions Division

Program Coordinator: Marty Pittman, *pittmanm@lanecc.edu*, 541-463-5617

Academic Advising Team: *MAProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost for Program: $ 12,023.00

- Resident Tuition: $6,174.00*
- Technology Fees: $539.00
- General Student Fees: $402.00**
- Online Course Fee: $ (if applicable)
- Books / Course Materials: $3.875.00
- Program Specific Fees: $509.00 (certifications/licensure/exams, immunizations, application fee, background check, drug/alcohol screening and immunization tracking account)
- Differential Fees: $524.00****

Estimated Cost for Prerequisites: $3,419.00

- Resident Tuition: $2,898.00*
- Technology Fees: $253.00
- General Student Fees: $268.00**
- Online Course Fee: $ (if applicable)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program will be able to:

PLO 1 - Prepare patients for examination or treatment; take temperatures, measure height and weight, and accurately record information in the patient chart
PLO 2 - Physically assist patients onto and off of exam table
PLO 3 - Sterilize instruments and stand by to assist as the practitioner examines or treats patients, or performs in-office surgeries
PLO 4 - Give medical care to patients, under the practitioner's supervision, such as giving injections and drawing blood ; perform certain diagnostic testing in the laboratory
PLO 5 - Treat the patient with respect, maintain confidentiality, and comply with healthcare laws and ethics
PLO 6 - Perform administrative duties, which include managing an appointment schedule, organizing patients' medical records, bookkeeping procedures, and processing insurance claims
PLO 7 - Use library resources for research and written assignments for a variety of purposes
PLO 8 - Perform mathematic equations associated with medication dosages as well as basic mathematics to process medical insurance claims
PLO 9 - Apply knowledge of anatomy and physiology, and medical terminology in a clinical setting

Admission Information

Students are encouraged to consult a program academic advisor before applying for admission. The application and information on the point allocation system and transfer students is available in the Advising Department and on the Medical Assistant website, lanecc.edu/hp/medical-assistant.

The program runs two cohorts a year: Fall and Spring term.

Program Requirements

Program Prerequisites

Program Prerequisites must be completed with a letter grade of C or better. P/NP is not accepted. Prerequisites are required for program admission. To meet minimum application requirements, additional coursework may be needed. See Academic Advisors and application packet for information.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition 4 Credit(s)
- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- Any WR course higher than WR 115

Complete both of the following:

- MTH 052 - Math for Health and Physical Sciences 4 Credit(s)
- HP 100 - Medical Terminology 1 3 Credit(s)

Anatomy and Physiology (3-4 credits) - Complete one of the following:

- HP 150 - Human Body Systems 1 3 Credit(s)
- BI 231 - Human Anatomy and Physiology 1 4 Credit(s)

Human Relations (3-4 credits) - Complete one of the following:

- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- EMS 102 - Crisis Intervention 3 Credit(s)

Psychology Requirement (3-4 credits)

- Complete one PSY course, 100-level or higher

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted. The following course may be completed with a C- or Pass: BT 165.

- BT 165 - Introduction to the Accounting Cycle 4 Credit(s)
- HP 110 - Health Office Procedures 3 Credit(s)
- HP 153 - Introduction to Pharmacology 3 Credit(s)
- HP 220 - Legal and Ethical Aspects of Healthcare 3 Credit(s)
- MA 112 - Medical Insurance Procedures 3 Credit(s)
- MA 119 - Introduction to Medical Coding and Scribing 3 Credit(s)
- MA 150 - Laboratory Orientation 3 Credit(s)

Anatomy and Physiology 2 (4 credits) – Complete one of the following:

Note: must either complete HP 150 & 152 or BI 231 & 232. Mixing sequences is not allowed.

- HP 152 - Human Body Systems 2 3 Credit
- **BI 232 – Human Anatomy and Physiology 2 4 Credit(s)**

Clinical Assistant (9 credits) - Complete all of the following:

- MA 110 - Clinical Assistant 1 3 Credit(s)
- MA 120 - Clinical Assistant 2 3 Credit(s)
- MA 130 - Clinical Assistant 3 3 Credit(s)

Electronic Records (3-4 credits) - Complete one of the following:

- HP 105 - EHR for the Provider Office 3 Credit(s)
- HIM 107 - Integrated Electronic Health Records 4 Credit(s)

Computer Literacy (4 credits) - Complete one of the following:

- BT 120 - MS WORD for Business 4 Credit(s)
- CIS 101 - Computer Fundamentals 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)

Cooperative Education

Cooperative Education courses must be completed with a grade of C or better. P/NP is not accepted.

- MA 206 - Co-op Ed: Medical Assistant Seminar 2 Credit(s)
- Complete 5 credits of MA 280 - Co-op Ed: Medical Assistant

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- 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.
- MA 112 - Medical Insurance Procedures, MA 119 - Introduction to Medical Coding and Scribing and courses with the prefixes BT, CIS, CS, HIM, HP, PSY may be taken prior to program acceptance.
- Cooperative Education: During the required 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.

Licensing and Certification

Certified Medical Assistant: CMA (AAMA). This is a National Certification.

Accreditation

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; caahep.org; 727-210-2350

Multimedia Design, 1-yr Certificate

Length: 46 credits

Offered by the Arts & Humanities Division

Faculty Coordinator: Media Arts Department, *artshumanities-office@lanecc.edu*

Arts Academic Advising Team: *ArtsPrograms@lanecc.edu*; lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $ 10,121.00

- Resident Tuition: $ 5,796.00*
- Technology Fees: $ 506.00
- General Student Fees: 804.00**
- Online Course Fee: $ 180.00(if applicable)
- Books / Course Materials: $ 900.00
- Program Specific Fees: $ 436.00 (Course Fees)
- Other Cost / Expenses: $ 1,500.00*** (Computer/Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students for entry-level positions in the media industry and careers in multimedia design and production.

Students who complete this program will be able to:

PLO 1 - Research, develop, and create effective content in a variety of digital media specialties
PLO 2 - Demonstrate innovative use of concepts, techniques and tools in one or more media disciplines
PLO 3 - Work productively, independently and as a team member, in the creation, pre-production, production, post-production, and distribution of multimedia projects from conception to final product
PLO 4 - Demonstrate an understanding of the issues related to ethical and responsible media creation, including professional standards for copyright, fair use, and documentation
PLO 5 - Research, evaluate, and use evolving media tools and technologies and sustain on-going technical and conceptual learning
PLO 6 - Produce, organize, and present creative content to demonstrate the requisite knowledge, skills, and abilities for professional and/or educational advancement

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits) - Complete the following:

- WR 121 - Academic Composition (or WR 121_H)

Math (4-5 credits) - Complete the following:

- MTH 098 - Math Literacy 5 Credit(s)
- MTH 060 - Beginning Algebra 4 Credit(s)
- Any Mathematics course higher than MTH 060

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- ART 115 - Basic Design: Fundamentals 3 Credit(s)
- ART 216 - Digital Design Tools 3 Credit(s)
- ART 245 - Drawing for Media 4 Credit(s)
- AUD 120 - Audio Production 4 Credit(s)
- FA 221 - Computer Animation 4 Credit(s)
- FA 250 - Concepts of Visual Literacy 3 Credit(s)
- MUL 101 - Introduction to Media Arts 3 Credit(s)
- MUL 103 - Time-Based Tools 4 Credit(s)
- MUL 105 - Digital Photography 4 Credit(s)
- VP 151 - Video Production 1: Camera 3 Credit(s)

Notes

- This program is fully contained in the Multimedia Design, AAS degree.
- This program follows the Certificate of Completion Requirements unless otherwise specified.

Occupational Skills Training, 1-yr Certificate

Length: 45 credits

Program Contacts

Offered by the Career Pathways office

Program Coordinator: Rosa Lopez; *lopezr@lanecc.edu*; 541-463-4726

Academic Advising: Contact *careerpathways@lanecc.edu*

Cooperative Education Coordinator: Shamra Clark; *clarks@lanecc.edu*; 541-463-5008

Estimated Cost: $7,317.00

- Resident Tuition: $5670.00*
- Technology Fees: $495.00
- General Student Fees: $402.00**
- Books/Course Materials: $750.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to create an individualized career training opportunity focused on learning at a job site. This program offers students the ability to earn college credits while providing them the opportunity to design a career path that accommodates their occupational goals, abilities, skills and interests. The individual career plan must incorporate work site (hands-on) learning and may also include related classroom instruction as necessary to allow the student to pursue a career path toward gainful employment. The OST Certificate is intended to serve as a beginning point for students to prepare for a job or to get a better job while opening the door to further education to expand their employment opportunities. Programs are to be developed based upon the assessed needs of individual students and are not to be pre-packaged programs of study.

Students who complete this program will be able to:

PLO 1 - Complete occupation-specific classes and work site education/training
PLO 2 - Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them
PLO 3 - Gain knowledge and skills to prepare for employment in a chosen occupation
PLO 4 - Improve communication, human relations, and critical thinking and problem-solving abilities
PLO 5 - Interpret the concepts of a problem-solving task and translate them into mathematics
PLO 6 - Learn and enhance vocabulary and communication skills relevant to their individualized program and career plan
PLO 7 - Learn to research labor market trends and employment opportunities relevant to their career plan
PLO 8 - Improve awareness of individual communication and work style, and improve the ability to apply specific skills relevant to the students current Career Plan

Admission Information

Each student will need to fill out a Career Pathways application form and Student Plan for admissions into the Occupational Skills Program. Capacity is limited. For information, go to lanecc.edu/pathways. Each student's plan should include the following:

Occupational Goal

Labor Market Review

Student Assessment

Program of Study describing skills and knowledge needed to enter employment

Program Requirements

General Education

General Education courses must be completed with a letter grade of C- or better, or Pass.

Writing (3-4 credits), choose one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- WR 115 - Introduction to College Composition 4 Credit(s)
- or any higher Writing course

Math (3 credits)

- MTH 025 - Basic Mathematics Applications 3 Credit(s) or higher Math course.

Human Relations (3-4 credits), choose one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

CORE courses must be completed with a letter grade of C- or better. P/NP not accepted. Up to 6 credits of GWE 180 - Co-op Ed: General Work Experience may be substituted for required OST 280 credits.

- Complete 20 credits of OST 280 - Co-op Ed: Occupational Skills
- Complete 16 credits of occupation-specific coursework

Notes

- This program follows the Certificate of Completion Requirements unless otherwise specified.
- Per state requirement, students in Occupational Skills programs must complete 20 credits of cooperative education, OST 280 Co-op Ed: Occupational Skills. This is an exception to the 18 credit cooperative education limit in other Lane programs.
- Ongoing career coaching is required as part of this program.

Practical Nursing, 1-yr Certificate

Length: Program 45 credits

Program Prerequisites: 24 credits

Program Contacts

Offered by the Health Professions Division

Program Coordinator: Maggie Kruit, *kruitm@lanecc.edu*, 541-463-5753

Academic Advising Team: *NursingProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost for Program: $12,406.00

- Resident Tuition: $5,670.00*
- Technology Fees: $495.00
- General Student Fees: $402.00** (if applicable)
- Online Course Fee: $ (if applicable)
- Books / Course Materials: $675.00
- Program Specific Fees: $ 2,601.00 (certifications-licensure-exams, health insurance, application fee, background check, drug/alcohol screening, CPR, Kaplan/DocuCare/ELNEC learning modules, American Data Bank account and industry student membership)
- Other Cost / Expenses: $ 1,335.00*** (nursing kit, uniforms/stethoscope/shoes, uniform laundry, ID badge and computer)
- Differential Fees: $ 1,228.00 ****

Estimated Cost of Prerequisites: $3,690.00

- Resident Tuition: $3,024.00*
- Technology Fees: $264.00
- General Student Fees: $402.00** (if applicable)
- Online Course Fee: $ (if applicable)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare the student for a certificate in Practical Nursing (PN), which meets the educational requirements for the national exam for PN licensure (NCLEX-PN).

Students who complete this program will be able to:

PLO 1 - Patient-centered Care: Incorporate novice level management skills while providing patient-centered care
PLO 2 - Quality and Safety: Execute nursing care that minimize risk or harm to patients, self, and others, and use data to monitor outcomes of patient-centered care
PLO 3 - Clinical Decision-Making: Formulate clinical judgments when providing nursing care based on current evidence, clinical expertise, and patient preferences, needs and values
PLO 4 - Professionalism: Execute nursing care that reflects integrity, accountability, and legal and ethical practice
PLO 5 - Informatics and Technology: Execute nursing care using current technology and patient information to maximize safety and optimize health
PLO 6 - Teamwork and Collaboration: Communicate effectively and collaboratively in a self-directed manner with patients, families and members of the healthcare team

Admission Information

For information about this program and the application packet, please see lanecc.edu/hp/nursing/licensed-practical-nursing

Drug testing, criminal back-ground check and immunizations required. Information on criminal background checks and disqualifying crimes can be found at the Oregon Board of Nursing at: secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3929

Program Requirements

Program Prerequisites

Program Prerequisites must be completed with a letter grade of C or better. P/NP is not accepted.

Prerequisites to Apply (8 credits)

The following courses are required prior to application submission. In order to be competitive in the selection process, you may need additional courses. Work with your Academic Advisor to select appropriate courses.

Math (4-5 credits) - Complete one of the following:

- MTH 052 - Math for Health and Physical Sciences 4 Credit(s)
- MTH 065 - Elementary Algebra 4 Credit(s)
- MTH 095 - Intermediate Algebra 5 Credit(s)
- or higher-level MTH course

Note: MTH 095 or higher is required for RN program.

Anatomy & Physiology (4 credits)

- BI 231 - Human Anatomy and Physiology 1 4 Credit(s)

Prerequisites for Admission (15 credits)

The following courses are required prior to beginning the program.

REQUIRED: Must be a current Certified Nursing Assistant (CNA)

- HP 100 - Medical Terminology 1 3 Credit(s)
- PSY 215 - Lifespan Developmental Psychology 4 Credit(s)

Anatomy & Physiology (8 credits)

- BI 232 - Human Anatomy and Physiology 2 4 Credit(s)
- BI 233 - Human Anatomy and Physiology 3 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted (except for PN 101B, PN 102B, & PN 103B). PN 101A meets the Human Relations requirement and cannot be substituted. WR 121 is required to be completed prior to Fall Term of program entry. It is recommended that students also complete WR 122 by Fall Term of program entry.

Writing (8 credits) - Complete both of the following:

- WR 121 - Academic Composition 4 Credit(s) (or WR 121_H)
- WR 122 - Argument, Research and Multimodal Composition 4 Credit(s) (or WR 122_H)

Practical Nursing (37 credits)

- PN 101A - Practical Nursing 1 7 Credit(s)
- PN 101B - Practical Nursing 1 Lab 5 Credit(s)
- PN 102A - Practical Nursing 2 7 Credit(s)
- PN 102B - Practical Nursing 2 Lab 5 Credit(s)
- PN 103A - Practical Nursing 3 7 Credit(s)
- PN 103B - Practical Nursing 3 Lab 6 Credit(s)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- The most recent BI 233 course must have been completed within 7 years prior to starting the PN Program.

Licensing and Certification

Nursing Approval: 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. OCNE is a partnership of Oregon nursing programs dedicated to educating future nurses. Faculty from eleven community colleges and six university campuses created - and continue to develop – a shared curriculum taught on all consortium campuses.

Licensing and 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).

Web Design, 1-yr Certificate

Length: 45 credits

Offered by the Arts & Humanities Division

Faculty Coordinator: Media Arts Department, *artshumanities-office@lanecc.edu*

Arts Academic Advising Team: *ArtsPrograms@lanecc.edu*; lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $ 9,072.00

- Resident Tuition: $ 5,670.00*
- Technology Fees: $ 495.00
- General Student Fees: $ 402.00**
- Online Course Fee: $ 100.00 (if applicable)
- Books / Course Materials: $ 600.00
- Program Specific Fees: $ 305.00 (Course Fees)
- Other Cost / Expenses: $ 1500.00***(Computer/Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

This program 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.

Students who complete this program will be able to:

PLO 1 - Use appropriate library and information resources to research media topics and issues, concepts and tools, and support lifelong technical and aesthetic learning
PLO 2 - Create functional web pages using relevant front-end web development languages
PLO 3 - Describe the effects of media on society and demonstrate the ethical use of media
PLO 4 - Develop and apply effective visual design strategies for creating web sites, interactive multimedia, and computer-based training for delivery over the Internet and current distribution formats
PLO 5 - Select and employ web writing styles, infographics, imagery, video, sound, and motion graphics to communicate context-appropriate messages

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits) - Complete the following:

- WR 121 - Academic Composition (or WR 121_H)

Math (4-5 credits) - Complete one of the following:

- MTH 098 - Math Literacy 5 Credit(s)
- MTH 060 - Beginning Algebra 4 Credit(s)
- Any Mathematics course higher than MTH 060

Human Relations (3-4 credits) - Complete one of the following:

- BA 278 - Leadership and Team Dynamics 4 Credit(s)
- CG 100 - College Success 1-3 Credit(s)
- CG 203 - Human Relations at Work 1-3 Credit(s)
- COMM 130 - Business and Professional Communication 4 Credit(s)

- COMM 218 - Interpersonal Communication 4 Credit(s)
- COMM 219 - Small Group Communication 4 Credit(s)
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- ART 115 - Basic Design: Fundamentals 3 Credit(s)
- ART 216 - Digital Design Tools 3 Credit(s)
- ART 245 - Drawing for Media 4 Credit(s)
- ART 289 - Web Production 3 Credit(s)
- ART 290 - Design Concepts for the Web 3 Credit(s)
- CIS 195 - Web Authoring 1 4 Credit(s)
- CS 133JS - Beg. Programming: JavaScript 4 Credit(s)
- MUL 212 - Digital Imaging 4 Credit(s)
- MUL 218 - Business Practices for Media Arts 3 Credit(s)

Cooperative Education

Cooperative Education must be completed with a letter grade of C- or better, or Pass. **Complete 3 credits of Cooperative Education.**

- MUL 280 - Co-op Ed: Web Design 3-12 Credit(s)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- Students using lower-credit courses to meet General Education requirements may need to take additional credits to meet the 45-credit minimum.

Welding Processes, 1-yr Certificate

Length: 47 credits

Program Contacts

Offered by: Advanced Technology, lanecc.edu/advtech

Program Coordinator: Doug Ford, *forddo@lanecc.edu*, 541-463-5498

Advanced Technology Academic Advising: *AdvTechPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $ 10,197.00

- Resident Tuition: $ 5,922.00*
- Technology Fees: $ 517.00
- General Student Fees: $ 536.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $ 729.00
- Program Specific Fees: $ 1,976.00 (course fees)
- Other Cost / Expenses: $ 385.00***
- Differential Fees: $ 132.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare graduates 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.

Students who complete this program will be able to:

PLO 1 - Read simple blueprints, interpret and apply industrial welding symbols
PLO 2 - Demonstrate proficiency at an industry entry-level with Shielded Metal Arc Welding, various wire drive processes and Gas Tungsten Arc Welding
PLO 3 - Weld and cut metal as is typical of circumstances found in industrial environments
PLO 4 - Demonstrate and use industry safety standards

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (3-4 credits) - Complete one of the following:

- WR 115W - Introduction to College Writing: Workplace Emphasis
- WR 115 - Introduction to College Composition
- Any WR course higher than WR 115

Math (4-5 credits) - Complete one of the following:

- MTH 085 - Applied Geometry for Technicians
- MTH 097 - Geometry
- MTH 112 - Trigonometry

Human Relations (3-4 credits) - Complete one of the following:

- 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 Communication
- COMM 260 - Introduction to Conflict Management 4 Credit(s)

Program Core Courses

PROGRAM CORE courses must be completed with a letter grade of C- or better. P/NP is not accepted. **Complete the maximum number of credits listed for all WLD courses.**

- WLD 111 - Blueprint Reading for Welders 3 Credit(s)
- WLD 121 - Shielded Metal Arc Welding 1 1-4 Credit(s)
- WLD 122 - Shielded Metal Arc Welding 2 1-4 Credit(s)
- WLD 143 - Wire Drive Welding 1 1-4 Credit(s)
- WLD 154 - Wire Drive Welding 2 1-4 Credit(s)
- WLD 159 - Wire Drive Welding 3 1-4 Credit(s)
- WLD 160 - Wire Drive Welding 4 1-4 Credit(s)
- WLD 242 - Gas Tungsten Arc Welding 1 3 Credit(s)
- WLD 256 - Gas Tungsten Arc Welding 2 3 Credit(s)
- WLD 257 - Gas Tungsten Arc Welding 3 3 Credit(s)

Program Electives

Take 1-4 credits of Program Electives. WLD courses must be completed with a letter grade of C- or better. P/NP is not accepted. WLD 139 is only offered P/NP, and must be completed with a Pass grade. All other ELECTIVES must be completed with a grade of C- or better, or Pass.

- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- ENGR 280W - Co-op Ed: Welding 3-12 Credit(s)
- MFG 101 - Safety and Basic Shop Practice 3 Credit(s)
- MTH 060 - Beginning Algebra 4 Credit(s)
- MTH 075 - Applied Algebra for Technicians 4 Credit(s)
- Any Math course higher than MTH 075
- WLD 139 - Welding Lab 1-3 Credit(s)
- WLD 140 - Welder Qualification (Cert): Wire Drive Processes 3 Credit(s)
- WLD 141 - Welder Qualification (Cert): SMAW 3 Credit(s)
- WLD 142 - Pipe Welding Lab: Carbon Steel 3 Credit(s)

Notes

- This is the parent program for Welding Processes: Shielded Metal Arc Welder, CPC and Welding Processes: Wire Drive Welder, CPC.
- This program follows Certificate of Completion Requirements unless otherwise specified.
- A high school diploma or equivalent is recommended for all applicants to this program.

Career Pathway Certificates of Completion

All CPCs follow the Career Pathway Certificate of Completion Requirements unless otherwise specified. Go to individual certificates to see specific program requirements.

Career Pathway Certificate of Completion Requirements

Career Pathway Certificates of Completion (CPC) are between 12-44 credits and are fully embedded in an Associate of Applied Science degree or a Certificate of Completion. 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.

Certificate Requirements

Unless otherwise specified by individual programs, complete all courses with a letter grade of C- or better, or Pass.

Cumulative GPA must be at least 2.0 when the certificate is awarded.

Learning Outcomes

Lane degrees and certificates are aligned with Lane's Core Learning Outcomes and Oregon learning outcomes. View our State General Education Learning Outcomes. Certificates of completion have program-specific outcomes. See Programs (A-Z) for details.

Career Pathway Certificates offered at Lane

Lane divides CPCs into two categories—Model A: Beginning and Model B: Advanced. To learn more about Career Pathway Certificates of Completion, to see which are Model A and Model B and which degree or certificate they are embedded in, go to lanecc.edu/pathways/career-pathways-certificates.

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.

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.

Notes

College-level courses are numbered 100 or higher. Courses numbered 001-099 are considered skills based/developmental.

Courses numbered 180, 197, 199, 280, 297, 298, or 299 count as electives, and do not meet General Education requirements. Courses numbered 199 and 299 are experimental, and may later be reviewed and approved in a certificate.

Credit-by-Exam and Credit-by-Assessment may comprise up to 25% of total degree credits.

See the list of Course Types by Prefix. Policies on accepting career technical credits vary at four-year institutions in Oregon. Consult an academic advisor if considering transferring after earning an AAS.

Lower-division college-level courses (100 and 200-level) taken at Lane might not meet the requirements of an upper-division course with a similar title and content offered by other colleges and universities. In such cases, the courses in question will

Students may use up to 18 credits of Cooperative Education toward a degree/certificate. Cooperative Education may be used as part of Program Core Courses, not as General Education.

Aviation Commercial Pilot, CPC

Length: 14 credits

Program Contacts

Offered by Lane Aviation Academy

Program Coordinator: Paul Lancaster, Director of Flight Training, *LancasterP@lanecc.edu*, 541-463-4316

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated: $34,639.00

- Resident Tuition: $1,764.00*
- Technology Fees: $154.00
- General Student Fees: $336.00**
- Online Course Fee: $100.00 (if applicable)
- Books / Course Materials: $200.00
- Program Specific Fees: $32,085.00 (application fee, course fees and exams/licensure)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

This program provides students with an FAA Commercial Pilot Certificate.

Students who complete this program will be able to:

PLO 1 - Conduct safe and legal flight operations in accordance with FAA regulations
PLO 2 - Use a variety of avionics and navigation aids for both Visual (VFR) and Instrument (IFR) flight operations
PLO 3 - Apply the Aeronautical Decision Making model (ADM) with particular attention to the human element and its integration with technology, addressing FAA guidelines on hazardous attitudes
PLO 4 - Identify, assess, and respond to hazards to flight operations including weather, mechanical, medical, physiological, and psychological issues, in order to make sound go/no-go and in-flight decisions in normal and emergency circumstances
PLO 5 - Explain the functions and interactions of aerodynamics, aircraft systems, navigation, communications, regulations, and meteorology

Admission Information

This will be a limited enrollment program. Please visit the Aviation Academy web page for more information and to apply. There is a $75.00 fee to apply. lanecc.edu/aviationacademy

The program starts in Fall 2021 and only runs once per year. Note - program will switch to start summer term beginning Summer 2022.

Program Requirements

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- AP 210 - Flight Lab - Cross-Country 1 Credit(s)
- AP 212 - Commercial Pilot Ground School 5 Credit(s)
- AP 215 - Aircraft Systems & Structures 2 2 Credit(s)
- AP 220 - Flight Lab - Maneuvers 1 Credit(s)
- AP 221 - Simulator Lab - Commercial 1 Credit(s)
- AP 230 - Flight Lab - Commercial Pilot Certificate 1 Credit(s)
- AP 235 - Accident Investigations 3 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program represents the minimum core elements for an FAA Commercial Pilot Certificate.
- This program is fully contained in the Aviation Professional Pilot, AAS. Students in the degree program will complete the commercial pilot certificate requirements during their second year.

Certifications

Commercial Pilot Certificate (Single-Engine Land). AP 210, AP 220, AP 230, and AP 212 are required to take the FAA practical test, but full course completion is recommended. FAA Practical Test is administered by the FAA or an FFA Designated Pilot Examiner (DPE).

Aviation Instrument Rating, CPC

Length: 14 credits

Program Contacts

Offered by Lane Aviation Academy

Program Coordinator: Paul Lancaster, Director of Flight Training, *LancasterP@lanecc.edu*, 541-463-4316

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $34,499.00

- Resident Tuition: $1,764.00*
- Technology Fees: $154.00
- General Student Fees: $246.00**
- Online Course Fee: $50.00 (if applicable)
- Books / Course Materials: $200.00
- Program Specific Fees: $32,085.00 (Application Fee, Course Fees and Exams/Licensure)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives,) and includes any prerequisites required prior to the entry of the program.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

***This is the total of all the differential fees attached to the courses in this program.

**** Any special info about computer needs or expenses.

Program Learning Outcomes

This program provides students with an FAA Instrument Rating.

Students who complete this program will be able to:

PLO 1 - Conduct safe and legal flight operations in accordance with FAA regulations
PLO 2 - Use a variety of avionics and navigation aids for Instrument (IFR) flight operations
PLO 3 - Apply the Aeronautical Decision Making model (ADM) with particular attention to the human element and its integration with technology, addressing FAA guidelines on

hazardous attitudes
PLO 4 - Identify, assess, and respond to hazards to flight operations including weather, mechanical, medical, physiological, and psychological issues, in order to make sound go/no-go and in-flight decisions in normal and emergency circumstances
PLO 5 - Explain the functions and interactions of aerodynamics, aircraft systems, navigation, communications, regulations, and meteorology

Admission Information

This will be a limited enrollment program. Please visit the Aviation Academy web page for more information and to apply. There is a $75.00 fee to apply: lanecc.edu/aviationacademy

The program starts in Fall 2021 and only runs once per year. Note - program will switch to start summer term beginning Summer 2022.

Program Requirements

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- AP 130 - Flight lab - Attitude Control 1 Credit(s)
- AP 132 - Instrument Ground School 5 Credit(s)
- AP 135 - Advanced Avionics 1 Credit(s)
- AP 140 - Flight Lab - Instrument Rating 1 Credit(s)
- AP 141 - Simulator Lab - Instrument 1 Credit(s)
- GS 109 - Meteorology 5 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program represents the minimum core elements for an FAA Instrument Rating add-on for a Private or Commercial Pilot Certificate.
- This program is fully contained in the Aviation Professional Pilot, AAS. Students in the degree program will complete the certificate requirements during Winter and Spring of their first year.

Certifications

Instrument Rating (Single-Engine Land)

AP 130, AP 140, and AP 132 are required to take the FAA practical test, but full course completion is recommended. FAA Practical Test is administered by the FAA or an FFA Designated Pilot Examiner (DPE).

Aviation Private Pilot, CPC

Length: 17 credits

Program Contacts

Offered by Lane Aviation Academy

Program Coordinator: Paul Lancaster, Director of Flight Training, *LancasterP@lanecc.edu*, 541-463-4316

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $18,863.00 (Track A)

This track includes students at or above 180 lbs, over 6'2", over 39" sitting height.

- Resident Tuition: $2,142.00*
- Technology Fees: $187.00
- General Student Fees: $224.00**
- Online Course Fee: $140.00 (if applicable)
- Books / Course Materials: $1,000.00
- Program Specific Fees: $14,870 (Application Fee, Course Fees, and Exams/Licensure)
- Other Cost / Expenses: $300.00*** (Tools and Supplies)

Estimated Cost: $20,991.00 (Track B)

This track includes students under 180 lbs, under 6'2", under 39" sitting height.

- Resident Tuition: $2,142.00*
- Technology Fees: $187.00
- General Student Fees: $224.00**
- Online Course Fee: $140.00 (if applicable)
- Books / Course Materials: $1,000.00
- Program Specific Fees: $16,998.00 (Application Fee, Course Fees, and Exams/Licensure)
- Other Cost / Expenses: $ 300.00*** (Tools and Supplies)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

This program provides students with an FAA Private Pilot Certificate.

Students who complete this program will be able to:
PLO 1 - Conduct safe and legal flight operations in accordance with FAA regulations
PLO 2 - Use a variety of avionics and navigation aids for Visual (VFR) flight operations
PLO 3 - Apply the Aeronautical Decision Making model (ADM) with particular attention to the human element and its integration with technology, addressing FAA guidelines on hazardous attitudes
PLO 4 - Identify, assess, and respond to hazards to flight operations including weather, mechanical, medical, physiological, and psychological issues, in order to make sound go/no-go and in-flight decisions in normal and emergency circumstances
PLO 5 - Explain the functions and interactions of aerodynamics, aircraft systems, navigation, communications, regulations, and meteorology

Admission Information

This will be a limited enrollment program. Please visit the Aviation Academy web page for more information and to apply. There is a $75.00 fee to apply. lanecc.edu/aviationacademy

The program starts in Fall 2021 and only runs once per year. Note - program will switch to start summer term beginning Summer 2022.

Program Requirements

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

Track A courses designed for students at or above 180 lbs, over 6'2", over 39" sitting height
Track B courses designed for students under 180 lbs, under 6'2", under 39" sitting height

- AP 110A - Flight Lab - Pre-Solo 1 Credit(s) or AP 110B
- AP 112 - Private Pilot Ground School 5 Credit(s)
- AP 113 - Airman Certification Standards and Maneuvers 1 Credit(s)
- AP 115 - Intro to Aviation and Careers 1 Credit(s)
- AP 120A - Flight Lab - Private Pilot Certificate 1 Credit(s) AP 120B
- AP 121 - Simulator Lab - Private 1 Credit(s)
- AP 125 - Aircraft Systems & Structures 1 2 Credit(s)
- AP 126 - Aviation Weather Services 2 Credit(s)
- AP 127 - Aerodynamics 3 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program represents the minimum core elements for a Private Pilot Certificate.
- This program is fully contained in the Aviation Professional Pilot, AAS. Students in the degree program will complete these certificate requirements in their first two terms.

Certifications

Private Pilot Certificate (Single-Engine Land)

(AP 110A or AP 110B) and (AP 120A or AP 120B) and AP 112 are required to take the FAA practical test, but full course completion is recommended. FAA Practical Test is administered by the FAA or an FFA Designated Pilot Examiner (DPE).

Business Management: Small Business Ownership, CPC

Length: 35 credits

Program Contacts

Offered by the Business Department

Program Coordinators: LuAnne Johnson (*johnsonlm@lanecc.edu*, 541-463-5767 and Tim Hovet (*hovett@lanecc.edu*, 541-463-5537

Business Advising Team: *BusinessAdvising@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $7,314.00

- Resident Tuition: $4,410.00*
- Technology Fees: $385.00
- General Student Fees: $402.00**
- Online Course Fee: $350.00 (if applicable)
- Books / Materials: $767.00
- Other Costs or Expenses: $1,000.00***

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program 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.

Students who complete this program will be able to:

PLO 1 - Design and utilize QuickBooks as a tool to efficiently meet an organizations accounting and tax compliance responsibilities
PLO 2 - Determine the appropriate type of business entity for various business endeavors, and understand, outline and evaluate the components of a business plan
PLO 3 - Recognize how the major elements of the marketing process apply to small business marketing situations
PLO 4 - Understand his or her motivations and the reality of owning a small business, and understand the legal implications of being a business owner
PLO 5 - Understand the historical role and evolving trends in small business including: transitions to paperless environments, globalization, role of e-commerce, and sustainability
PLO 6 - Understand the link between accounting data and the underlying business reality, and use the accounting equation for analyzing business transactions and creating financial statements
PLO 7 - 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
PLO 8 - Use cell, row and column, and worksheet formatting techniques to create professional-looking spreadsheets for analyzing business decisions
PLO 9 - Use sophisticated Excel functions to perform sensitivity analysis to solve business problems

Program Requirements

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP not accepted.

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

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Business Management, AAS degree.

Commercial Cooking: Food Production/Prep Cook, CPC

Length: 15 credits

Program Contacts

Offered by the Culinary Arts and Hotel/Restaurant/Tourism Management department

Program Coordinator: Clive Wanstall, wanstallc@lanecc.edu, 541-462-3507

Academic Advising Team: *CulinaryHospPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $3,587.00

- Resident Tuition: $1,890.00*
- Technology Fees: $165.00
- General Student Fees: $134.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $235.00
- Program Specific Fees: $310.00 (culinary course fees)
- Other Cost / Expenses: $430.00*** (knife, baker kit, uniform & shoes)
- Differential Fees: $423.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

Prepare commercial cooks with practical skills and safe food preparation technical knowledge to enable successful entry and potentially accelerated upward mobility in a wide range of kitchens and food production facilities.

Students who complete this program will be able to:

PLO 1 - Safely and effectively operate current standard commercial cooking equipment including cook tops, food processors, ovens (baking, convection, and conventional), dough mixers, meat slicers, and a variety of kitchen hand tools
PLO 2 - Apply fundamental theory, culinary skills and techniques, and time management principles to prepare industry standard food products
PLO 3 - Consistently employ sanitation concepts including high standards of personal hygiene, appropriate cleaning and sanitizing of equipment, and correct processing and storage of potentially hazardous foods according to the HACCP concept
PLO 4 - Perform basic math functions, measure and scale ingredients and portions, and convert recipes to higher and lower yields
PLO 5 - Define and employ the basic terms and key concepts used in the preparation of volume foods

Admission Information

Selective-entry admission; there is a separate program application located at lanecc.edu/culinary.

There are non-refundable program fees to cover tools and uniforms. There is a uniform fitting around four weeks prior to classes commencing.

Must obtain Oregon Health Authority Food Handlers Certification before being accepted into the program.

Show readiness for MTH 025C or higher and WR 097 or higher.

Program Requirements

Program Core Courses (15 credits)

Program Core courses must be completed with a grade of C- or better. P/NP is not accepted.

- CA 160 - Introduction to Cooking Theories 1 7 Credit(s)
- CA 175 - Foodservice Sanitation and Safety 2 Credit(s)
- HRTM 100 - Introduction to Culinary and Hospitality 3 Credit(s)
- Complete one Math course selected from the following:
  - MTH 025C - Basic Mathematics Applications 3 Credit(s) (Recommended)
  - MTH 025 - Basic Mathematics Applications 3 Credit(s)
  - Any Math higher than MTH 025

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Commercial Cooking, 1-yr Certificate degree.
- Successful students will receive the National Restaurant Association ServSafe Food Protection Manager Certification administered by Lane faculty.
- Students may choose to continue to attend Culinary arts classes to further develop their employable skill set or decide to enter the Baking & Pastry or Hotel/Tourism fields, which have some overlapping courses currently with Lane.
- This Career Pathways Certificate offers multiple entry points for a career path in the largest employment sector in Oregon combined with the ability for shorter job specific training.
- The graduate should be well positioned for joining the workforce with upward mobility, being exposed to the industry holistically and the values of lifelong learning.

Commercial Unmanned Aerial Systems: Aerial Photography, CPC

Length: 12 credits

Program Contacts

Offered by Lane Aviation Academy

Program Coordinator: Walter (Sean) Parrish, Chief Flight Instructor, *parrishw@lanecc.edu*, 541-463-4323

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $4,036.00

- Resident Tuition: $1,512.00*
- Technology Fees: $132.00
- General Student Fees: $402.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $ 400.00
- Program Specific Fees: $ 1,590.00 (course fees and Exams/licensure)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students for successful careers in Aerial Photography in Unmanned Aerial Systems (UAS).

Students who complete this program will have:

PLO 1 - Integrate unmanned flights into the NAS safely and effectively
PLO 2 - Safely and effectively plan and execute unmanned aircraft missions
PLO 3 - Safely pilot unmanned aircraft systems in normal and simulated emergency flight operations
PLO 4 - Apply the principles of photography and videography in unmanned operations

Program Requirements

Program Core Courses

FT courses must be completed with a letter grade of C- or better. P/NP is not accepted. All other courses must be completed with a grade of C- or better, or Pass.

Ground School (6 credits) - Complete both of the following:

- AP 112 - Private Pilot Ground School 5 Credit(s)
- FT 123 - Commercial UAS Ground School 1 Credit(s)

UAS Flight Labs (2 credits) - Complete both of the following:

- FT 124A - UAS Flight Lab 1 Credit(s)
- FT 124B - UAS Flight Lab 1 Credit(s)

Photography (4 credits) - Complete one of the following:

- ART 282 - Landscape and Architectural Photography 4 Credit(s)
- MUL 105 - Digital Photography 4 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Commercial Unmanned Aerial Systems, AAS degree.

Licensing and Certification

Commercial FAA Unmanned Aerial Systems (UAS) Part 107 license

Commercial Unmanned Aerial Systems: Geographic Information Science, CPC

Length: 25 credits

Program Contacts

Offered by Lane Aviation Academy

Program Coordinator: Walter (Sean) Parrish, Chief Flight Instructor, *parrishw@lanecc.edu*, 541-463-4323

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $7,377.00

- Resident Tuition: $3,150.00*
- Technology Fees: $275.00
- General Student Fees: $402.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $600.00
- Program Specific Fees: $2,950.00 (Course Fees and Exams/Licensure)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students for successful careers in Geographic Information Science in Unmanned Aerial Systems (UAS).

Students who complete this program will have:

PLO 1 - Integrate unmanned flights into the NAS safely and effectively
PLO 2 - Safely and effectively plan and execute field missions in a variety of situations utilizing current unmanned aircraft systems
PLO 3 - Work safely and effectively within a crew/team environment utilizing current unmanned technology
PLO 4 - Safely pilot unmanned aircraft systems in normal and simulated emergency flight operations
PLO 5 - Utilize spatial data and GIS technology to make or inform appropriate decisions and create deliverable geospatial products

Program Requirements

Program Core Courses

FT courses must be completed with a letter grade of C- or better. P/NP is not accepted. GIS courses must be completed with a grade of C- or better, or Pass.

- AP 112 - Private Pilot Ground School 5 Credit(s)
- FT 123 - Commercial UAS Ground School 1 Credit(s)
- FT 230 - UAS Data Acquisition and Analysis 3 Credit(s)

UAS Flight Labs (4 Credits)

- FT 124A - UAS Flight Lab 1 Credit(s)
- FT 124B - UAS Flight Lab 1 Credit(s)
- FT 124C - UAS Flight Lab 1 Credit(s)
- FT 124D - UAS Flight Lab 1 Credit(s)

GIS Courses (12 Credits)

- GIS 151 - Digital Earth 4 Credit(s)
- GIS 245 - GIS 1 4 Credit(s)
- GIS 246 - GIS 2 4 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Commercial Unmanned Aerial Systems, AAS degree.

Licensing and Certification

Commercial FAA Unmanned Aerial Systems (UAS) Part 107 license, Pix4D certification.

Computer Network Monitoring and Management, CPC

Length: 12 credits

Program Contacts

Offered by the Computer and Information Technology department

Program Coordinator: Joseph Colton, *coltonj@lanecc.edu*, 541-463-5249

CIT Academic Advising Team: *CITPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $2,504.00

- Resident Tuition: $1,512.00*
- Technology Fees $132.00
- General Student Fees $134.00**
- Online Course Fees (if applicable)
- Program Specific Fees: $ 26.00 (data fee)
- Other Costs and Expenses: $ 700.00*** (Computer / Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to 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.

Students who complete this program will be able to:

PLO 1 - Understand the performance fundamentals required to keep computer networks efficient
PLO 2 - Install and configure Windows and Linux servers and Cisco routers and switches
PLO 3 - Identify sources of network performance problems and resolve them
PLO 4 - Implement the SNMP protocol on various networked devices
PLO 5 - Understand the importance of proactive management and planning for growth
PLO 6 - Install and configure an enterprise network monitoring package to track performance and availability of services
PLO 7 - Implement event handlers and notification/alert systems
PLO 8 - Use protocol analysis software to monitor traffic and solve network problems

Program Requirements

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted.

- CS 240U - Advanced Unix/Linux: Server Management 4 Credit(s)
- CS 240W - Advanced Windows: Server Management 4 Credit(s)
- CS 288 - Network Monitoring and Management 4 Credit(s)

Notes

- This program is fully contained in the Computer Network Operations, AAS degree
- This program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.

Computer Programming: Database Specialist, CPC

Length: 20 credits

Program Contacts

Offered by the Computer and Information Technology department

Program Coordinator: Pam Farr, farrp@lanecc.edu,541-463-5464

CIT Academic Advising Team: *CITPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $4,128.00

- Resident Tuition: $2,520.00*
- Technology Fees: $220.00
- General Student Fees: $402.00**
- Online Course Fees: (if applicable)
- Books / Materials: $8.00
- Program Specific Fees: $78.00 (Data Fee)

Other Cost / Expenses: $900.00*** (Computer / Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare technicians for entry-level positions as database specialists.

Students who complete this program will be able to:

PLO 1 - Design, implement, test, debug and document relational database systems using a variety of current tools and technologies
PLO 2 - Explain and model the relationship between computer programs and organizational processes
PLO 3 - Translate database related problems into SQL logic and expressions
PLO 4 - Use appropriate library and information resources to research database technologies and support lifelong technical learning

Program Requirements

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted.

Computer Science Sequence - Complete one of the following options (8 credits):

- **Option 1: C#**
  - CS 161N - Computer Science 1 4 Credit(s) (recommended)
  - CS 162N - Computer Science 2 4 Credit(s) (recommended)
- **Option 2: C++**
  - CS 161C - Computer Science 1 4 Credit(s)
  - CS 162C - Computer Science 2 4 Credit(s)
- **Option 3: Python**
  - CS 161P - Computer Science 1 4 Credit(s)
  - CS 162P - Computer Science 2 4 Credit(s)
- **Complete all of the following (12 credits):**
  - CS 275 - Basic Database SQL 4 Credit(s)
  - CS 276 - Database Systems and Modeling 4 Credit(s)
  - CS 234N - Advanced Programming: C# 4 Credit(s)

Notes

- This program is fully contained in the Computer Programming, AAS degree.
- This program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.
- Computer programming languages: Students' taking their first programming language (C, N, or P) will take CS 161/162. Because CS 161/162 are not repeatable courses, upon taking a second programming language, students must use the CS 133/233 course numbers. CS 161/162 are the courses listed in catalog degree requirements but CS 133/233 will be accepted as well. For help with this, contact the department or academic advisors.

Certifications

By completing CS 275 and CS 276, students can take the Oracle Certified Foundations Associate Exam.

Computer Programming: Front End Web Development, CPC

Length: 20 credits

Program Contacts

Offered by the Computer and Information Technology department

Program Coordinator: Marilou Good, goodm@lanecc.edu, 541-463-5838

CIT Academic Advising Team: *CITPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $4,355.00

- Resident Tuition: $2,520.00*
- Technology Fees: $220.00
- General Student Fees: $402.00**
- Online Course Fee: $200.00 (if applicable)
- Books / Materials: $35.00
- Program Specific Fees $78.00 (Data Fee)
- Other Cost / Expenses: $900.00*** (Computer / Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to 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 front-end 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.

Students who complete this program will be able to:

PLO 1 - Design and build interactive web sites using client-side technologies
PLO 2 - Design and build object-oriented programs
PLO 3 - Evaluate your own work and the work of others

Program Requirements

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted.

- CIS 195 - Web Authoring 1 4 Credit(s)

Javascript (8 credits) - Complete both of the following:

- CS 133JS - Beg. Programming: JavaScript 4 Credit(s)
- CS 233JS - Intermediate Programming: JavaScript 4 Credit(s)

Computer Science (8 credits) - Complete both of the following:

- CS 161N - Computer Science 1 4 Credit(s)
- CS 162N - Computer Science 2 4 Credit(s)

Notes

- This program is fully contained in the Computer Programming, AAS degree.
- This program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.
- Computer programming languages: Students' taking their first programming language (C, N, or P) will take CS 161/162. Because CS 161/162 are not repeatable courses, upon taking a second programming language, students must use the CS 133/233 course numbers. CS 161/162 are the courses listed in catalog degree requirements but CS 133/233 will be accepted as well. For help with this, contact the department or academic advisors.

Computer Programming: Mobile Application Development, CPC

Length: 16 credits

Program Contacts

Offered by the Computer and Information Technology department

Program Coordinator: Brian Bird, *birdb@lanecc.edu*, 541-463-3024

CIT Academic Advising Team: *CITPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $3,472.00

- Resident Tuition: $2,016.00*
- Technology Fees: $176.00
- General Student Fees: $268.00**
- Online Course Fee: $160.00 (if applicable)
- Program Specific Fees: $52.00 (Data Fee)
- Other Cost / Expenses: $800.00**** (Computer / Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare technicians for entry-level positions as mobile application programmers.

Students who complete this program will be able to:

PLO 1 - Design, implement, test, debug and document mobile application based computer programs using a variety of current tools and technologies
PLO 2 - Design, implement, test, debug and document object-oriented computer programs
PLO 3 - Interpret the mathematical concepts of a programming related problem-solving task and translate them into programming logic and expressions
PLO 4 - Use appropriate library and information resources to research programming tools and technologies and support lifelong technical learning

Program Requirements

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. Students completing the AAS: Computer Programming degree must complete Computer Science 1 & 2 with a grade of B- or better. P/NP not accepted.

- CS 161N - Computer Science 1 4 Credit(s)
- CS 162N - Computer Science 2 4 Credit(s)
- CS 235AM - Intermediate Mobile Application Development: Android 4 Credits
- CS 235IM - Intermediate Mobile Applications Development: IOS 4 Credit(s)

Notes

- This program is fully contained in the Computer Programming, AAS degree.
- This program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.
- Computer programming languages: Students' taking their first programming language (C, N, or P) will take CS 161/162. Because CS 161/162 are not repeatable courses, upon taking a second programming language, students must use the CS 133/233 course numbers. CS 161/162 are the courses listed in catalog degree requirements but CS 133/233 will be accepted as well. For help with this, contact the department or academic advisors.

Construction Trades, General Apprenticeship: Trade Worker Apprenticeship Technologies, CPC

Length: Varies depending on trade area

Program Contacts

Offered by the Advanced Technology department

Program Coordinator: Joy Crump, *crumpj@lanecc.edu*, 541-463-5496

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $4,344.00

- Resident Tuition: $2,520.00*
- Technology Fees: $220.00
- General Student Fees: $804.00**
- Online Course Fee (if applicable)
- Books / Course Materials: $800.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to provide a structured system of training in construction fundamentals to prepare students with the skills and knowledge required to enter the construction trade.

Students who complete this program will be able to:

PLO 1 - Apply theory as it relates to trade competencies
PLO 2 - Successfully complete all required core related-training with a grade of C or better for individual trade
PLO 3 - Perform the duties & responsibilities of the individual construction trade/occupation
PLO 4 - 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.

Program Requirements

Program Core Courses

Complete all courses listed in one of the following trades. Program Core course must be completed with a letter grade of C or better. P/NP is not accepted.

Carpenters (18 credits)

- APR 115 - Carpentry Skill Fundamentals 3 Credit(s)
- APR 116 - Carpentry Framing Fundamentals 3 Credit(s)
- APR 117 - Carpentry Framing and Introduction to Concrete 3 Credit(s)
- APR 118 - Carpentry Framing and Finishing 3 Credit(s)
- APR 119 - Carpentry Commercial Plans and Exterior Finish 3 Credit(s)
- APR 120 - Carpentry Interior Finish 3 Credit(s)

HVAC Technician/Installer (12 credits)

- APR 101A - Trade Skills Fundamentals 4 Credit(s)
- APR 140 - Electrical Systems Installation Methods 4 Credit(s)
- APR 190 - Electrical Theory 1 1-4 Credit(s) (take 4 credits of APR 190)

Plumbers (20 credits)

- APR 160 - Plumbing Skill Fundamentals 4 Credit(s)
- APR 161 - Plumbing Materials and Fixtures 4 Credit(s)
- APR 162 - Plumbing Basic Waste Water Systems 2 Credit(s)
- APR 163 - Plumbing Calculations and Print Reading 4 Credit(s)
- APR 164 - Plumbing Basic Installation 1 4 Credit(s)
- APR 165 - Plumbing Basic Installation 2 2 Credit(s)

Sheet Metal Workers (12 credits)

- APR 101A - Trade Skills Fundamentals 4 Credit(s)
- APR 170 - Introduction to Sheet Metal Apprenticeship 4 Credit(s)
- APR 171 - Sheet Metal Basic Layout 4 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is contained in the Construction Trades, General Apprenticeship, AAS.

Drafting for Commercial Construction, CPC

Length: 16 credits

Program Contacts

Offered by: Advanced Technology, lanecc.edu/advtech

Program Coordinator: Margaret Robertson, *robertsonm@lanecc.edu*

Advanced Technology Academic Advising: *AdvTechPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $4,520.00

- Resident Tuition: 2,016.00*
- Technology Fees: $176.00
- General Student Fees: $268.00** (if applicable)
- Online Course Fee: $160.00
- Books / Course Materials: $650.00
- Other Cost / Expenses: $ 1,250.00*** (computer/Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Hardware: In order to run AutoCAD, Revit, and SolidWorks software, students need a computer with Windows 10 or newer operating system; CPU of 3.3 GHz or higher; 8 GB of RAM, with 16 GB recommended; 30 GB free disk space for download and installation, plus 500 GB or more storage; graphics card capable of 24-bit color and DirectX 11 compliant, such as Nvidia Quadro series, AMD FirePro series, or AMD Radeon series; at least two USB ports; and an external mouse. (A computer with Mac OS can run AutoCAD software, but not Revit or SolidWorks.) A limited number of laptops are available on loan from the LCC Student Helpdesk. In addition, students need a way to store backup copies of all files, such as a flash drive, external hard drive, or cloud service.

Connectivity: Students need a reliable internet connection; a browser such as Google Chrome or Firefox; and a robust antivirus and firewall product such as McAfee or Norton, kept up to date.

Software: Students need Microsoft Office, with Word, Excel, and PowerPoint, available free to LCC students. Students will need the current version of AutoCAD, Revit, and SolidWorks software and will get instructions in classes for downloading free educational versions.

Program Learning Outcomes

The purpose of this program is to prepare students and working professionals to collaborate with contractors, architects, engineers, and designers (AEC) as effective members of AEC teams.

Students who complete this program will be able to:

PLO 1 - Create architectural drawings which follow recognized national standards for format, annotation, lines, and symbols
PLO 2 - Identify the components of a typical set of construction documents
PLO 3 - Analyze forces acting on structures using the concept of equilibrium
PLO 4 - Use graphical methods or simple trigonometry to analyze forces on beams, trusses, and columns
PLO 5 - Describe the basic contracting process for commercial projects

Program Requirements

Program Core Courses

All courses must be completed with a letter grade of C- or better. P/NP is not accepted.

- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- DRF 205 - Drafting: Structures 4 Credit(s)
- DRF 210 - Commercial Buildings 4 Credit(s)
- DRF 220 - Building Information Modeling 4 Credit(s)

Notes

- This program is fully contained in the Drafting, AAS degree.
- This program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.
- A high school diploma or equivalent is recommended for all applicants to this program.

Drafting for Manufacturing, CPC

Length: 12 credits

Program Contacts

Offered by: Advanced Technology, lanecc.edu/advtech

Program Coordinator: Margaret Robertson, *robertsonm@lanecc.edu*, 541-463-3143

Advanced Technology Academic Advising: *AdvTechPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $3,598.00

- Resident Tuition: $1,512.00*
- Technology Fees: $132.00
- General Student Fees: $133.00** (if applicable)
- Online Course Fee: $120.00
- Books / Course Materials: $450.00
- Other Cost / Expenses: $ 1,250.00*** (computer/Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Hardware: In order to run AutoCAD, Revit, and SolidWorks software, students need a computer with Windows 10 or newer operating system; CPU of 3.3 GHz or higher; 8 GB of RAM, with 16 GB recommended; 30 GB free disk space for download and installation, plus 500 GB or more storage; graphics card capable of 24-bit color and DirectX 11 compliant, such as Nvidia Quadro series, AMD FirePro series, or AMD Radeon series; at least two USB ports; and an external mouse. (A computer with Mac OS can run AutoCAD software, but not Revit or SolidWorks.) A limited number of laptops are available on loan from the LCC Student Helpdesk. In addition, students need a way to store backup copies of all files, such as a flash drive, external hard drive, or cloud service.

Connectivity: Students need a reliable internet connection; a browser such as Google Chrome or Firefox; and a robust antivirus and firewall product such as McAfee or Norton, kept up to date.

Software: Students need Microsoft Office, with Word, Excel, and PowerPoint, available free to LCC students. Students will need the current version of AutoCAD, Revit, and SolidWorks software and will get instructions in classes for downloading free educational versions.

Program Learning Outcomes

This program is designed for those entering or currently working in the field of manufacturing who wish to deepen their understanding of mechanical drawing standards and methods and to develop their two-dimensional drawing and three-dimensional computer modeling skills.

Students who complete this program will be able to:

PLO 1 - Appropriately apply mechanical dimensioning and tolerancing standards
PLO 2 - Use computer-aided drafting software to create mechanical drawings
PLO 3 - Use solid modeling software to create three-dimensional parts, assemblies, and drawings with parts lists

Program Requirements

Program Core Courses

All courses must be completed with a letter grade of C- or better. P/NP is not accepted.

- DRF 121 - Mechanical Drafting 4 Credit(s)
- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- DRF 245 - Solid Modeling 4 Credit(s)

Notes

- This program is fully contained in the Drafting, AAS degree.
- This program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.
- A high school diploma or equivalent is recommended for all applicants to this program.

Drafting for Residential Construction, CPC

Length: 12 credits

Program Contacts

Offered by: Advanced Technology, lanecc.edu/advtech

Program Coordinator: Margaret Robertson, *robertsonm@lanecc.edu*

Advanced Technology Academic Advising: *AdvTechPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $ 3,598.00

- Resident Tuition: $1,512.00*
- Technology Fees: $132.00
- General Student Fees: $135.00** (if applicable)
- Online Course Fee: $120.00
- Books / Course Materials: $450.00
- Other Cost / Expenses: $ 1,250.00*** (computer/Internet)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Hardware: In order to run AutoCAD, Revit, and SolidWorks software, students need a computer with Windows 10 or newer operating system; CPU of 3.3 GHz or higher; 8 GB of RAM, with 16 GB recommended; 30 GB free disk space for download and installation, plus 500 GB or more storage; graphics card capable of 24-bit color and DirectX 11 compliant, such as Nvidia Quadro series, AMD FirePro series, or AMD Radeon series; at least two USB ports; and an external mouse. (A computer with Mac OS can run AutoCAD software, but not Revit or SolidWorks.) A limited number of laptops are available on loan from the LCC Student Helpdesk. In addition, students need a way to store backup copies of all files, such as a flash drive, external hard drive, or cloud service.

Connectivity: Students need a reliable internet connection; a browser such as Google Chrome or Firefox; and a robust antivirus and firewall product such as McAfee or Norton, kept up to date.

Software: Students need Microsoft Office, with Word, Excel, and PowerPoint, available free to LCC students. Students will need the current version of AutoCAD, Revit, and SolidWorks software and will get instructions in classes for downloading free educational versions.

Program Learning Outcomes

This program is designed for those entering or currently practicing in the field of residential construction who wish to deepen or develop their understanding of construction documents and basic design.

Students who complete this program will be able to:

PLO 1 - Use computer-aided drafting software to create residential construction documents
PLO 2 - Create architectural drawings which follow recognized national standards for format, annotation, lines, and symbols
PLO 3 - Analyze forces acting on structures using the concept of equilibrium
PLO 4 - Use graphical methods or simple trigonometry to analyze forces on beams, trusses, and columns

Program Requirements

Program Core Courses

All courses must be completed with a letter grade of C- or better. P/NP is not accepted.

- DRF 137 - Architectural Plans 4 Credit(s)
- DRF 160 - Computer-Aided Drafting and Design 4 Credit(s)
- DRF 205 - Drafting: Structures 4 Credit(s)

Notes

- This program is fully contained in the Drafting, AAS degree.
- This program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.
- A high school diploma or equivalent is recommended for all applicants to this program.

Early Childhood Education: Guidance and Curriculum, CPC

Length: 20 credits

Program Contacts

Offered by the Social Science Division

Program Coordinator: Kathleen Lloyd, *lloydk@lanecc.edu*, 541-463-5287

Academic Advising Team: *EducationAdvising@lanecc.edu;* contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $3,827.00

- Resident Tuition: $2,520.00*
- Technology Fees: $220.00
- General Student Fees: $267.00** (if applicable)
- Online Course Fee: $200.00
- Books / Course Materials: $500.00
- Program Specific Fees: $120.00 (MMR immunization if needed)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare graduates to work as early childhood education teaching assistants.

Students who complete this program will be able to:

PLO 1 - Plan learning opportunities that align with D.A.P. (developmentally appropriate practice)
PLO 2 - Examine philosophies, approaches, and theories of development relating to the early years
PLO 3 - Describe the use of positive guidance strategies that support moral autonomy in young children
PLO 4 - Recognize the developmental needs and characteristics of young children in cognitive, language, social, emotional, and physical domains

Program Requirements

Program Core Courses

Core classes must be completed with a grade of C- or better, or Pass.

- ECE 120 - Introduction to Early Childhood 2 Credit(s)
- ECE 130 - Guidance of Young Children 3 Credit(s)
- ECE 150 - Creative Activities for Children 3 Credit(s)
- ECE 160 - Exploring Early Childhood Curriculum 4 Credit(s)
- ECE 210 - Applying Early Childhood Curriculum 4 Credit(s)

Supervised Teaching - Complete 4 credits of the following:

- ECE 240 - Supervised Student Teaching 4 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Early Childhood Education degree.
- Immunization is required prior to enrolling in ECE 240 - Supervised Student Teaching. More information at lanecc.edu/socialscience/early-childhood-education.
- Some ECE and HDFS courses are offered through College Now at high schools in Lane County and outlying areas. For more information, see lanecc.edu/hsconnections/collegenow/courses-high-school
- Students seeking support with Reading / Writing / Math or English Language skills while transitioning to Early Childhood classes may apply to PASS Lane ECE. Contact Marcia Koenig (koenigm@lanecc.edu) 541-463-5818, Bldg 4/215.

- Students receiving SNAP food stamp benefits who are completing ECE Certificates may contact STEP at Lane program for coaching and access to financial resources.
- Prerequisites are not required for most ECE courses. See course description.
- Transfer Credit for Prior Learning may be granted based on OCCD Oregon Registry Steps. Please contact the Program Coordinator, Kathleen Lloyd.
- Students seeking this certificate will complete 90 hours of student teaching (ECE 240). Please contact the Program Coordinator, Kathleen Lloyd, for further information and to schedule your hours.

Credential

ECE students are encouraged to enroll in the Oregon Registry (pdx.edu/occd), a statewide professional recognition program that records and recognizes the growth and achievements of early childhood care and education professionals. Step 7 provides the Child Development Associate (CDA) Credential. College credit is also available for individuals at Step 7 or higher on the Oregon Registry, based on community training hours. Child Development Associate (CDA).

Early Childhood Education: Infant and Toddler, CPC

Length: 17 credits

Program Contacts

Offered by the Social Science Division

Program Coordinator: Kathleen Lloyd, *lloydk@lanecc.edu*, 541-463-5287

Academic Advising Team: *EducationAdvising@lanecc.edu;* contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $3,586.00

- Resident Tuition: $2,142.00*
- Technology Fees: $187.00
- General Student Fees: $267.00** (if applicable)
- Online Course Fee: $170.00
- Books / Course Materials: $700.00
- Program Specific Fees: $120.00 (MMR immunization if needed)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students to plan environments of high quality for infants and toddlers and to carry out developmentally appropriate curriculum.

Students who complete this program will be able to:
PLO 1 - Analyze the elements in developmentally appropriate environments for infants and toddlers
PLO 2 - Describe the use of positive guidance strategies that support moral autonomy in young children
PLO 3 - Recognize the developmental needs and characteristics of young children in cognitive, language, social, emotional, and physical domains
PLO 4 - Define state rules and regulations that govern certification of infant and toddler centers

Program Requirements

Program Core Courses

Core classes must be completed with a grade of C- or better, or Pass.

- ECE 130 - Guidance of Young Children 3 Credit(s)
- ECE 170 - Infants and Toddlers Development 4 Credit(s)
- ECE 250 - Infant and Toddler Environments 3 Credit(s)
- HDFS 226 - Child Development 3 Credit(s)

Supervised Teaching - Complete 4 credits of the following:

- ECE 240 - Supervised Student Teaching 4 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Early Childhood Education, AAS degree.
- Immunization is required prior to enrolling in ECE 240 - Supervised Student Teaching. More information at lanecc.edu/socialscience/early-childhood-education
- Some ECE and HDFS courses are offered through College Now at high schools in Lane County and outlying areas. For more information, see lanecc.edu/hsconnections/collegenow/courses-high-school
- Students seeking support with Reading / Writing / Math or English Language skills while transitioning to Early Childhood classes may apply to PASS Lane ECE. Contact Marcia Koenig (koenigm@lanecc.edu) 541-463-5818, Bldg 4/215.
- Students receiving SNAP food stamp benefits who are completing ECE Certificates may contact STEP at Lane program for coaching and access to financial resources.
- Prerequisites are not required for most ECE courses. See course descriptions.
- Transfer Credit for Prior Learning may be granted based on OCCD Oregon Registry Steps. Please contact the Program Coordinator, Kathleen Lloyd.
- Students seeking this certificate will complete 90 hours of student teaching (ECE 240). Please contact the Program Coordinator, Kathleen Lloyd, for further information and to schedule your hours.

Credential

ECE students are encouraged to enroll in the Oregon Registry (pdx.edu/occd), a statewide professional recognition program that records and recognizes the growth and achievements of early childhood care and education professionals. Step 7 provides the Child Development Associate (CDA) Credential. College credit is also available for individuals at Step 7 or higher on the Oregon Registry, based on community training hours. Child Development Associate (CDA).

Early Childhood Teacher Aide, CPC

Length: 17 credits

Program Contacts

Offered by the Social Science Division

Program Coordinator: Kathleen Lloyd, *lloydk@lanecc.edu*, 541-463-5287

Academic Advising Team: *EducationAdvising@lanecc.edu;* contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $3,486.00

- Resident Tuition: $2,142.00*
- Technology Fees: $187.00
- General Student Fees: $267.00**(if applicable)
- Online Course Fee: $170.00
- Books / Course Materials: $600.00
- Program Specific Fees: $120.00 (MMR immunization if needed)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students 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

Students who complete this program will be able to:
PLO 1 - Apply the principles of creative expression to plan developmentally appropriate experiences for young children in the arts
PLO 2 - Examine philosophies, approaches, and theories of development related to early childhood
PLO 3 - Describe the use of positive guidance strategies that support moral autonomy in young children
PLO 4 - Define health and safety state rules and regulations that govern the licensing of early childhood programs
PLO 5 - Demonstrate, in a supervised setting, the use of positive guidance strategies that support moral autonomy in young children

Program Requirements

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- ECE 105 - Health and Safety Issues in Early Childhood Education 2 Credit(s)
- ECE 120 - Introduction to Early Childhood 2 Credit(s)
- ECE 130 - Guidance of Young Children 3 Credit(s)
- ECE 150 - Creative Activities for Children 3 Credit(s)
- HDFS 226 - Child Development 3 Credit(s)

Supervised Teaching - Complete 4 credits of the following:

- ECE 240 - Supervised Student Teaching 4 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements.
- This program is fully contained in the Early Childhood Education, AAS.
- Immunization is required prior to enrolling in ECE 240 - Supervised Student Teaching. More information at lanecc.edu/socialscience/early-childhood-education
- Some ECE and HDFS courses are offered through College Now at high schools in Lane County and outlying areas. For more information, see lanecc.edu/hsconnections/collegenow/courses-high-school
- Students seeking support with Reading / Writing / Math or English Language skills while transitioning to Early Childhood classes may apply to PASS Lane ECE. Contact Marcia Koenig (*koenigm@lanecc.edu*) 541-463-5818, Bldg 4/215
- Students receiving SNAP food stamp benefits who are completing ECE Certificates may contact STEP at Lane program for coaching and access to financial resources.
- Prerequisites are not required for most ECE and HDFS courses. See course descriptions.
- Transfer Credit for Prior Learning may be granted based on OCCD Oregon Registry Steps. Please contact the Program Coordinator, Kathleen Lloyd.
- Students seeking this certificate will complete 90 hours of student teaching (ECE 240). Please contact the Program Coordinator, Kathleen Lloyd, for further information and to schedule your hours.

Credential

ECE students are encouraged to enroll in the Oregon Registry (pdx.edu/occd), a statewide professional recognition program that records and recognizes the growth and achievements of early childhood care and education professionals. Step 7 provides the Child Development Associate (CDA) Credential. College credit is also available for individuals at Step 7 or higher on the Oregon Registry, based on community training hours. Child Development Associate (CDA).

Electrician Apprenticeship Technologies: Trade Worker Apprenticeship Technologies, CPC

Length: Varies depending on trade area

Program Contacts

Offered by the Advanced Technology department

Program Coordinator: Joy Crump, *crumpj@lanecc.edu*, 541-463-5496

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $4,622.00

- Resident Tuition: $3,276.00*
- Technology Fees: $286.00
- General Student Fees: $30.00**
- Online Course Fee: $260.00 (if applicable)
- Books / Course Materials: $620.00
- Program Specific Fees: $150.00 (Apprenticeship Dept Fee)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is 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.

Students who complete this program will be able to:

PLO 1 - Apply theory to electrical systems
PLO 2 - 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.

Program Requirements

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted. Complete all courses listed in one of the following trades.

Limited Energy Technician License A (24 credits)

- APR 101A - Trade Skills Fundamentals 4 Credit(s)
- APR 140 - Electrical Systems Installation Methods 4 Credit(s)
- APR 141 - Limited Voltage Electrical Circuits 4 Credit(s)
- APR 142 - Devices, Testing Equipment and Code 4 Credit(s)
- APR 143 - Limited Voltage Cabling 4 Credit(s)
- APR 144 - Communications 4 Credit(s)

Manufacturing Plant Electrician (16 credits)

Complete the maximum number of credits listed for each course in this trade area.

- APR 190 - Electrical Theory 1 1-4 Credit(s)
- APR 191 - Electrical Theory 2 1-4 Credit(s)
- APR 285 - Motors 1-4 Credit(s)
- APR 286 - Motors 2 1-4 Credit(s)

Inside Wire Electrician (26 credits)

- APR 130 - Electrical Principles 5 Credit(s)
- APR 131 - Electrical Principles/Residential Wiring 5 Credit(s)
- APR 132 - Electrical Residential Wiring Lab 3 Credit(s)
- APR 133 - Electrical Generators, Transformers, and Motors 1 5 Credit(s)
- APR 134 - Electrical Generators, Transformers and Motors 2 5 Credit(s)
- APR 135 - Electrical, Generators, Transformers, and Motors Lab 3 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Electrician Apprenticeship Technologies, AAS.

Fitness and Lifestyle Specialist: Group Exercise Instructor, CPC

Length: 18 credits

Program Contacts

Offered by: Health and Physical Education

Program Coordinator: Wendy Simmons, simmonsws@lanecc.edu, 541-463-5551

Fitness Lifestyle Specialist Advising Team: *FLSProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $3,461.00

- Resident Tuition: $2,268.00*
- Technology Fee: $198.00
- General Student Fees: $267.00**
- Online Course Fee: $10.00 (if applicable)
- Books: $653.00
- Program Specific Fee: $30.00
- Other Costs / Expenses: $35.00*** (Equipment)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to 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.

Students who complete this program will be able to:
PLO 1 - Demonstrate excellent interpersonal skills in the areas of leadership, exercise motivation, and communication (written, verbal, and non-verbal)
PLO 2 - Design, evaluate, and instruct safe and effective group exercise classes utilizing a variety of exercise modalities
PLO 3 - Understand the role of proper nutrition and training techniques as they relate to physical fitness and weight management
PLO 4 - Apply nationally recognized standards for group exercise instruction. Work within their scope of practice and role in the fitness field while practicing appropriate and ethical professional conduct
PLO 5 - Respond to the needs of a diverse clientele and demonstrate inclusive practices; appropriately modify and adapt group classes
PLO 6 - Communicate to participants the benefits, risks, and precautions involved with participation in group exercise
PLO 7 - Apply basic exercise principles related to kinesiology, physiology, conditioning, resistance and functional training to ensure a safe and productive exercise experience

Program Requirements

Program Core Courses

FLS and PE 280F must be completed with a letter grade of C- or better. P/NP is not accepted. HE courses must be completed with a grade of C- or better, or Pass.

- FLS 120 - Fitness Assessment & Exercise Prescription - Field Techniques 3 Credit(s)
- FLS 130 - Principles of Strength Training and Conditioning Instruction 2 Credit(s)
- FLS 140 - Applied Exercise Physiology 1 3 Credit(s)
- FLS 150 - Techniques of Group Exercise Leadership 2 Credit(s)
- FLS 160 - Applied Anatomy and Kinesiology 3 Credit(s)
- FLS 170 - Mental Dynamics of Exercise and Sport 3 Credit(s)

CPR (1-3 credits) - Complete one of the following:

- HE 161 - Cardiopulmonary Resuscitation 1 Credit(s) Students with a current CPR Certification may substitute the CPR requirement. Contact Program Coordinator for details.
- HE 252 – First Aid 3 Credit(s)

Cooperative Education

- Complete 1 credit of PE 280F - Co-op Ed: Fitness

Notes

- This program is embedded in the Fitness and Lifestyle Specialist, 1-yr Certificate.
- This program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.
- Program application must be completed prior to enrollment in PE 280F - Co-op Ed: Fitness. Apply at lanecc.edu/healthpe/fitness-specialist-information.

Health Information Management: Basic Health Care, CPC

Length: Program 23 credits

Program Contacts

Offered by Health Professions

Health Information Management Academic Advising Team: *HIMProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Project Specialist: Kathy Torvik; torvikk@lanecc.edu

Estimated Cost for Program: $4,131.00

- Resident Tuition: $2,898.00*
- Technology Fees: $253.00
- General Student Fees** (if applicable)
- Online Course Fee: $230.00
- Books / Course Materials: $750.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program, which can be completed entirely online, is to teach the basic skills needed for employment in an entry-level position in a healthcare 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.

Students who complete this program will be able to:

PLO 1 - Understand the requirements to work as a professional in a health care environment
PLO 2 - Demonstrate basic computer skills
PLO 3 - Apply the principles and privacy and security based on laws and professional ethics required in health care practices
PLO 4 - Demonstrate ability to use medical terminology appropriately, including abbreviations, acronyms, spelling, and pronunciation
PLO 5 - Demonstrate knowledge on the basics of human anatomy and physiology
PLO 6 - Demonstrate professional written and verbal communications in a responsible and confidential manner
PLO 7 - 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

Program Requirements

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition 4 Credit(s)
- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- Any WR course higher than WR 115

Mathematics (4 credits):

- MTH 052 - Math for Health and Physical Sciences 4 Credit(s) or higher

Medical Terminology (3 credits):

- HP 100 - Medical Terminology 1 3 Credit(s)

Health Office Procedures (3 credits):

- HP 110 - Health Office Procedures 3 Credit(s)

Computer Literacy (4 credits) - Complete one of the following:

- CIS 101 - Computer Fundamentals 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)

Human Body Systems (6 credits) - Complete both of the following:

- HP 150 - Human Body Systems 1 3 Credit(s)
- HP 152 - Human Body Systems 2 3 Credit(s)

Notes

- This program is fully contained in the Health Information Management (online), 1-yr Certificate.
- This program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.
- All courses can be completed online.
- Completion of BI 231, BI 232, and BI 233 with a letter grade of C or better is an acceptable equivalent for HP 150 and HP 152.
- BT 120 - MS WORD for Business can be used to meet the Computer Literacy requirement if completed prior to Summer 2020 (when the program's prerequisites changed).
- Students planning to pursue the Health Information Management (online), AAS, the Health Information Management (online), 1-yr Certificate, or the Health Information Management: Medical Coding (online), CPC will have met their program prerequisites upon completion of this program.
- All program prerequisites with the subject prefix CIS, CS, and HP must be completed no more than five years prior to HIM program acceptance. The prerequisites with CIS, CS, and HP prefixes can possibly be waived with current work experience in an HIM related field.
- Students who do not meet reading and/or math requirements may apply to PASS Lane Summer programming for alternative admission process. PASS Lane contact is Marcia Koenig (*koenigm@lanecc.edu*), Bldg. 11/244, 541-463-5818.

Health Information Management: Medical Coding (online), CPC

Length: Program 42 credits

Program Prerequisites: 21 credits

Program Contacts

Offered by Health Professions

Health Information Management Academic Advising Team: *HIMProgram@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Project Specialist: Kathy Torvik; torvikk@lanecc.edu

Estimated Cost for Program: $9,555.00

- Resident Tuition: $5,292.00*
- Technology Fees: $462.00
- General Student Fees: ** (if applicable)
- Online Course Fee: $420.00
- Books / Course Materials: $1,382.00
- Program Specific Fees: $479.00 (certifications-licensure-exams, application fee, background check, drug/alcohol screening, Castlebranch/Complio account and industry student membership)
- Other Cost / Expenses: $1,500.00*** (computer/internet)

Estimated Cost for Prerequisites: $3,087.00

- Resident Tuition: $2,646.00*
- Technology Fees: $231.00
- General Student Fees: ** (if applicable)
- Online Course Fee: $210.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program, which can be completed entirely online, is to prepare students to become coding specialists who review and analyze 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. This certificate can be earned completely online.

Students who complete this program will be able to:

PLO 1 - Apply principles of healthcare privacy, confidentiality, legal, ethical issues, and data security (HIPAA regulatory standards)
PLO 2 - Communicate both verbally and written form with others of the health care team in an effective, appropriate, and capable manner
PLO 3 - Demonstrate understanding of the etiology, pathology, symptoms, signs, diagnostic studies, treatment modalities, and prognosis of diseases and procedures to be coded
PLO 4 - 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
PLO 5 - Demonstrate the organization, analysis, and evaluation of health record content for completeness and accuracy

Admission Information

Application and admission into the Health Information Management (online), AAS is required. Admission and application information is located at lanecc.edu/hp/him

Program Requirements

Prerequisites

Prerequisites must be completed with a letter grade of C or better. P/NP is not accepted.

The following courses must be completed prior to applying for the Health Information Management program.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition 4 Credit(s)
- WR 115W - Introduction to College Writing: Workplace Emphasis 3 Credit(s)
- Any WR course higher than WR 115

Mathematics (4 credits):

- MTH 052 - Math for Health and Physical Sciences 4 Credit(s) or higher

Medical Terminology (3 credits):

- HP 100 - Medical Terminology 1 3 Credit(s)

Computer Literacy (4 credits) - Complete one of the following:

- CIS 101 - Computer Fundamentals 4 Credit(s)
- CS 120 - Concepts of Computing: Information Processing 4 Credit(s)

Human Body Systems (6 credits) - Complete both of the following:

- HP 150 - Human Body Systems 1 3 Credit(s)
- HP 152 - Human Body Systems 2 3 Credit(s)

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted.

- HIM 107 - Integrated Electronic Health Records 4 Credit(s)
- HIM 154 - Introduction to Disease Processes 4 Credit(s)
- HIM 222 - Reimbursement Methodologies 4 Credit(s)
- HIM 260 - Medical Record Auditing 4 Credit(s)
- HIM 270 - ICD-10 Coding 5 Credit(s)
- HIM 271 - ICD-10-PCS Coding 5 Credit(s)
- HIM 273 - CPT and HCPCS Coding 5 Credit(s)
- HP 110 - Health Office Procedures 3 Credit(s)
- HP 220 - Legal and Ethical Aspects of Healthcare 3 Credit(s)

Cooperative Education

Cooperative Education and Seminar must be completed with a letter grade of C or better. P/NP is not accepted. HIM 280 may be used to meet the Cooperative Education requirement.

Seminar (2 credits):

- COOP 206 - Co-op Ed: Internship Seminar

Cooperative Education (3 credits):

- HIT 280 - Co-op Ed: Health Records

Notes

- This program is fully contained in the Health Information Management (online), AAS degree.
- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- Students can take all HIM Program courses prior to admission except COOP 206, HIM 222, HIM 270, HIM 271, HIM 273 and HIT 280.
- All program prerequisites with the subject prefix CIS, CS, and HP must be completed no more than five years prior to HIM program acceptance. The prerequisites with CIS, CS, and HP prefixes can possibly be waived with current work experience in an HIM related field.
- All program prerequisites can be completed online.
- Coding and Reimbursement classes (HIM 270, HIM 271, HIM 273, and HIM 222) must be completed within five years of the start of the governing catalog
- Students who complete the Medical Coding (online), CPC may use the HIM coding sequence (HIM 270, HIM 271, HIM 273) plus one Computer Literacy course (CIS 101 or CS 120) to meet the HIM 114 - Introduction to Medical Coding requirement for the AAS: Health Information Management degree. See your Academic Advising team or Program Coordinator for more details about course substitutions and/or waivers.
- Completion of BI 231, BI 232, and BI 233 with a letter grade of C or better is an acceptable equivalent for HP 150 and HP 152.
- BT 120 - MS WORD for Business can be used to meet the Computer Literacy requirement if completed prior to Summer 2020 (when the program's prerequisites changed).
- Students who do not meet reading and/or math requirements may apply to PASS Lane Summer programming for alternative admission process. PASS Lane contact is Marcia Koenig (*koenigm@lanecc.edu*), Bldg. 11/244, 541-463-5818.
- Cooperative Education is required for students to earn their Medical Coding (online), CPC. 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.

Human Services: Addiction Studies, CPC

Length: 24 credits

Program Contacts

Offered by the Social Science Division

Program Coordinator: Susan Shipp, *shipps@lanecc.edu*, 541-463-5231

Academic Advising Team: *socsci-llcprograms@lanecc.edu*, contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $4,190.00

- Resident Tuition: $3,024.00*
- Technology Fee: $264.00
- General Student Fees: $402.00**
- Books/Course Materials: $500.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

***** Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

******* Any special info about program costs or expenses.

******** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

This program is designed for students who are interested in career enhancement and certification in addiction counseling. Students completing this Career Pathway Certificate fulfill the 150 hours of drug and alcohol education required by the Mental Health and Addiction Certification Board of Oregon (MHACBO) for a CADC I**.** State certification also requires successfully completing 1000 hours of supervised practice and a written exam. A minimum of two years of recovery for those who are recovering from a Substance Use Disorder is necessary for state certification; many internship placements and employment settings also have this requirement.

Three credits of HS 280 - Cooperative Education: Human Services may apply toward the supervised hours requirement.

Students who complete this program will be able to:

PLO 1 - Practice professional and ethical standards inherent in the human services field
PLO 2 - Utilize skills of attending behavior, active listening, effective questioning techniques that align with theoretical orientations in the helping fields, while working with both individuals and groups
PLO 3 - Exhibit competence in working with people from diverse backgrounds
PLO 4 - Conduct various assessments with regard to eligibility, service needs and problem resolution, commonly used in the human services field
PLO 5 - Develop a plan of action for clients using a strengths-based approach to link people with community resources
PLO 6 - Utilize technology and digital resources for educational and career purposes
PLO 7 - Exhibit and apply knowledge of substances of abuse, the process of addiction, prevention and treatment

Program Requirements

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted. HS 150 - Personal Effectiveness for Human Service Workers is required, and HS 226 - Ethics and Law is recommended, prior to enrollment in Co-op Education.

- HS 102 - Psychopharmacology 4 Credit(s)
- HS 150 - Personal Effectiveness for Human Service Workers 3 Credit(s)
- HS 155 - Interviewing Theory and Techniques 3 Credit(s)
- HS 224 - Group Counseling Skills 3 Credit(s)
- HS 226 - Ethics and Law 3 Credit(s)
- HS 228 - HIV/AIDS and other Infectious Diseases: Risk Assessment and Intervention 2 Credit(s)
- HS 266 - Case Management 3 Credit(s)

Cooperative Education (3 credits):

- HS 280 - Cooperative Education: Human Services

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Human Services, AAS degree.
- HS 155 - Interviewing Theory and Techniques *must* be completed prior to enrollment in HS 266, and is recommended prior to enrollment in HS 224.
- HS 150 - Personal Effectiveness for Human Service Workers must be completed prior to enrollment in Cooperative Education. HS 226 - Ethics and Law is recommended prior to enrollment in Cooperative Education.
- Cooperative Education: Students are required to attend a co-op orientation prior to beginning their field placement. Contact Christina Salter, Co-op Coordinator at *salterc@lanecc.edu* or 541-463-5813.

Industrial Mechanics and Maintenance Technology Apprenticeship: Trade Worker Apprenticeship Technologies, CPC

Length: 15 credits

Program Contacts

Offered by the Advanced Technology department

Program Coordinator: Joy Crump, *crumpj@lanecc.edu*, 541-463-5496

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $2,832.00

- Resident Tuition: $1,890.00*
- Technology Fees: $165.00
- General Student Fees: $402.00**
- Books / Course Materials: $375.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

***** Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

****** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

******* Any special info about program costs or expenses.

******** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to provide a structured system of training to prepare students with the foundational skills and knowledge required to enter the maintenance millwright trade.

Students who complete this program will be able to:

PLO 1 - 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

Program Requirements

Program Core Courses (15 credits)

Complete all courses listed in the following trade. Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted.

Maintenance Millwright

- APR 150 - The Millwright and Shop Safety 5 Credit(s)
- APR 151 - Millwright Machine Theory and Trade Calculations 5 Credit(s)
- APR 152 - Millwright: Power Transmissions and Boilers-Steam 5 Credit(s)

Notes

- This program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Industrial Mechanics and Maintenance Technology Apprenticeship, AAS

Manufacturing Technician 1, CPC

Length: 18 credits

Program Contacts

Offered by: Advanced Technology Division

Program Coordinator: Steve Caffey, caffeys@lanecc.edu, 541-463-3145

Advanced Technology Academic Advising Team: advtechprograms@lanecc.edu; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $4,061.00

- Resident Tuition: $2,268.00*
- Technology Fees: $198.00
- General Student Fees: $268.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $204.00
- Program Specific Fees: $306.00 (Course Fees / Materials)
- Other Cost / Expenses: $ 25.00*** (Instruments / Tools)
- Differential Fees: $ 792.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this certificate is to prepare students for an entry-level manufacturing position. The skills provided will prepare the student for successful advancement through on-the-job training.

Students who complete this program will be able to:
PLO 1 - Operate safely in a manufacturing environment
PLO 2 - Use precision measuring tools effectively
PLO 3 - Read prints and apply mathematical skills to accomplish shop tasks
PLO 4 - Use the bandsaw, mill and lathe, both manual and CNC with entry-level skill

Program Requirements

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted. It is recommended students complete math and computer science prior to registering for CNC 101. Enrollment in MFG and CNC courses by consent only. See your Academic Advisor or Program Coordinator about enrollment.

- CNC 101 - CNC Concepts 3 Credit(s)
- MFG 101 - Safety and Basic Shop Practice 3 Credit(s)
- MFG 102 - Shop Measurement and Coordinate System 3 Credit(s)
- MFG 103 - Metal Cutting Basics 3 Credit(s)
- MFG 151 - Manufacturing 1 6 Credit(s)

Notes

- This program is fully contained in the Manufacturing Technology, AAS degree
- The program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified
- A high school diploma or equivalent is recommended for all applicants to this program.

Manufacturing Technician 2, CPC

Length: 36 credits

Program Contacts

Offered by: Advanced Technology Division

Program Coordinator: Steve Caffey, *caffeys@lanecc.edu*, 541-463-3145

Advanced Technology Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $7,809.00

- Resident Tuition: $4,536.00*
- Technology Fees: $396.00
- General Student Fees: $402.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $230.00
- Program Specific Fees: $612.00 (Course Fees / Materials)
- Other Cost / Expenses: $50.00*** (Instruments / Tools)
- Differential Fees: $1,583.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare 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.

Students who complete this program will be able to:
PLO 1 - Operate safely in a manufacturing environment
PLO 2 - Use precision measuring tools effectively
PLO 3 - Read prints and apply the mathematical skills to accomplish tasks
PLO 4 - Safely and effectively use most manual shop machinery
PLO 5 - Describe major concepts associated with the setup and operation of CNC equipment and integrate that basic knowledge in guided projects

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted. It is recommended students complete math and computer science prior to registering for CNC 101. Enrollment in MFG and CNC courses by consent only. See your Academic Advisor or Program Coordinator about enrollment.

- CNC 101 - CNC Concepts 3 Credit(s)
- CNC 102 - CNC Setup and Operation 3 Credit(s)
- CNC 103 - CNC Programming 3 Credit(s)
- CNC 108 - CNC Projects 3 Credit(s)
- MFG 101 - Safety and Basic Shop Practice 3 Credit(s)
- MFG 102 - Shop Measurement and Coordinate System 3 Credit(s)
- MFG 103 - Metal Cutting Basics 3 Credit(s)
- MFG 151 - Manufacturing 1 6 Credit(s)
- MFG 152 - Manufacturing 2 4 Credit(s)
- MFG 153 - Manufacturing 3 5 Credit(s)

Notes

- This program is fully contained in the Manufacturing Technology, AAS degree
- The program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.
- A high school diploma or equivalent is recommended for all applicants to this program.

Music Technology and Sound Engineering: MIDI and Audio Production, CPC

Length: 39 credits

Offered by the Division of the Arts

Program Coordinators: Matthew Svoboda, *svobodam@lanecc.edu*, 541-463-5736; Hisao Watanabe, *watanabeh@lanecc.edu*, 541-463-5019; Seth Mulvihill, *mulvihills@lanecc.edu*, 541-463-5184; Doug Doerfert, doerfertd@lanecc.edu, 541-463-5045

Arts Academic Advising Team: *ArtsPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $7,347.00

- Resident Tuition: $4,914.00*
- Technology Fees: $429.00
- General Student Fees: $536.00**
- Books / Materials: $600.00
- Program Specific Fees: $868.00 (Music, Music Tech and individual music lessons fees)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

This program 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.

Students who complete this program will be able to:

PLO 1 - Utilize MIDI networks and MIDI sequencers
PLO 2 - Utilize software and hardware for recording, editing, and processing music and audio for commercial and artistic purposes
PLO 3 - Communicate using technical vocabulary associated with MIDI, audio, and synthesis of sound
PLO 4 - Select appropriate microphones, preamplifiers, and other outboard signal processors for various recording techniques and microphone placement
PLO 5 - Analyze audio recordings in terms of frequency, stereo field, phase cancellation, and dynamic range
PLO 6 - Engineer and produce high quality recording sessions for music, advertising, voiceovers, video and film soundtracks, and other types of projects
PLO 7 - Do creative work through working with deadlines and scheduling time with clients and artists
PLO 8 - Apply basic music theory and keyboard skills when working in a DAW

Program Requirements

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP not accepted.

Music Fundamentals (5 credits) - Complete both of the following:

- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 131 - Group Piano 2 Credit(s)

Music Core (8 credits) - Complete all of the following:

- MUS 111 - Music Theory 1 (First Term) 4 Credit(s)
- MUS 114 - Sight-reading and Ear Training (First Term) 2 Credit(s)
- MUS 127 - Keyboard Skills 1 (First Term) 2 Credit(s)

MIDI / Audio Engineering (23 credits) - Complete all of the following:

- AUD 120 - Audio Production 4 Credit(s)
- MUS 118 - Music Technology MIDI/Audio 1 4 Credit(s) (MUS 118 must be completed prior to enrollment in MUS 119 & MUS 107)
- MUS 119 - Music Technology MIDI/Audio 2 4 Credit(s) (MUS 119 must be completed prior to, or concurrently with MUS 107)
- MUS 107 - Audio Engineering 1 3 Credit(s) *Fall (MUS 107 must be completed prior to enrollment in MUS 109)
- MUS 109 - Audio Engineering 2 4 Credit(s) *Winter (MUS 109 must be completed prior to enrollment in MUS 110)
- MUS 110 - Audio Engineering 3 4 Credit(s) *Spring

Individual Lessons (1 credit) - Complete any MUP 100 course:

- MUP 100 - Individual Lessons 1-2 Credit(s)

Ensemble

Ensemble courses must be completed with a grade of C- or better, or Pass.

Ensemble (2 credits) - Complete one of the following:

- MUS 291 - Chamber Choir 2 Credit(s)
- MUS 293 - Jazz Combos 2 Credit(s)
- MUS 294 - Jazz Ensemble 2 Credit(s)
- MUS 295 - Symphonic Band 2 Credit(s)
- MUS 297 - Concert Choir 2 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Music Technology and Sound Engineering, AAS degree.
- Music Theory Placement exam required to get into MUS 111. Contact the music office at 541-463-3108 for exam information.
- MUS 107 and MUS 109 must be completed with a grade of C- or better to advance to the next course in the sequence.

Music Technology and Sound Engineering: MIDI Production, CPC

Length: 20 credits

Offered by the Division of the Arts

Program Coordinators: Matthew Svoboda, *svobodam@lanecc.edu*, 541-463-5736; Hisao Watanabe, *watanabeh@lanecc.edu*, 541-463-5019; Seth Mulvihill, *mulvihills@lanecc.edu*, 541-463-5184; Doug Doerfert, doerfertd@lanecc.edu, 541-463-5045

Arts Academic Advising Team: *ArtsPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $4,012.00

- Resident Tuition: $ 2,520.00*
- Technology Fees $ 220.00
- General Student Fees: $ 268.00**
- Books / Materials: $ 300.00
- Program Specific Fees: $ 704.00 (Music, Music Tech and Individual Music Lessons Fees)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to develop familiarity with MIDI software, MIDI hardware, and foundations of music production including basic audio production concepts such as file management, mixing, and basic recording.

Students who complete this program will be able to:

PLO 1 - Utilize MIDI networks and MIDI sequencers
PLO 2 - Utilize software and hardware for recording, editing, and processing music and audio for commercial and artistic purposes
PLO 3 - Communicate using technical vocabulary associated with MIDI, audio, and synthesis of sound
PLO 4 - Use a variety of synthesizers, virtual instruments, and keyboards with digital audio workstations (DAW)
PLO 5 - Apply basic keyboard skills when working in a DAW

Program Requirements

Program Core Courses

Program Core courses must be completed with a grade of C- or better. P/NP not accepted.

- AUD 120 - Audio Production 4 Credit(s)
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 118 - Music Technology MIDI/Audio 1 4 Credit(s)
- MUS 119 - Music Technology MIDI/Audio 2 4 Credit(s)
- MUS 131 - Group Piano 2 Credit(s)

Individual Lessons (1 credit) - Complete any MUP 100 course:

- MUP 100 - Individual Lessons 1-2 Credit(s)

Ensemble

Ensemble must be completed with a grade of C- or better, or Pass.

Ensemble (2 credits) - Complete one of the following:

- MUS 291 - Chamber Choir 2 Credit(s)
- MUS 293 - Jazz Combos 2 Credit(s)
- MUS 294 - Jazz Ensemble 2 Credit(s)
- MUS 295 - Symphonic Band 2 Credit(s)
- MUS 297 - Concert Choir 2 Credit(s)

Notes

- This program follows the Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Music Technology and Sound Engineering, AAS degree.

Paramedicine: Emergency Medical Technician, CPC

Length: Program 12 credits

Program Contacts

Offered by the Health Professions Division

Program Coordinator: Kris Siewert, *siewertk@lanecc.edu*, 541-463-3297

Health Professions Academic Advising Team: *EMSProgram@lanecc.edu,* contact advising: lanecc.edu/advising/contact; 541-463-3800

Cooperative Education: lanecc.edu/cooped/contact

Estimated Cost: $5,600.00

- Resident Tuition: $1,512.00*
- Technology Fees: $132.00
- General Student Fees: $134.00** (if applicable)

- One Time Student Fee: $30.00
- Online Course Fee: $80.00 (if applicable)
- Books / Course Materials: $200.00
- Program Specific Fees: $2,162.00 (lab/program application fees, EMT & Paramedic licensure/exams, background check/fingerprinting, medical requirements, American DataBank)
- Other Cost / Expenses: $ 850.00*** (instrument/tools, uniform/boots, computer)
- Differential Fees: $500.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare students for occupations as an Emergency Medical Technician. This program is a nationally recognized licensure that a student would be able to utilize in most of the United States.

Students who complete this program will be able to:
PLO 1 - Sit for their National Registry of EMTs cognitive exam
PLO 2 - Work on an ambulance
PLO 3 - Work as either paid or professional in a fire department
PLO 4 - Work on wildland fires as Emergency Medical support
PLO 5 - Work in an Emergency Room

Admission Information

Students are encouraged to consult the Academic Advising Team (*EMSProgram@lanecc.edu*) before applying for admission. Program application and information about the point allocation system is available at lanecc.edu/hp/emt.

Program Requirements

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

- EMS 111 - Emergency Medical Technician 8 Credit(s)
- EMS 112 - Emergency Medical Technician Lab 3 Credit(s)
- EMS 113 - Emergency Medical Technician Clinical 1 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Paramedicine, AAS degree.

Welding Processes: Shielded Metal Arc Welder, CPC

Length: 15 credits

Program Contacts

Offered by: Advanced Technology, lanecc.edu/advtech

Program Coordinator: Doug Ford, *forddo@lanecc.edu*, 541-463-5498

Advanced Technology Academic Advising: *AdvTechPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $3,136.00

- Resident Tuition: $1,890.00*
- Technology Fees: $165.00
- General Student Fees: $134.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $317.00
- Program Specific Fees: $630.00 (course fees)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare graduates for employment for entry-level positions in the metal fabrication industry.

Students who complete this program will be able to:

PLO 1 - Demonstrate proficiency at an industry entry-level with Shielded Metal Arc Welding
PLO 2 - Weld and cut metal as is typical of circumstances found in industrial environments
PLO 3 - Demonstrate and use industry safety standards

Program Requirements

Program Core Courses

WLD courses must be completed with a letter grade of C- or better. P/NP is not accepted. MFG and MTH courses must be completed with a grade of C- or better, or Pass. **Take the maximum number of credits listed for WLD courses.**

Welding Core - 3 courses:

Complete WLD 121, WLD 122 and either WLD 141 or 140.

- WLD 121 - Shielded Metal Arc Welding 1 1-4 Credit(s)
- WLD 122 - Shielded Metal Arc Welding 2 1-4 Credit(s)
- **One Welder Qualification (CERT) course from the following:**
  - WLD 140 - Welder Qualification (Cert): Wire Drive Processes 3 Credit(s)
  - WLD 141 - Welder Qualification (Cert): SMAW 3 Credit(s)

Geometry – One Geometry course **from the following:**

- MTH 085 - Applied Geometry for Technicians 4 Credit(s)
- MTH 097 - Geometry 4 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)

NOTE: WLD 111 may be substituted for the geometry requirement.

Notes

- This program is fully contained in the Welding Processes, 1-yr Certificate
- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- 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.
- AAS: Fabrication / Welding Technology students will be awarded this Pathway upon completion of degree.

Welding Processes: Wire Drive Welder, CPC

Length: 15 credits

Program Contacts

Offered by: Advanced Technology, lanecc.edu/advtech

Program Coordinator: Doug Ford, *forddo@lanecc.edu*, 541-463-5498

Advanced Technology Academic Advising: *AdvTechPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $ 3,240.00

- Resident Tuition: $ 1,890.00*
- Technology Fees: $ 165.00
- General Student Fees: $ 134.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $ 329.00
- Program Specific Fees: $ 722.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to prepare graduates for employment for entry-level positions in the metal fabrication industry.

Students who complete this program will be able to:

PLO 1 - Demonstrate proficiency at an industry entry-level with various wire drive processes
PLO 2 - Weld and cut metal as is typical of circumstances found in industrial environments
PLO 3 - Demonstrate and use industry safety standards

Program Requirements

Program Core Courses

WLD courses must be completed with a letter grade of C- or better. P/NP is not accepted. MFG and MTH courses must be completed with a grade of C- or better, or Pass. **Take the maximum number of credits listed for WLD courses.**

Welding Core - 3 courses:

Complete WLD 143, WLD 154 and either WLD 140 or 141.

- WLD 143 - Wire Drive Welding 1 1-4 Credit(s)
- WLD 154 - Wire Drive Welding 2 1-4 Credit(s)
- One Welder Qualification (CERT) course from the following (3 credits):
  - WLD 140 - Welder Qualification (Cert): Wire Drive Processes or
  - WLD 141 - Welder Qualification (Cert): SMAW

Geometry – One Geometry course **from the following:**

- MTH 085 - Applied Geometry for Technicians 4 Credit(s)
- MTH 097 - Geometry 4 Credit(s)
- MTH 112 - Trigonometry 5 Credit(s)

NOTE: WLD 111 may be substituted for the geometry requirement.

Notes

- This program is fully contained in the Welding Processes, 1-yr Certificate.
- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- 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.
- AAS: Fabrication / Welding Technology students will be awarded this Pathway upon completion of degree.

Short-Term Certificates

All certificate programs follow the Certificate of Completion Requirements unless otherwise specified. Go to individual certificates to see specific program requirements.

Baking and Pastry, Certificate of Completion

Length: 22 credits

Program Contacts

Offered by the Culinary Arts and Hotel/Restaurant/Tourism Management department

Program Coordinator: Clive Wanstall, wanstallc@lanecc.edu, 541-462-3507

Academic Advising Team: *CulinaryHospPrograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $5,598.00

- Resident Tuition: $2,772.00*
- Technology Fees: $242.00
- General Student Fees: $402.00**
- Online Course Fee: (if applicable)
- Books / Course Materials: $115.00
- Program Specific Fees: $686.00 (culinary course fees)
- Other Cost / Expenses: $430.00*** (knife, baker kit, uniform & shoes)
- Differential Fees: $951.00****

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

This program is for students who want to gain entry into the food service industry as beginning bakers and pastry cooks.

Students who complete this program will be able to:

PLO 1 - Independently produce a wide range of baked goods employing current technologies and traditional baking methods

PLO 2 - Safely and effectively operate current standard commercial bakery equipment including cook tops, food processors, ovens (baking, convection, and conventional), dough mixers, and a variety of kitchen hand tools

PLO 3 - Perform basic math functions, measure and scale ingredients and portions, and convert recipes to higher and lower yields

PLO 4 - Consistently employ sanitation concepts including high standards of personal hygiene, appropriate cleaning and sanitizing of equipment, and correct processing and storage of potentially hazardous foods according to the HACCP concept

Admission Information

Selective-entry admission; there is a separate program application located at lanecc.edu/culinary/baking-and-pastry.

There are non-refundable program fees to cover tools and uniforms. There is a uniform fitting around four weeks prior to classes commencing.

Must obtain Oregon Health Authority Food Handlers Certification before being accepted into the program.

Show readiness for MTH 025C or higher and WR 097 or higher.

Program Requirements

General Education

Math must be completed with a grade of C- or better, or Pass; and may be taken prior to program entry or during any program term.

Math (3-5 credits) - Complete one of the following:

- MTH 025C - Basic Mathematics Applications 3 Credit(s) (Recommended)
- MTH 025 - Basic Mathematics Applications 3 Credit(s)
- Any Math course higher than MTH 025

Program Core Courses

Program Core courses must be completed with a letter grade of C- or better. P/NP is not accepted.

- CA 163A - Beginning Baking and Pastry 3 Credit(s)
- CA 163B - Intermediate Baking and Pastry 2 Credit(s)
- CA 163C - Advanced Baking and Pastry 2 Credit(s)
- CA 121 - Composition of Cake 2 Credit(s)
- CA 122 - Artisan Breads 2 Credit(s)
- CA 123 - International Baking and Pastry 2 Credit(s)
- CA 124 - Seasonal Baking and Pastry 1 2 Credit(s)
- CA 125 - Seasonal Baking and Pastry 2 2 Credit(s)
- CA 175 - Foodservice Sanitation and Safety 2 Credit(s)

Notes

- This program follows Career Pathway Certificate of Completion Requirements unless otherwise specified.
- A Lane County Food Handlers card is required for entry into the program.
- Students must complete college placement tests showing readiness for MTH 025 / MTH 025C or higher and WR 097 or higher to be accepted into the program. Students who do not meet reading and/or math requirements may apply to PASS Lane Summer programming for alternative admission process. PASS Lane contact is Marcia Koenig (*koenigm@lanecc.edu*) 541-463-5818, Bldg 11/244.
- This certificate is a fall term start only.

Educational Assistant, Certificate of Completion

Length: 28 credits

Program Contacts

Offered by the Social Science Division

Program Coordinator: Contact Social Science, 541-463-5427

Academic Advising Team: *EducationAdvising@lanecc.edu*; drop-in advising lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $4,948.00

- Resident Tuition: $3,528.00*
- Technology Fees: $308.00
- General Student Fees: $402.00** (if applicable)
- Online Course Fee: $210.00
- Books / Course Materials: $500.00

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

**General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

The purpose of this program is to allow students beginning their coursework toward an Education degree to quickly become employed as an instructional aide in regional schools

to allow them to earn income while enrolled in lower division community college courses. The certificate is designed to provide an introductory level of competitive skills needed to assist teachers in a multicultural and accessible classroom. The introduction to a multicultural and inclusive curricula will enhance the Educational Assistants' ability to work with primary and secondary students of diverse backgrounds and needs.

Students who complete this program will be able to:

PLO 1 - Collaborate with the classroom instructor to create and adapt activities and lessons for individuals and small groups in a multilingual, special needs, diverse and inclusive classroom
PLO 2 - Apply social/emotional theories of healthy child development in order to sustain an emotionally safe classroom environment
PLO 3 - Differentiate the physical, cognitive and social/emotional developmental stages of middle childhood and adolescence
PLO 4 - Apply reading, writing, and mathematics skills to research and analysis
PLO 5 - Develop and express new perspectives through observation of and interaction with diverse individuals
PLO 6 - Define and explain the historical context and function of laws governing the education of students with diverse backgrounds and special needs

Program Requirements

General Education

General Education courses must be completed with a grade of C- or better, or Pass.

Writing (4 credits) - Complete one of the following:

- WR 115 - Introduction to College Composition 4 Credit(s)
- or higher-level Writing course

Math (4 credits) - Complete one of the following:

- MTH 060 - Beginning Algebra 4 Credit(s)
- or higher-level Math course

Communication (4 credits) - Complete one of the following:

- COMM 111 - Fundamentals of Public Speaking 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)

Program Core Courses

Program Core courses must be completed with a grade of C- or better, or Pass.

Intro to Education (3 credits) - Complete one of the following:

- ED 100 - Introduction to Education 3 Credit(s)
- ED 216 - Foundations of Education 3 Credit(s)

Child Development (3 credits) - Complete one of the following:

- ED 233 - Adolescent Learning and Development 3 Credit(s)
- HDFS 226 - Child Development 3 Credit(s)

Race and Ethnicity (4 credits) - Complete one of the following:

- ES 101 - Historical Racial and Ethnic Issues 4 Credit(s)
- SLD 111 - Chicano/Latino Leadership 1: Quien Soy? Quienes 4 Credit(s)

Diversity and Inclusion (6 credits) - Complete both of the following:

- ED 258 - Multicultural Education 3 Credit(s)
- ED 269 - Inclusion and Special Needs 3 Credit(s)

Notes

This program follows Certificate of Completion Requirements unless otherwise specified.

Geographic Information Science, Certificate of Completion

Length: 12 credits

Program Contacts

Offered by the Social Science Division

Program Coordinator: Lynn Songer, *songerl@lanecc.edu*, 541-463-5493

Academic Advising Team: *socsci-llcprograms@lanecc.edu*, contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $2,337.00

- Resident Tuition: $1512.00*
- Technology Fee: $132.00
- General Student Fees: $268.00**
- On Line Course Fee: $120.00 (if applicable)
- Books/Course Materials: $200.00
- Program-Specific Fees: $105.00 (course fee)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives).

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Note: Students must have a computer that runs a Windows 10 or newer operating system (PC or Mac with a dual boot). At minimum, the computer needs to have: CPU of 2.2 GHz; Hyper-threading (HHT) or Multi-core recommended, 8 GB ram. 6 GB disk space, and video graphics adapter with 64 MB RAM; 256 MB RAM or higher recommended. NVIDIA, ATI, and Intel chipsets supported.

Program Learning Outcomes

The purpose of this program 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 degrees and transfer areas, such as: Computer Aided Design, Environmental Science, Programming, Criminal Justice, Unmanned Aerial Systems, General Science and Civil Engineering. This program is endorsed by the National GEO Tech Center of Excellence.

Students who complete this program will be able to:

PLO 1 - Collect and input data into a GIS system using: GPS, Digitizing, Geocoding
PLO 2 - Create, manage, and update spatial data
PLO 3 - Design and generate various cartographic products for planning or presentations
PLO 4 - Manage information in a GIS database
PLO 5 - Perform routine data analysis-buffer, query, union, intersect

Program Requirements

Recommended Prerequisites

Recommended Prerequisites must be completed with a letter grade of C- or better, or Pass.

- MTH 060 - Beginning Algebra 4 Credit(s) or higher
- CIS 101 - Computer Fundamentals 4 Credit(s)

Program Core Courses

GIS 151 and GIS 245 must be completed with a letter grade of C- or better. GIS 246 must be completed with a grade of B or better to earn this certificate. P/NP not accepted.

- GIS 151 - Digital Earth 4 Credit(s) offered Fall and Spring terms
- GIS 245 - GIS 1 4 Credit(s) offered Winter term
- GIS 246 - GIS 2 4 Credit(s) offered Spring term

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- Required 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.

Limited Electrician Apprenticeship Technologies, Certificate of Completion

Length: Varies depending on trade area

Program Contacts

Offered by the Advanced Technology department

Program Coordinator: Joy Crump, *crumpj@lanecc.edu*, 541-463-5496

Academic Advising Team: *advtechprograms@lanecc.edu*; contact advising: lanecc.edu/advising/contact; 541-463-3800

Estimated Cost: $4,625.00

- Resident Tuition: $3,276.00*
- Technology Fees: $286.00
- General Student Fees: $35.00**
- Online Course Fee: $260.00 (if applicable)
- Books / Course Materials: $618.00
- Program Specific Fees: $150.00 (Apprenticeship department fee)

Costs provided are estimates only. Learn more and view current tuition and fee information at lanecc.edu/esfs/credit-tuition.

* Resident tuition is based on all program requirements (general education, core, directed electives). Any prerequisites required prior to the entry of the program will be listed separately.

** General Student fees are paid once each term, depending on whether you are taking classes on Main Campus, or at one of the outreach centers or by distance learning.

*** Any special info about program costs or expenses.

**** This is the total of all the differential fees attached to the courses in this program.

Program Learning Outcomes

Students may earn a Certificate of Completion in Limited Electrician Apprenticeship Technologies by successfully completing core related training credits.

Students who complete this program will be able to:

PLO 1 - 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

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 a minimum of a C grade for one year of high school algebra (or equivalent).

Program Requirements

Program Core Courses

Program Core courses must be completed with a letter grade of C or better. P/NP is not accepted. Complete all courses listed in one of the following trades.

Limited Energy Technician License B (26 credits)

- APR 101A - Trade Skills Fundamentals 4 Credit(s)
- APR 140 - Electrical Systems Installation Methods 4 Credit(s)
- APR 141 - Limited Voltage Electrical Circuits 4 Credit(s)
- APR 142 - Devices, Testing Equipment and Code 4 Credit(s)
- APR 143 - Limited Voltage Cabling 4 Credit(s)
- APR 144 - Communications 4 Credit(s)
- APR 220 - Electrical Apprenticeship Code and Exam Preparation 2-3 Credit(s) (take 2 credits of APR 220)

Limited Maintenance Electrician (20 credits)

- APR 189 - Shop Practices 2 Credit(s)
- APR 220 - Electrical Apprenticeship Code and Exam Preparation 2-3 Credit(s) (take 2 credits of APR 220)
- APR 190 - Electrical Theory 1 1-4 Credit(s) (take 4 credits of APR 190)
- APR 191 - Electrical Theory 2 1-4 Credit(s) (take 4 credits of APR 191)
- APR 285 - Motors 1-4 Credit(s) (take 4 credits of APR285)
- APR 286 - Motors 2 1-4 Credit(s) (take 4 credits of APR 286)

Notes

- This program follows Certificate of Completion Requirements unless otherwise specified.
- This program is fully contained in the Electrician Apprenticeship Technologies, AAS.

Licensing and 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.

Non-Credit Programs

English as a Second Language (Community)

Length: Depends on placement level

Program Contacts

Offered by: ESL Department

Program Coordinator: Leilani Perez, 541-463-3403, *perezl@lanecc.edu*

Student Services Team: 541-463-5253, *eslstudentservices@lanecc.edu*

Academic Advising Team: *interntionaladvisor@lanecc.edu*

Fees and program cost

U.S. - Fees may change during the year. Learn more and view updated information at lanecc.edu/esl/fees-and-charges.

International - Fees may change during the year. Learn more and view updated information at lanecc.edu/international/costs-and-payments.

Admission Information

The Community English Program (CEP) at Lane Community College offers 6 levels of English as a Second language study that ranges from true beginning through high intermediate proficiency level. These classes combine the language skills of reading, writing, listening and speaking. All new students should complete the ESL Intake Form and take a placement test, which can be located at lanecc.edu/esl/evening-program-community-esllanecc.edu/esl/evening-program-community-esl

Courses

Level 1 - ESL XESC 05161 - Combined Skills Level 1

Level 2 - ESL XESC 05162 - Combined Skills Level 2

Level 3 - ESL XESC 05163 - Combined Skills Level 3

Level 4 - ESL XESC 05164 - Combined Skills Level 4

Level 5 - ESL XESC 05165 - Combined Skills Level 5

Level 6 - ESL XESC 05166 - Combined Skills Level 6

English as a Second Language (Intensive)

Length: Depends on placement level

Program Contacts

Offered by: ESL Department

Program Coordinator: Leilani Perez, 541-463-3403, *perezl@lanecc.edu*

Student Services Team: 541-463-5253, *eslstudentservices@lanecc.edu*

Academic Advising Team: *interntionaladvisor@lanecc.edu*

Fees and program cost

U.S. - Fees may change during the year. Learn more and view updated information at lanecc.edu/esl/fees-and-charges.

International - Fees may change during the year. Learn more and view updated information at lanecc.edu/international/costs-and-payments.

Program Learning Outcomes

The purpose of this program is to assist non-native speakers, both resident and international students, to achieve educational, workplace or other personal goals by facilitating English language learning and intercultural understanding in a supportive, respectful environment.

Admission Information

The Intensive ESL (IESL) Program at Lane Community College offers 6 levels of English as a Second language study that ranges from true beginning through college transition. All new students should complete the ESL Intake Form and then take a placement test to be placed in an appropriate class level. For more information, go to lanecc.edu/esl/daytime-program-intensive-esl.

ESL to Credit Bridge Program: For students interested in completing ESL coursework simultaneously with credit courses, contact the department or view the Bridge Program information at lanecc.edu/esl/bridge-program.

Courses

There are 6 levels in the IESL program (A, B, C, D, E, and F).

Level A

ESL XESC 0516A - Basic Combined Skills Level A

ESL XESR 0516A - Reading and Writing Level A

Level B

ESL XESR 0516B - Reading and Oral Skills Level B

ESL XESW 0516B - Writing and Grammar Level B

Level C

ESL XESR 0516C - Reading and Oral Skills Level C

ESL XESW 0516C - Writing and Grammar Level C

Level D

ESL XESR 0516D - Reading and Oral Skills Level D

ESL XESW 0516D - Writing and Grammar Level D

Level E

ESL XEBO 0516E - Bridge Oral Skills Level E

ESL XEBW 0516E - Bridge Reading and Writing Level E

ESL XESR 0516E - ESL - Academic Reading

ESL XESS 0516E - Academic Listening and Speaking Level E

ESL XESW 0516E - Academic Writing and Grammar Level E

ESL XESR 0516E - Medical English

Level F

ESL XEBO 0516F - Bridge Oral Skills Level F

ESL XESS 0516F - College Transition Listening and Speaking Level F

ESL XESR 0516F - College Transition Reading Level F

ESL XEBW 0516F - Bridge Reading and Writing Level F

ESL XESW 0516F - College Transition Writing and Grammar Level F

Non-Degree Transfer Options

If you are interested in transferring, be sure to work with an academic advisor on the best option for you.

You can also explore transfer options within Lane's 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

Core Transfer Map (CTM)

The Core Transfer Map (CTM) is a group of eight classes that add up to at least 30 credits. When the full set of eight courses are successfully completed at an Oregon community college, they are guaranteed to transfer as a block to any Oregon public university, and they will count toward that university's core bachelor's degree requirements. The CTM will be noted on a student's transcript upon completion of the requirements and at the request of the student. Students may take classes that fit these categories at any Oregon community college, and all classes transfer to meet at least 30 credits of general education requirements for a bachelor's degree at any Oregon public University.

Note that students interested in a specific major should consult with an Academic Advisor of that area when picking their specific Core Transfer Map classes. This will help keep you on track for credits towards your 4-year degree completion, by helping you select Core Transfer Map classes that can also fulfill lower-division requirements in your major.

If you believe that you have completed the requirements for the Core Transfer Map, and would like the CTM notated on your transcript please send an email with your request to *degreeevaluators@lanecc.edu*

Required Courses

Subject	General Pathway	STEM Pathway
Writing	WR 121	WR 121
Arts and Letters	2 courses chosen from the AAOT General Education Arts and Letters list (6-8 credits)	2 courses chosen from the AAOT General Education Arts and Letters list (6-8 credits)
Social Sciences	2 courses chosen from the AAOT General Education Social Science list (6-8 credits)	2 courses chosen from the AAOT General Education Social Science list (6-8 credits)
Natural Science	2 Lab Science courses chosen from the AAOT General Education Science/Math/Computer Science with Labs list (8-10 credits; lab science courses ONLY)	2 Lab Science courses chosen from the AAOT General Education Science/Math/Computer Science with Labs list (8-10 credits; lab science courses ONLY. Note that science courses for non-majors do not qualify)
Math	1 course (4-5 credits); any 100-level or 200-level MTH course for which MTH 095 or MTH 098 is a prerequisite. See course listing for MTH options.	1 course (4-5 credits); any 100-level or 200-level MTH course for which MTH 095 or MTH 098 is a prerequisite. See course listing for MTH options.

Additional Requirements

Subject	General Pathway	STEM Pathway
Cultural Literacy	Students must select one course from any of the discipline studies that is designated as meeting the statewide criteria for Cultural Literacy, as indicated by (*) on the AAOT General Education lists. This course can be one of the 6 required courses in Arts and Letters, Social Sciences, or Natural Sciences.	Students must select one course from any of the discipline studies that is designated as meeting the statewide criteria for Cultural Literacy, as indicated by (*) on the AAOT General Education lists. This course can be one of the 6 required courses in Arts and Letters, Social Sciences, or Natural Sciences.
At Least 30 Total Credits	If the credit total for the above requirements is less than 30 credits, select a course of your choice from any of the AAOT General Education lists.	If the credit total for the above requirements is less than 30 credits, select a course of your choice from any of the AAOT General Education lists.
Completion Standards	All courses must be completed with a grade of "C-" or "P" or better. Students must have a cumulative GPA of at least 2.0 in the Foundational Curriculum courses at the time of completion.	All courses must be completed with a grade of "C-" or "P" or better. Students must have a cumulative GPA of at least 2.0 in the Foundational Curriculum courses at the time of completion.

Oregon Transfer Module

The OTM is 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.

For current Lane courses that meet OTM requirements, see: Approved Discipline Studies Courses for Associate Degrees and Oregon Transfer Module

Guidelines

Complete a total of 45 credits of college-level coursework (see notes).

Complete at least 24 credits at Lane.

All courses must be a minimum of 3 credits.

All courses must be completed with a letter grade of "C-" or better. P/NP is not accepted.

Cumulative GPA must be at least 2.0 at the time the Oregon Transfer Module is notated.

Foundational Skills

Writing

Complete two courses:

WR 121_H / WR 121 - Academic Composition 4 Credit(s)

And complete one of the following:

WR 122_H / WR 122 - Argument, Research and Multimodal Composition 4 Credit(s) or

WR 123 - Composition: Research Writing 4 Credit(s) or

WR 227_H / WR 227 - Technical Writing 4 Credit(s)

Oral Communications

Complete one course from the Oral Communication list.

Mathematics

Complete one course in college-level mathematics:

MTH 105 - Math in Society 4 Credit(s)

MTH 106 - Math in Society 2 4 Credit(s)

MTH 107 - Math in Society 3 4 Credit(s)

MTH 111 - College Algebra 5 Credit(s)

MTH 112 - Trigonometry 5 Credit(s)

Any 200-level mathematics course

Discipline Studies

Arts and Letters

Complete three courses from the Arts and Letters list.

Social Sciences

Complete three courses from the Social Science list.

Science/Math/Computer Science

Complete three courses, including at least one laboratory course in Biological or Physical science, from the Science/Math/Computer Science list.

Science/Math/CS Notes

- **Biology**: 100-level Biology courses are not repeatable. Students may only use one BI 101, one BI 102, and one BI 103 to meet requirements for any Lane degree, regardless of letter option. Please contact your academic advising team for details.
- **Chemistry**: General Chemistry and Organic Chemistry series have separate lab courses. It is highly recommended students take lecture and lab courses together. To complete an AAOT Lab Science requirement, both lecture and lab courses must be completed.
- **Computer Programming**: Students taking their first programming language (C++, .NET, or Python) will take CS 161 and 162. Because CS 161 and 162 are not repeatable courses, students taking a second programming language must use the CS 133 and 233 course numbers. Please contact the department or your academic advising team for details.

Electives

To receive an Oregon Transfer Module transcript notation, students must complete all Foundational Skills and Discipline Studies requirements. Students must also complete enough elective coursework to total 45 credits. Elective courses must be completed from the approved Discipline Studies options:

Arts and Letters

Social Science

Science/Math/Computer Science

Notes

Courses numbered 197, 198, 199, 280, 297, 298, or 299 count as electives and do not meet Foundational Skills or Discipline Studies requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved to meet Discipline Studies requirements.

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

200-level second language courses count toward the Arts and Letters requirement. American Sign Language (ASL) is considered a second language.

University second language admission requirements for transfer students graduating high school 1997 or later include one of the following:

Two terms of the same college-level second language with an average grade of C- or above.

Two years of the same high school-level second language with an average grade of C- or above.

Satisfactory performance on an approved second language assessment of proficiency.

Demonstrated proficiency in American Sign Language meets second language admission requirements.

Credit-by-Exam and Credit-by-Assessment may comprise no more than 25% of total degree credits.

Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.

Some courses are included on more than one Discipline Studies list. These courses may be used only once to meet a specific Discipline Studies requirement. Please contact your academic advisor for details.

Lower-division college-level courses taken at Lane will not always meet the same requirements an upper-division college-level course with similar content does at a four-year transfer institution. In such cases, the course(s) in question will generally transfer as an elective. Please contact specific four-year schools for details.

Only the Academic Requirements Review Committee (ARRC) may waive a college-related instruction requirement. Petitions are available from Enrollment Services at lanecc.edu/esfs/general-education-substitution-and-waiver-petition.

Course Types by Prefix

Career Technical Education (CTE) 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.

AM: Automotive

AP: Aviation Pilot

APR: Apprenticeship

AS: Aerospace Science

AUD: Audio Production

AV: Aviation Maintenance

BT: Business Technology

CA: Culinary Arts

CE: Continuing Education

CIS: Computer Information Systems

COOP: Cooperative Education

CNC: Computer Numerical Control

CST: Construction

DA: Dental Assisting

DH: Dental Hygiene

DRF: Drafting

DS: Diesel

EMS: Emergency Medical Services

ET: Electronic Technology

FA: Film Arts (FA 221, FA 222, FA 250, FA 254, FA 256)

FLS: Fitness and Lifestyle Specialist

FT: Flight Technology

GD: Graphic Design

GWE: General Work Experience

HIM: Health Information Management

HIT: Health/Medical Technology

HP: Health Professions

HRTM: Hotel, Restaurant, Tourism Management

IDS: Interdisciplinary Studies

MA: Medical Assistant

MDP: Multimedia Production

MFG: Manufacturing Technology

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: Watershed Science Technician

Lower-Division Collegiate (LDC) courses

Courses numbered 100-299 are considered LDC courses, which are generally accepted as transfer courses.

ASL: American Sign Language

ANTH: Anthropology

ARH: Art History

ART: Art

ASTR: Astronomy

BA: Business Administration

BI: Biology

CG: Career Development/Human Relations and College Success

CH: Chemistry

CHN: Mandarin Chinese

CINE: Cinema Studies

CJA: Criminal Justice

COMM: Communication

CRWR: Creative Writing

CS: Computer Science

CW: Chinuk Wawa

D: Dance

ECE: Early Childhood Education (was CTE prior to Summer 2021)

ECON: Economics

ED: Education

EL: Effective Learning
ENG: English
ENGR: Engineering
ENSC: Environmental Science
ES: Ethnic Studies
FA: Film Arts
FL: Foreign Language
FN: Food and Nutrition (was CTE prior to Summer 2021)
FR: French
G: Geology
GEOG: Geography
GIS: Geographic Information Science
GS: General Science
HE: Health
HDFS: Human Development/Family Studies (was CTE prior to Summer 2021)
HON: Honors
HS: Human/Community Services (was CTE prior to Summer 2020)
HST: History
HUM: Humanities
J: Journalism
LIB: Library
MTH: Mathematics
MUP: Music Performance
MUS: Music
PE: Physical Education
PEAT: Physical Education - Athletics
PEO: Physical Education - Outdoor Education
PH: Physics
PHL: Philosophy
PS: Political Science
PSY: Psychology
SLD: Student Leadership Development
SOC: Sociology
SOIL: Soil Science
SPAN: Spanish
SUST: Sustainability
TA: Theatre Arts
WR: Writing
WS: Women's Studies

Support courses

Courses below 100 are considered support skills or developmental and are generally not accepted for transfer to a university.

ESL: English as a Second Language
MTH: Mathematics (MTH 010-099)
RD: Reading (RD 087)
WR: Writing (WR 087, WR 093, WR 097)

Previously used prefixes

^ *indicates CTE*
AB: Auto Body^
AIL: American Indian Language (replaced by CW)
ALS: Academic Learning Skills
AT: Advanced Technology^
AVN: Avionics^
APPR: Apprenticeship (now APR)^
BOT: Botany (replaced by BI)
BVDP: Broadcast/Video Production^
CAS: Computer Application Software^
CPSY: Counseling Psychology
CSK: Career Skills Training^
DDA: Dental Administrative Assistant^
EET: Electronic Engineering Tech^
ELT: Electronics^ (replaced by ET)
EMT: Emergency Medical Technician^
ENVS: Environmental Science
EXMS: Exercise and Movement Science^ (replaced by FLS)
HI: Health Informatics (replaced by HIM)^
HO: Health Occupations (replaced by HP)^
INTL: International^
IT: Industrial Technology^
JPN: Japanese
LA: Legal Office Assistant^
LAT: Landscape/Nursery Technology^
LE: Law Enforcement^
LGL: Legal Office^
MS: Media Studies^
NUR: Nursing (A, D, N)^
PGS: Physics - General Science^
PPPM: Public Policy and Management
PST: Professional Skills Training
RB: Radio^
REL: Religion
RE: Real Estate
RH: Refrigeration^
RT: Respiratory Care^
RVS: Recreational Vehicle Service^
SP: Speech (now COMM)
TTL: Trans and Trucking Logistics^
Z: Zoology (replaced by BI)

Sustainability-Focused Courses

For students interested in issues of sustainability (ecological, social, economic), the following courses have been deemed to have sustainability as a central focus.

Courses identified as sustainability-focused:

Provide opportunities for students to learn about practices that support and improve the health of the systems that sustain life.

Provide an interdisciplinary perspective that builds understanding of sustainable ecological, social and economic systems and, concern for environmental justice, and the competence to act on such knowledge.

Equip and encourage students to participate actively in building socially diverse, just, and sustainable society, while cultivating connections to local, regional, and global communities.

Sustainability Courses

Sustainability is an interest area and not a requirement for Lane degrees and certificates. Please work with an academic advisor to determine whether these courses meet specific degree or program requirements.

BI 103M - General Biology: Biodiversity and Sustainability 4 Credit(s)
CH 170 - Introduction to Environmental Chemistry 4 Credit(s)
CST 201 - Sustainable Building Practices 3 Credit(s)
ENG 240 - Nature Literature 4 Credit(s)
ENSC 181 - Terrestrial Environment 4 Credit(s)
ENSC 182 - Atmospheric Environment and Climate Change 4 Credit(s)
ENSC 183 - Aquatic Environment 4 Credit(s)
ENSC 265 - Environmental Science Field Methods 4 Credit(s)
HE 255 - Global Health and Sustainability 4 Credit(s)
IDS 280S - Co-op Ed: Sustainability Coordinator 3-12 Credit(s)
PS 297 - Environmental Politics 4 Credit(s)
SOIL 205 - Introduction to Soil Science 4 Credit(s)
WATR 202 - Fostering Sustainable Practices 3 Credit(s)

Other Learning Opportunities

Academic Learning Skills

Main Campus, Building 11, Room 245, 541-463-5439, lanecc.edu/als

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, digital learning skills 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.

Adult Basic and Secondary Education

Main Campus, Building 11, Room 201, 541-463-5214; Downtown Campus, Room 404, 541-463-6180, lanecc.edu/abse

College and GED Preparation: Looking to prepare for college, complete your GED, and/or build skills for a better job? We have you covered!

We are a tuition-free, non-credit program designed to provide learning opportunities for students who want more from life. This program is a pathway for students to obtain a GED certificate, to enter or return to college, to build core academic and student success skills in preparation for college classes and training programs, to explore support services and degree options, and/or to increase employability.

We offer classes at multiple campuses and outreach sites throughout Lane County. Students can choose from a range of course levels and individualized or structured class options in reading, writing, and math. Class times are offered during the day and evening in many locations.

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.

College Preparation and Transition: These courses prepare learners who need to build or brush up on college readiness skills for postsecondary education, including math, reading, writing, and student success principles. Students learn how to successfully navigate the college system, explore career/degree options, practice time/self-management, while completing coursework aligned to credit level programs.

GED Preparation in English and Spanish: The GED is the national high school equivalency assessment operated by GED Testing Service and includes a set of four tests: Math, Reasoning through Language Arts, Science, and Social Studies. Our classes prepare students to successfully complete the GED for employment and/or college entry.

Preparación para el GED en inglés y español: El GED es la evaluación de equivalencia de escuela secundaria nacional operada por el Servicio de Pruebas del GED e incluye un conjunto de cuatro pruebas: Matemáticas, Razonamiento a través de Artes del Lenguaje, Ciencias y Estudios Sociales. Nuestras clases preparan a los estudiantes para completar con éxito el GED para el empleo y / o la entrada a la universidad.

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). All new students must attend an orientation session.

Admission Procedures: Class locations, orientation, and registration information are available on the department website.

Registration, Costs and Payment Methods: To learn about registration, costs and payment methods for Adult Basic and Secondary Education, consult the department website.

If you are ready to take that next step in your life, or simply want to find out more information about how we might help, call us or check out the department website. Let's get you started today!

Cooperative Education

Main Campus, Building 19, Room 231, 541-463-5203, lanecc.edu/cooped

Are you interested in earning college credit for on the job experience? Cooperative Education (Co-op) Internships give students practical work experience related to their educational and career goals.

Co-op Internships offer a chance to:

Explore and confirm a career choice

Develop skills and self-confidence

Develop job contacts and a work history

Connect classroom learning with real world applications

Learn how to prepare a resume and improve interviewing skills

Co-op is a working partnership between the student, Lane Community College, and the Co-op employer. Hundreds of employers participate in the program each year and over 500 Lane students enroll in co-op each year working in both paid and non-paid positions. Many Co-op students are retained by employers as regular employees after graduation, although employment is not guaranteed.

To get started with Co-op:

Contact the Co-op coordinator in your subject area to determine if you are ready for an internship or if your current employment might qualify.

Work with your coordinator to set up a Co-op internship

Register for Co-op and begin your internship

Credits Co-op credits may not be audited or taken as pass/no pass. Students 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 and a minimum of 3 credits is generally required. Co-op credits may not be earned for past work experience (see Credit by Assessment).

For questions regarding Cooperative Education in specific areas go to our contact page to determine the correct coordinator to speak with. For general information regarding Co-op, please call or stop by our office.

Credit for Prior Learning

lanecc.edu/copps/documents/credit-prior-learning-procedure

Lane Community College recognizes the value of granting credit for prior learning (CPL) and non-traditional credit awards providing the practices for granting credit are carefully monitored and documented. The following types of credit for prior learning may be offered:

College Level Examination Program (CLEP)

Advanced Placement (AP)

International Baccalaureate (IB)

American College of Education Transcript (includes Joint Services Military Transcripts)

Credit by Exam

Credit by Assessment

English as a Second Language

Main Campus, Building 11, Room 242, 541-463-5253; Downtown Center, 4th Floor, Room 404; lanecc.edu/esl

The mission of English as a Second Language is to assist non-native speakers, both resident and international students, to achieve educational, workplace or other personal goals by facilitating English language learning and intercultural understanding in a supportive, respectful environment. To view program and course information, see:

English as a Second Language (Community)

English as a Second Language (Intensive)

High School Connections

Main Campus, Building 19, Room 231, 541-463-5521, lanecc.edu/hsconnections

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 dually enrolled at their high school and Lane, through our 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 equivalent to those offered in Lane programs and align with Lane course content, credits and learning outcomes. Courses are taught in many career technical and transfer subject areas. College Now credits are free for the 2021-22 academic year. Students must register for the College Now courses in order to receive Lane credit Click here to view College Now course offerings by high school: lanecc.edu/hsconnections/collegenow/courses-high-school

Early **College**, is a collaborative effort with local schools to provide early college opportunities to high school students. High school students have the opportunity to enroll in career technical or transfer courses at the college that are not available at their high school and receive high quality support from our dedicated advisor. The High School Connections office works with local school districts who sponsor their students, as well as individual students paying on their own. Additionally, school districts may contract with Lane to provide college courses 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 or are dual enrolled in another Lane credit class on campus or online. This course prepares students to skillfully navigate Lane systems, become 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 students who want to improve their likelihood of success in a college environment. Students self-assess interest areas and strengths, explore career pathways, and gain skills in work ethic and appropriate modes of communication in the college setting.

Honors Program

lanecc.edu/honors or email *honors@lanecc.edu*

The Lane Honors Program provides students 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

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 may fulfill general education electives and requirements for transfer degrees.

For a list of current classes, to learn more about the Honors Program or to apply, please visit our website or e-mail with questions.

LaneOnline

Main Campus, Center Building, Room 352, 541-463-5893 lanecc.edu/laneonline or email *online@lanecc.edu*

LaneOnline provides credit courses delivered through technology. Over 250 courses in various subject areas are offered each year. LaneOnline courses follow the same term schedules as on-campus classes and students follow the same admission and registration procedures as on-campus students. In order to participate in LaneOnline courses, students will need access to a computer with internet, current browser, and required software. Tuition for LaneOnline courses is the same as other courses. Fees will be assessed for Online and Hybrid Courses, see Tuition, Fees, Financial Aid

The Associate of Arts Oregon Transfer, Associate of General Studies, and Associate of Science, AS degrees and significant coursework for other degrees and certificates can be completed by taking online courses through LaneOnline. 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 at lanecc.edu/laneonline and clicking the desired term to see available classes.

Distance Education Modalities

In all courses, instructors may require students to use Moodle to access assignments or course content. Students must have a computer and a stable broadband internet connection.

Synchronous = there are scheduled class meetings (in person or on Zoom)

Asynchronous = there are no scheduled class meetings

Online (OL)

All course content, resources, assignments and assessments are online (usually via Moodle). There are no required meeting times on campus or on Zoom (the courses are asynchronous). Student-to-student interaction, teacher-to-student interaction and social community are hallmarks of online learning.

Online w/In-Person Testing (OT)

Courses in this designation will provide fully asynchronous OR online-synchronous (scheduled meetings over Zoom) instruction but will require students to visit Lane's campus (or another approved testing location) for assessments.

Hybrid/In-Person (HIP)

A portion of the class instruction is conducted online (asynchronously) usually via Moodle, and the rest is conducted during regularly scheduled in-person meetings. The in-person meetings occur on campus at a specified time and attendance is expected.

Hybrid/Zoom (HZ)

A portion of the class instruction is conducted online (asynchronously) usually via Moodle, and the rest is conducted during regularly scheduled Zoom meetings. The Zoom meetings occur at a specified time and attendance is expected.

HyFlex (HF)

A portion of the class instruction is conducted online (asynchronously) usually via Moodle, and the rest is conducted during regularly scheduled meetings. The scheduled meetings are offered in-person and simultaneously on Zoom and attendance is expected. Students can choose on a day-to-day basis whether to attend class either on campus or on Zoom.

Live Streaming (LS)

Live Streaming courses allow students to attend and interact in a course via Zoom at scheduled class meeting times. Some Live Streaming classes may be paired with on-campus courses, so students will be part of a class but will attend online (via Zoom and Moodle).

Courses

Aerospace Science

AS 111 - The Air Force Today

1 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
Cadets learn officership, leadership, drill and ceremony, and customs and courtesies. Lec/lab. Graded P/N. Only offered to students enrolled in the AFROTC officer commissioning program.
Corequisite: Taken concurrently with AS 111, AS 112 and AS 113.

AS 211 - The Development of Air Power

1 Credit(s)
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.
Corequisite: If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.

AS 212 - The Development of Air Power

1 Credit(s)
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.
Corequisite: If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.

AS 213 - The Development of Air Power

1 Credit(s)
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.
Corequisite: If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.

AS 220 - Leadership Laboratory

1 Credit(s)
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/NP. Only offered to students enrolled in the AFROTC officer commissioning program.
Corequisite: AS 220 is taken concurrently with AS 211, AS 212, and AS 213.

American Sign Language

ASL 101 - 1st Year American Sign Language

4 Credit(s)
The first course in a three-course series introduction to American Sign Language (ASL) stressing the development of expressive skill, receptive skill, and cultural awareness through a communication-centered approach. The primary emphasis is on the student's active use of the language. Students will begin to gain active conversational competence

in ASL. Course activities include visual readiness skills, vocabulary, culture and grammar. Target ACTFL proficiency level post-course: Novice High. For beginners.

ASL 102 - 1st Year American Sign Language

4 Credit(s)
The second course in a three-course series introduction to American Sign Language (ASL) stressing the development of expressive skill, receptive skill, and cultural awareness through a communication-centered approach. The primary emphasis is on the student's active use of the language. Students will begin to gain active conversational competence in ASL. Course activities include visual readiness skills, vocabulary, culture and grammar. Target ACTFL proficiency level post-course: Intermediate Low.
Prerequisite: ASL 101

ASL 103 - 1st Year American Sign Language

4 Credit(s)
The third course in a three-course series introduction to American Sign Language (ASL) stressing the development of expressive skill, receptive skill, and cultural awareness through a communication-centered approach. The primary emphasis is on the student's active use of the language. Students will begin to gain active conversational competence in ASL. Course activities include visual readiness skills, vocabulary, culture and grammar. Target ACTFL proficiency level post-course: Intermediate Mid.
Prerequisite: ASL 102

Anthropology

ANTH 101 - Physical Anthropology

4 Credit(s)
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 Credit(s)
This course serves as an introduction to foundational aspects of archaeology including methods, theory, and the major progression through time of culture and technology. It 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 Mesopotamia, Egypt, India, China, South America, MesoAmerica, and North America. May be offered online.

ANTH 103 - Cultural Anthropology

4 Credit(s)
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 Credit(s)
First term of a two-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 - Chicano Cultures

4 Credit(s)
This course is the second term of a two (2) term sequence. The course explores the historical roots and cultural anthropology of contemporary Mexican Indians and Mexican Americans (Chicano). It examines the impact of colonialism on Mesoamerican Indian cultures and, after the origin of Mexican Americans post Mexican-American War, its influence on Chicano cultures. Students will be exposed to the objectives and findings of cultural anthropology, as well as encouraged to appreciate the cultural differences and similarities within and between Mexican Indians and Chicanos.

ANTH 231 - American Indian Studies

3 Credit(s)
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 Credit(s)
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 Credit(s)
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

APR 101 - Trade Skills Fundamentals

4 Credit(s)
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.

APR 101A - Trade Skills Fundamentals

4 Credit(s)
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 101I - Trade Skills Fundamentals

4 Credit(s)
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.

APR 105 - Electrical Wiring for the Trades

4 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 130A - Electrical Principles

4 Credit(s)
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 Credit(s)
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 131A - Electrical Principles/Residential Wiring

4 Credit(s)
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 Credit(s)
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 Credit(s)
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 133A - Electrical Generators, Transformers, and Motors 1

4 Credit(s)
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 Credit(s)
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 134A - Electrical Generators, Transformers and Motors 2

4 Credit(s)
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 Credit(s)
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 Credit(s)
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 140I - Industrial Instrumentation Technician Trade Orientation

4 Credit(s)
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 Credit(s)
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 141I - Industrial Instrumentation Technician Gaskets, Mathematics and Drawings

4 Credit(s)
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course explores the basic laws of electrical theory and the safety practices employed in the limited electric field. Power quality, trade repairs and installations and blueprint reading will be reviewed along with the NEC codes that

regulate the trade. Students learn a knowledge base consisting of the basic theory, vocabulary and safety practices common to limited energy installations

APR 142 - Devices, Testing Equipment and Code

4 Credit(s)
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 142I - Industrial Instrumentation Technician Test Equipment, Pumps, Valves and Lubrication

4 Credit(s)
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 Credit(s)
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course provides an overview of the types of cable used for various low-voltage installations. Also, covers the methods used to select the proper size and type of cable for a typical installation. Provides information and detailed instructions for selecting, installing, and testing connectors and other terminating devices on the various cables used in low-voltage work, including telecommunications, video and audio, and fiber optics. Covers grounding and bonding of electrical systems. Discusses NEC® regulations pertaining to grounding and bonding. Covers equipment and devices used for grounding and bonding, including their methods of installation. Explains power quality, along with the causes and effects of poor power quality.

APR 143I - Industrial Instrumentation Technician Electrical Theory and National Electrical Code

4 Credit(s)
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 Credit(s)
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 144I - Industrial Instrumentation Technician Test Equipment

4 Credit(s)
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 Credit(s)
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.
Prerequisite: Minimum reading score of 68 (Accuplacer) or 241 (Next Gen Accuplacer) OR minimum writing score of 64 (Accuplacer) or 226 (Next Gen Accuplacer) OR RD 080 OR RD 087 and EL 115R OR Prior College. Within the past 2 years, completed MTH020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office.

APR 151 - Millwright Machine Theory and Trade Calculations

5 Credit(s)
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.
Prerequisite: Minimum reading score of 68 (Accuplacer) or 241 (Next Gen Accuplacer) OR minimum writing score of 64 (Accuplacer) or 226 (Next Gen Accuplacer) OR RD 080 OR RD 087 and EL 115R OR Prior College. Within the past 2 years, completed MTH 020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office.

APR 152 - Millwright: Power Transmissions and Boilers-Steam

5 Credit(s)
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
Prerequisite: RD 087 AND EL 115 OR prior college or placement test and within the past 2 years, completed MTH 020 or higher with a grade of C- or better or placed into MTH 075 through the Testing Office.

APR 160 - Plumbing Skill Fundamentals

4 Credit(s)
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 160A - Plumbing Skill Fundamentals

2 Credit(s)
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 Credit(s)
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 161A - Plumbing Materials and Fixtures

2 Credit(s)
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 Credit(s)
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 162A - Plumbing Basic Waste Water Systems

2 Credit(s)
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 Credit(s)
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 163A - Plumbing Calculations and Print Reading

2 Credit(s)
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 Credit(s)
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 164A - Plumbing Basic Installation 1

2 Credit(s)
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 Credit(s)
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 165A - Plumbing Basic Installation 2

2 Credit(s)
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 Credit(s)
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 Credit(s)
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 173 - Sheet Metal Formulas

4 Credit(s)
Covers fractions and decimals, geometric shapes, equation solutions, ratios and proportions, perimeters, areas, and volumes of geometric shapes; powers; and, use of the scientific calculator. Emphasis is on applications to applied sheet metal fabricators.

APR 185 - Shielded Metal Arc Welding 1

1-4 Credit(s)
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.
Prerequisite: RD 087 AND EL 115 OR prior college or placement test.

APR 186 - Wire Drive Welding 1

1-4 Credit(s)
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.
Prerequisite: RD 087 AND EL 115 OR prior college or placement test.

APR 187 - Fundamentals of Metallurgy

1-3 Credit(s)
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.
Prerequisite: RD 087 AND EL 115 OR prior college or placement test.

APR 189 - Shop Practices

2 Credit(s)
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.
Prerequisite: RD 087 AND EL 115 OR prior college OR placement test.

APR 190 - Electrical Theory 1

1-4 Credit(s)
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.
Prerequisite: RD 087 AND EL 115 OR prior college AND MTH 060 OR higher with a letter grade of C- or better, OR placement test.

APR 191 - Electrical Theory 2

1-4 Credit(s)
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.
Prerequisite: ET 129 OR APR 190

APR 201 - Carpentry Basic Rigging and Practices

3 Credit(s)
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.
Learning Outcomes

APR 202 - Carpentry Concrete Practices

3 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
This is the first course of a four 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 Credit(s)
This is the second course of a four 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 Credit(s)
This is the third course of a four 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 213 - HVAC Systems 4

4 Credit(s)
This is the fourth course of a four- term sequence in HVAC theory and application . This class identifies basic systems common to this industry with emphasis on water treatment, indoor air quality, building management, system design, air balancing , and commercial and industrial refrigeration. In addition, concepts in alternative and specialized heating and cooling system s, as well as crew leadership are explored. 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 Credit(s)
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 Credit(s)
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 225A - Electrical Motor Controls

4 Credit(s)
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 Credit(s)
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 226A - Electrical Grounding/Bonding and Blueprint Reading

4 Credit(s)
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 Credit(s)
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.

Learning Outcomes

Students who successfully complete this course will be able to:
1. Demonstrate proper motor and transformer installations and troubleshooting technique
2. Employ common safety practices; use different types of personal protective gear, and Lock-out / Tag-out techniques
3. Demonstrate understanding of lighting techniques
4. Demonstrate a basic understanding of low voltage and Telecomm theory and application
5. Demonstrate troubleshooting techniques involved with electric motor control; start/stop, contactors, proximity switches, starters, and reversing circuits
6. Demonstrate a working knowledge of the National Electrical Code

APR 240 - Audio and Intrusion Systems

4 Credit(s)
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 240I - Industrial Instrumentation Technician Process Mathematics and Tubing

4 Credit(s)
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores the theory and safety practices employed in fire alarm and intrusion detection systems along with the NEC codes that regulate their use and installation. Students learn basic theory, vocabulary and safety practices common to alarm systems.

APR 241 - Fire Alarm Systems and Nurse Call

4 Credit(s)
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 241I - Industrial Instrumentation Technician Drawings, Conductors, Terminations and Splices

4 Credit(s)

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 Credit(s)

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 242I - Industrial Instrumentation Technician E, Electronic Components, Drawings and Motor Controls

4 Credit(s)

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 245I - Industrial Instrumentation Technician Distribution, Transformers and Conductor Selection

4 Credit(s)

Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores control elements, transducers, and transmitters commonly used in process control. Students will learn a knowledge base consisting of the basic theory, vocabulary, and safety practices commonly used in process-control systems.

APR 250 - Millwright: Industrial Print Reading, Schematics, and Estimating

5 Credit(s)

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.

Prerequisite: Minimum reading score of 68 (Accuplacer) or 241 (Next Gen Accuplacer) OR minimum writing score of 64 (Accuplacer) or 226 (Next Gen Accuplacer) OR RD 080 OR RD 087 And EL 115R OR Prior College. Within the past 2 years, completed MTH 020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office.

APR 251 - Millwright: Pneumatics and Lubrications

5 Credit(s)

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.

Prerequisite: Minimum reading score of 68 (Accuplacer) or 241 (Next Gen Accuplacer) OR minimum writing score of 64 (Accuplacer) or 226 (Next Gen Accuplacer) OR RD 080 OR RD 087 And EL 115R OR Prior College. Within the past 2 years, completed MTH 020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office.

APR 252 - Hydraulics for Millwrights

5 Credit(s)

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.

Prerequisite: Minimum reading score of 68 (Accuplacer) or 241 (Next Gen Accuplacer) OR minimum writing score of 64 (Accuplacer) or 226 (Next Gen Accuplacer) OR RD 080 OR RD 087 and EL 115R OR Prior College. Within the past 2 years, completed MTH 020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office.

APR 253 - Millwright Piping Systems

5 Credit(s)

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.

Prerequisite: Minimum reading score of 68 (Accuplacer) or 241 (Next Gen Accuplacer) OR minimum writing score of 64 (Accuplacer) or 226 (Next Gen Accuplacer) OR RD 080 OR RD 087 and EL 115R OR Prior College. Within the past 2 years, completed MTH 020 or higher with a grade of "C-" or better or placed into MTH 075 through the Testing Office.

APR 254I - Industrial Instrumentation Technician Grounding Installation and Bending of Conduit

4 Credit(s)

Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores control elements, transducers, and transmitters commonly used in process control. Students will learn a knowledge base consisting of the basic theory, vocabulary, and safety practices commonly used in process-control systems.

APR 255I - Industrial Instrumentation Technician Fluid Controls and Motor Operated Valves

4 Credit(s)

Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores control elements, transducers, and transmitters commonly used in process control. Students will learn a knowledge base consisting of the basic theory, vocabulary, and safety practices commonly used in process-control systems.

APR 260 - Plumbing Water Supply Systems

4 Credit(s)

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 260A - Plumbing Water Supply Systems

2 Credit(s)

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 Credit(s)

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 261A - Plumbing Piping Sizing and Systems

2 Credit(s)

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 Credit(s)
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 262A - Plumbing Advanced Waste Systems

2 Credit(s)
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 Credit(s)
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 263A - Plumbing Code and Test Prep

2 Credit(s)
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 264I - Industrial Instrumentation Technician Process Controls

4 Credit(s)
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores control elements, transducers, and transmitters commonly used in process control. Students will learn a knowledge base consisting of the basic theory, vocabulary, and safety practices commonly used in process-control systems.

APR 265I - Industrial Instrumentation Technician Specialized Control Systems 1

4 Credit(s)
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. This course explores control elements, transducers, and transmitters commonly used in process control. Students will learn a knowledge base consisting of the basic theory, vocabulary, and safety practices commonly used in process-control systems.

APR 268I - Industrial Instrumentation Technician Specialized Control Systems 2

4 Credit(s)
Designed for Oregon state-recognized apprentices employed in a trade or industry related occupation. This course explores control elements, transducers, and transmitters commonly used in process control. Students will learn a knowledge base consisting of the basic theory, vocabulary, and safety practices commonly used in process-control systems.

APR 270 - Architectural Sheet Metal

4 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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.
Prerequisite: ET 229 or APR 285.

APR 290 - Programmable Controllers 1

1-4 Credit(s)
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.
Prerequisite: Second year standing.

APR 291 - Programmable Controllers 2

1-4 Credit(s)
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, and field devices are practiced with an emphasis on troubleshooting.
Prerequisite: ET 234 or APR 290.

APR 292 - Programmable Controllers 3

4 Credit(s)
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.
Prerequisite: ET 235 or APR 291 and second year standing.

Art

ART 111 - Introduction to Visual Arts

3 Credit(s)
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 115 - Basic Design: Fundamentals

3 Credit(s)
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, as well as create and analyze projects that demonstrate critical and creative thinking and knowledge of 2D design theory and practice.
Prerequisite/Corequisite: Recommend Art majors take concurrently with ART 111 and ART 131

ART 116 - Basic Design: Color

3 Credit(s)
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.
Prerequisite: Recommend students first take ART 115.

ART 117 - Basic Design: 3-Dimensional

3 Credit(s)
Beginning course on the fundamental principles of 3D 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 3D design fields.

ART 118 - Artist Books and Pop-up

4 Credit(s)
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. May be repeated up to 9 total credits.

ART 119 - Typography 1

3 Credit(s)
Explores the use and design of letterforms and typographic design. Typographic history and classification of typefaces are covered, while essential craftsmanship and technical skills are stressed. Concept development and critical evaluation of design approaches are part of this course. Assignments are designed to build upon the skills acquired in subsequent projects. This course provides students with an in-depth understanding of how typography is used to communicate content as well as being visually effective. Type hierarchy and organizational layout skills will be explored. Students will perform a series of projects by hand and/or digitally to demonstrate skill in these areas.
Prerequisite: ART 115 or ART 131

ART 120 - Intermediate Artist Books and Pop-up

4 Credit(s)
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. May be repeated up to 9 total credits.
Prerequisite: ART 118

ART 131 - Introduction to Drawing

3 Credit(s)
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. May be repeated up to 9 total credits.
Corequisite: Recommend Art majors take concurrently with ART 115.

ART 216 - Digital Design Tools

3 Credit(s)
An introduction to vector and bitmap images, and document-sharing software used in graphic design.

ART 220 - Documentary Photography

3 Credit(s)
Explore the creation and historical impact of documentary photography. Lecture and discussion are 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 221 - Graphic Design 1

4 Credit(s)
Available only to students accepted into the graphic design program, this course is an introduction to how graphic design, layout, and typography can be used to communicate to specific audiences. The design process from intake to finished piece is explored. This course introduces abstract concepts of communication that use gestalt principles, symbolism and metaphor to make the whole greater than the parts. A focus on logo design and corporate identity creation is used to reinforce core concepts. Students perform a variety of projects to demonstrate their skills and understanding of these.
Prerequisite: ART 115, ART 116, ART 119 with a grade of B-

ART 222 - Graphic Design 2

4 Credit(s)
Available only to students accepted into the graphic design program, this course explores graphic design in three-dimensions through the design of brochures, packaging, and event graphics. Students learn grid systems, the use of templates and dielines, how to prepare files for print, proofing, cutting, scoring and folding in the completion of their projects. Students demonstrate an understanding of how to graphically communicate to a target audience while also considering the wider world audience.
Prerequisite: ART 221 with a grade of B- or better

ART 223 - Graphic Design 3

4 Credit(s)
Available only to students accepted into the graphic design program, this course goes further into event graphics and corporate identity and includes design concepts for web and UI/UX. Students brand themselves and develop their resumes and portfolios throughout the term. Professional practices and job acquisition skills are taught.
Prerequisite: ART 222 with a grade of B- or better

ART 225 - Digital Illustration

3 Credit(s)
Students gain experience in using vector software to create technical and creative illustrations.
Prerequisite: ART 216

ART 227 - Graphic Design Production 1

3 Credit(s)
An introduction to digital prepress production with emphasis on page layout software and professional standards of production.
Prerequisite: ART 216 and acceptance into the second year of the graphic design program

ART 228 - Graphic Design Production 2

4 Credit(s)
An intermediate course in digital production with emphasis on professional standards of production.
Prerequisite: ART 227 with a grade of B- or better

ART 229 - Graphic Design Production 3

4 Credit(s)
An advanced course in digital production with emphasis on professional standards of production.
Prerequisite: ART 228 with a grade of B- or better

ART 231 - Drawing: Intermediate

3 Credit(s)
Emphasis on further development and exploration of drawing skills of observation, representation, composition, thematic development and critical analysis begun in ART 131. 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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.
Prerequisite: ART 131 or instructor permission by portfolio.

ART 234 - Drawing: Figure

3 Credit(s)
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.
Prerequisite: ART 131.

ART 237 - Illustration 1

3 Credit(s)
This course explores possibilities of commercial illustration. The emphasis will be on solving visual problems and developing concepts and personal style. A variety of hands-on techniques and media will be covered. Students will create projects that emphasize imagination, design and compositional skills and the use of visual resources for image creation. Students will build upon observational drawing skills from Introduction to Drawing. May be repeated up to 9 total credits.
Prerequisite: ART 131.

ART 240 - Natural Science Drawing

3 Credit(s)
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. May be repeated up to 9 total credits.

ART 245 - Drawing for Media

4 Credit(s)
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 Credit(s)
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 Credit(s)
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. 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 Credit(s)
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. 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 Credit(s)
Enhancement of ceramic wheel-throwing and hand building skills. An introduction to complex thrown and hand-built 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.
Prerequisite: ART 250 and ART 251.

ART 255 - Alchemy of Ceramics: Materiality, Chemistry, and Kiln Firing

3 Credit(s)
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.
Prerequisite: ART 250

ART 261 - Photography 1

3 Credit(s)
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 266 - Off-Loom Fibers

3 Credit(s)
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: 2D and 3D 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.

ART 270 - Printmaking: Traditional and Digital Etching

3 Credit(s)
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 edition 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. May be repeated for up to 9 total credits.

ART 271 - Printmaking; Woodcut and Linocut

3 Credit(s)
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. May be repeated for up to 9 total credits.

ART 272 - Printmaking: Experimental Processes

3 Credit(s)
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. May be repeated up to 9 total credits.

ART 273 - Printmaking: Intermediate Traditional and Digital Etching

3 Credit(s)
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. May be repeated up to 9 total credits.
Prerequisite: ART 270

ART 274 - Printmaking: Intermediate Woodcut and Linocut

3 Credit(s)
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.
Prerequisite: ART 271.

ART 275 - Screen Printing

3 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.
Prerequisite: Recommended ART 276 or ART 117

ART 281 - Painting: Introduction

3 Credit(s)
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 282 - Landscape and Architectural Photography

4 Credit(s)
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.

ART 284 - Painting: Intermediate

3 Credit(s)
An intermediate-level course in acrylic 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.
Prerequisite: ART 281.

ART 285 - Advanced Screen Printing

3 Credit(s)
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.
Prerequisite: ART 275.

ART 286 - Sculpting for Animators

3 Credit(s)
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 288 - Introduction to Web Design and Social Media

3 Credit(s)
Introduction to design and communication principles as they apply to web design. Students also investigate the unique challenges involved in website design including an introduction to social media marketing.

ART 289 - Web Production

3 Credit(s)
An intermediate web development course emphasizing web production best practices and strategies. Topics include site building and management, navigation and usability, web typography, and image optimization for the web. Students will gain hands-on experience with modern tools and technologies including use of web-based tools and web authoring software.
Prerequisite: ART 216 or MUL 212.

ART 290 - Design Concepts for the Web

3 Credit(s)
An intermediate study of website design with an emphasis on informational architecture and user interface/experience design including strategy, planning, usability, and design of website interfaces and layouts.
Prerequisite: ART 216 or MUL 212, and ART 289

ART 291 - Sculpture: Metal Casting

5 Credit(s)
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 Credit(s)
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 a historical as well as an aesthetic and socio-political perspective, as well as work on a design project for a pre-determined public space.
Prerequisite: ART 115

ART 293 - Sculpture: Figure

3 Credit(s)
Intensive study of the human figure in 3D 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 Credit(s)
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.
Prerequisite: ART 131, drawing experience, or instructor consent.

ART 295 - Watercolor: Intermediate

3 Credit(s)
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.
Prerequisite: ART 294, previous college watercolor class, or instructor consent.

ART 296 - Mural Painting Class

4 Credit(s)
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.
Prerequisite: ART 115 and ART 116

Art History

ARH 200 - History of Design Arts

3 Credit(s)
From the first broadsides on the streets of London to aerodynamics in transportation technology to the advent of digital technology, History of Design Arts introduces students to a wide span of eras, cultures, ideas, and practitioners. The course will highlight the designs that shape our culture.

ARH 203 - Survey of American Indian Art and Architecture: North and Central America

4 Credit(s)
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 Credit(s)
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.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills).

ARH 205 - History of Western Art 2

3 Credit(s)
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.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills).

ARH 206 - History of Western Art 3

3 Credit(s)
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.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills).

ARH 207 - History of Indian Art

3 Credit(s)
A historical survey of the visual 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.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills).

ARH 208 - History of Chinese Art

3 Credit(s)
A historical survey of the visual 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.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills).

ARH 209 - History of Japanese Art

3 Credit(s)
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.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills).

ARH 211 - Early Modern Art: 1850-1910

3 Credit(s)
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 Credit(s)
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 Credit(s)
A historic study of the artistic traditions of the United States from 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.

ARH 217 - History of Middle Eastern and Islamic Art

3 Credit(s)
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.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills).

ARH 218 - History of Photography:1700-1910

3 Credit(s)
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.

ARH 219 - History of Photography: 1910-1950

3 Credit(s)
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. It 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 Credit(s)
Study of the major commercial and artistic trends in photography from 1950 to the present. Entails critical reviews of the relationship of photography to significant cultural, political, and artistic trends of the recent past.

Astronomy

ASTR 121 - Astronomy of the Solar System

4 Credit(s)
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. Lab included.
Prerequisite: MTH 052 or MTH 060 or MTH 065 or MTH 070 or MTH 095 or MTH 111 or placement test.

ASTR 122 - Stellar Astronomy

4 Credit(s)
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. Lab included.
Prerequisite: MTH 052 or higher

ASTR 123 - Cosmology and the Large-Scale Structure of the Universe

4 Credit(s)
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. Lab included.
Prerequisite: MTH 052 or higher

Audio Production

AUD 120 - Audio Production

4 Credit(s)
Basic theories and practices of audio production and post production techniques for time-based media. This includes the use of microphones, mobile recorders, digital audio workstations and understanding studio concepts. Topics covered: mobile recording, Foley artistry, and automatic dialogue replacement. Students gain an understanding of sound capture and manipulation through demonstrations, practical hands-on exercises and recording assignments.
Prerequisite: MUL 103 or MUS 118 or equivalent skill set

Automotive

AM 143 - Brakes

1-8 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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.

Aviation Maintenance

AV 251 - General 101

6 Credit(s)
Physics, material and processes, metal heat treatment, non-destructive testing (dye penetrant, eddy current, ultrasound and magnetic particle inspection), hardware identification, precision measurement, fabricate rigid and flexible fluid lines, corrosion identification and control.
Prerequisite: RD 087 and MTH 020 OR higher OR Prior College OR placement test.

AV 252 - General 102

6 Credit(s)
Maintenance publications, maintenance forms and records, mechanic privileges and limitations, airframe and engine inspection, ground operations and aircraft drawings.
Prerequisite: RD 087 and MTH 020 OR higher OR Prior College OR placement test.

AV 253 - General 103

6 Credit(s)
Basic electricity; measure voltage, current and resistance, determine relationship of voltage, current and resistance in electrical circuits, calculate and measure electrical power, calculate and measure capacitance and inductance, read and interpret aircraft electrical circuit diagrams, inspect and service batteries.
Prerequisite: RD 087 and MTH 020 OR higher OR Prior College OR placement test.

AV 254 - General 104

6 Credit(s)
Inspect, troubleshoot and repair aircraft and engine and airframe electrical systems, install and service engine and airframe electrical wiring, controls, switches indicators and protective devices, inspect, troubleshoot constant speed and integrated speed drive generators, read and interpret aircraft electrical circuit diagrams including solid state devices and logic functions.
Prerequisite: RD 087 and MTH 020 OR higher OR Prior College OR placement test.

AV 255 - General 105

6 Credit(s)
Aircraft fuel systems, aircraft and engine instrument systems, aircraft and engine fire protection systems, weight and balance.
Prerequisite: RD 087 and MTH 020 OR higher OR Prior College OR placement test.

AV 261 - Airframe 1

6 Credit(s)
Assembly and rigging, ice and rain control systems, communication and navigation systems, welding.
Prerequisite: RD 087 and MTH 020 OR higher OR Prior College OR placement test.

AV 262 - Airframe 2

6 Credit(s)
Position and warning systems, aircraft landing gear systems, hydraulic and pneumatic power systems.
Prerequisite: RD 087 and MTH 020 OR higher OR prior college OR placement test.

AV 263 - Airframe 3

6 Credit(s)
Inspect and repair sheet metal structures, install conventional rivets, form, layout and bend sheet metal.
Prerequisite: RD 087 and MTH 020 OR higher OR prior college OR placement test.

AV 264 - Airframe 4

6 Credit(s)
Wood structures, aircraft covering, non-metallic structures, aircraft finishes, cabin atmosphere and control systems.
Prerequisite: RD 087 and MTH 020 OR higher OR prior college OR placement test.

AV 271 - Powerplant 1

6 Credit(s)
Inspect, check, troubleshoot, service, repair and overhaul reciprocating engines, remove and install reciprocating engines, inspect and repair a radial engine.
Prerequisite: RD 087 and MTH 020 OR higher OR prior college OR placement test.

AV 272 - Powerplant 2

6 Credit(s)
Inspect, check, troubleshoot, service, repair and overhaul turbine engines and auxiliary power units, remove and install turbine engines.
Prerequisite: RD 087 and MTH 020 OR higher OR prior college OR placement test.

AV 273 - Powerplant 3

6 Credit(s)
Induction and engine airflow systems, engine exhaust and reverser systems, ignition and starting systems, engine cooling systems.
Prerequisite: RD 087 and MTH 020 OR higher OR prior college OR placement test.

AV 274 - Powerplant 4

6 Credit(s)
Fuel metering, propellers and unducted fans, lubrication systems.
Prerequisite: RD 087 and MTH 020 OR higher OR prior college OR placement test.

AV 282 - Airframe Return to Service

6 Credit(s)
This Airframe capstone course provides diversified projects, supervised field experience and FAA examination review for graduating students seeking their Mechanic Certificate with Airframe Rating. Projects include, but are not limited to, 100 Hour aircraft inspections, flight control rigging, aircraft electrical troubleshooting and repair, aircraft weighing, use of maintenance forms and records, and interpretation federal aviation regulations.
Prerequisite: AV 251, AV 252, AV 253, AV 254, AV 255, AV 261, AV 262, AV 263, AV 264, AV 271, AV 272, AV 273, AV 274; AND RD 087; AND MTH 020 or higher, OR prior college, OR placement test.

AV 283 - Powerplant Return to Service

6 Credit(s)
This Powerplant capstone course provides diversified projects, supervised field experience and FAA examination review for graduating students seeking their Mechanic Certificate with Powerplant Rating. Projects include, but are not limited to, 100 Hour powerplant inspections, engine and propeller troubleshooting and repair, engine electrical system troubleshooting and repair, ignition system inspection and adjustment, exhaust system inspection and repair, use of maintenance forms and records, and interpretation of federal aviation regulations.
Prerequisite: AV 251, AV 252, AV 253, AV 254, AV 255, AV 261, AV 262, AV 263, AV 264, AV 271, AV 272, AV 273, AV 274; AND RD 087; AND MTH 020 or higher, OR prior college, OR placement test.

Aviation Pilot

AP 110A - Flight Lab - Pre-Solo

1 Credit(s)
Part 61 pre-solo flight training for students under 180 pounds in weight and 6'2" in height.

AP 110B - Flight Lab - Pre-Solo

1 Credit(s)
Part 61 pre-solo flight training for students at or over 180 pounds in weight and 6'2" in height.

AP 112 - Private Pilot Ground School

5 Credit(s)
Part 141 private pilot ground training.
Corequisite: AP 113

AP 113 - Airman Certification Standards and Maneuvers

1 Credit(s)
Breakdown of private pilot flight maneuvers and the Airman Certification Standards of each.
Corequisite: AP 112

AP 115 - Intro to Aviation and Careers

1 Credit(s)
An introduction to aviation industries and career areas, both flying and non-flying, as presented by a variety of guest speakers from the aviation industry and online course work. Class attendance during in-person sessions is mandatory for credit; this is not a graded course.

AP 116 - Aviation History

4 Credit(s)
In depth study of aviation history. From the dreams of Leonardo da Vinci to the reality of fighter jets. Primary focus is on the invention and advancement of aircraft and the careers that followed.

AP 120A - Flight Lab - Private Pilot Certificate

1 Credit(s)
Part 61 private pilot flight training for students under 180 pounds in weight and 6'2" in height.
Prerequisite: AP 110A

AP 120B - Flight Lab - Private Pilot Certificate

1 Credit(s)
Part 61 private pilot flight training for students at or over 180 pounds in weight and 6'2" in height.
Prerequisite: AP 110B

AP 121 - Simulator Lab - Private

1 Credit(s)
Part 61 private pilot simulator training.

AP 125 - Aircraft Systems & Structures 1

2 Credit(s)
In depth study of small fixed-wing aircraft systems.

AP 126 - Aviation Weather Services

2 Credit(s)
In depth study of weather reporting available to pilots on the aviationweather.gov website.

AP 127 - Aerodynamics

3 Credit(s)
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.

AP 130 - Flight lab - Attitude Control

1 Credit(s)
Part 61 attitude instrument flight training.
Prerequisite: AP 120A or AP 120B

AP 132 - Instrument Ground School

5 Credit(s)
Part 141 instrument ground training.
Corequisite: AP 135

AP 135 - Advanced Avionics

1 Credit(s)
Hands on advanced GPS lab.
Corequisite: AP 132

AP 140 - Flight Lab - Instrument Rating

1 Credit(s)
Part 61 instrument rating flight training.
Prerequisite: AP 120A or AP 120B

AP 141 - Simulator Lab - Instrument

1 Credit(s)
Part 61 instrument simulator training.

AP 210 - Flight Lab - Cross-Country

1 Credit(s)
Part 61 commercial cross-county flight training.
Prerequisite: AP 120A or AP 120B

AP 212 - Commercial Pilot Ground School

5 Credit(s)
Part 141 commercial pilot ground training.

AP 215 - Aircraft Systems & Structures 2

2 Credit(s)
In depth study of advanced fixed-wing aircraft systems including hydraulics, fly-by-wire, and turbine-engines.

AP 220 - Flight Lab - Maneuvers

1 Credit(s)
Part 61 commercial maneuvers flight training.
Prerequisite: AP 120A or AP 120B

AP 221 - Simulator Lab - Commercial

1 Credit(s)
Part 61 commercial pilot simulator training.

AP 222 - CFI/CFII Ground School

3 Credit(s)
Part 61 CFI/CFII ground training.
Corequisite: AP 225

AP 225 - FOI & Human Factors

3 Credit(s)
Study of psychological principles related to 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 person/machine interface are covered. Studies Crew Resource Management to improve crew coordination and situational awareness.
Corequisite: AP 222

AP 230 - Flight Lab - Commercial Pilot Certificate

1 Credit(s)
Part 61 commercial pilot flight training.
Prerequisite: AP 120A or AP 120B, AP 130, AP 140, AP 210, and AP 220

AP 232 - Multi-Engine Ground School

2 Credit(s)
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.

AP 235 - Accident Investigations

3 Credit(s)
Study and 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.

AP 240 - Flight Lab - Multi-Engine Rating & CFI/CFII Certificate

1 Credit(s)
Part 61 multi-engine, CFI, and CFII flight training.
Prerequisite: AP 230, AP 222, AP 225, AP 212

AP 280 - Co-op Ed: Pro Pilot

3-12 Credit(s)
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.

Biology

Students may only use one BI 101, one BI 102, and one BI 103 to meet requirements for any Lane degree, regardless of letter option. Additional BI 101, BI 102, and BI 103 courses will count as electives.

BI 101 - General Biology

4 Credit(s)
BI 101 topics: atoms, molecules, cellular processes, genetics, protein synthesis, photosynthesis, respiration. Lab included. Only one BI 101 can be used to meet requirements for any Lane degree, regardless of letter option.

BI 101E - General Biology-Ocean Life Foundations

4 Credit(s)
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. Includes a field trip to the coast.

BI 101F - General Biology-Survey of Biology

4 Credit(s)
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, genetic engineering, and cancer.

BI 101I - General Biology-Botanical Beginnings

4 Credit(s)
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 Credit(s)
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 Credit(s)
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 102 - General Biology

4 Credit(s)
BI 102 topics: homeostasis, feedback loops, and body systems. Lab included. Only one BI 102 can be used to meet requirements for any Lane degree, regardless of letter option.

BI 102C - General Biology-Marine Biology

4 Credit(s)
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. Includes a field trip to the coast.

BI 102D - General Biology-Survey of Biology

4 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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. Lab included.

BI 102I - General Biology-Human Biology

4 Credit(s)
Students learn human body systems, including circulatory, respiratory, urinary, reproductive, nervous, muscular, skeletal, lymphatic, digestive, and endocrine systems.

BI 103 - General Biology

4 Credit(s)
BI 103 topics: ecology, evolution and the classification and natural history of organisms. Lab included. Only one BI 102 can be used to meet requirements for any Lane degree, regardless of letter option.

BI 103A - General Biology-Birds of Oregon

4 Credit(s)
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 103D - General Biology: Sea Birds and Mammals

4 Credit(s)
Students learn unique anatomical and physiological adaptations of marine birds and mammals to understand evolutionary processes, ecological interactions, and human impact on populations. Includes a field trip to the coast.

BI 103E - General Biology: Survey of Biology

4 Credit(s)
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 Credit(s)
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 Credit(s)
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. Includes field trips.

BI 103H - General Biology-Mushrooms

4 Credit(s)
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 Credit(s)
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 103L - General Biology: Evolution and Diversity

4 Credit(s)
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.

BI 103M - General Biology: Biodiversity and Sustainability

4 Credit(s)
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 112 - Cell Biology for Health Occupations

4 Credit(s)
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. Lab included.
Corequisite: CH 112

BI 211 - Principles of Biology

4 Credit(s)
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.
Prerequisite: MTH 095 with grade of C- or better, or placement into MTH 111 or higher.

BI 212 - Principles of Biology

4 Credit(s)
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. Lab included.
Prerequisite: BI 211 with grade of C- or better or BI 101F or BI 112 with grade of A- or better or instructor consent.

BI 213B - Principles of Botany

4 Credit(s)
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.
Prerequisite: Grade of C- or better in BI 211 and BI 212 or instructor consent.

BI 213Z - Principles of Zoology

4 Credit(s)
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.
Prerequisite: Grade of C- or better in BI 212 and BI 212 or instructor consent.

BI 231 - Human Anatomy and Physiology 1

4 Credit(s)
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. May be offered online. Lab included.
Prerequisite: Grade of C- or better in BI 112 and CH 112.

BI 232 - Human Anatomy and Physiology 2

4 Credit(s)
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. Lab included.
Prerequisite: Grade of C- or better in BI 231

BI 233 - Human Anatomy and Physiology 3

4 Credit(s)
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. Lab included.
Prerequisite: Grade of 'C-' or better in BI 232

BI 234 - Introductory Microbiology

4 Credit(s)
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. Lab included.
Prerequisite: Grade of C- or better in BI 233 or instructor consent

Business Administration

BA 101 - Introduction to Business

4 Credit(s)
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 Credit(s)
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.
Prerequisite: BA 101

BA 211 - Financial Accounting

4 Credit(s)
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.
Prerequisite: MTH 095 or higher or test, BA 101 and WR 121 or WR 122 or WR 123. Sophomore standing recommended.

BA 213 - Managerial Accounting

4 Credit(s)
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 cost accounting.
Prerequisite: BA 211

BA 214 - Business Communications

4 Credit(s)
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. Students will prepare and deliver business-related presentations that inform, recommend and train.
Prerequisite: BT 108 and WR 121.

BA 222 - Financial Management

4 Credit(s)
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.
Prerequisite: MTH 105 or higher, BT 123, BT 165 OR BA 211

BA 223 - Marketing

4 Credit(s)
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.
Prerequisite: BA 101

BA 224 - Human Resource Management

4 Credit(s)
This course is an introduction to Human Resource Management. It examines the policies and practices used by human resource management staff to build and maintain an effective work force. Topics include human resource planning, job analysis, recruitment, selection, performance appraisal, manpower development, compensation, and labor relations.
Prerequisite: BA 101

BA 226 - Business Law

4 Credit(s)
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 Credit(s)
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 thoroughly explored. 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.
Prerequisite: BA 101

BA 249 - Retailing

4 Credit(s)
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.
Prerequisite: BA 223

BA 250 - Small Business Management

4 Credit(s)
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.
Prerequisite: BT 123 and BA 223

BA 254 - General Aviation Management

3 Credit(s)
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.

BA 278 - Leadership and Team Dynamics

4 Credit(s)
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 281 - Personal Finance

4 Credit(s)
As a comprehensive introduction to personal finance, the course covers budgets, personal banking, consumer credit, insurance, investing, stocks, bonds, retirement planning, and paying for college, and an introduction to personal income taxes. Analytical tools are applied to optimize personal decision making.

Business Technology

BT 108 - Business Proofreading and Editing

4 Credit(s)
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 120 - MS WORD for Business

4 Credit(s)
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.
Prerequisite: Recommend familiarity with Windows operating system and the ability to accurately type 30 words per minute.

BT 123 - MS EXCEL for Business

4 Credit(s)
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.
Prerequisite: CIS 101 or CS 120 or BT 120 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.

BT 144 - Administrative Procedures

4 Credit(s)
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.
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.

BT 150 - Business Web Pages with WordPress

3 Credit(s)
Introduction to business web concepts and site building. This class incorporates research into best business web practices while learning how to use the latest online platforms for building a business web page. The class will focus on the use of WordPress, Wix, HTML5, and CSS3. The final project involves developing a web site for a local business or not-for-profit agency.

BT 163 - QuickBooks

4 Credit(s)
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.
Prerequisite: BT 165 or BA 211

BT 165 - Introduction to the Accounting Cycle

4 Credit(s)
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 Credit(s)
Introduces federal and state regulations affecting payroll. Provides practice in all payroll operations, including new employee documentation, preparation of payroll and payroll records, accounting entries, and preparation of federal payroll tax returns that are required of business.
Prerequisite: BT 165 - Introduction to the Accounting Cycle 4 Credit(s)
Recommend BT123 MS EXCEL for Business.

BT 181 - Customer Service

4 Credit(s)
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.

BT 221 - Budgeting for Managers

4 Credit(s)
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.
Prerequisite: BT 165 or BA 211. Recommend BT 123 - MS EXCEL for Business.

BT 223 - MS EXCEL for Business-Expert

4 Credit(s)
Advanced Excel functions for business problem solving. Focus on creation of effective business spreadsheets to assist managers in decision making.
Prerequisite: 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.

BT 230 - Sustainable Paperless Practices using Adobe Acrobat

4 Credit(s)
Information and document management in a paperless office using Adobe Acrobat Professional to create and edit PDF documents, forms, and portfolios. Will include managing data and documents in a collaborative digital environment. Will also include research and planning of paperless office systems; electronic record keeping; ethical, legal, and technical issues of electronic data; disaster recovery and security.
Prerequisite: BT 120 with a minimum grade of C. 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.

BT 253 - Digital Marketing

4 Credit(s)
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 270 - Project Management

4 Credit(s)
This course is an introduction to project management and the role of the project manager. The course features the phases of the project life cycle including definition, planning, implementation, monitoring, and termination. Students will collaborate in teams to apply the tools, methods, and strategies used to manage successful projects.
Prerequisite: BA 101 - Introduction to Business 4 Credit(s) plus basic computer literacy and software application skills.

BT 272 - Tax concepts and Preparation

4 Credit(s)
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.
Prerequisite: BT 206 and BT 165

BT 286 - Professional Bookkeeping

4 Credit(s)
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.
Prerequisite: BA 211 and BT 170 and BT 165 and BT 123 and BT 163

BT 291 - Operations Management

4 Credit(s)
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.
Prerequisite: BA 101, BT 123, and MTH 095

Career Development/Human Relations

CG 140 - Career and Life Planning

1-3 Credit(s)
This course focuses on self-assessment, career exploration, and goal setting. You will gain insight into your interests, strengths, values, and life roles; research majors and career fields; discover how successful people create their paths; and develop a vision and next steps for your future.

CG 140T - Career and Life Planning: WIT

2 Credit(s)
This course is designed to help students in Women in Transition plan their careers and their lives. Students will develop greater self-awareness of their values, interests, and skills, and explore available careers that fit personal wants and needs.
Corequisite: CG 220

CG 203 - Human Relations at Work

1-3 Credit(s)
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.

CG 213 - Improving Parent Child Relations

3 Credit(s)
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.

CG 220 - Life Transitions: Women in Transition

2 Credit(s)
This course is designed to help students in Women in Transition navigate their current life transitions and explore positive new life directions. Students will develop skills in understanding life transitions, coping with stress and powerful emotions, and utilizing assertive communication and boundary setting in personal and professional relationships.
Corequisite: CG 140T

Chemistry

General Chemistry and Organic Chemistry courses have separated out the lab into its own course. It is highly recommended to take both lecture and lab together. The courses pairs are as follows:

CH 221 (4cr) + CH 227 (2cr)	CH 241 (4cr) + CH 247 (2cr)
CH 222 (4cr) + CH 228 (2cr)	CH 242 (4cr) + CH 248 (2cr)
CH 223 (4cr) + CH 229 (2cr)	CH 243 (4cr) + CH 249 (2cr)

CH 104 - Introduction to General Chemistry

5 Credit(s)
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.
Prerequisite: MTH 052 or above with grade of C- or better or pass placement test.

CH 106 - Introduction to Organic and Biological Chemistry

5 Credit(s)
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.

Prerequisite: Grade of C- or better in CH 104 or instructor consent.

CH 112 - Chemistry for Health Occupations

4 Credit(s)
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.
Prerequisite: MTH 052 or above with grade of C- or better or pass placement test.
Corequisite: BI 112

CH 114 - Introduction to Forensic Chemistry

4 Credit(s)
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.
Prerequisite: MTH 020 or above with grade of C- or better or pass placement test.

CH 150 - Preparatory Chemistry

3 Credit(s)
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.
Prerequisite: MTH 065 or above with grade of C- or better or pass placement test.

CH 170 - Introduction to Environmental Chemistry

4 Credit(s)
This course is designed to introduce non-science majors to the chemistry of the environment. Basic chemistry principles will be introduced and applied to the chemistry of the atmosphere, water, and soil. The impacts of production and pollution will be evaluated in terms of human and environmental health from a scientific and social perspective.
Prerequisite: MTH 052 or equivalent with a grade of C- or better.

CH 201 - Chemistry for Engineering Majors I

4 Credit(s)
First course of a two-term sequence designed for engineering majors not needing the three term general chemistry sequence. Introduces measurement, atoms, stoichiometry, gases, thermochemistry, electronic structure, and bonding. Lecture and laboratory; lab emphasizes green chemistry.
Prerequisite: MTH 111 or above with a grade of C- or better or pass placement test

CH 202 - Chemistry for Engineering Majors 2

4 Credit(s)
Second course of a two-term sequence designed for engineering majors not needing the three-term general chemistry sequence. Introduces thermodynamics, kinetics, equilibrium, weak acid-base equilibrium, solubility equilibrium, electrochemistry. Lecture and laboratory; lab emphasizes green chemistry.
Prerequisite: CH 201 with a grade of C- or better

CH 221 - General Chemistry 1

4 Credit(s)
Lecture for the 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. It is recommended to take the accompanying lab, CH 227 (2 credits), at the same time as the lecture.
Prerequisite: MTH 095 with grade of C- or better or place into MTH 111 or higher on math placement test.

CH 222 - General Chemistry 2

4 Credit(s)
Lecture for the 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. It is recommended to take the accompanying lab, CH 228 (2 credits), at the same time as the lecture.
Prerequisite: CH 221

CH 223 - General Chemistry 3

4 Credit(s)
Lecture for the 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. It is recommended to take the accompanying lab, CH 229 (2 credits), at the same time as the lecture.
Prerequisite: CH 222

CH 227 - General Chemistry Laboratory 1

2 Credit(s)
First laboratory course of the general chemistry lab sequence. Introduces chemical lab safety, common laboratory techniques, and analytical skills. Lab emphasized green chemistry.
Prerequisite/Corequisite: CH 221

CH 228 - General Chemistry Laboratory 2

2 Credit(s)
Second laboratory course of the general chemistry lab sequence. Introduces chemical lab safety, common laboratory techniques, and analytical skills. Lab emphasized green chemistry.
Prerequisite: CH 227 or CH 221 (if taken prior to winter 2021)
Prerequisite/Corequisite: CH 222

CH 229 - General Chemistry Laboratory 3

2 Credit(s)
Third laboratory course of the general chemistry lab sequence. Introduces chemical lab safety, common laboratory techniques, and analytical skills. Lab emphasized green chemistry.
Prerequisite: CH 228 or CH 222 (if taken prior to winter 2021)
Prerequisite/Corequisite: CH 223

CH 241 - Organic Chemistry

4 Credit(s)
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. It is recommended to take the accompanying lab, CH 247 (2 credits), at the same time as the lecture.
Prerequisite: CH 222

CH 242 - Organic Chemistry

4 Credit(s)
Organic chemistry lecture for science and health science majors, with a green chemistry emphasis. Topics include alcohols, ethers, aromatics, conjugated systems, aldehydes, and ketones. It is recommended to take the accompanying lab, CH 248 (2 credits), at the same time as the lecture.
Prerequisite: CH 241

CH 243 - Organic Chemistry

4 Credit(s)
Organic chemistry lecture for science and health science majors, with a green chemistry emphasis. Topics include carbonyl systems, nitrogen containing compounds, conjugated systems, and organic compounds of biochemical significance. It is recommended to take the accompanying lab, CH 249 (2 credits), at the same time as the lecture.
Prerequisite: CH 242

CH 247 - Organic Chemistry Laboratory 1

2 Credit(s)
First laboratory course of the organic chemistry sequence. Introduces common organic laboratory techniques, synthesis methods, and analytical skills including spectroscopies, with a green chemistry emphasis.
Prerequisite: CH 228 or CH 222 (if taken prior to winter 2021)
Prerequisite/Corequisite: CH 241

CH 248 - Organic Chemistry Laboratory 2

2 Credit(s)
This is the second laboratory course of the organic chemistry sequence. Focusing on developing synthetic laboratory skills including synthetic methods, problem solving, product yields, and analytical skills including spectroscopies, with a green chemistry emphasis.
Prerequisite: CH 247 or CH 241 (if taken prior to winter 2021)
Prerequisite/Corequisite: CH 242

CH 249 - Organic Chemistry Laboratory 3

2 Credit(s)
This is the third laboratory course of the organic chemistry sequence. Focusing on developing synthetic laboratory skills including synthetic methods, problem solving, product yields, and analytical skills including spectroscopies, with a green chemistry emphasis. Students in this course will develop and pursue a synthesis research project.
Prerequisite: CH 248 or CH 222 (if taken prior to winter 2021)
Prerequisite/Corequisite: CH 243

Chinese

CHN 101 - 1st Year Mandarin Chinese

4 Credit(s)
The first course of a three-course sequence in introductory Mandarin Chinese language and culture class, with a well- balanced emphasis on effective communicative skills in both the written and spoken language and an understanding of the practices and products of native Chinese culture. Target proficiency level post-course: Novice Low. For beginners.

CHN 102 - 1st Year Mandarin Chinese

4 Credit(s)
The second course of a three-course sequence in introductory Mandarin Chinese language and culture class, with a well- balanced emphasis on effective communicative skills in both the written and spoken language and an understanding of the practices and products of native Chinese culture. Target proficiency level post-course: Novice Mid.
Prerequisite: CHN 101

CHN 103 - 1st Year Mandarin Chinese

4 Credit(s)
The third course of a three-course sequence in introductory Mandarin Chinese language and culture class, with a well- balanced emphasis on effective communicative skills in both the written and spoken language and an understanding of the practices and products of native Chinese culture. Target proficiency level post-course: Novice High.
Prerequisite: CHN 102

Chinuk Wawa

CW 101 - Chinuk Wawa

4 Credit(s)
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 learn the sound system of Chinuk Wawa. Be able to converse in a variety of common everyday settings using vocabulary and structures presented in class. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language.

CW 102 - Chinuk Wawa

4 Credit(s)
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 continue to become proficient in the sound system of Chinuk Wawa. Be able to 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.
Prerequisite: CW 101 or consent of instructor

CW 103 - Chinuk Wawa

4 Credit(s)
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 become proficient in the sound system of Chinuk Wawa. Be able to 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.
Prerequisite: CW 102 or consent of instructor

CW 201 - Chinuk Wawa

4 Credit(s)
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 learn and discuss the culture and history of the Grand Ronde and other Chinuk Wawa speaking people. Converse in a variety of common everyday settings. Learn to use more advanced verb structures: Learn to work (with a linguistic emphasis) with texts. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and learning about the cultures of the people who spoke and still speak the language.
Prerequisite: CW 103 or consent of the instructor

CW 202 - Chinuk Wawa

4 Credit(s)
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 Learn and discuss the culture and history of the Grand Ronde and other Chinuk Wawa speaking people. Converse in a variety of settings. Learn to use more advanced verb structures. Learn to work (with a linguistic emphasis) with texts. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and understanding the cultures of the people who spoke and still speak the language.
Prerequisite: CW 201 or consent of the instructor

CW 203 - Chinuk Wawa

4 Credit(s)
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 learn and discuss the culture and history of the Grand Ronde and other Chinuk Wawa speaking people. Converse in a variety of settings. Learn to use more advanced grammatical structures. Work (a linguistic emphasis) on texts. Emphasis is placed on daily speaking, writing, reading, and listening of Chinuk Wawa and understanding the cultures of the people who spoke and still speak the language.
Prerequisite: CW 202 or consent of the instructor

Cinema Studies

CINE 265 - Film History 1-The Silent Era to Early Sound

4 Credit(s)
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.
Prerequisite: Suggested placement into WR 115 or higher (college-level reading and writing skills)

CINE 266 - Film History 2-The Sound Era through the 1960s

4 Credit(s)
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.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills)

CINE 267 - Film History 3-1960s-the present

4 Credit(s)
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.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills)

College Success

CG 100 - College Success

1-3 Credit(s)
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 Credit(s)
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.

Communication

COMM 100 - Basic Communication

4 Credit(s)
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.

COMM 105 - Listening and Critical Thinking

4 Credit(s)
This course is designed to develop an 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 Credit(s)
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 Credit(s)
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 debate.

COMM 115 - Introduction to Intercultural Communication

4 Credit(s)
This course examines the exchange of information between people who are culturally unalike. The essence of intercultural communication is the way in which different cultural values, beliefs, rituals, behaviors, artifacts, experiences, and worldviews – the sets of variables which form the differences between cultures – affect the ways in which people process information. This class discusses how people from different cultures come to see things differently, and how those perceptual differences effect their communication. Class experiences will include lectures, group discussions, activities, and intercultural simulations. While course material is theoretical, course assignments and discussions are designed for application to your everyday encounters with individuals from other countries, therefore, student participation is essential to learning the course materials.

COMM 130 - Business and Professional Communication

4 Credit(s)
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, technical communication, proposal presentation, and more. In addition, attention will be given to presentational aids, both traditional and computer generated.

COMM 218 - Interpersonal Communication

4 Credit(s)
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, emotions, intimacy, gender/cultural differences, and relationship development.

COMM 219 - Small Group Communication

4 Credit(s)
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 Credit(s)
This course explores gender as a cultural communication practice that simultaneously reflects and enacts the culture in which it occurs. That is, gender is positioned as something that we do, via communication, rather than what we are. In order to understand and consider critically gender as communication, this course examines the difference between sex and gender, the intersection of gender and culture, and theories of how we become gendered. We will examine the ways in which social and political meanings attached to gender are communicated in various cultural institutions, practices, and contexts; and we will also consider how issues such as identity, representation, race, sexuality, class, and power bear on gender.

COMM 260 - Introduction to Conflict Management

4 Credit(s)
This course emphasizes understanding conflict as a communication phenomenon and provides a summary and synthesis of social science research and theory on conflict. This course highlights the interactive nature of conflict and demonstrates the value of collaborative models for resolving conflict.

COMM 265 - Environmental Communication

4 Credit(s)
Environmental Communication will prepare students for today's rhetorical challenges as they seek to communicate about environmental issues in ways that will promote sustainability of communities and ecosystems. This course will be useful for anyone who intends to understand the persuasive strategies used by advocates to defend their outlooks about the environment. Students will apply these principles in papers and oral presentations.

COMM 285 - Mediated Communication

4 Credit(s)
The use of computers and other technologies in our daily lives has evolved from simple computer calculations to allowing us a personal space in which to share our innermost thoughts and feelings on a large network with others. This course explores the impact of technology on human communication in a variety of contexts including information goals, relational goals, persuasive goals, and entertainment goals.

Computer Information Systems

CIS 100 - Computing Careers Exploration

1 Credit(s)
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 Credit(s)
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.

CIS 125A - Software Tools: App Development

4 Credit(s)
This course provides students with no programming background with an introduction to application development. Students will use a visual drag and drop tool to build web based applications and will be introduced to fundamental programming concepts and skills in the process.
Prerequisite: Basic computer literacy.

CIS 125D - Software Tools 1: Databases

4 Credit(s)
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.
Prerequisite: Basic computer literacy skills.

CIS 125G - Software Tools 1: Game Development

4 Credit(s)
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.
Prerequisite: Basic computer literacy.

CIS 126 - Game Design: Principles and Practices

4 Credit(s)

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 Credit(s)

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.

Prerequisite: CIS 125G and (CS 162C or CS 162N or FA 222) or instructor's permission

CIS 140U - Introduction to Unix/Linux

4 Credit(s)

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.

Prerequisite: Basic Computer Literacy

CIS 140W - Introduction to Operating Systems: Windows Clients

4 Credit(s)

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.

Prerequisite: Digital Literacy..

CIS 195 - Web Authoring 1

4 Credit(s)

This course provides students with little computer experience the concepts and skills necessary to create static web pages using the current versions of Hyper Text 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.

Prerequisite: Basic computer literacy and file management.

CIS 225 - Computer End-User Support

4 Credit(s)

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.

Prerequisite: CIS 125D, and CS 179, or instructor consent.

CIS 244 - Systems Analysis

4 Credit(s)

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.

Prerequisite: CIS 125D and CS 161N or CS 161C or CS 133C or CS 133N or instructor consent.

CIS 276R - Data Integration, Analytics and Reporting

4 Credit(s)

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.

Prerequisite: CS 275

CIS 287 - Microcomputer Hardware

1-4 Credit(s)

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.

Computer Science

CS 120 - Concepts of Computing: Information Processing

4 Credit(s)

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.

CS 133C - Beginning Programming: C++

4 Credit(s)

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. **Prerequisite:** Complete one of the following courses: CIS 125G, CS 160, MTH 095, MTH 111, MTH 112, MTH 231, MTH 241, MTH 251 (or by placement). Students must also complete CS 161N or CS 161P to enroll in this course.

CS 133JS - Beg. Programming: JavaScript

4 Credit(s)

This course provides students with the concepts and skills required to create dynamic, interactive Web pages using client side JavaScript.

Prerequisite: MTH 060 or higher and CIS 195 or instructor consent

CS 133N - Beginning Programming: C#

4 Credit(s)

This course is an introduction to software design, development and testing. It covers basic syntax and semantics of C#, algorithms and program design. Development tools and object-oriented programming are introduced.

Prerequisite: Complete one of the following: CS 160 or CIS 125A. Students must also complete CS 161C or CS 161P to enroll in this course.

CS 133P - Beginning Programming: Python

4 Credit(s)

This course is an introduction to software design, development and testing. It covers basic syntax and semantics of Python, data types, and algorithm and program design. Development tools and object-oriented programming are introduced.

Prerequisite: CS 160 or CIS 125G or MTH 082 or MTH 095 or MTH 098 or MTH 111 or MTH 112 or MTH 231 or MTH 241 or MTH 251 or placement test. Students must also complete CS 161N or CS 161C to enroll in this course.

CS 160 - Orientation to Computer Science

4 Credit(s)

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.

Prerequisite: MTH 095, or MTH 111, or MTH 241, or placement test into MTH 111.

CS 161C - Computer Science 1

4 Credit(s)

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.

Prerequisite: Complete one of the following courses: CIS 125G, CS 160, MTH 095, MTH 111, MTH 112, MTH 231, MTH 241, or MTH 251 (or by placement).

CS 161N - Computer Science 1

4 Credit(s)

This course is an introduction to software design, development and testing. It covers basic syntax and semantics of C#, algorithms and program design. Development tools and object-oriented programming are introduced.

Prerequisite: Complete one of the following: CIS 125A or CS 160

CS 161P - Computer Science 1

4 Credit(s)

This course is an introduction to software design, development and testing. It covers basic syntax and semantics of Python, data types, and algorithm and program design. Development tools and object-oriented programming are introduced.

Prerequisite: One of the following courses: CIS 125G, CS 160, CS 161C, MTH 095, MTH 098, MTH 111, MTH 112, MTH 231, MTH 241, or MTH 251 (or by placement).

CS 162C - Computer Science 2

4 Credit(s)

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.
Prerequisite: CS 161C with a B- or higher or instructor consent

CS 162N - Computer Science 2

4 Credit(s)
This course is a continuation of CS 161N. Topics covered include more advanced Object-Oriented programming concepts, searching and sorting, linear data structures, stream and file I/O, recursion and exception handling.
Prerequisite: CS 161N or CS 133N

CS 162P - Computer Science 2

4 Credit(s)
This course is a continuation of CS 161P. Topics covered include more advanced Object-Oriented programming concepts, searching and sorting, linear data structures, stream and file I/O, recursion, and exception handling.
Prerequisite: CS 161P or CS 161C or instructor consent

CS 179 - Introduction to Computer Networks

4 Credit(s)
Introduction to Computer Networks covers networking architecture, structure, and functions. The course introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum.
Prerequisite: Basic computer literacy

CS 184 - Introduction to Cybersecurity

4 Credit(s)
This course will cover foundational knowledge and essential skills in industry standard domains in the cybersecurity profession. These domains include information security, systems security, network security, mobile security and physical security. This course will also introduce students to the ethical and legal issues and relevant laws related to the cybersecurity field. Students will also explore common use-case scenarios and gain hands-on experience while participating labs.

CS 188 - Wireless Networking

4 Credit(s)
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.
Prerequisite: CS 179 or instructor consent

CS 189 - Routing and Switching Essentials

4 Credit(s)
This course covers the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality.
Prerequisite: CS 179 or instructor consent

CS 233C - Intermediate Programming: C++

4 Credit(s)
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.
Prerequisite: Complete one of the following: CS 161C or CS 133C. Students must also complete CS 162N or CS 162P to enroll in this course.

CS 233JS - Intermediate Programming: JavaScript

4 Credit(s)
This 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.
Prerequisite: CS 133JS and (CS 162N or CS 233N)

CS 233N - Intermediate Programming C#

4 Credit(s)
This course is a continuation of CS 133N. Topics covered include more advanced Object-Oriented programming concepts, searching and sorting, linear data structures, stream and file I/O, recursion and exception handling.
Prerequisite: Complete one of the following: CS 161N or CS 133N. Students must also complete CS 162C or CS 162P to enroll in this course.

CS 233P - Intermediate Programming: Python

4 Credit(s)
This course is a continuation of CS 133P. Topics covered include more advanced Object-Oriented programming concepts, searching and sorting, linear data structures, stream and file I/O, recursion, and exception handling.
Prerequisite: Complete one of the following: CS 161P or CS 133P or CS 161C. Students must also complete CS 162C or CS 162N to enroll in this course.

CS 233S - Python for Systems Administrators

4 Credit(s)
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.
Prerequisite: CS 133P or CS 161P or CS 233P

CS 234N - Advanced Programming: C#

4 Credit(s)
This is the third in a sequence of three 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.
Prerequisite: CS 162N or CS 233N or instructor consent

CS 235AM - Intermediate Mobile Application Development: Android

4 Credit(s)
This course introduces students to applying object oriented programming to mobile application development and the Android System Development Kit. Cross-platform mobile app development will be done using the Mono framework and the MonoDevelop IDE.
Prerequisite: CS 162N or CS 162P or CS 162C or CS 233N or CS 233P or CS 233C

CS 235IM - Intermediate Mobile Applications Development: IOS

4 Credit(s)
This course introduces students to the application of object oriented programming to mobile application development for devices running IOS.
Prerequisite: CS 162N or CS 162C or CS 162P or CS 233N or CS 233C or CS 233P

CS 240U - Advanced Unix/Linux: Server Management

4 Credit(s)
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.
Prerequisite: CIS 140U or instructor consent

CS 240W - Advanced Windows: Server Management

4 Credit(s)
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.
Prerequisite: CIS 140W or CS 179 or instructor consent

CS 246 - System Design

4 Credit(s)
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.
Prerequisite: CS 260 or CIS 135G or CS 295N

CS 260 - Data Structures 1

4 Credit(s)
This course is intended primarily for students seriously interested in computer science. Students will demonstrate the usage of advanced data structures, including linked-lists and tree structures using pointers, and advanced structure programming methods through a variety of programming projects.
Prerequisite: CS 162C or CS 162P or CS 162N or CS 233C or CS 233N or CS 233P AND (MTH 111 or MTH 112 or MTH 231 or MTH 241 or MTH 251) or instructor consent

CS 273 - Introduction to Virtualization and Cloud Computing

4 Credit(s)
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.
Prerequisite: CS 189 and CS 240W

CS 275 - Basic Database SQL

4 Credit(s)
This training course is valuable for anyone who needs to learn SQL programming. The course is designed for students new to writing SQL queries or having insufficient practice experience. It will provide a solid foundation of the SQL programming language that enables students to query and manipulate databases. Working in Oracle throughout this course, students work with the ANSI/ISO standard with the SQL implementation of the database product.
Prerequisite: CS 161N or CS 161C or CS 161P or CS 133N or CS 133C or CS 133P or BT 223 or instructor consent

CS 276 - Database Systems and Modeling

4 Credit(s)
This is an introduction to production-scale, relational database environments. Included in the course are discussion and applications of database models, entity relationship design, normalization, as well as an introduction to big data databases.
Prerequisite: CS 275

CS 279 - Scaling Networks

4 Credit(s)
Scaling Networks covers the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality.
Prerequisite: CS 189 or instructor consent

CS 284 - Network Security Fundamentals

4 Credit(s)
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.
Prerequisite: CS 179 or CS 184

CS 285 - Cybersecurity Operations

4 Credit(s)
This course is designed to teach students basic incident response and incident handling, including identifying sources of attacks and security breaches, analyzing security logs and network traffic, performing postmortem analysis, and implementing and modifying security measures. It will provide them with the fundamental knowledge and core skills needed to begin working in a Security Operations Center (SOC) as a junior analyst.
Prerequisite: CS 189 or CS 279 and CS 284

CS 286 - Firewalls and VPNs

4 Credit(s)
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.
Prerequisite: CS 284 and CS 189 or CS 279, or instructor consent

CS 288 - Network Monitoring and Management

4 Credit(s)
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.
Prerequisite: CS 240U and (CS 179 or CS 189)

CS 289 - Connecting Networks

4 Credit(s)
Connecting Networks discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements.
Prerequisite: CS 279 or instructor consent

CS 290 - Ethical Hacking Fundamentals

4 Credit(s)
This course will introduce the student to the ethical use of various security assessment tools and techniques commonly used to locate weaknesses and vulnerabilities of computer and network systems. This course will cover common system vulnerabilities, exploits, and countermeasures. Students will learn various computer hacking skills in order to understand how to defend against similar techniques. Students will also explore real world scenarios, gaining hands-on experience while participating in scenario-based labs.
Prerequisite: CS 189 and CS 284

CS 295N - Web Development 1: ASP.NET

4 Credit(s)
This is the first in a sequence of two 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.
Prerequisite: CS 162N or CS 233N for a grade of B- or better, or instructor consent
Corequisite: CS 234N

CS 295P - Web Development 1: PHP

4 Credit(s)
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.
Prerequisite: CS 133JS or instructor consent

CS 296N - Web Development 2: ASP.NET

4 Credit(s)
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.
Prerequisite: CS 295N or instructor consent
Learning Outcomes

CS 296P - Web Development 2: PHP

4 Credit(s)
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.
Prerequisite: CS 295P or instructor consent

CS 297 - Programming Capstone

4 Credit(s)
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 first 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.
Prerequisite: CS 246 or instructor consent

Construction

CST 110 - Blueprint Reading 1

3 Credit(s)
Provides skills in understanding blueprints. Emphasizes fundamentals of blueprint reading, including development of skills in understanding basic lines, views, dimensions, symbols, notations and computation.
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

CST 111 - Construction Orientation and Environment

2 Credit(s)
Introduction to the construction industry. Economic and environmental influences affecting the construction industry are discussed. Current tools and materials of today's industry are introduced. Occupations in the construction field are explored as well as professional opportunities for construction graduates.
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.
Learning Outcomes
Upon successful completion of this course, the student should be able to:
1. Describe vocational, technical, and professional opportunities in the construction field.
2. Describe construction job titles and their descriptions and expected wages or salaries.
3. Understand basic concepts in construction organizations, labor/management problems, and the environmental influence affecting construction practices.
4. Discuss new methods and materials used in local construction industry.

CST 116 - Construction Estimating

4 Credit(s)
Study of techniques used to estimate construction materials and costs for residential and small commercial structures. Tips for creating accurate estimates.
Prerequisite: CST 110

CST 118 - Building Construction

1-5 Credit(s)
The three CST118 courses provide technical information relevant to today's building practices. Through hands-on projects, field visits, and lectures students become familiar with the skills and knowledge necessary to succeed in today's construction environment. Work required to plan, design, and construct building structures is explored. 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 provides an orientation to electrical, mechanical, and plumbing systems. CST 118 A/B/C consists of a total of 15 credits (264 hours). Majors should enroll in 5 credits per term for three terms to satisfactorily complete the CST 118 sequence (A/B/C).
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

CST 118A - Building Construction A

1 to 5 Credit(s)
The three CST118 courses provide technical information relevant to today's building practices. Through hands-on projects, field visits, and lectures students become familiar with the skills and knowledge necessary to succeed in today's construction environment. Work required to plan, design, and construct building structures is explored. 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 provides an orientation to electrical, mechanical, and plumbing systems. CST 118 A/B/C consists of a total of 15 credits (264 hours). Majors should enroll in 5 credits per term for three terms to satisfactorily complete the CST 118 sequence (A/B/C).
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

CST 118B - Building Construction B

1 to 5 Credit(s)
The three CST118 courses provide technical information relevant to today's building practices. Through hands-on projects, field visits, and lectures students become familiar with the skills and knowledge necessary to succeed in today's construction environment. Work required to plan, design, and construct building structures is explored. 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 provides an orientation to electrical, mechanical, and plumbing systems. CST 118 A/B/C consists of a total of 15 credits (264 hours). Majors should enroll in 5 credits per term for three terms to satisfactorily complete the CST 118 sequence (A/B/C).
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

CST 118C - Building Construction C

1 to 5 Credit(s)
The three CST118 courses provide technical information relevant to today's building practices. Through hands-on projects, field visits, and lectures students become familiar with the skills and knowledge necessary to succeed in today's construction environment. Work required to plan, design, and construct building structures is explored. 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 provides an orientation to electrical, mechanical, and plumbing systems. CST 118 A/B/C consists of a total of 15 credits (264 hours). Majors should enroll in 5 credits per term for three terms to satisfactorily complete the CST 118 sequence (A/B/C).
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

CST 119 - Building Construction Surveying

3 Credit(s)
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. Measuring, marking and layout for home construction. Emphasis is placed on field practice. CONSTRUCTION MAJORS ONLY.

CST 122 - Construction Codes

2 Credit(s)
Various codes specifying the standards of construction as referenced by the Oregon Residential Specialty Code. Codes and basic methods of construction with explanations for their purpose. 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 Credit(s)
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 Credit(s)
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.
Prerequisite: CST 110

Cooperative Education

AM 280 - Co-op Ed: Automotive

3-12 Credit(s)
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.

ART 280A - Co-op Ed: Art and Applied Design

3-12 Credit(s)
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.
Prerequisite: Instructor approval

ART 280GD - Co-op Ed: Graphic Design

3-12 Credit(s)
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.
Prerequisite: Instructor approval

AV 280 - Co-op Ed: Aviation Maintenance

3-12 Credit(s)
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.

BA 280 - Co-op Ed: Business Management

3-12 Credit(s)
In this internship course students will gain work experience in area businesses related to supervision, management, office operations, project management, human resources, sales and marketing. 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.
Prerequisite: BT 206

BA 280AA - Co-op Ed: Administrative Professional

3-12 Credit(s)
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.
Prerequisite: BT 206

BA 280AC - Co-op Ed: Accounting

3-12 Credit(s)
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.
Prerequisite: BT 206

BI 280 - Co-op Ed: Biology

3-12 Credit(s)
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.

BT 206 - Co-op Ed: Business Seminar

2 Credit(s)
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.
Prerequisite: BA 101 and BT 120

CA 280 - Co-op Ed: Culinary Arts

1-7 Credit(s)
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.
Prerequisite: CA majors only.

CE 280MR - Co-op Ed: Medical Receptionist (Continuing Ed)

3-12 Credit(s)
This internship course provides on-the-job learning experiences in the medical receptionist field. Students earn college credit while working under the supervision of a healthcare professional. Internship sites are selected to support each student's career goals, contributing to the student's education and future employability.

CE 280PB - Co-op Ed: Phlebotomy (Continuing Ed)

3-12 Credit(s)
This internship course provides on-the-job learning experiences in the phlebotomy field. Students earn college credit while working under the supervision of a healthcare professional. Internship sites are selected to support each student's career goals, contributing to the student's education and future employability.

CE 280RX - Co-op Ed: Pharmacy Tech (Continuing Ed)

3-12 Credit(s)
This internship course provides on-the-job learning experiences in the pharmacy tech field. Students earn college credit while working under the supervision of a healthcare professional. Internship sites are selected to support each student's career goals, contributing to the student's education and future employability.

CH 280 - Co-op Ed: Physics-Chemistry

3-12 Credit(s)
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.

CJA 280 - Co-op Ed: Criminal Justice

3-12 Credit(s)
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.
Prerequisite: CJA 100 and CJA 110 or instructor permission.

COOP 206 - Co-op Ed: Internship Seminar

1-2 Credit(s)
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.

COOP 280SL - Co-op Ed: Service Learning

1-3 Credit(s)
Gain service-related experience to address community needs in by volunteering either on-campus or with community partners. Students will 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. Please contact the Service Learning cooperative education coordinator before attempting to register.

COOP 280_H - Co-op Ed: Service Learning-Honors

3-12 Credit(s)
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. 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.
Prerequisite: Instructor approval.

CS 206 - Co-op Ed: Computer Information Technology Seminar

2 Credit(s)
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.
Prerequisite: CIS 100

CS 280CN - Co-op Ed: Computer Network Operations

3-12 Credit(s)
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 Credit(s)
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 280PR - Co-op Ed: Computer Programming

3-12 Credit(s)
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.

CST 280 - Co-op Ed: Construction

3-12 Credit(s)
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.

DA 206 - Co-op Ed: Dental Assisting Seminar

1 Credit(s)
Must be enrolled in the Dental Assisting program. 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.
Corequisite: Must be enrolled with DA 280

DA 280 - Co-op Ed: Dental Assisting

6-12 Credit(s)
Must be enrolled in the Dental Assisting Program. Course provides dental assisting work experience in community businesses. Includes opportunity to integrate theory and practice. Students can develop skills & explore career options.
Corequisite: Course must be co-enrolled with DA 206.

DH 280 - Co-op Ed: Dental Hygiene

3-12 Credit(s)
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.

DS 280 - Co-op Ed: Diesel

3-12 Credit(s)
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.

ED 280 - Co-op Ed: Education

3-12 Credit(s)
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

1-7 Credit(s)
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.

EMS 280P1 - Co-op Ed: Paramedic Internship P1

3-12 Credit(s)
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.
Prerequisite: EMS 262 with grade of C- or better; P/NP not accepted. Must be enrolled in one of the following Majors: Paramedicine

EMS 280P2 - Co-op Ed: Paramedic Internship P2

5 to 12 Credit(s)
Second term of a two-term course. A continuation of EMS 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.
Prerequisite: EMS 280P1 with grade of C- or better; P/NP not accepted. Must be enrolled in one of the following Majors: Paramedicine

ENGR 280 - Co-op Ed: Engineering

3-12 Credit(s)
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.

ENGR 280D - Co-op Ed: Drafting

3-12 Credit(s)
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.

ENGR 280M - Co-op Ed: Manufacturing Technology

3-12 Credit(s)
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.

ENGR 280W - Co-op Ed: Welding

3-12 Credit(s)
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.

FL 280IW - Co-op Ed: International Work Experience

1-12 Credit(s)
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.
Prerequisite: Instructor approval

G 280 - Co-op Ed: Geology

3-12 Credit(s)
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 Credit(s)
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.

GIS 280 - Co-op Ed: Geographic Information Science

3-12 Credit(s)
Cooperative Education is a work experience opportunity for students that have completed two GIS classes and have instructor's approval.

GWE 180 - Co-op Ed: General Work Experience

1-12 Credit(s)
This course provides learning experiences in community businesses and organizations. Students develop employability skills, explore career options and network with professionals and employers while earning college credit.
Prerequisite: Instructor consent

HE 280 - Co-op Ed: Health Occupations

3-12 Credit(s)
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.

HIM 280 - Co-op Ed: Health Information Management

3 Credit(s)
This internship course offers a work experience that integrates theory and practice in the field of Health Information Management. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the AAS HIM degree.
Prerequisite: COOP 206 with a grade of C or better, admission to the Health Information Management (HIM) program, and instructor approval

HIT 280 - Co-op Ed: Health Records

3-12 Credit(s)
The purpose of this course is to provide students meaningful learning experiences related to the field of health records. This course allows students the opportunity to earn college credit while working in the health care community under supervision.
Prerequisite: COOP 206, admission to the Health Information Management (HIM) program, and instructor approval

HRTM 280 - Co-op Ed: Hospitality Management

1-7 Credit(s)
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.
Prerequisite: Majors only

HS 280 - Cooperative Education: Human Services

1-12 Credit(s)
In this internship course students will gain human services-related work experience in community organizations. Students will integrate theory and practice, develop skills, explore career options, and network with professional while earning college credit. Please contact the Human Services cooperative education coordinator before attempting to register.
Prerequisite: HS 150 with a grade of C- or better.

IDS 280S - Co-op Ed: Sustainability Coordinator

3-12 Credit(s)
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.

J 280 - Co-op Ed: Journalism

3-12 Credit(s)
This course provides work experience in journalistic writing and reporting, illustration and design, and photography and video. 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 co-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.

MA 206 - Co-op Ed: Medical Assistant Seminar

2 Credit(s)
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.
Prerequisite: Admission to the Medical Assistant program

MA 280 - Co-op Ed: Medical Assistant

5-12 Credit(s)
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.
Prerequisite: Admission to the Medical Assistant program

MDP 280 - Co-op Ed: Multimedia

3-12 Credit(s)
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.
Prerequisite: Instructor approval

MTH 280 - Co-op Ed: Mathematics

3-12 Credit(s)
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.

MUL 280 - Co-op Ed: Web Design

3-12 Credit(s)
This course provides career-related work experience in professional web design sites and related-businesses 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 web design co-op coordinator before registering. Course may be repeated.
Prerequisite: Instructor approval

MUS 280 - Co-op Ed: Music

3-12 Credit(s)
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. Contact the music co-op coordinator before registering. May be repeated up to 12 total credits.
Prerequisite: Instructor approval

NRG 280 - Co-op Ed: Energy Management

3-12 Credit(s)
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.

NRS 280 - Co-op Ed: Nursing

2-12 Credit(s)
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.
Prerequisite: Admission in Nursing Program.

OST 280 - Co-op Ed: Occupational Skills

1-12 Credit(s)
In this course students earn college credit for on-the-job work experience related to his or her educational and career goals. Students integrate theory and practice, develop skills, expand career knowledge and make contact for future employment. Twenty to 26 credits of co-op are required for the Occupational Skills certificate.

PE 280C - Co-op Ed: Coaching

3-12 Credit(s)
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.
Prerequisite: Instructor approval for site and credit load.

PE 280F - Co-op Ed: Fitness

1-12 Credit(s)
Supervised and structured work experience in the professional fitness industry. Students will integrate classroom learning with field experience by demonstrating skills in real world applications. Students will have the opportunity to expand their knowledge, explore career options and network with potential employers.
Prerequisite: Admission into the Fitness & Lifestyle Specialist program.

Instructor approval for site and credit load.

PS 280 - Co-op Ed: Political Science

2-12 Credit(s)
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 Credit(s)
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.

PSY 280 - Co-op Ed: Psychology

3-12 Credit(s)
In this internship course students will gain psychology-related work experience in community organizations. Students will integrate theory and practice, develop skills, explore career options, and network with professional while earning college credit. Please contact the Psychology cooperative education coordinator before attempting to register.

PTA 206 - Physical Therapist Assistant Seminar

2 Credit(s)
Students will increase their understanding of physical therapy workplace behaviors and expectations while reflecting on prior experiences and attitudes. Students will learn and practice presenting themselves in a competent and professional manner, self-assess utilizing the clinical performance instrument, and complete pre-clinical requirements in preparation for cooperative education internships and, ultimately, a healthcare career. Coursework is delivered online.
Prerequisite: PTA 103 and PTA 132 with a letter grade of C or better.

PTA 280A - Co-op Ed: Physical Therapist Assistant - First Clinical Experience

4-8 Credit(s)
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.
Prerequisite/Corequisite: PTA 104 and (PTA 104L or PTA 104LR) and PTA 133 and (PTA 133L or PTA 133LR) with a grade of C.

PTA 280B - Co-op Ed: Physical Therapist Assistant - Second Clinical Experience

4-8 Credit(s)
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.
Prerequisite: PTA 280A

PTA 280C - Co-op Ed: Physical Therapist Assistant - Third Clinical Experience

4-8 Credit(s)
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.
Prerequisite: PTA 280B

SOC 280 - Co-op Ed: Sociology

3-12 Credit(s)
In this internship course students will gain sociology-related work experience in community organizations. Students will integrate theory and practice, develop skills, explore career options, and network with professional while earning college credit. Please contact the Sociology cooperative education coordinator before attempting to register.

TA 280 - Co-op Ed: Performing Arts

3-12 Credit(s)
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 co-op coordinator before registering. Course may be repeated.
Prerequisite: Instructor approval

WATR 280 - Co-op Ed: Water Conservation Technician

3-12 Credit(s)
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.

Creative Writing

CRWR 240 - Creative Writing: Nonfiction

4 Credit(s)
This course is designed to introduce the genre of creative nonfiction. Students will learn the conventions and techniques of creative nonfiction 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.
Prerequisite: A passing grade of (C- or better) in WR 121 or waiver based on instructor's evaluation of student writing.

CRWR 241 - Creative Writing: Fiction

4 Credit(s)
This course is an introduction to the principles and practice of writing, editing, and publishing short fiction. Students will focus on such elements as character, conflict, plot, point of view, setting, theme, dialogue, and tone both through the study of exemplary short fiction and through creating their own short stories that might then be entered in contests or sent off for publication. Students can expect to write two to three stories as well as other exercises such as textual analysis and peer reviews. Workshop discussions may be used along with instructor feedback to guide revision and editing of student work.
Prerequisite: A passing grade of (C- or better) in WR 121 or waiver based on instructor's evaluation of student writing

CRWR 242 - Creative Writing: Poetry

4 Credit(s)
This course is a course in writing poetry. The course will help students: Learn the elements of poetry and read poems by well-known poets. Develop ability in poetic composition. Read and write poems effectively. Receive constructive criticism of their writing and learn to be balanced and confident in their critical evaluations of their peers and gain a better understanding of themselves and others as writers.
Prerequisite: A passing grade (C- or better) in WR 121 or waived based on instructor's evaluation of student writing

Criminal Justice

CJA 100 - Introduction to Criminal Justice

4 Credit(s)
An introductory overview of the U.S. criminal justice system through an examination of its historical origins and development, structure, processes, and functions. Examines law enforcement, the courts, and corrections as distinct but complimentary components of the system and places the system within the larger context of legal and social philosophy. Topics include an introduction to the concepts and primary theories of criminology, the U.S. Constitution, substantive and procedural criminal law, justice administration, juvenile justice, ethics, and issues of gender and cultural diversity. Explores educational and career opportunities.

CJA 200 - Introduction to Criminology

4 Credit(s)
An introductory, interdisciplinary survey of the study of crime, criminal behavior, and the application of theory to crime prevention and offender treatment. Topics include the development of criminological thought; social and legal definitions and classifications of crime; social, cultural, psychological, biological, political, and economic theories of criminal behavior; the uses and limitations of empirical research methods to the study of crime; and the influence of criminological theory on public policy. Completion of WR 121 is strongly recommended.
Prerequisite: Completion of WR 121/WR 121_H is strongly recommended.

CJA 201 - Juvenile Delinquency

3 Credit(s)
An exploration of the nature, extent, and causes of delinquency and youth crime in the United States. Examines the historical development and methods of delinquency research; introduces students to the most influential theoretical perspectives; and provides an overview and critical analysis of specific treatment strategies as well as public crime prevention and control policies. Topics include offender and victim typologies and the influence of socio-economic, demographic, and cultural factors on juvenile behavior.

CJA 207 - Gender, Crime and Justice

4 Credit(s)
An examination of the influence of gender on crime, victimization, and criminal justice responses. Topics include gender-specific variation in rates and types of crime; disparity in official criminal justice responses to crime and victimization; societal reactions; the interconnected nature of gender, race, social class, crime and social control; and gender representation in the criminal justice professions.

CJA 210 - Criminal Investigation 1

3 Credit(s)
An exploration of the history, practice, and profession of criminal investigations. Provides an overview of general and offense-specific investigative principles and methods with an emphasis on the identification, documentation, collection and preservation of physical, testimonial, and documentary evidence. Topics include crime scene management, investigation, and reconstruction; criminal identification and criminalistics techniques; initial and follow-up investigatory phases; roles of law enforcement and support personnel; inductive and deductive reasoning; interpretation and application of substantive law; covert operations; and constitutional constraints.

CJA 212 - Criminal Justice Documentation and Reporting

3 Credit(s)
An overview of criminal justice documentation with an emphasis on written documentation methods and products. It will provide students with the information and basic skills necessary to write accurate and effective reports, affidavits, memoranda, and other documents specific to criminal justice professions. Topics include legal requirements, criminal justice-specific writing conventions and terminology, and documentation and reporting strategies.
Prerequisite: WR 121 or WR 121_H or instructor consent.

CJA 213 - Interviewing and Interrogation

3 Credit(s)
An examination of the investigative interview process, particularly as it applies to criminal inquiries and prosecutions. The course provides a comparative overview and critical analysis of the most commonly taught and widely used interviewing and interrogation techniques. Topics include the role of testimonial evidence; ethical and legal requirements and constraints; basic information-gathering strategies and practices; varied approaches for interviewing victims, witnesses, and suspects; the nature of psychological persuasion; and the interpretation of verbal and physical behavior.

CJA 214 - Introduction to Forensic Science

4 Credit(s)
An introductory survey of science and its application to the law. Provides an overview of the primary forensic science disciplines and an examination of principals, theories and practices related to the collection and analysis of evidence. Topics include types of physical evidence; crime scene processing methods and procedures; crime laboratories; analytic methods; interpretation of analytical test results; and related case law. Lab included.

CJA 220 - Introduction to Criminal Law

3 Credit(s)
An overview of substantive criminal law in the United States that comprises an examination of the historical development, philosophical principles, sources and nature of criminal law. Specific topics include the distinction between criminal and civil law; the classification of crimes; definitions and essential elements of key crimes and inchoate offenses; basic principles of and defenses to criminal liability, and the use of law as a social force.

CJA 222 - Criminal Law: Procedural Issues

3 Credit(s)
An overview of U.S. constitutional, statutory, and case law as it relates to the investigation of crime, processing of accused persons, and maintenance of order in American society. Topics include search and seizure, detention and arrest, use of force, self-incrimination, the right to counsel, rules of evidence, criminal court proceedings, and post-conviction remedies.

Culinary Arts

CA 121 - Composition of Cake

2 Credit(s)
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.
Prerequisite: COC/CAHRTM Majors only.

CA 122 - Artisan Breads

2 Credit(s)
This class is designed 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 - International Baking and Pastry

2 Credit(s)
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.
Prerequisite: Prerequisite: CPC/CAHM Majors only.

CA 124 - Seasonal Baking and Pastry 1

2 Credit(s)
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.
Prerequisite: COC/CAHRTM Majors only.

CA 125 - Seasonal Baking and Pastry 2

2 Credit(s)
This course, the second in the Seasonal Baking and Pastry series, is designed to continue developing students' classical baking and pastry techniques with the use of seasonal produce. Featuring products and produce primarily from the Lane County Farmers' Market, each class will showcase the edible labors of our local farmers. With guided and hands-on instruction, students will acquire the fundamentals of baking savory and sweet products with the season's fruits, vegetables, and herbs as well as prepare for the next season's offerings.
Prerequisite: CA 124

CA 160 - Introduction to Cooking Theories 1

7 Credit(s)
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.
Prerequisite/Corequisite: CA 175 Culinary Arts majors only.

CA 162 - Introduction to Cooking Theories 2

7 Credit(s)
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.
Prerequisite: CA 160

CA 163 - Introduction to Cooking Theories 3

7 Credit(s)
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.
Prerequisite: CA 162.

CA 163A - Beginning Baking and Pastry

3 Credit(s)
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.
Prerequisite/Corequisite: CA 175, CPC/CAHM majors only.

CA 163B - Intermediate Baking and Pastry

2 Credit(s)
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' percentages.
Prerequisite: CA 163A

CA 163C - Advanced Baking and Pastry

2 Credit(s)
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.
Prerequisite: CA 163B

CA 175 - Foodservice Sanitation and Safety

2 Credit(s)
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.

CA 292 - Advanced Cooking Theories 1

8 Credit(s)
Prerequisite: CA 163, CA175, HRTM 105, HRTM 106, MTH 025 or higher. 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.
Prerequisite: CA 163, CA 175, HRTM 105, HRTM 106 . MTH 025 or higher

CA 293 - Advanced Cooking Theories 2

8 Credit(s)
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.
Prerequisite: CA 292.

CA 294 - Advanced Cooking Theories 3

8 Credit(s)
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.
Prerequisite: CA 162

Dance

D 152 - Dance Basics

2 Credit(s)
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 Credit(s)
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. Class will focus on either mat work or barre. May be repeated up to 12 total credits.

D 160 - Dance Composition

3 Credit(s)
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. 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.
Prerequisite: D 257

D 172 - Dancing the Fluid Body

2 Credit(s)
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 176 - Fluid Yoga

2 Credit(s)
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 - Contemporary Dance 1

2 Credit(s)
For dancers with little or no previous dance experience, this beginning level class accommodates the pre-major and non-major student.

D 178 - Contemporary Dance 2

2 Credit(s)
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 179 - Contemporary Dance 3

2 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 194 - Hip Hop 2

2 Credit(s)
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 Credit(s)
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.
Prerequisite: Intermediate Ballet: D 186 or D 187

D 251 - Looking at Dance

4 Credit(s)
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.
Prerequisite: WR 121 recommended

D 256 - Anatomy of the Moving Body

4 Credit(s)
An introduction to anatomy of the human body in movement. Areas of focus include the skeleton, joints, connective tissues, muscles, the nervous system, and respiration. Anatomical terminology and kinesiological vocabulary are used to analyze movement. Emphasis is placed on student exploration of their physicality in movement. Sensation based knowledge is valued for application in movement, creative thinking, and injury prevention.

D 257 - Dance Improvisation

2 Credit(s)
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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 260 - Group Choreography

3 Credit(s)
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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.
Prerequisite: D 257 and D 160

D 261 - Dance Rehearsal and Performance

1-3 Credit(s)
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

DA 102 - Advanced Clinical Experiences

3 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 - Dental Health Sciences

3 Credit(s)
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 Credit(s)
Must be enrolled in the Dental Assisting Program. This course covers the study of head & neck anatomy with emphasis on oral structures, individual teeth and tooth surfaces using the universal numbering system.

DA 192 - Dental Materials

3 Credit(s)
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 Credit(s)
Must be enrolled in the Dental Assisting Program. Course covers completion of laboratory procedures from DA 192 associated with dentistry, such as placement of filling materials, retainers, bleaching trays, denture relines, temporary crowns & restorations, sealants and custom trays.

DA 194 - Dental Office Procedures

3 Credit(s)
Must be enrolled in the Dental Assisting Program. Principles of appointment planning, telephone techniques, case presentation, communications & marketing, and management of client records using Eaglesoft dental software. Teaching is done both online and in a computer lab to support computerized instruction.

DA 195 - Chairside Procedures 1

5 Credit(s)
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, & operative dentistry.

DA 196 - Chairside Procedures 2

7 Credit(s)
Must be enrolled in the Dental Assisting Program. Course covers signs & symptoms of medical emergencies that may occur in the dental office. Specialties of dentistry, principle procedures, instrument set-ups, and clinical experience in 4-handed dentistry are also included.

DA 210 - Dental Radiology 1

4 Credit(s)
Must be enrolled in the Dental Assisting Program. Course covers background, terminology, & 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 Credit(s)
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.

Dental Hygiene

DH 107 - Dental Infection Control and Safety

1 Credit(s)
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.
Prerequisite: Admission to the Dental Hygiene program.

DH 113 - Dental Anatomy and Histology

2 Credit(s)
The study of dental histology and morphology of the teeth and surrounding soft tissues.
Prerequisite: Admission to the Dental Hygiene program.

DH 118A - Clinical Dental Hygiene 1

4 Credit(s)
Introduction to basic instrumentation, assessment procedures, and clinical protocol for dental hygiene care.
Prerequisite: Admission to the Dental Hygiene program.
Corequisite: DH118A and DH 118B require simultaneous registration.

DH 118B - Clinical Dental Hygiene 1 Lab

2 Credit(s)
Clinical lab required for DH 118A.

DH 119A - Clinical Dental Hygiene 2

3 Credit(s)
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.
Prerequisite: Admission to the Dental Hygiene program.
Corequisite: DH119A and DH 119B require simultaneous registration.

DH 119B - Clinical Dental Hygiene 2 Lab

4 Credit(s)
Clinical lab required for DH 119A.

DH 120A - Clinical Dental Hygiene 3: Lecture/seminar

3 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program
Corequisite: DH120A and DH 120B require simultaneous registration.

DH 120B - Clinical Dental Hygiene 3 Clinic Lab

4 Credit(s)
Clinical lab required for DH 120A.

DH 132 - Dental Materials for the Dental Hygienist

2 Credit(s)
Composition, properties and manipulation of dental materials. Laboratory and clinical experience with dental materials.
Prerequisite: Admission to Dental Hygiene program

DH 139 - Special Needs Patient and Dental Emergencies

2 Credit(s)
Knowledge and skill development in assessment, diagnosis, planning and treatment of dental patients with developmental disabilities, complex medical problems and significant physical limitations. Development of critical thinking and problem solving skills in the care of patients with special needs, prevention of emergencies and selection of treatment.
Prerequisite: Admission to Dental Hygiene program

DH 220A - Clinical Dental Hygiene 4-Lecture/seminar

2 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program
Corequisite: DH 220B

DH 220B - Clinical Dental Hygiene 4 Lab

5 Credit(s)
Clinical lab required for DH 220A
Corequisite: DH 220A

DH 221A - Clinical Dental Hygiene 5

2 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program
Corequisite: DH 221B

DH 221B - Clinical Dental Hygiene 5 Lab

6 Credit(s)
Clinical Lab required for DH 221A
Corequisite: DH 221A

DH 222A - Clinical Dental Hygiene 6

2 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program
Corequisite: DH 222B

DH 222B - Clinical Dental Hygiene 6 Lab

5 Credit(s)
Clinical Lab required for DH 222A.
Corequisite: DH 222A

DH 228 - Oral Biology 1

4 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program

DH 229 - General and Oral Pathology

3 Credit(s)
Concepts in general, systemic, and oral pathology. Emphasis on entities frequently encountered, clinical signs and symptoms, and concepts of differential diagnosis.
Prerequisite: Admission to Dental Hygiene program

DH 233 - Anesthesia/Analgesia for Dental Hygiene Therapy

3 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program

DH 234 - Trends and Issues in Dental Hygiene

2 Credit(s)

Exploration of current trends and issues in the profession, ethics and jurisprudence, practice management and researching employments opportunities for the dental hygienist.
Prerequisite: Admission to Dental Hygiene program

DH 237 - Community Dental Health

3 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program

DH 238 - Community Dental Health

1 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program

DH 243A - Oral Radiology

2 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program
Corequisite: DH 244A and DH 244B are taken together and require simultaneous registration.

DH 243B - Oral Radiology

1 Credit(s)
Clinical Lab. Lab required for DH 243A.

DH 244A - Oral Radiology

1 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program. Continuation of DH 243A - Oral Radiology.

DH 244B - Oral Radiology

1 Credit(s)
Clinical Lab required for DH 244A.

DH 254 - Pharmacology

3 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program

DH 270 - Periodontology 1

2 Credit(s)
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.
Prerequisite: Admission to Dental Hygiene program

DH 271 - Periodontology 2

1 Credit(s)
Treatment of the moderate to advanced periodontal patient, treatment decisions implementing guidelines based on current American Academy of Periodontology (AAP) Disease Classification of Periodontal and Peri -Implant Diseases; and interprofessional collaboration. Studies systemic risk factors, restorative considerations, occlusion and TMJ disorders, periodontal surgeries, gingival curettage, Laser-assisted Periodontal Therapy, peri-implant disease and maintenance, periodontal emergencies, and periodontal disease in the pediatric population. Review of evidenced based medicine and periodontal research, newer treatment diagnostics and modalities.
Prerequisite: Admission to Dental Hygiene program

DH 275 - Restorative Dentistry 1

3 Credit(s)
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.

DH 276 - Restorative Dentistry 2

3 Credit(s)
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. **Prerequisite:** Admission to Dental Hygiene program

DH 277 - Restorative Dentistry 3

1 Credit(s)
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.

Diesel and Heavy Equipment

DS 154 - Heavy Duty Braking Systems

1-12 Credit(s)
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. This includes the following; safety; technical information and shop projects to apply and understand theories, principles and applications including: fundamentals of braking, applied preventive maintenance program for trucks/tractors; disc; s-cam brake systems; anti-lock air brake systems; heavy duty wedge brakes; power assist units; truck/tractor air brake system components; diesel engine exhaust brakes and retarders as used in on and off highway heavy duty trucks and equipment.

DS 155 - Heavy Equipment Hydraulics

1-12 Credit(s)
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; safety; technical information and shop projects to apply and understand theories, principles and applications including: 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 as used in on and off highway heavy duty trucks and equipment.

DS 158 - Heavy Equipment Chassis and Power Trains

1-12 Credit(s)
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, failure analysis and repair of heavy equipment chassis and power trains. This includes the following; safety; technical information and shop projects to apply and understand theories, principles and applications; frames; suspensions; conventional steering systems; track-type undercarriages; final drives; steering mechanisms; clutches; standard transmission; on and off highway automatic transmissions; fluid couplings and torque convertors; drive lines; front and rear drive carrier units; heavy duty tires, wheels, rims, wheel hubs, dead and live axles as used in on and off highway heavy duty trucks and equipment.

DS 256 - Diesel and Auxiliary Fuel Systems

1-12 Credit(s)
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, failure analysis, and repair of diesel, auxiliary fuel systems and exhaust after treatment systems. This includes the following; safety; technical information and shop projects to apply and understand theories, principles and applications including: alternative type fuel systems; diesel fuel systems including mechanical and electronic diesel engine controls; and diesel engine performance analysis; as used in on and off highway heavy duty trucks and equipment.

DS 257 - Diesel Electrical Systems

1-12 Credit(s)
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, failure analysis, and repair of diesel electrical systems. This includes the following; safety; technical information and shop projects to apply and understand theories of electrical fundamentals; operation and testing of batteries and battery banks; alternators and charging systems; starters and starting systems; hybrid drive systems; circuits and schematics; connectors, conductors and wiring harnesses; electronic control systems and components; heating ventilation and air conditioning systems as used in on and off highway heavy duty trucks and equipment.

DS 259 - Diesel Engines and Engine Overhaul

1-12 Credit(s)
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, failure analysis, and repair of diesel engines. This includes the following: safety; technical information and shop projects to apply and understand theories, principles and applications including: development of the diesel engine; diesel engine operating principles; combustion chamber design and function; the cylinder block; cylinder head and components; crankshaft, main bearings, rod 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, emission control systems; hand tools; precision measuring tools as used in on and off highway heavy duty trucks and equipment.

Drafting

DRF 121 - Mechanical Drafting

4 Credit(s)
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.
Prerequisite: DRF 160

DRF 137 - Architectural Plans

4 Credit(s)
Fundamentals of building materials, construction techniques, and drawings used in residential structures.
Prerequisite: DRF 160

DRF 160 - Computer-Aided Drafting and Design

4 Credit(s)
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 203 - Electrical Drafting

2 Credit(s)
Drafting techniques required for electrical and electronic fields. Basic electrical concepts, power generation and distribution, wiring, ladder diagrams for motor control circuits, logic diagrams, electronic components and schematics.

DRF 205 - Drafting: Structures

4 Credit(s)
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.
Prerequisite: DRF 160, MTH 075 and MTH 085 or instructor consent.

DRF 207 - Drafting: Strength of Materials

4 Credit(s)
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.
Prerequisite: MTH 075, MTH 085, and DRF 205.

DRF 210 - Commercial Buildings

4 Credit(s)
Fundamentals of building materials, construction techniques, construction documents, and processes used in commercial structures.
Prerequisite: DRF 160.

DRF 211 - Sustainable Building Systems

4 Credit(s)
Fundamental concepts of green building design, including energy, water, lighting, heating, and cooling. Includes an introduction to LEED green building standards.
Prerequisite: WR 115 or higher or by placement

DRF 220 - Building Information Modeling

4 Credit(s)
DRF 220 is an introduction to Autodesk Revit and will allow students to gain an understanding of BIM software and its application within the fields of Architecture and Structural Engineering. Activities in this class will include creating 3D building models along with their corresponding elevations, sections and details. This class will navigate

the Revit interface, sheet setup, inserting families, setting levels, annotations, dimensions and plotting.

DRF 235 - Mechanical Design Skills

4 Credit(s)
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.
Prerequisite: DRF 121

DRF 236 - Machine Elements

4 Credit(s)
A study of components used in machine design including gears, V-belt drives, roller chain, linkages, cams, fasteners, keys, guards, electric motors, weldments, and materials.

Prerequisite: DRF 121

DRF 245 - Solid Modeling

4 Credit(s)
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 and create parts lists.
Prerequisite: DRF 160

DRF 248 - Hydraulics Drafting

1 Credit(s)
Basic understanding of the principles of fluid power. Introduces hydraulic and pneumatic components, develops familiarity with symbols used in schematic drawings, and develops skills in creating hydraulic and pneumatic schematic drawings.

Early Childhood Education

ECE 105 - Health and Safety Issues in Early Childhood Education

2 Credit(s)
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 health and safety through developmentally appropriate practices. Recognizing/Reporting Child Abuse/Neglect required to pass.

ECE 110 - Observing Young Children's Behavior

1 Credit(s)
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.
Prerequisite: WR 115 is recommended.

ECE 120 - Introduction to Early Childhood

2 Credit(s)
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 Credit(s)
Acquaints student with the logic and ethics of developmentally appropriate guidance of children aged birth through five years. Focuses on guidance, social and emotional behavior patterns, daily routines.

ECE 150 - Creative Activities for Children

3 Credit(s)
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 Credit(s)
Students will gain understanding in planning daily and weekly program activities for young children. There is an emphasis on planning developmentally appropriate, play-based 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.

ECE 170 - Infants and Toddlers Development

4 Credit(s)
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. This class may be offered online.

ECE 210 - Applying Early Childhood Curriculum

4 Credit(s)
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", including the development of inquiry-based STEM (science, technology, engineering, and math) activities as well as the outdoor environment.

ECE 230 - Family, School, Community Relations

3 Credit(s)
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 developing communication skills with parents.

ECE 240 - Supervised Student Teaching

4 Credit(s)
Designed to provide the student with actual experience in the supervision, guidance, and care of young children based on NAEYC standards for Early Childhood Professional Preparation. Students learn to demonstrate consistent appropriate guidance and plan and carry out a developmentally appropriate curriculum.

ECE 250 - Infant and Toddler Environments

3 Credit(s)
Course topics include: How suitable materials and a carefully planned physical environment can enhance optimum development. How to staff a center appropriately. Develop a brief review of infant-toddler development. Basic care giving techniques. How to plan curriculum and resources and references.

ECE 253 - Diversity Issues in Early Childhood Education

3 Credit(s)
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 young children and their families. Students will also evaluate and develop appropriate materials and methods to increase children's awareness and appreciation of diversity.

ECE 260 - Administration of Child Care Programs

3 Credit(s)
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.

Earth and Environmental Sciences

ENSC 181 - Terrestrial Environment

4 Credit(s)
Interactions among humans and natural land-based systems and their environmental consequences. Topics and labs include land-based 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. Lab included.

ENSC 182 - Atmospheric Environment and Climate Change

4 Credit(s)
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. Lab included.
Recommended: G 102 or GEOG 141

ENSC 183 - Aquatic Environment

4 Credit(s)
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. Lab included.

ENSC 265 - Environmental Science Field Methods

4 Credit(s)
Students will gain practical field experience, with online and face-to-face instruction, using

protocols to collect scientific environmental data, particularly in wetlands, and on endangered, threatened and invasive species in various environmental settings. Students also explore monitoring, mitigation, and restoration in these areas. They will work side by side with collaborating resource professionals. One of the following courses is recommended to be taken prior to this class: BI 103B, BI 103F, BI 103J, ENSC 181, BOT 213, or WST 230.

Economics

ECON 200 - Principles of Economics: Introduction to Economics

3 Credit(s)
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.
Prerequisite: MTH 111 and sophomore standing recommended.

ECON 201 - Principles of Economics: Introduction to Microeconomics

3 Credit(s)

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.
Prerequisite: ECON 200 or ECON 202.

Recommended: MTH 111 and sophomore standing

ECON 202 - Principles of Economics: Introduction to Macroeconomics

3 Credit(s)
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..
Prerequisite: ECON 200 or ECON 201.

Recommended: MTH 111 and sophomore standing

ECON 204 - Introduction to International Economics

4 Credit(s)
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 260 - Introduction to Environmental and Natural Resource Economics

4 Credit(s)
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.

Education

ED 100 - Introduction to Education

3 Credit(s)
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 ra current issue in education. Course also includes an in-class observation.

ED 125 - Tutor Training 1

1 Credit(s)
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).
Prerequisite: Employment as a tutor.

ED 126 - Tutor Certification - Advanced

1 Credit(s)
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).
Prerequisite: Continued employment as a tutor and completion of ED 125

ED 127 - Tutor Certification-Master Level

1 Credit(s)
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.
Prerequisite: Continued employment as a tutor and completion of ED 125 and ED 126

ED 216 - Foundations of Education

3 Credit(s)
Analyzes the system of education in a democratic society. This course introduces the historical, social, philosophical, political, legal and economic foundations of education to provide a framework from which to analyze contemporary educational issues.

ED 230 - Language and Literacy

3 Credit(s)
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 Credit(s)
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 Credit(s)
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 269 - Inclusion and Special Needs

3 Credit(s)
Course designed to deepen the understanding of the historical and cultural roots of individuals who have disabilities. Topics covered include an overview of laws impacting students and families. A special emphasis will be placed on the definitions and classifications, instructional models and responses to the exceptional student. The course focuses on the characteristics of students with special needs and the adaptation of teaching to meet these needs.

Effective Learning

EL 110 - Effective College Reading

1-3 Credit(s)
This course develops students' ability to monitor, apply and adjust a variety of reading strategies for increased comprehension of academic texts. It introduces discipline-specific study methods to help students successfully read course materials, think critically, navigate information technology in their subject area, and develop rich academic vocabulary.

EL 113 - Connections: Specific Study Skills

3 Credit(s)
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.
Corequisite: WR 093

EL 115 - Effective Learning

3 Credit(s)
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 115R - Critical Thinking for College Reading

3 Credit(s)
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.
Corequisite: RD 087.

EL 116 - Critical Thinking for Paragraph Writing

3 Credit(s)
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.
Corequisite: WR 087

EL 117 - Critical Thinking for Essay Writing

3 Credit(s)
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 (EL117 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.
Corequisite: WR 097

EL 121 - Effective Digital Learning

1-3 Credit(s)
This course introduces students to the major skills and knowledge needed to learn effectively in digital environments and from digital texts. Students will gain an understanding of time- and self-management strategies, critical digital literacy skills including active online reading and media comprehension strategies, and media analysis skills for use in fully online, partially online, and face-to-face classes where digital texts may be used.

Electronics

ET 121 - Shop Practices

2 Credit(s)
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.
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

ET 129 - Electrical Theory 1

4 Credit(s)
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.
Prerequisite: RD 087 and EL 115 OR prior college AND MTH 060 or higher with a grade of C- or better, or placement test.

ET 130 - Electrical Theory 2

1-4 Credit(s)
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. .
Prerequisite: ET 129.

Emergency Medical Services

EMS 101 - Introduction to Emergency Services

4 Credit(s)
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.

EMS 102 - Crisis Intervention

3 Credit(s)
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.

EMS 103 - Emergency Services Rescue

4 Credit(s)
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.
Prerequisite: EMS 111, EMS 112, and EMS 113 with grade of C- or better; P/NP not accepted

EMS 111 - Emergency Medical Technician

8 Credit(s)
This course is a state-approved course in Emergency Medical Technician. Successful completion of this 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. 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.
Prerequisite: Must be enrolled in one of the following Majors: Paramedicine: Emergency Medical Technician, CPC
Corequisite: EMS 112, EMS 113

EMS 112 - Emergency Medical Technician Lab

3 Credit(s)
This course is the Lab component of the Emergency Medical Technician licensing course.
Prerequisite: Must be enrolled in one of the following Majors: Paramedicine: Emergency Medical Technician, CPC
Corequisite: EMS 111 and EMS 113

EMS 113 - Emergency Medical Technician Clinical

1 Credit(s)
This course is the Clinical Experience component of the Emergency Medical Technician licensing course.
Prerequisite: Must be enrolled in one of the following Majors: Paramedicine: Emergency Medical Technician, CPC
Corequisite: EMS 111 And EMS 112

EMS 201 - Pathophysiology

3 Credit(s)
This course is part of a multi-part program in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic in pathophysiology. 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. Program graduates are eligible to take the Program graduates are eligible to take the National Registry Paramedic Cognitive and Psychomotor Exams.
Prerequisite: Must be enrolled in one of the following Majors: Paramedicine

EMS 211 - Pharmacology 1

2 Credit(s)
This course is part 1 of a 2-part course within a multi-part program in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic in pharmacology. 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. Program graduates are eligible to take the Program graduates are eligible to take the National Registry Paramedic Cognitive and Psychomotor Exams.
Prerequisite: Must be enrolled in one of the following Majors: Paramedicine

EMS 212 - Pharmacology 2

2 Credit(s)
This course is part 2 of a 2-part course within a multi-part program in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic in pharmacology. 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. Program graduates are eligible to take the National Registry Paramedic Cognitive and Psychomotor Exams.
Prerequisite: EMS 211 with a grade of C- or better; P/NP not accepted. Must be enrolled in one of the following Majors: Paramedicine

EMS 221 - Trauma Emergencies 1

3 Credit(s)
This course is part 1 of a 2-part course within a multi-part program in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic in trauma 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. Program graduates are eligible to take the National Registry Paramedic Cognitive and Psychomotor Exams.
Prerequisite: Must be enrolled in one of the following Majors: Paramedicine

EMS 222 - Trauma Emergencies 2

3 Credit(s)
This course is part 2 of a 2-part course within a multi-part program in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic in trauma 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. Program graduates are eligible to take the National Registry Paramedic Cognitive and Psychomotor Exams.
Prerequisite: EMS 221 with grade of C- or better; P/NP not accepted. Must be enrolled in one of the following Majors: Paramedicine

EMS 231 - Medical Emergencies 1

3 Credit(s)
This course is part 1 of a 3-part course within a multi-part program in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic in medical 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. Program graduates are eligible to take the National Registry Paramedic Cognitive and Psychomotor Exams.
Prerequisite: Must be enrolled in one of the following Majors: Paramedicine

EMS 232 - Medical Emergencies 2

3 Credit(s)
This course is part 2 of a 3-part course within a multi-part program in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic in medical 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. Program graduates are eligible to take the National Registry Paramedic Cognitive and Psychomotor Exams.
Prerequisite: EMS 231 with grade of C- or better; P/NP not accepted. Must be enrolled in one of the following Majors: Paramedicine

EMS 233 - Medical Emergencies 3

2 Credit(s)
This course is part 3 of a 3-part course within a multi-part program in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic in medical 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. Program graduates are eligible to take the National Registry Paramedic Cognitive and Psychomotor Exams.
Prerequisite: EMS 232 with grade of C- or better; P/NP not accepted. Must be enrolled in one of the following Majors: Paramedicine

EMS 241 - Electrocardiography 1

3 Credit(s)
This course is part 1 of a 2-part course within a multi-part program in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic in electrocardiography. 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. Program graduates are eligible to take the Oregon/National.
Prerequisite: Must be enrolled in one of the following Majors: Paramedicine

EMS 242 - Electrocardiography 2

3 Credit(s)
This course is part 2 of a 2-part course within a multi-part program in paramedic education. This course covers the knowledge, skill and behaviors required of a paramedic in electrocardiography. 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. Program graduates are eligible to take the Oregon/National.
Prerequisite: EMS 241 with grade of C- or better; P/NP not accepted. Must be enrolled in one of the following Majors: Paramedicine

EMS 251 - Paramedic Lab 1

1-3 Credit(s)
This course is part 1 of a 3-part lab series for Paramedicine.
Prerequisite: Must be enrolled in one of the following Majors: Paramedicine

EMS 252 - Paramedic Lab 2

1-3 Credit(s)
This course is part 2 of a 3-part lab series for Paramedicine.
Prerequisite: EMS 251 with grade of C- or better; P/NP not accepted. Must be enrolled in one of the following Majors: Paramedicine

EMS 253 - Paramedic Lab 3

1-3 Credit(s)
This course is part 3 of a 3-part lab series for Paramedicine.
Prerequisite: EMS 252 with grade of C- or better; P/NP not accepted. Must be enrolled in one of the following Majors: Paramedicine

EMS 261 - Paramedic Clinical 1

1 Credit(s)
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.
Prerequisite: Must be enrolled in one of the following Majors: Paramedicine

EMS 262 - Paramedic Clinical 2

3 Credit(s)
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.
Prerequisite: EMS 261 with grade of C- or better; P/NP not accepted. Must be enrolled in one of the following Majors: Paramedicine

EMS 263 - Paramedic Clinical 3

4 Credit(s)
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.
Prerequisite: EMS 262 with grade of C- or better; P/NP not accepted. Must be enrolled in one of the following Majors: Paramedicine

Energy Management

NRG 101 - Introduction to Energy Management

3 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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.
Prerequisite: PH 101 or department approval

NRG 112 - Commercial Energy Use Analysis

4 Credit(s)
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.
Prerequisite: NRG 111 and NRG 121 and MTH 095 or Math Placement or Department Approval.

NRG 121 - Air Conditioning System Analysis

3 Credit(s)
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.
Prerequisite: PH 101 or department approval.

NRG 122 - Commercial Air Conditioning System Analysis

3 Credit(s)
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.
Prerequisite: NRG 121 or department approval.

NRG 123 - Energy Control Strategies

4 Credit(s)
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.
Prerequisite: NRG 122 and NRG 124 or department approval.

NRG 124 - Energy Efficiency Methods

4 Credit(s)
Students learn analysis 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.
Prerequisite: PH 102 or instructor consent

NRG 131 - Lighting Fundamentals

3 Credit(s)
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.
Prerequisite: PH 101 and PH 102 or department approval

NRG 142 - Energy Accounting

3 Credit(s)
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.
Prerequisite: BT 123

NRG 154 - Alternative Energy Technologies

3 Credit(s)
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 181 - Direct Digital Controls 1

4 Credit(s)
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 Credit(s)
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 Credit(s)
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.
Prerequisite: NRG 181

NRG 184 - Direct Digital Controls 2

4 Credit(s)
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.
Prerequisite: NRG 181

NRG 185 - Lighting Controls

4 Credit(s)
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.

Engineering

ENGR 101 - Engineering Orientation

3 Credit(s)
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, possible group projects and/or oral and written reports.

ENGR 102 - Engineering Orientation 2

4 Credit(s)
This course is an introduction to the use of computing language in engineering. Students will use a standard problem-solving methodology through the course.
Prerequisite/Corequisite: MTH 251 or MTH 252 completed with a grade of C- or better within the past two years

ENGR 115 - Engineering Graphics

3 Credit(s)
An introduction to graphic communication, including visualization, multiview and isometric.
Prerequisite/Corequisite: MTH 112 or equivalent course completed with a grade of C- or better within the past two years or placement test

ENGR 211 - Statics

4 Credit(s)

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.
Prerequisite: MTH 252 and PH 211 completed with a grade of C- or better within the past eight terms

ENGR 212 - Dynamics

4 Credit(s)
This is a fundamental dynamics course about analysis of motions of particles and rigid bodies encountered in engineering. 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.
Prerequisite: ENGR 211 and MTH 254, all completed with a grade of C- or better within the past two years

ENGR 213 - Strength of Materials

4 Credit(s)
Course presents theory of stress and strain, shear, bending, combined stresses, and temperature-induced stresses in axially loaded members, circular shafts, beams and in statically indeterminate systems. Additional topics include thin-walled pressure vessels, torsional and flexural loading, failure theory and column buckling.
Prerequisite: ENGR 211 and MTH 252, both completed with a minimum grade of "C-" or better within the past two years

ENGR 221 - Electrical Fundamentals 1

4 Credit(s)
Linear circuits will be analyzed via Kirchhoff'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.
Prerequisite: PH 213 completed with a grade of "C-" or better within the past two years

English

ENG 100 - Children's Literature

4 Credit(s)
Children's Literature is a wide-ranging introductory course which includes the history of literature for children and a continuing discussion of the ways our culture and history have defined and created what children may or may not be and what they may or may not read, enjoy, or understand. 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 multicultural 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 addresses children's literature from a literary perspective, discussing texts from theoretical as well as a pedagogical framework. A major aim of the class is to introduce students to recent and emerging authors in order to broaden familiarity with current material available to young people.

ENG 104 - Introduction to Literature: Fiction

4 Credit(s)
This course will present to the student a wide range of fiction from various time periods and cultures. Students will learn basic literary terminology, analyze and interpret texts, and discuss concepts that enhance appreciation of fiction. The course may include the short story and the novel or novella.

ENG 105 - Introduction to Literature: Drama

4 Credit(s)
This course will introduce students to a wide variety of world plays which may include classical Greek drama, Shakespeare, Noh theater, and modern works. Students will learn basic dramatic terminology, analyze and interpret texts, and discuss concepts that enhance appreciation of drama. The course may include informal performance or other creative approaches to drama.

ENG 106 - Introduction to Literature: Poetry

4 Credit(s)
In this course, students will experience a wide range of poetry from various time periods and cultures. Students will learn basic poetic terminology, analyze and interpret texts, and discuss concepts that enhance appreciation of poetry. Students may also engage in creative assignments.

ENG 107 - Survey of World Literature

4 Credit(s)
Part of a two-term offering 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 109 - Survey of World Literature

4 Credit(s)
Survey of World Literature is a two-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.
Prerequisite: None; recommended to have college-level reading and writing skills (a passing grade in WR 115 or placement into WR 121)

ENG 151 - Black American Literature

4 Credit(s)
This course will offer students an intense examination of and engagement with Black American 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. Students will read, critically engage, and respond to texts in a variety of literary genres as well as critical and theoretical texts.

ENG 194 - Literature of Comedy

4 Credit(s)
"Is comedy really tragedy plus time?" This course traces the historical and cultural development of canonical and popular works of comedy. We will develop a working definition of comedy for our times by exploring classic and contemporary theories of humor, laughter, and comedy in its social contexts. Texts range from ancient theories to contemporary social media contexts. Genres may include plays, essays, poems, fiction, film, social and streaming media, and comic arts. Themes include the changing role of comedy in societies, the role of gender, race, sexuality, class and audience in shaping what's funny, and the conventions, mechanics and effects of jokes, tropes, and types.

ENG 201 - Shakespeare

4 Credit(s)
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 Credit(s)
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 Credit(s)
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 was written prior to approximately 1785 BCE. 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 Credit(s)
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 second term was written after approximately 1785 BCE. 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 Credit(s)
This is an introductory course to Latinx 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 Latinx writers in the United States.

ENG 217 - Reading, Writing and Digital Culture

4 Credit(s)
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 222 - Literature and Gender

4 Credit(s)
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 may examine the concept of gender itself. Students may consider relevant concepts from feminist theory and gender studies such as the difference between gender identity, gender expression, sex, and sexuality, as well as gender construction, performativity, and intersectionality.

ENG 232 - Native American Literature, Myth and Folklore

4 Credit(s)
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 Credit(s)
Metá-kuye-ásin. All our relations. In this course we read essays and poems by writers who find home in the wilderness, desert, mountains, farms, prairies—and family in the plants and animals with which they live. Our readings ask us to consider who we are and how we should live—but their focus is on what it means to be part of this natural world. We read within and without the canon—delving into writers such as Thoreau, Evelyn White, Muir, Dillard, Silko, Erdrich, Berry, Abbey, Lopez, Leopold, Ackerman, and Kimmerer.

ENG 243 - Native American Autobiography

4 Credit(s)
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 Credit(s)
The course will familiarize students with literature from a variety of genres written by Asian American authors. The course may also engage students with 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 Credit(s)
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, as well as 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 Credit(s)
This course acquaints 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 interpretation. 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 course will draw on material produced prior to the American Civil War period.

ENG 254 - Survey of American Literature

4 Credit(s)
This course acquaints 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 interpretation. 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 course will draw on material produced after the American Civil War period.

ENG 257 - The American Working Class in Fiction and Non-Fiction

4 Credit(s)
Using the concept of the "American Dream" to examine work, class, and social mobility, students will learn to appreciate the power of class in shaping individual lives and our culture. There is a prevailing belief in America that we are a "classless" society, but this course interrogates this concept. Through critical examination of a variety of works of fiction and non-fiction, students will explore ways that the inequalities of class, ethnicity, race, and gender interrelate to sustain the power and interests of economic elites.

ENG 260 - Introduction to Women Writers

4 Credit(s)
This course will introduce students to the richness and variety of literary works written by women over the course of several centuries. 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. Critical thinking will play a role as students consider literature written by a range of women writers in a global context. The course will include an introduction to feminist literary theory and will introduce students to a variety of literary genres and styles.

ENG 261 - Science Fiction

4 Credit(s)
This course examines science fiction from a diverse range of time periods, authors, subgenres, and forms. Students will understand science fiction as engaging with both the realities of the present and the possibilities of the future, taking seriously not only its status as a literary genre but also the social, political, and philosophical questions it raises.

ENG 270 - Bob Dylan: American Poet

4 Credit(s)
All winners of the Nobel Prize in Literature deserve a course of their own, perhaps—but only Bob Dylan has one at Lane. In 2016 the Nobel Committee awarded Dylan the prize "for having created new poetic expressions within the great American song tradition." In this literature course, we examine the relationship between texts and the traditions from which they sprout: Dylan's masterful songs have deep roots in American blues, English and American folk songs, British Romantic poetry, and even Greek and Roman classics. How poems work, the relationship between sound/song and lyrics, and the possibilities of meaning in Dylan's work are our main themes.

ENG 282 - Introduction to Comics-Graphic Novels

4 Credit(s)
This course introduces students to the academic study of comics and graphic novels, focusing on these forms as literary productions, asking questions about how and why these forms are written and read. Students will encounter a variety of comics and graphic novel forms with an international, historical, and critical perspective on the art of editorial cartoons, comics, comic books, and graphic novels and how they communicate, inform, and emotionally engage audiences.

English as a Second Language (Community Program)

ESL XESC 05161 - Combined Skills Level 1

5 Hours per week
This course focuses on continuing to develop basic English language skills. Students will use English in basic, everyday functions and personal interactions, communicate in both written and spoken English to give simple information about self. Students will use

English to have brief, routine conversations with some effort, read very simple and familiar or patterned sentences on familiar subjects and write common words and phrases

ESL XESC 05162 - Combined Skills Level 2

5 Hours per week
This course focuses on continuing to develop basic English language skills. Students will use English to have brief, routine conversations, read simplified texts, write simple sentences related to daily needs and use digital tools and devices to advance study and workplace skills.

ESL XESC 05163 - Combined Skills Level 3

5 Hours per week
This course focuses on developing high beginning English language skills. At the end of the course, students should be able to use English to have brief conversations on familiar topics, read short texts with clear organization, tables, graphs, maps and diagrams, write short paragraphs on familiar and high interest topics and use digital tools and devices to advance study and workplace skills.

ESL XESC 05164 - Combined Skills Level 4

5 Hours per week
This course focuses on developing low intermediate English language skills and on the rights and responsibilities of community membership. Students will engage in fluent conversations on familiar topics, and provide a short narrative. Students will also identify main ideas, details, and some implied meaning in extended conversations, read a range of increasingly elaborated texts, write texts to address work and family purposes and use digital tools and devices to advance study and workplace skills.

ESL XESC 05165 - Combined Skills Level 5

5 Hours per week
This course focuses on continued development of intermediate English language skills and on the rights and responsibilities of community membership. Students will participate in moderate-length conversations with increasing ease and fluency, listen to detailed presentations on work and community topics, read introductory academic texts, popular literary texts and everyday work and community documents. Students will write a range of simple and functional and narrative texts for work, community, family, academic, and creative purposes and use digital tools and devices to advance study and workplace skills.

ESL XESC 05166 - Combined Skills Level 6

5 Hours per week
This course focuses on preparing students to access and use resources in the community and at the college to successfully transition to work, college or workplace training. Activities include guest speakers, field trips, college advising, job shadowing, internships, volunteering, and career exploration. Students will participate in conversations with ease and fluency, listen to detailed presentations, read everyday work and community documents with ease. Also, students will write a range of simple and functional and narrative texts for work and community purposes and use digital tools and devices in educational and workplace settings.

English as a Second Language (Intensive Program)

ESL XESC 0516A - Basic Combined Skills Level A

10 Hours per week
Low Beginning-Beginning. This course focuses on reading, writing, speaking, listening and vocabulary development. Vocabulary development is practiced and reinforced in reading, writing, speaking, and listening.

ESL XESR 0516A - Reading and Writing Level A

10 Hours per week
Beginning-High-Beginning. This course focuses on reading, writing, and vocabulary development. Vocabulary development is practiced and reinforced in reading and writing.

ESL XESR 0516B - Reading and Oral Skills Level B

10 Hours per week
High Beginning-Low-Intermediate. This course focuses on reading, speaking, listening and vocabulary development. Students will participate in simple conversational exchanges with supportive listeners. Vocabulary development is practiced and reinforced in reading, speaking, and listening. This course focuses on everyday and informational texts.

ESL XESW 0516B - Writing and Grammar Level B

10 Hours per week
Low Intermediate. This course focuses on sentence-level accuracy in written English in informative genres and simple directions.

ESL XESR 0516C - Reading and Oral Skills Level C

10 Hours per week
Intermediate. This course focuses on reading, speaking, pronunciation, listening and vocabulary development. Students will participate in conversational exchanges and course discussion so others can understand. Vocabulary development is practiced and reinforced in reading, speaking, and listening. The course focuses on informational and academic texts.

ESL XESW 0516C - Writing and Grammar Level C

10 Hours per week
Low intermediate-intermediate. This course focuses on grammar development and extended paragraph writing in narrative and informative genres.

ESL XESR 0516D - Reading and Oral Skills Level D

10 Hours per week
Intermediate-High Intermediate. This course focuses on reading, speaking, listening and vocabulary development. Vocabulary development is practiced and reinforced in reading, speaking, and listening. This course focuses on academic, work, and community texts.

ESL XESW 0516D - Writing and Grammar Level D

10 Hours per week
Intermediate-High Intermediate. This course focuses on grammar development and basic essay writing in a variety of community and academic contexts.

ESL XESS 0516E - Academic Listening and Speaking Level E

5 Hours per week
High-Intermediate to Low-Advanced. This course is designed to prepare students for listening and speaking in academic and formal settings.

ESL XESW 0516E - Academic Writing and Grammar Level E

10 Hours per week
High-Intermediate to Low-Advanced. This course focuses on intermediate to advanced grammar development and essay writing to help students of English build their academic English in order to be successful in college transition English.

ESL XEBO 0516E - Bridge Oral Skills Level E

5 Hours per week
This Academic English as a Second Language course supports academic success in Communications 115: Intercultural Communication by using the content of this 4-credit college course to work on skill development in the areas of reading, writing (including sentence structure), listening, speaking, and academic study skills. This course is designed for non-native speakers of English.

ESL XEBW 0516E - Bridge Reading and Writing Level E

7 Hours per week
This Academic English as a Second Language course supports academic success in COMM 115 - Introduction to Intercultural Communication by using the content of this 4-credit college course to work on skill development in the areas of reading, writing (including sentence structure), listening, speaking, and academic study skills. This course is designed for non-native speakers of English.

ESL XESR 0516E - ESL - Academic Reading

5 Hours per week
High Intermediate-Low Advanced. This course focuses on developing academic vocabulary as well as reading speed and comprehension of non-simplified texts. Students will also participate in a discussion forum about a novel. This course focuses on academic, work, and community texts.

ESL XEBO 0516F - Bridge Oral Skills Level F

5 Hours per week
This college transition English as a Second Language course supports academic success in WR 121 - Academic Composition. The content of this 4-credit college course combined with ESL support allows students to work on skill development in the areas of reading, writing (including sentence structure), listening, speaking, and academic study skills. This course is designed for non-native speakers of English.

ESL XEBW 0516F - Bridge Reading and Writing Level F

7 Hours per week
This college transition English as a Second Language course supports academic success in WR 121 - Academic Composition. The content of this 4-credit college course combined with ESL support allows students to work on skill development in the areas of reading, writing (including sentence structure), listening, speaking, and academic study skills. This course is designed for non-native speakers of English.

ESL XESS 0516F - College Transition Listening and Speaking Level F

5 Hours per week
This course is designed to prepare students for academic listening and speaking and

draws heavily from the materials in the Reading/Vocabulary course and classroom observations.

ESL XESR 0516F - College Transition Reading Level F

5 Hours per week
Advanced. This course focuses on reading and vocabulary development. Vocabulary development is practiced and reinforced in reading and discussion. This course focuses on academic, work, and community texts.

ESL XESW 0516F - College Transition Writing and Grammar Level F

10 Hours per week
Low-Advanced to Advanced. This course focuses on advanced grammar development and essay writing to help students of English transition to an institute of higher learning in order to work on a degree or certification in a professional field.

Ethnic Studies

ES 101 - Historical Racial and Ethnic Issues

4 Credit(s)
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 Credit(s)
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 199NA - Native American Leadership: Contemporary Leadership in Indigenous Communities

4 Credit(s)
The course is designed to explore the history, philosophy, and methods of modern-day leadership in indigenous communities. Students will examine the late 20th and 21st century indigenous civil rights, ecological, and cultural movements that have shaped contemporary society. This course focuses on indigenous leadership theory; foundations of indigenous leadership; and contemporary indigenous leadership in practice.

ES 212 - Chicano/Latino Studies: Political and Ideological Perspectives

4 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 224 - Black Male Studies: Lies, Literature, and Legacy

4 Credit(s)
Black Male Studies humanizes Black males and challenges the pathological accounts held about Black males. Furthermore, Black Male Studies attempts to impart nuance, problematize, and critically question the hegemonic characterizations of Black Males. This course will: (1) introduce students with 19th century ethnology, (2) explore the various accounts of the sexual violence of Black men during slavery and the Jim Crow period by white men and women, (3) utilize empirical findings concerning Black males' actual gender attitudes and activism concerning fatherhood in the 20th and 21st century, and (4) present the various terms and theories found within the literature as applied to the situation of Black males, such as social dominance theory, C.R.I.S.H.I.S. (Constructed Racialized Identity Sustained Hegemonically In Systems), RBF (Racial Battle Fatigue).

ES 241 - Native American Studies: Consequences of Native American and European Contact

4 Credit(s)
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 243 - Native American Studies: Contemporary Indigenous Issues

4 Credit(s)
This course examines the ongoing impact of colonialism on indigenous peoples in the U.S. Identity, citizenship, sovereignty, treaty rights, land/resource ownership and use, political activism, education, and economic issues are explored. This course also looks at alliance-building between indigenous peoples and other groups here and abroad.

ES 244 - Native American Leadership 1: Building Leadership Through Indigenous Oratory

4 Credit(s)
The course will examine the historical and contemporary methods by which Indigenous leadership is shaped from birth to adulthood through the use of oratory. Students will explore the broad concept of folklore and the methodology behind the strategic application within Indigenous communities.

Fabrication and Welding

WLD 111 - Blueprint Reading for Welders

3 Credit(s)
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.
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

WLD 112 - Fabrication/Welding 1

12 Credit(s)
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.
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

WLD 113 - Fabrication/Welding 2

12 Credit(s)
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.
Prerequisite: WLD 112 or WLD 111 and WLD 121 and WLD 143 and WLD 242 or instructor consent.

WLD 114 - Fabrication/Welding 3

12 Credit(s)
Comprehensive skills necessary for the fabrication of metal products. This course builds

and advances skills previously learned. Instruction and practice are 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.
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.

WLD 121 - Shielded Metal Arc Welding 1

1-4 Credit(s)
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.
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

WLD 122 - Shielded Metal Arc Welding 2

1-4 Credit(s)
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.
Prerequisite: WLD 121 or performance test and written examination.

WLD 139 - Welding Lab

1-3 Credit(s)
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.
Prerequisite: Instructor consent and minimum reading score of 68 OR RD 087 and EL 115 OR prior college OR placement test.

WLD 140 - Welder Qualification (Cert): Wire Drive Processes

3 Credit(s)
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.
Prerequisite: WLD 143 or WLD 154 or WLD 112 and (WLD 113 or WLD 114) or instructor consent.

WLD 141 - Welder Qualification (Cert): SMAW

3 Credit(s)
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.
Prerequisite: WLD 122 or WLD 112 and (WLD 113 or WLD 114) or instructor consent.

WLD 142 - Pipe Welding Lab: Carbon Steel

3 Credit(s)
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.
Prerequisite: WLD 121 or WLD 122

WLD 143 - Wire Drive Welding 1

1-4 Credit(s)
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.
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

WLD 151 - Fundamentals of Metallurgy

1-3 Credit(s)
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.
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

WLD 154 - Wire Drive Welding 2

1-4 Credit(s)
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.
Prerequisite: WLD 143 or instructor consent.

WLD 159 - Wire Drive Welding 3

1-4 Credit(s)
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.
Prerequisite: WLD 143 or instructor consent.

WLD 160 - Wire Drive Welding 4

1-4 Credit(s)
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 & 3. Instruction in material preparation and testing of weld samples will also be provided.
Prerequisite: WLD 143 and WLD 154.

WLD 215 - Fabrication/Welding 4

12 Credit(s)
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.
Prerequisite: WLD 112 and WLD 113 and WLD 114. Second year standing or instructor consent or performance test and written examination.

WLD 216 - Fabrication/Welding 5

12 Credit(s)
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.
Prerequisite: WLD 215. Second year standing or instructor consent or performance test and written examination.

WLD 217 - Fabrication/Welding 6

12 Credit(s)
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.
Prerequisite: WLD 216. Second year standing or instructor consent or performance test and written examination.

WLD 242 - Gas Tungsten Arc Welding 1

3 Credit(s)
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.
Prerequisite: RD 087 and EL 115 OR prior college OR placement test.

WLD 256 - Gas Tungsten Arc Welding 2

3 Credit(s)
This course provides continuing training in the technology and practice of the gas tungsten arc welding (GTAW) of carbon and stainless steel sheet. Testing of weld samples is included in this course.
Prerequisite: Prerequisite: RD 087 AND EL 115R OR prior college or placement test through the Testing Office.

WLD 257 - Gas Tungsten Arc Welding 3

3 Credit(s)
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.
Prerequisite: WLD 256

Film Arts

FA 221 - Computer Animation

4 Credit(s)
This course serves as an introduction to the technical and conceptual methods for the creation and animation of digital 3D objects. This is a projected oriented, hands-on course, which gives students an opportunity to design and produce 3D computer animation projects, as well as to watch and discuss animation. The course will emphasize principles of animation and introduce 3D modeling and animation tools techniques.

FA 222 - Computer Animation 2

4 Credit(s)
A comprehensive exploration of 3D computer animation arts: 3D space and form, model creation, texturing, lighting, scene composition, animation and rendering strategies.
Prerequisite: FA 221

FA 250 - Concepts of Visual Literacy

3 Credit(s)
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 Credit(s)
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 Credit(s)
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.

FA 256 - Lighting for Photography

3 Credit(s)
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.

FA 261 - Writing and Interactive Design

3 Credit(s)
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 plans for a multimedia project involving elements such as text, graphics, illustrations, animation, video, sound, hyperlinks, and search mechanisms.
Prerequisite: WR 121 or WR 121_H and ART 216

FA 264 - Women Make Movies

4 Credit(s)
This course focuses on women directors and their contributions to cinema. Students will be introduced to the historical, cultural, and economic context of film production, as well as to formalist film vocabulary. They will explore readings in feminist scholarship and analyze woman-authored cinema in the context of race, ethnicity, gender, sexuality, and class. Texts span the silent period to the present.
Prerequisite: Suggested placement into WR 115 (college-level reading and writing skills)

FA 270C - Film Genres: Comedy

4 Credit(s)
Film Genre Topics 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 theories of a given genre, as well as representative cinematic texts. The course will focus on analyzing, historicizing, and exploring a chosen genre and its cycles. The course is repeatable as topics change.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills)

FA 270H - Film Genres: Horror

4 Credit(s)
Film Genre Topics 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 theories of a given genre, as well as representative cinematic texts. The course will focus on analyzing, historicizing, and exploring a chosen genre and its cycles. The course is repeatable as topics change.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills)

FA 270N - Film Genres: Noir

4 Credit(s)
Film Genre Topics 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 theories of a given genre, as well as representative cinematic texts. The course will focus on analyzing, historicizing, and exploring a chosen genre and its cycles. The course is repeatable as topics change.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills)

FA 276 - Gender, Race, and Class in U.S. Cinema

4 Credit(s)
This cinema course is 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.
Prerequisite: Suggested placement into WR 115 (college-level reading and writing skills).

Fitness and Lifestyle Specialist

FLS 110 - Coaching Healthy Eating

2 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
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.

FLS 185 - Career Preparation

3 Credit(s)
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 Credit(s)
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.
Prerequisite: FLS 160 must be completed with a letter grade of C- or better. P/NP is not accepted.

FLS 195 - Interdisciplinary Practicum

1-3 Credit(s)
Prerequisite: Program Admissions Supervised practicum in a 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.
Prerequisite: Admission into program

FLS 214 - Physical Exercise and Healthy Aging

3 Credit(s)
Teaches the physiological changes that occur during the aging process and the positive 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.

Flight

FT 115 - Aircraft Structures and Systems

3 Credit(s)
Designed to give a pilot a thorough understanding of airplane systems and structural design.

FT 121 - UA Platforms and Systems

4 Credit(s)
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 Credit(s)
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 Credit(s)
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 124A - UAS Flight Lab

1 Credit(s)
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 Credit(s)
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.
Prerequisite: FT 124A

FT 124C - UAS Flight Lab

1 Credit(s)
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.
Prerequisite: FT 124B

FT 124D - UAS Flight Lab

1 Credit(s)
This course will act as the hands on portion of all elective UAS courses in the form of multiple TCOs. 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 UAs.
Prerequisite: FT 124C

FT 124E - UAS Flight Lab

1 Credit(s)
This course will act as the hands on portion of all elective UAS courses in the form of multiple TCOs. 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 UAs.
Prerequisite: FT 124D

FT 124F - UAS Flight Lab

1 Credit(s)
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.
Prerequisite: FT 124E

FT 142 - Pt 141 Private Pilot Stage 2 Post-solo Flight and Ground Lecture

3 Credit(s)
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.
Prerequisite: FT 141 or instructor consent

FT 142W - Pt 141 Private Pilot Stage 2 Post-solo Flight and Ground Lecture

3 Credit(s)
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.
Prerequisite: FT 141W or instructor consent

FT 143 - Pt 141 Private Pilot Stage 3 Cross-country and Certification prep Flight and Ground Lecture

3 Credit(s)
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.
Prerequisite: FT 141 or instructor consent

FT 143W - Pt 141 Private Pilot Stage 3 Cross-country and Certification prep Flight and Ground Lecture

3 Credit(s)
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.
Prerequisite: FT 141W or instructor consent.

FT 201 - Pt 141 Instrument Rating Stage 1 Altitude Instrument Flying and Basic Instrument Navigation

4 Credit(s)
Student will learn precise airplane attitude control solely by reference to flight instruments, including instrument flight theory for both the control 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.
Prerequisite: FT 143 or instructor consent

FT 202 - Pt 141 Instrument Rating Stage 2 Holding and Instrument Approaches

5 Credit(s)
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.
Prerequisite: Instructor consent

FT 203 - Pt 141 Instrument Rating Stage 3 Instrument Cross-country and Certification Prep

3 Credit(s)
Student will learn instrument cross-country flight planning and practice all required FAA Instrument Rating tasks until they meet or exceed Airmen Certification Standards.
Prerequisite: FT 201

FT 221 - Pt 141 Commercial Pilot Stage 1 Ground and Airborne Lecture with solo lab

3 Credit(s)
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.
Prerequisite: Instructor consent

FT 222 - Pt 141 Commercial Pilot Stage 2 Ground and Airborne Lecture with solo lab

3 Credit(s)
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.
Prerequisite: FT 143

FT 223 - Pt 141 Commercial Pilot Stage 3 Ground and Airborne Lecture

2 Credit(s)
Student will develop/maintain a high level of proficiency in attitude instrument flying.
Prerequisite: FT 143 or instructor consent

FT 224 - Pt 141 Commercial Pilot Stage 4 Ground and Airborne Lecture

4 Credit(s)
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.
Prerequisite: FT 143 or instructor consent

FT 225 - Pt 141 Commercial Pilot Stage 5 Ground and Airborne Lecture with Solo Lab

5 Credit(s)
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.
Prerequisite: FT 221, FT 222, FT 223, FT 224 or instructor consent

FT 228 - Multiengine Ground School

2 Credit(s)
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.
Prerequisite: Recommend possession of FAA private pilot license.

FT 230 - UAS Data Acquisition and Analysis

3 Credit(s)
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.
Prerequisite: FT 123 and FT 124B
Corequisite: GIS 151

FT 231 - UAS Advanced Sensor

4 Credit(s)
This course furthers a UA operator's knowledge in aerial photography and data 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 Credit(s)
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.
Prerequisite: FT 124C, FT 124E, FT 230, FT 231

FT 251 - Commercial Pilot Ground School

4 Credit(s)
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.
Prerequisite: Recommend private pilot license or equivalent.
Corequisite: FT 261

FT 252 - Instrument Ground School

4 Credit(s)
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.
Prerequisite: Recommend completion of FT 251
Corequisite: FT 262

FT 256 - Flight Instructor-Airplane and Instrument Flight Instructor-Airplane Ground School

3 Credit(s)
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 Credit(s)
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.
Corequisite: FT 251

FT 262 - Aviation Law and Regulations

1 Credit(s)
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.
Corequisite: FT 252

French

FR 101 - First-Year French

5 Credit(s)
This is the first course in a sequence of three courses designed for students with no prior language study. In French 101, 102, and 103, students develop their intercultural competency and skills in speaking, listening, reading and writing through short cultural readings, videos, songs, and short conversations. Computer work is required.

FR 102 - First-Year French

5 Credit(s)
This is the second course in a sequence of three courses designed for students with no prior language study. In French 101, 102, and 103, students develop their intercultural competency and skills in speaking, listening, reading and writing through short cultural readings, videos, songs, and short conversations. Computer work is required.
Prerequisite: FR 101 with a letter grade of C- or higher, or Pass

FR 103 - First-Year French

5 Credit(s)
This is the third course in a sequence of three courses designed for students with no prior language study. In French 101, 102, and 103, students develop their intercultural competency and skills in speaking, listening, reading and writing through short cultural readings, videos, songs, and short conversations. Computer work is required.
Prerequisite: FR 102 with a letter grade of C- or higher, or Pass

FR 107 - Beginning French Conversation

1 Credit(s)
This course offers conversational practice in French at the beginning level. Offered P/NP, winter term only.
Prerequisite: FR 101

FR 188 - Study Abroad: French Language and Culture in Normandy

6 Credit(s)
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.
Prerequisite: FR 101 or equivalent

FR 201 - Second-Year French

4 Credit(s)
This is the first course in a sequence of three courses of intermediate French. In French 201, 202, and 203, students develop their intercultural competence, and skills in speaking, listening, reading, and writing through engaging cultural readings, short films, current news, and discussion. Computer work is required.
Prerequisite: FR 103 with a letter grade of C- or higher, or Pass

FR 202 - Second-Year French

4 Credit(s)
This is the second course in a sequence of three courses of intermediate French. In French 201, 202, and 203, students develop their intercultural competence, and skills in speaking, listening, reading, and writing through engaging cultural readings, short films, current news, and discussion. Computer work is required.
Prerequisite: FR 201 with a letter grade of C- or higher, or Pass

FR 203 - Second-Year French

4 Credit(s)
This is the first course in a sequence of three courses of intermediate French. In French 201, 202, and 203, students develop their intercultural competence, and skills in speaking, listening, reading, and writing through engaging cultural readings, short films, current news, and discussion. Computer work is required.
Prerequisite: FR 202 with a letter grade of C- or higher, or Pass

FR 211 - Conversational French

2 Credit(s)
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.
Prerequisite: FR 103 or equivalent

FR 288 - Study Abroad: French Language and Culture in Normandy

6 Credit(s)
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.
Prerequisite: FR 101

General Science

GS 101 - General Science (Nature of the Northwest)

4 Credit(s)
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. Lab included.

GS 106 - Earth, Sea, Sky

4 Credit(s)
This course surveys Earth and space sciences for non-science majors. Topics include geologic processes, time, hazards, oceans, atmosphere, and cosmology from asteroids, planets, stars, to galaxies and beyond. Labs include basic scientific techniques, minerals, rocks, maps, and space imagery. Lab included.
Prerequisite: MTH 052 or above with grade of C- or better or placement test or instructor consent

GS 108 - Oceanography

4 Credit(s)
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. Lab included.

GS 109 - Meteorology

5 Credit(s)
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.

GS 142 - Earth Science: Earth Revealed

4 Credit(s)
Introduces geology and integrates topics of Earth's history, plate tectonics, minerals, rocks, volcanism, earthquake activity, weathering, rivers, groundwater, glaciers, and coasts. Lab exercises are completed at home or in the field. Lab included.

GS 201 - Scientific Skepticism - Someone is Wrong on the Internet!

4 Credit(s)
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.

Geographic Information Science

GIS 151 - Digital Earth

4 Credit(s)
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 are used to solve real-world problems and aid critical decision making. Students who take this class online must have a computer with a Windows operating system (PC or a MAC with a Windows boot option) OR be able to attend the GIS open lab hours. Lab included.

GIS 245 - GIS 1

4 Credit(s)
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 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. Lab included. Students who take this class online must have a computer with a windows operating system (PC or a MAC with a windows boot option) OR be able to attend the GIS open lab hours.
Prerequisite: GIS 151 or instructor consent

GIS 246 - GIS 2

4 Credit(s)
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 computer outside of class (new within 3 years) is strongly recommended. Students who do not have access to a computer may be at a disadvantage. Lab included. Students who take this class online must have a computer with a windows operating system (PC or a MAC with a windows boot option) OR be able to attend the GIS open lab hours.
Prerequisite: GIS 245

Geography

GEOG 141 - Natural Environment

4 Credit(s)
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. Global Climate Change.

GEOG 142 - Introduction to Human Geography

4 Credit(s)
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 they 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.

GEOG 201 - World Regional Geography

4 Credit(s)
Regional geography gives students the skills and tools to understand and interpret the events that shape our lives. Students will explore major geographic regions focusing on the ways that humans create "places" through culture and adapting the physical environment. Students will apply a spatial perspective to reveal how physical and cultural attributes impact the balances and imbalances in our increasingly globalized world and how levels of development impact geographic differentiation.

Geology

G 101 - Earth's Dynamic Interior

4 Credit(s)
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. Lab included.

G 102 - Earth's Dynamic Surface

4 Credit(s)
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. Lab included.

G 103 - Evolving Earth

4 Credit(s)
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. Lab included.

G 146 - Rocks and Minerals

4 Credit(s)
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. Lab included.

G 147 - National Parks Geology

4 Credit(s)
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. May have field trips to parks. Advise another geology class first. Lab included.

G 148 - Geologic Hazards

4 Credit(s)
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. Lab included.

G 201 - Earth Materials and Plate Tectonics

4 Credit(s)
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. Lab included.

G 202 - Earth's Surface Systems

4 Credit(s)
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. Lab included.

G 203 - Evolution of the Earth

4 Credit(s)
Geology 203 explores how plate motion, 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. Lab included.
Prerequisite: Grade of C- or better in G 101 or G 102 or G 201 or G 202.

Graphic Design

GD 110 - Introduction to Graphic Design

1 Credit(s)
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.

Health and First Aid

HE 152 - Drugs, Society and Behavior

3 Credit(s)
This course is designed to introduce the student to the social reality of drug use and drug users. We will study the historical significance and social construction of drug use, users, abuse, addiction and treatment options. We will explore the relationships between individual and group behavior and their relationship to society.

HE 161 - Cardiopulmonary Resuscitation

1 Credit(s)
This American Red Cross adult, child and infant CPR/AED certification class provides the skills needed to recognize and give lifesaving care to a person experiencing cardiac and respiratory related emergencies.

HE 209 - Human Sexuality

3 Credit(s)
Students will explore the physiological, psychological, and sociological factors that contribute to the development and expression of one's sexuality. This course is designed to increase self-awareness and knowledge about sexual relationships and sexual identity, in order to create positive sexual health outcomes.

HE 212 - Women's Health

3 Credit(s)
Examines current issues in women's health and wellness with an emphasis on disease prevention, empowerment, and optimal well-being. Topics include biological, cultural, sociological, global, psychological, historical, and political influences that shape and define women's health and healthcare choices.

HE 240 - Holistic Health

3 Credit(s)
Explore how complementary, alternative, and integrative medicine contrasts with Western medicine, to make informed health care choices. Investigate traditional indigenous systems of healing throughout the world. Examine holistic therapies and sustainable approaches to address issues around stress, nutrition, inactivity, environmental health and well-being.

HE 250 - Personal Health

3 Credit(s)
Explore and investigate the influence of family, community and personal beliefs on happiness and well-being. Develop knowledge and awareness of the impact that interpersonal communication, stress, nutrition, emotional, mental and environmental health can have on your life and ability to reach your fullest potential.

HE 251 - Wilderness First Aid

3 Credit(s)
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 Credit(s)
This course will focus on emergency first aid response, assessment, care, prevention and promotion. Students will study and practice and become certified in life-saving skills related to airway obstruction, CPR, shock, soft tissue musculoskeletal sudden illness, and a variety of other emergencies.

HE 255 - Global Health and Sustainability

4 Credit(s)
Investigate the global interacting cause-and-effect relationships between economy, power, privilege, social identity and determinants, topics will include; industry, consumerism, violence, maternal and child health, food/agriculture, hunger, homelessness, emerging disease, climate, ecosystems, biodiversity. We will identify and

explore solutions for creating personal and community resilience, sustainability and positive health outcomes for people and planet.

HE 262 - First Aid 2: Beyond the Basics

3 Credit(s)
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 Credit(s)
Explore current evidence-based fitness research and its relationship to achieving positive health outcomes. Develop and understanding of how optimal fitness including; cardiorespiratory, strength training, weight management and healthy diet contributes to the prevention of stress and chronic disease.

Health Information Management

HIM 107 - Integrated Electronic Health Records

4 Credit(s)
Students will learn to work with simulated Electronic Health Record (EHR) systems with simulated data. Students will apply practice management systems used in a medical office and work with health data. As they work with data using these systems, they will learn about the functionality of this software. Within this environment, they will experience threats to security and appreciate the need for standards, high levels of usability, and sources of errors.

HIM 114 - Introduction to Medical Coding

4 Credit(s)
A coding survey course for those involved in health care delivery, particularly dealing with insurance and/or Medicare and government regulations. Included in this course is the process and practice of ICD-10- CM diagnosis coding as well as CPT procedure coding.
Prerequisite: HP 100
Prerequisite/Corequisite: HP 100 and (HP 150 or BI 231) with grade of C or better, or work experience

HIM 120 - Introduction to Health Information Management

3 Credit(s)
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.

HIM 154 - Introduction to Disease Processes

4 Credit(s)
This course provides students with a basic understanding of factors that contribute to the occurrence of various diseases and how those diseases may be treated by clinical professionals. Upon successful completion of this course, students will have achieved the goal of being able to recognize the signs and symptoms of diseases and their common treatments. This course includes a pharmacy component.

HIM 160 - Healthcare Insurance and Billing

4 Credit(s)
This is a hands-on course interactive course where students will learn how medical insurance plays an important role in the financial well-being of every health care business. This course is designed to emphasize the revenue cycle-ten steps that clearly identify all the components needed to successfully manage the medical insurance claims process. The cycle shows how administrative medical professionals follow the money ." This course covers both outpatient physician and inpatient/outpatient hospital situations.

HIM 183 - Introduction to Health Information Systems

4 Credit(s)
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.

HIM 200 - Healthcare Statistics

3 Credit(s)
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.
Prerequisite: MTH 052 or higher, or test into MTH 060 or higher

HIM 210 - Leadership for Health Information Management

4 Credit(s)
This course will provide practical instruction in management principles from a health information (HIM) perspective. HIM Managers are found in all healthcare settings: acute-care, outpatient, long-term care, rehabilitation, healthcare insurance, and even as HER vendors. The principles introduced will provide a foundation and path for sound management practice and decision making as well as the human resources department plays in today's healthcare management environment.
Prerequisite: MTH 052 or higher, and complete the following courses: HP 110, HIM 107, HIM 183, and (CIS 101 or CS 120), with a grade of C or better or instructor consent

HIM 222 - Reimbursement Methodologies

4 Credit(s)
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 Credit(s)
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.

HIM 241 - Health Information Management Applications 1

4 Credit(s)
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.
Prerequisite: HIM 114 and HIM 120 and HIM 183 and HP 220 and HIM 222 with grade of C or better, or instructor consent

HIM 242 - Health Information Management Applications 2

4 Credit(s)
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.
Prerequisite: HIM 241 with a grade of C or higher, or instructor consent.

HIM 260 - Medical Record Auditing

4 Credit(s)
This is a hands-on, interactive course where students will learn how medical record auditing plays an important role in the financial well-being of every healthcare business. This course is designed to emphasize the principles of medical record documentation and chart auditing. This course will detail the processes of documentation, coding guidelines and regulatory information as it pertains to auditing. This course covers both outpatient physician and inpatient / outpatient hospital records.
Prerequisite: HIM 270 and HIM 273 with a grade of C or better.

HIM 270 - ICD-10 Coding

5 Credit(s)
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.
Prerequisite: HIM 114 with a grade of C or better.

HIM 271 - ICD-10-PCS Coding

5 Credit(s)
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.
Prerequisite: HIM 114 for a grade of C or better

HIM 273 - CPT and HCPCS Coding

5 Credit(s
Students gain a working knowledge of CPT and HCPCS coding with exposure in abstracting and identifying correct outpatient procedure (C PT) codes and HCPCS codes

per guidelines and will utilize encoder programs.
Prerequisite: (HP 100 and HP 150 and HP 152) or (BI 231 and BI 233) with a grade of C or better

HIM 275 - CPT Coding 2

4 Credit(s)
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.
Prerequisite: HIM 273

Health Professions

HP 100 - Medical Terminology 1

3 Credit(s)
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.

HP 105 - EHR for the Provider Office

3 Credit(s)
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.

HP 110 - Health Office Procedures

3 Credit(s)
Principles and practical application of administrative duties in a healthcare office. Topics covered include management of both paper and electronic medical records, ROI (release of information), appointment scheduling, professional verbal and written communication skills, legal and ethics in healthcare, banking and revenue cycle basics, HIPAA privacy and OSHA safety requirements, and some entry-level management skills.

HP 150 - Human Body Systems 1

3 Credit(s)
This course introduces the fundamental concepts of the anatomy and physiology of the cell and skin, musculoskeletal, nervous, sensory, endocrine, and circulatory-lymphatic systems. Part 1 of a 2 part series.

HP 152 - Human Body Systems 2

3 Credit(s)
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.
Prerequisite: HP 150

HP 153 - Introduction to Pharmacology

3 Credit(s)
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.

HP 220 - Legal and Ethical Aspects of Healthcare

3 Credit(s)
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.

History

HST 101 - Western Civilization: Ancient Mediterranean

4 Credit(s)
A survey of the historical development of religious and secular value systems, scientific theories, social structures, economies, and political thought and institutions of the Western world from the earliest recorded city-states through the early Renaissance. The course will focus on the diverse societies and cultures of the Near East, Egypt, Greeks, Jews, Romans, and Christians and on the influence of Germanic and Islamic societies in the wake of the fall of Rome. The course will also examine the historical relationship between the events and ideas of this earlier period and our modern world. May be taken out of sequence.

HST 102 - Western Civilization: Making of Modern Europe

4 Credit(s)
A survey of the historical development of religious and secular value systems, scientific theories, social structures, economies, and political thought and institutions of the Western world from Italian Renaissance through the French Revolution. Topics include Europe's colonization of the western hemisphere, the Reformation era, the Enlightenment and Scientific Revolution, and the early Industrial Revolution. The course will also provide students with an overview of diverse peoples, nationalities, and cultures in the context of changing social, political, and economic conditions and values. It will further examine the influence of the events and ideas of this period on the modern world. May be taken out of sequence.

HST 103 - Western Civilization: Europe and the World

4 Credit(s)
A survey of the historical development of the Western world from approximately 1800 to the late twentieth century that provides students with an overview of diverse peoples, nationalities, and cultures in the context of changing social, political, and economic conditions and values. The concepts, events, and people covered will guide our understanding of the present world. Topics include industrialization and labor; social movements; mid-19th- century political revolutions; imperialism; ideologies and politics of the 19th and 20th centuries; the world wars and decolonization; the Cold War, and popular culture. May be taken out of sequence.

HST 104 - World History

4 Credit(s)
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.

HST 105 - World History

4 Credit(s)
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.

HST 106 - World History

4 Credit(s)
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.

HST 195 - History of the Vietnam War

4 Credit(s)
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.

HST 201 - History of the United States

4 Credit(s)
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.

HST 202 - History of the United States

4 Credit(s)
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.

HST 203 - History of the United States

4 Credit(s)
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.

HST 208 - US History Since 1945

4 Credit(s)
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 Credit(s)
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.

HST 266 - US Women's History

4 Credit(s)
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.

Honors

Note: Students cannot receive credit for both the Honors and non-Honors versions of a course.

ANTH 102_H - World Archaeology-Honors

4 Credit(s)
This course serves as an introduction to foundational aspects of archaeology including methods, theory, and the major progression through time of culture and technology. It 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 Mesopotamia, Egypt, India, China, South America, MesoAmerica, and North America. 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. Students cannot receive credit for both ANTH 102_H and ANTH 102.

ARH 209_H - History of Japanese Art-Honors

3 Credit(s)
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. 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. Students cannot receive credit for both ARH 209 and ARH 209_H.
Prerequisite: Suggested placement into WR 115 or above (college-level reading and writing skills).

ART 115_H - Basic Design: Fundamentals-Honors

3 Credit(s)
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, as well as create and analyze projects that demonstrate critical and creative thinking and knowledge of 2D design theory and practice. 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. Students cannot receive credit for both ART 115_H and ART 115.
Prerequisite/Corequisite: Recommend take concurrently with ART 111 and ART 131

BI 101_H - General Biology-Honors

4 Credit(s)
BI 101 topics: atoms, molecules, cellular processes, genetics, protein synthesis, photosynthesis, respiration. Lab included. 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. Students cannot receive credit for both BI 101_H and BI 101. Students may use only one BI 101 to meet requirements for any Lane degree, regardless of letter option.

Prerequisite: WR 121 readiness (score of at least 96 on the sentence-skills placement test) recommended.

COMM 111_H - Fundamentals of Public Speaking-Honors

4 Credit(s)
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. 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. Students cannot receive credit for both COMM 111_H and COMM 111.

CRWR 242_H - Creative Writing: Poetry-Honors

4 Credit(s)
This is a course in writing poetry. The course will help students: Learn the elements of poetry and read poems by well-known poets. Develop ability in poetic composition. Read and write poems effectively. Receive constructive criticism of their writing. Learn to be balanced and confident in their critical evaluations of their peers and gain a better understanding of themselves and others as writers. 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. Students cannot receive credit for both CRWR 242_H and CRWR 242.

ENG 104_H - Introduction to Literature: Fiction-Honors

4 Credit(s)
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. 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. Students cannot receive credit for both ENG 104 and ENG 104_H.
Prerequisite: None; recommended to have college-level reading and writing skills (a passing grade in WR 115 or placement into WR 121).

ENG 105_H - Introduction to Literature: Drama-Honors

4 Credit(s)
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. 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. Students cannot receive credit for both ENG 105_H and ENG 105.

ENG 106_H - Introduction to Literature: Poetry-Honors

4 Credit(s)
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. 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. Students cannot receive credit for both ENG 106_H and ENG 106.

ENSC 182_H - Atmospheric Environment and Climate Change-Honors

4 Credit(s)
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. Lab included. 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 also meets Lane Degree requirements that are fulfilled by the same course number without the _H.
Prerequisite: Recommended: G 102 or GEOG 141

ENSC 183_H - Aquatic Environment-Honors

4 Credit(s)
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. Lab included. 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 also meets Lane Degree requirements that are fulfilled by the same course number without the _H.

HON 280_H - Co-op Ed: International Work Experience-Honors

1-12 Credit(s)
This is a structured program for honors students to do an 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 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.
Prerequisite: Instructor approval; WR 121-readiness recommended

PS 297_H - Environmental Politics-Honors

4 Credit(s)
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. 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. Students cannot receive credit for both PS 297 and PS 297_H.

PSY 201_H - General Psychology-Honors

4 Credit(s)
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. 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. Students cannot receive credit for both PSY 201 and PSY 201_H.

SOC 204_H - Introduction to Sociology-Honors

4 Credit(s)
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. 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. Students cannot receive credit for both SOC 204_H and SOC 204.

TA 272_H - Introduction to Theatre-Honors

4 Credit(s)
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. 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. Students cannot receive credit for both TA 272 and TA 272_H.

WR 121_H - Academic Composition-Honors

4 Credit(s)
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. 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. Students cannot receive credit for both WR 121_H and WR 121.
Prerequisite: WR 115 or placement

WR 122_H - Argument, Research and Multimodal Composition-Honors

4 Credit(s)
While continuing the concerns of WR 121, WR 122 focuses on persuasion and argument supported by external research, including the processes of finding and evaluating sources, citing, documenting, and integrating source material into the student's own text. Both subjects --argument and research-- are presented in the context of critical reading and the writing. 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. Students cannot receive credit for both WR 122_H and WR 122.
Prerequisite: WR 121 or WR 121_H

WR 227_H - Technical Writing-Honors

4 Credit(s)
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. 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. Students cannot receive credit for both WR 227_H and WR 227.
Prerequisite: WR 121 or WR 121_H. Recommended: WR 122

Hotel/Restaurant/Tourism Management

HRTM 100 - Introduction to Culinary and Hospitality

3 Credit(s)
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 Credit(s)
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 Credit(s)
Open to the public. 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 109 - Principles of Meetings and Convention Management

3 Credit(s)
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 140 - Hospitality Law and Ethics

3 Credit(s)
Open to the Public. Legal and ethical concepts in the hospitality industry are explored. Ethical perspectives are identified and applied to hospitality operations.

HRTM 205 - Managing the Restaurant Operation

3 Credit(s)
This 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.
Prerequisite: HRTM 105
Corequisite: HRTM 292

HRTM 220 - Sustainability in the Hospitality Industry

2 Credit(s)
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.
Prerequisite: CA/HRTM majors only.

HRTM 230 - Hotel Operations 1

3 Credit(s)
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.
Prerequisite: CA/HRTM majors only

HRTM 231 - Hotel Operations 2

3 Credit(s)
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.
Prerequisite: HRTM 230

HRTM 260 - Hospitality Human Resources and Supervision

3 Credit(s)
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.
Prerequisite: CAHM majors only

HRTM 265 - Food and Beverage Cost controls

3 Credit(s)
This course provides a study of the cost control aspects of hospitality operations, including: budgeting, forecasting, financial analysis, food and labor cost controls, beverage controls, and inventory management.
Prerequisite: CAHM majors only; HRTM 105 and MTH 025 or higher

HRTM 286 - Bar and Beverage Management

3 Credit(s)
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 292 - Dining Room and Kitchen Lab

4 Credit(s)
Students will work in a variety of front-of-house positions in the campus restaurant, developing skills in restaurant management and service.
Prerequisite: HRTM 105
Corequisite: HRTM 205

Human Development and Family Studies

HDFS 226 - Child Development

3 Credit(s)
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.

HDFS 227 - Children Under Stress

3 Credit(s)
This course examines the social, economic, and cultural factors that contribute to a child's experience and their impact on developmental potential. In this course, we look at some of the major issues that keep children from experiencing life more fully. Emphasis will be placed on attachment theory, the development of self-esteem, and trauma-informed care.

HDFS 228 - Young Children with Special Needs

3 Credit(s)
The development, needs, and behavior of preschool aged children with special needs. General and practical strategies 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.

Human/Community Services

HS 102 - Psychopharmacology

4 Credit(s)
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 MHACBO to meet certification requirements for alcohol & drug counselors.

HS 107 - Aging: A Social and Developmental Perspective

3 Credit(s)
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 Credit(s)
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 Services professional. Students will learn and practice field-orientated skills in preparation for cooperative education internship and employment, including stress management and burnout prevention.

HS 151 - Issues in Assessing and Treating the Problem Gambler

1 Credit(s)
Assessing and treating the problem gambler: Overview of the criteria for problem and pathological 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 Credit(s)
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 MHACBO to meet certification requirements for alcohol and drug counselors.

HS 158 - Trauma: Theory to Practice

2 Credit(s)
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 will be explored.

HS 201 - Introduction to Human Services

3 Credit(s)
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 diversity and trauma informed care on service delivery will be explored.

HS 209 - Crisis Intervention and Prevention

3 Credit(s)
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 Credit(s)
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 Credit(s)
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 MHACBO to meet certification requirements for alcohol and drug counselors.

HS 222 - Best Practices in Human Services: Interventions

4 Credit(s)
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 Credit(s)
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 MHACBO to meet certification requirements for alcohol and drug counselors.

HS 226 - Ethics and Law

3 Credit(s)
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 MHACBO to meet certification requirements for alcohol and drug counselors.

HS 228 - HIV/AIDS and other Infectious Diseases: Risk Assessment and Intervention

2 Credit(s)
Introduces the epidemiology of HIV/AIDS, and other infectious diseases, including 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 MHACBO to meet certification requirements for alcohol and drug counselors.

HS 229 - Grief and Loss Across Life Span

3 Credit(s)
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. This course utilizes lecture, discussion, and group exercises to respond compassionately and help individuals develop emotional resilience to loss.

HS 231 - Advanced Interviewing and Counseling

3 Credit(s)
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.
Prerequisite: HS 155

HS 232 - Cognitive-Behavioral Strategies

3 Credit(s)
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.
Prerequisite: HS 155

HS 265 - Casework Interviewing

3 Credit(s)
Students will learn the theoretical knowledge of a solution focus approach to develop skills needed to work in human services organizations. Students will learn the goals and methods of effective casework including interviewing skills, case management and treatment planning. This theoretical approach emphasizes clients' strengths and goals.
Prerequisite: HS 155

HS 266 - Case Management

3 Credit(s)
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 MHACBO to meet certification requirements, including ASAM assessment, for alcohol and drug counselors. Instructional methods will include lecture, discussion, films, small group activities, and guest speakers.
Prerequisite: HS 155

HS 267 - Cultural Competence in Human Services

3 Credit(s)
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. This class is accepted by MHACBO to meet certification requirements for alcohol and drug counselors.

Humanities

HUM 100 - Humanities Through the Arts

4 Credit(s)
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.

Independent Study

Independent Study 198/298 - Individual student course contract

Variable Credit(s)
Independent Study (198/298): A variable credit course based on independent study, contracted between an instructor and a student. The emphasis will be in areas of student tutoring or research-related projects which provide an opportunity for students to pursue in-depth study in an area previously or concurrently covered in a survey or introductory course. Contact academic departments directly for information.

Journalism

J 134 - Photojournalism

3 Credit(s)
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 Credit(s)
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.

Library

LIB 127 - Research Skills and Information Literacy

1 Credit(s)
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.

LIB 199FN - Fake News and Information Warfare

2 Credit(s)
Fake news is nothing new, but most Americans are unaware of the full extent to which various interests guide, constrain, repress, or censor their information environment, their beliefs, and their self-expression. This course will inform students of the civil liberties granted to them by the US Constitution and give them the tools they need in order to become more sophisticated and critical online information consumers. In the context of information warfare, it makes sense to learn how to fight.

Manufacturing Technology

CNC 101 - CNC Concepts

3 Credit(s)
This course is an introduction to computer Numerical Control (CNC) machinery and processes. It teaches basic concepts necessary for further study in CNC manufacturing.
Prerequisite: MFG 151. Enrollment by consent only. See your Academic Advisor or Program Coordinator about enrollment.

CNC 102 - CNC Setup and Operation

3 Credit(s)
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.
Prerequisite: CNC 101 and CS 120 or assessment.

CNC 103 - CNC Programming

3 Credit(s)
This course teaches basic 2 1/2 axis CNC Mill and 2 axis CNC Lathe programming with G-code
Prerequisite/Corequisite: CNC 102

CNC 108 - CNC Projects

3 Credit(s)
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.
Prerequisite/Corequisite: CNC 102 and CNC 103

CNC 201 - CNC Mill

3 Credit(s)
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.
Prerequisite: CNC 103 and CNC 108

CNC 202 - CNC Lathe

3 Credit(s)
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.
Prerequisite: CNC 201 and MFG 243

CNC 208 - CNC Advanced Projects

6 Credit(s)
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.
Prerequisite: MFG 244
Prerequisite/Corequisite: CNC 202

CNC 209 - Advanced CNC Concepts

6 Credit(s)
This course covers advanced Computer Numerical Control (CNC) concepts including use of 4 axis lathes and 5 axis mills
Prerequisite: CNC 201 and CNC 202

MFG 101 - Safety and Basic Shop Practice

3 Credit(s)
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.
Prerequisite/Corequisite: MTH 020 or assessment or instructor consent. Course may be taken alongside any/all prerequisites.

MFG 102 - Shop Measurement and Coordinate System

3 Credit(s)
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.
Prerequisite/Corequisite: MFG 101

MFG 103 - Metal Cutting Basics

3 Credit(s)
This course teaches the basics of metal cutting. Topics covered include: Shop Metallurgy, tool geometry, order of operations and machining strategies.
Prerequisite/Corequisite: MFG 102

MFG 151 - Manufacturing 1

6 Credit(s)
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.
Prerequisite/Corequisite: MFG 103

MFG 152 - Manufacturing 2

4 Credit(s)
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.
Prerequisite: MFG 151

MFG 153 - Manufacturing 3

5 Credit(s)
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.
Prerequisite: MFG 152

MFG 209 - Advanced Manufacturing Processes

6 Credit(s)
This course covers advanced machining and shop support concepts including surface grinding, dividing head use, tool and cutter grinding and machinery maintenance and repair.
Prerequisite: MFG 254 and MFG 255
Corequisite: MFG 254

MFG 241 - Solid Modeling 1

3 Credit(s)
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.
Prerequisite: MFG 102

MFG 242 - Solid Modeling 2

3 Credit(s)
This course continues solid modeling instruction with Solidworks including more advanced topics such as assemblies and basic engineering analysis.
Prerequisite: MFG 241

MFG 243 - CAM 1

6 Credit(s)
Computer Aided Manufacturing (CAM) uses computer models to automatically generate G-code 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.
Prerequisite: CNC 103

MFG 244 - CAM 2

6 Credit(s)
Computer Aided Manufacturing (CAM) uses computer models to automatically generate G-code 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.
Prerequisite: CNC 103

MFG 254 - Manufacturing 4

6 Credit(s)
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.
Prerequisite: MFG 153

MFG 255 - Manufacturing 5

6 Credit(s)
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.
Prerequisite: MFG 254

Mathematics

For Math Course Sequences, view the sequence chart

CG 123 - Amplify My Math Preparation (AMMP)

1 Credit(s)
This course is intended for students who desire to strengthen study skills, problem-solving abilities, and previously learned mathematical skills. As part of this course, students participate in activities designed to strengthen critical thinking skills and skills to support success in the college learning environment. This course also reshapes students' math attitudes, develops study skills, addresses math and test anxiety, and fosters productive persistence, reflection, and self-efficacy. This course provides a structured setting for students to refresh and review math skills in order to improve their math placement by utilizing ALEKS PPL Learning Modules. This course requires students to use online

software for working on the learning modules. Having internet access outside of class is necessary since some homework will be completed in an online learning system (ALEKS)

MTH 010 - Whole Numbers, Fractions, Decimals

3 Credit(s)
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 MTH 020.

MTH 020 - Math Renewal

4 Credit(s)
If you have taken a higher level math course than this and passed the course with a C- or better, you may not use this course for your degree/certificate requirements. This course begins with a review of whole number, fraction, and decimal arithmetic that includes rounding, estimation, order of operations, averages, and the solving of one-step equations. This review is followed by an introduction to ratios, proportions, percent, measurement, and basic geometry in a problem-solving context, with the review skills integrated throughout. Some applications for technical careers will be incorporated for students in professional technical programs.
Prerequisite: MTH 010 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 025 - Basic Mathematics Applications

3 Credit(s)
Basic fraction, decimal, percent, and ratios skills 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.
Prerequisite: MTH 020 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 025C - Basic Mathematics Applications

3 Credit(s)
Basic fraction, decimal, percent, and ratios skills 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.
Prerequisite: MTH 020 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 052 - Math for Health and Physical Sciences

4 Credit(s)
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.
Prerequisite: MTH 020 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 060 - Beginning Algebra

4 Credit(s)
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.
Prerequisite: MTH 020 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 065 - Elementary Algebra

4 Credit(s)
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, introduction to functions, and rational expressions.
Prerequisite: MTH 060 completed with a grade of C- or better within the past two years, or placement test.

MTH 070 - Introductory Algebra

5 Credit(s)
This course 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, ratios and proportions, unit analysis, systems of linear equations, polynomials, factoring, quadratic equations, introduction to functions, rational expressions, and exponents.
Prerequisite: Placement by the College's Math Placement Process within the past two years.

MTH 075 - Applied Algebra for Technicians

4 Credit(s)
This 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.
Prerequisite: MTH 020 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 082 - Math for Network Operations

4 Credit(s)
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.
Prerequisite: MTH 020 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 085 - Applied Geometry for Technicians

4 Credit(s)
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 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. Some algebra topics from MTH 075 will be applied. 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.
Prerequisite: MTH 075 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 095 - Intermediate Algebra

5 Credit(s)
Topics include equations, function notation, polynomials, coordinate graphing, rational equations, radical equations, exponents, quadratic functions, absolute value equations and inequalities, exponential and logarithmic functions, inequalities and problem solving methods. This course provides a foundation for MTH 097, MTH 105-107, MTH 111, or MTH 211 or MTH 213.
Prerequisite: MTH 065 or MTH 070 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 097 - Geometry

4 Credit(s)
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. MTH 097 is strongly recommended for MTH 111 and MTH 112.
Prerequisite: MTH 095 or MTH 111 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 098 - Math Literacy

5 Credit(s)
This course provides algebra, quantitative reasoning, and problem solving skills needed in Math 105, 106, 107, 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 106, and MTH 107.
Prerequisite: MTH 020 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 105 - Math in Society

4 Credit(s)
MTH 105, 106, and 107 are a three-course sequence but may be taken in any order. MTH 105 is survey of mathematical topics and applications of those topics for non-science majors including problem solving, probability, statistics, finance and exponential modeling.
Prerequisite: MTH 095 or MTH 098, or equivalent course completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 106 - Math in Society 2

4 Credit(s)
MTH 105, 106, and 107 are a three-course sequence but may be taken in any order. These applications include at least three of the following topics: history and uses of geometry, matrices and linear systems, Markov chains, game theory, logic, cryptography, scheduling, or other topics approved by the Mathematics Division.
Prerequisite: MTH 095 or MTH 098, or equivalent course completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 107 - Math in Society 3

4 Credit(s)
MTH 105, 106, and 107 are a three course sequence but 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.
Prerequisite: MTH 095 or MTH 098, or equivalent course completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 111 - College Algebra

5 Credit(s)
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 097 is strongly recommended.
Prerequisite: MTH 095 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 112 - Trigonometry

5 Credit(s)
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 097 is strongly recommended.
Prerequisite: MTH 111 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 211 - Fundamentals of Elementary Mathematics 1

4 Credit(s)
The 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.
Prerequisite: MTH 095 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 212 - Fundamentals of Elementary Mathematics 2

4 Credit(s)
The 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, 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.
Prerequisite: MTH 211 completed with a grade of C- or better within the past two years.

MTH 213 - Fundamentals of Elementary Mathematics 3

4 Credit(s)
The 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, elementary statistics, introductory geometry (basic definitions, vocabulary, polygons, angles, 2-3 dimensional geometry, congruence, constructions, similarity), transformational geometry, and measurement systems.
Prerequisite: MTH 211 or MTH 212 completed with a grade of C- or better within the past two years.

MTH 231 - Discrete Mathematics 1

4 Credit(s)
Topics include formal logic, methods of proof, sequences, recursion and mathematical induction. Also included are combinatorics, set and graph theory and trees. The order of the topics may vary with instructor and text.
Prerequisite: MTH 112 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 232 - Discrete Mathematics 2

4 Credit(s)
Topics include functions, relations, Pigeon Hole principle, matrix representation of trees, recursion. The order of the topics may vary with instructor and text.
Prerequisite: MTH 231 completed with a grade of C- or better within the past two years.

MTH 241 - Elementary Calculus 1

4 Credit(s)
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.
Prerequisite: MTH 111 completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 242 - Elementary Calculus 2

4 Credit(s)
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.
Prerequisite: MTH 241 with a grade of C- or better completed within the past two years.

MTH 243 - Introduction to Probability and Statistics

4 Credit(s)
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.
Prerequisite: MTH 105, MTH 111, or equivalent course completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

MTH 251 - Calculus 1 (Differential Calculus)

5 Credit(s)
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.
Prerequisite: MTH 112 completed with a grade of "C-" or better within the past five (5) years or placement by the College's Math Placement Process.

MTH 252 - Calculus 2 (Integral Calculus)

5 Credit(s)
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.
Prerequisite: MTH 251 or equivalent course completed with a grade of C- or better within the past five years.

MTH 253 - Calculus 3 (Infinite Series and Sequences)

5 Credit(s)
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.
Prerequisite: MTH 252 completed with a grade of C- or better within the past five years.

MTH 254 - Vector Calculus 1 (Introduction to Vectors and Multidimensions)

4 Credit(s)
This is the fourth term of a six-term sequence. Major emphasis is on three-dimensional vectors and differential calculus of several variables.
Prerequisite: MTH 252 completed with a grade of "C-" or better within the past five years

MTH 255 - Vector Calculus 2 (Introduction to Vector Analysis)

4 Credit(s)
This is the fifth term of a six-term sequence. Major emphasis is on multiple integration, vector fields, and applications.
Prerequisite: MTH 254 completed with a grade of C- or better within the past five years.

MTH 256 - Applied Differential Equations

4 Credit(s)
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.
Prerequisite: MTH 254 completed with a grade of C- or better within the past five years.

MTH 260 - Linear Algebra

4 Credit(s)
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.
Prerequisite: MTH 232 or MTH 252 with a grade of C- or better within the past five years.

MTH 261 - Introduction to Linear Algebra

2 Credit(s)
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 & MTH 253 satisfy the MTH 306 requirement at OSU.
Prerequisite: MTH 252 completed with a grade of C- or better within the past five years.

MTH 265 - Statistics for Scientists and Engineers

4 Credit(s)
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. This course satisfies the OSU requirement of ST 314 for engineering programs.
Prerequisite: MTH 252 completed with a grade of C- or better within the past five years.

Medical Assistant

MA 110 - Clinical Assistant 1

3 Credit(s)
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.
Prerequisite: Admission to the Medical Assistant program

MA 112 - Medical Insurance Procedures

3 Credit(s)
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-9/10-CM coding. Introduction to the CMS provider office billing form. May be offered online.

MA 119 - Introduction to Medical Coding and Scribing

3 Credit(s)
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.
Prerequisite/Corequisite: HP 152 or BI 233 with a grade of C or better.

MA 120 - Clinical Assistant 2

3 Credit(s)
Continuation of MA 110 Clinical Assistant. 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.
Prerequisite: Admission to the Medical Assistant program

MA 130 - Clinical Assistant 3

3 Credit(s)
Continuation of MA 120. This course includes ordering and scheduling diagnostic testing per doctor's instructions, instructing patients with special needs, and dealing with office emergencies.
Prerequisite: Admission to the Medical Assistant program

MA 150 - Laboratory Orientation

3 Credit(s)
Study of various office laboratory procedures and, in most instances, how to do them; hematology, urinalysis, immunology and phlebotomy.
Prerequisite: Admission to the Medical Assistant program

Multimedia

MUL 101 - Introduction to Media Arts

3 Credit(s)
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 will learn 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.

MUL 103 - Time-Based Tools

4 Credit(s)
A introductory course in digital time-based tools, covering foundational timeline-based software and hardware tools, skills, and theories used in video, audio, motion graphics, interactive, live, and other time-based productions.

MUL 105 - Digital Photography

4 Credit(s)
A foundational course on Digital Single-Lens Reflex (DSLR) cameras and lenses, sensors, data capture, processing, pixels, resolution, asset management, tagging, frames, depth of field, lighting, outputting, distribution, construction, image-making strategies, and emerging and experimental forms.

MUL 119 - Introduction to Animation

3 Credit(s)
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 Credit(s)
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.
Prerequisite: ART 222, ART 228 and ART 289
Corequisite: ART 223, ART 229, ART 290

MUL 208 - Motion Capture for Animation

4 Credit(s)
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.
Prerequisite: FA 221

MUL 210 - Multimedia Design

3 Credit(s)
Students design and produce time-based multimedia experiences using digital production techniques in imaging, sound, and animation. Emphasis is on design, editing, and effect implementation, motion graphics, interface control, project management, and the understanding and implementation of production and project specifications.
Prerequisite: MUL 103

MUL 212 - Digital Imaging

4 Credit(s)
Instruction in various aspects of digital imaging with an emphasis on bitmap (photographic) image design and processing using Adobe Photoshop.
Prerequisite: ART 216

MUL 215 - Digital Photography 2

3 Credit(s)
An advanced photography class that builds upon the skills learned in MUL105. Students will refine their use of DSLR and mirrorless cameras, Adobe Lightroom for asset management and the processing and printing of their photographs. Students will display and discuss their work during critiques as part of class each week. Work shown for critique will be both printed and electronically displayed. Students will learn to analyze each other's work during critique to further refine their own work.
Prerequisite: MUL 105

MUL 218 - Business Practices for Media Arts

3 Credit(s)
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.

MUL 220 - Intermediate Typography

3 Credit(s)
This course provides students with an in-depth understanding of how typography is used to communicate content both visually, as image or design, as well as invisibly, through the use of well-chosen body type that is easily read. Type hierarchy and grid systems are explored in order to provide graphic design students with organizational layout skills. Communication of information, i.e., instructions, data, graphs and tables, will also be considered. Design principles for the whole page and multi-page document layout is also taught. Students perform a series of projects to demonstrate their understanding and skills in these areas.
Prerequisite: ART 119

MUL 223 - Digital Sculpting and Texture

3 Credit(s)
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 224 - Digital Painting

3 Credit(s)
Students will explore the art and technology of digital painting. In a lab classroom setting students will discover a range of expressive possibilities using a variety of digital painting software, technology, and techniques. Skills acquired during this course apply to animation, game concept art, illustration, and fine art.

MUL 227 - Graphic Design Literacy

3 Credit(s)
Graphic Design Literacy explores the history of graphic design in both its past and present context. This class serves both those who just want to increase their appreciation of graphic design and those who are interested in graphic design careers.

Multimedia Production

MDP 246 - Multimedia Production 1

4 Credit(s)
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.
Prerequisite: FA 250, VP 151, AUD 120 and MUL 210

MDP 247 - Multimedia Production 2

4 Credit(s)
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.
Prerequisite: MDP 246 and FA 261 and VP 152 and MUL 212

MDP 248 - Multimedia Production 3

4 Credit(s)
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.
Prerequisite: MDP 247

Music

MUS 101 - Music Fundamentals

3 Credit(s)
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.
Prerequisite/Corequisite: Recommend MUS 131 Group Piano or MUS 137 Group Guitar be taken concurrently

MUS 103 - Songwriting Techniques and Analysis 1

3 Credit(s)
Explores the art and craft of songwriting. Students will analyze popular songs from a variety of sources including British Invasion, Rock, Country, Reggae, Rap, and Blues. Analysis will include keys, harmonies, song forms, melodic construction, phrasing, settings of lyrics. Recordings and scores will be used as reference materials for all analysis projects. Using the techniques and concepts gleaned through this analysis, the students will then create their own songs or develop more refined song analysis techniques.

MUS 107 - Audio Engineering 1

3 Credit(s)
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. Topics addressed and demonstrated include: sound and hearing, studio acoustics, microphone choice and positioning, mixing board, recording technology, tracking, audio editing, signal processing, monitoring, mixing, mastering, work flow, and professionalism.
Prerequisite: MUS 101 and MUS 119

MUS 109 - Audio Engineering 2

4 Credit(s)
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 and will have hands-on assignments using studio equipment. Topics covered include: outboard mic preamps 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, and tracking to different mediums.
Prerequisite: MUS 107

MUS 110 - Audio Engineering 3

4 Credit(s)
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 and work on a large-scale recording project. Topics include: 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.
Prerequisite: MUS 109

MUS 111 - Music Theory 1 (First Term)

4 Credit(s)
Thorough review of the fundamentals of music followed by their application to melody, harmony, and rhythm through analysis and composition. Emphasis 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. Designed to be taken with MUS 114 and MUS 127 concurrently.
Prerequisite: Theory placement test required
Corequisite: MUS 114 and MUS 127

MUS 112 - Music Theory 1 (Second Term)

4 Credit(s)
Emphasis on tonal species counter point and tonal music in four-part context. Includes tonal functional harmony involving tonic and dominant harmonies, non-harmonic tones, scoring, figured bass and introduction of cadences. Designed to be taken with MUS 115 and MUS 128 concurrently.
Prerequisite: MUS 111
Corequisite: MUS 115 and MUS 128

MUS 113 - Music Theory 1 (Third Term)

4 Credit(s)
Emphasis on concepts of prolongation and contextual analysis. Includes all diatonic chords, cadences, embellishing chords, melodic analysis, sequences, and secondary dominants. Designed to be taken with MUS 116 and MUS 129 concurrently.
Prerequisite: MUS 112
Corequisite: MUS 116 and MUS 129

MUS 114 - Sight-reading and Ear Training (First Term)

2 Credit(s)
Course 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. Designed to be taken with MUS 111 and MUS 127 concurrently.
Prerequisite: Theory placement test required
Corequisite: MUS 111 and MUS 127

MUS 115 - Sight-reading and Ear Training (Second Term)

2 Credit(s)
Solidifies the singing and listening skills that focuses on tonic and dominant chords. Introduces harmony and melodies using pre-dominant chords, and practices rhythmic patterns involving further subdivisions. Exercises with topics such as intervals, chord identifications, cadences, borrowed rhythms, and minor tonalities are introduced. Designed to be taken with MUS 112 and MUS 128 concurrently.
Prerequisite: MUS 114
Corequisite: MUS 112 and MUS 128

MUS 116 - Sight-reading and Ear Training (Third Term)

2 Credit(s)
Emphasis on exercises using all diatonic chords, complex rhythmic subdivisions, sequences, and non-chord tones. Basic understanding of secondary dominant chords is introduced. Designed to be taken with MUS 113 and MUS 129 concurrently.
Prerequisite: MUS 115
Corequisite: MUS 113 and MUS 129

MUS 118 - Music Technology MIDI/Audio 1

4 Credit(s)
Hands-on instruction in current applications of music technology in a comprehensive MIDI/audio studio. Students will learn to use various music production tools, 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 Credit(s)
Hands-on instruction in advanced techniques 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 and digital mixing and mastering. 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.
Prerequisite: MUS 118

MUS 127 - Keyboard Skills 1 (First Term)

2 Credit(s)
Course develops piano skills essential for all music majors: performance of rhythmic patterns, scales & arpeggios, intervals, chord progressions (including cadences) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. Designed to be taken with MUS 111 and MUS 114 concurrently.
Prerequisite: Theory placement test required
Corequisite: MUS 111 and MUS 114

MUS 128 - Keyboard Skills 1 (Second Term)

2 Credit(s)
Course develops piano skills essential for all music majors: performance of rhythmic patterns, scales & arpeggios, intervals, chord progressions (including cadences) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. Designed to be taken with MUS 112 and MUS 115 concurrently.
Prerequisite: MUS 127
Corequisite: MUS 112 and MUS 115

MUS 129 - Keyboard Skills 1 (Third Term)

2 Credit(s)
Course develops piano skills essential for all music majors: performance of rhythmic patterns, scales & arpeggios, intervals, chord progressions (including cadences) with correct voice leading and resolution, harmonization, transposition, improvisation, realization of figured bass, sight-reading of 2-part piano texture. Designed to be taken with MUS 113 and MUS 116 concurrently.
Prerequisite: MUS 128
Corequisite: MUS 113 and MUS 116

MUS 131 - Group Piano

2 Credit(s)
This course is for students who are not music majors and 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.

MUS 134 - Group Voice

2 Credit(s)
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.

MUS 137 - Group Guitar

2 Credit(s)
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. Student must have access to an acoustic guitar. May be repeated up to 6 total credits.

MUS 138 - Group Guitar 2

2 Credit(s)
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. Student must have access to an acoustic guitar. 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 Credit(s)
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. May be repeated up to 12 total credits.

MUS 201 - Exploring Music: Introduction to Music History

3 Credit(s)
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.

MUS 202 - Exploring Music: Introduction to Music History

3 Credit(s)
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.

MUS 203 - Exploring Music: Introduction to Music History

3 Credit(s)
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.

MUS 205 - Introduction to Jazz History

3 Credit(s)
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.

MUS 211 - Music Theory 2: (First Term)

3 Credit(s)
Further studies of compositional techniques in tonal harmony. Emphasis 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.
Prerequisite: MUS 113, MUS 116, and MUS 129
Corequisite: MUS 214 and MUS 224

MUS 212 - Music Theory 2 (Second Term)

3 Credit(s)
Course focuses on chromatic elaboration and enharmonic modulation using fully diminished seventh chords, augmented 6ths and Mm 7ths. Emphasis 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.
Prerequisite: MUS 211
Corequisite: MUS 215 and MUS 225

MUS 213 - Music Theory 2 (Third Term)

3 Credit(s)
Emphasis is on musical language of the 20th century, including modes, atonality, serialism, set theory, new forms and new organizations of rhythm and meter.
Prerequisite: MUS 212
Corequisite: MUS 216 and MUS 226

MUS 214 - Keyboard Skills 2 (First Term)

2 Credit(s)
Course develops 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 MUS 224 concurrently.
Prerequisite: MUS 113, MUS 116, and MUS 129
Corequisite: MUS 211 and MUS 224

MUS 215 - Keyboard Skills 2 (Second Term)

2 Credit(s)
Course develops 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.
Prerequisite: MUS 214
Corequisite: MUS 212 and MUS 225

MUS 216 - Keyboard Skills 2 (Third Term)

2 Credit(s)
Course develops 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 MUS 226 concurrently.
Prerequisite: MUS 215
Corequisite: MUS 213 and MUS 226

MUS 224 - Sight-reading and Ear Training (First Term)

2 Credit(s)
Course solidifies the knowledge of diatonic harmony and melody in both singing and dictation. In addition, it introduces chromatic harmonies involving secondary dominant chords and modulations to closely related keys. Designed to be taken with MUS 211 and MUS 214 concurrently.
Prerequisite: MUS 113, MUS 116, MUS 129
Corequisite: MUS 211 and MUS 214

MUS 225 - Sight-reading and Ear Training (Second Term)

2 Credit(s)
Course continues to solidify an understanding of secondary dominant harmonies while teaching students how to begin to identify various compositional forms by ear. Students practice singing, conducting, and dictation exercises written in asymmetrical meters, as well as hemiolas, modal mixture, Neapolitan 6th chords, and augmented 6th chords. Further work on modulations to closely related keys are discussed and practiced while modulations to remote keys are introduced. Designed to be taken with MUS 212 and MUS 215 concurrently.
Prerequisite: MUS 224
Corequisite: MUS 212 and MUS 215

MUS 226 - Sight-reading and Ear Training (Third Term)

2 Credit(s)
Course encapsulates the students' understanding of both tonal and chromatic harmony, and focuses on the concept of remote modulation. Introduces strategies for singing and hearing atonal and modal music. Designed to be taken with MUS 213 and MUS 216 concurrently.
Prerequisite: MUS 225
Corequisite: MUS 213 and MUS 216

MUS 260 - History of Hip-Hop and Rap Music

3 Credit(s)
Explores 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 264 - Roots of Rock (Roots-1963)

4 Credit(s)
Explores 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 - Golden Age of Rock & Roll (1964-1974)

4 Credit(s)
Explores the musical, social and cultural aspects of Rock music from its pre-Rock influences and its development through 1964 -1974, while learning about important artists in this style.

MUS 266 - Rockin' the New Millennium (1974-2006)

4 Credit(s)
Explores the musical, social and cultural aspects of rock music from c. 1974 through 2006, while learning about important artists in this style.

MUS 268 - History of Electronic Music

3 Credit(s)
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 live performance. We will also discuss the impact of electronic music in the United States and in other countries globally.

MUS 291 - Chamber Choir

2 Credit(s)
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.
Prerequisite: Must be able to read music. Audition required.

MUS 293 - Jazz Combos

2 Credit(s)
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. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.
Prerequisite: Recommend ability to read music or concurrent enrollment in MUS 101

MUS 294 - Jazz Ensemble

2 Credit(s)
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 ensemble experience for all. The class is limited to five 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.
Prerequisite: Audition required.

MUS 295 - Symphonic Band

2 Credit(s)
Woodwind, brass, and percussion students will study, rehearse, and perform all types of concert band literature. This course blends the talents of experienced community instrumentalists with student musicians creating an excellent ensemble experience for all. The Lane Symphonic band performs at least one formal concert during the term. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.
Prerequisite: Recommend audition and prior ensemble experience.

MUS 297 - Concert Choir

2 Credit(s)
Open to anyone interested in singing in a large ensemble. 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.
Prerequisite: Ability to match pitch.

Music Performance

MUP 100 - Individual Lessons

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance for pre- and non-majors. Instruction is available in Piano, Voice, Guitar, Electric Bass Guitar, Violin, Viola, Cello, String Bass, Flute, Oboe, Clarinet, Bassoon, Saxophone, French Horn, Trumpet, Trombone, Euphonium, Tuba, Percussion, Drum Set, Composition and Music Technology. Students receive up to ten 50-min lessons each term. Contents and expected learning proficiencies vary each term. May be repeated up 6 times.
Prerequisite: Instructor Approval or have taken the course within the past year

MUP 171 - Individual Lessons: Piano (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level.

MUP 174 - Individual Lessons: Voice (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 175 - Individual Lessons: Violin (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 176 - Individual Lessons: Viola (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 177 - Individual Lessons: Cello (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 178 - Individual Lessons: Bass (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 181 - Individual Lessons: Flute (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 182 - Individual Lessons: Oboe (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 183 - Individual Lessons: Clarinet (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 184 - Individual Lessons: Saxophone (First-year level).

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 185 - Individual Lessons: Bassoon (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 186 - Individual Lessons: Trumpet (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 187 - Individual Lessons: French Horn (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A

music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level-

MUP 188 - Individual Lessons: Trombone (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 189 - Individual Lessons: Baritone Horn (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 190 - Individual Lessons: Tuba (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 191 - Individual Lessons: Percussion (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 192 - Individual Lessons: Electric Bass (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 194 - Individual Lessons: Guitar (First-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 271 - Individual Lessons: Piano (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 274 - Individual Lessons: Voice (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 275 - Individual Lessons: Violin (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 281 - Individual Lessons: Flute (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 283 - Individual Lessons: Clarinet (Second-year level).

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 284 - Individual Lessons: Saxophone (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 286 - Individual Lessons: Trumpet (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 287 - Individual Lessons: French Horn (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 288 - Individual Lessons: Trombone (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 289 - Individual Lessons: Baritone Horn (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 290 - Individual Lessons: Tuba (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be

repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 291 - Individual Lessons: Percussion (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 292 - Individual Lessons: Electric Bass (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

MUP 294 - Individual Lessons: Guitar (Second-year level)

1 Credit(s)
Individual instruction in technical and stylistic aspects of solo performance. Students receive ten 50-min lessons each term. Regular practice outside of lessons expected. A music jury at the end of the term is required. Contents and expected learning proficiencies vary each term according to the level of individual proficiency and experience. May be repeated up to 12 total credits.
Prerequisite: Jury required to enter this level

Nursing

NRS 110A - Foundations of Nursing-Health Promotion

4 Credit(s)
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.
Prerequisite: BI 233 and BI 234 and FN 225 and PSY 215 and (WR 121 or WR 121_H) and (WR 122 or WR 122_H) and MTH 095 or higher with a grade of C or better.
Corequisite: NRS 110B.

NRS 110B - Foundations of Nursing-Health Promotion Clinical Lab

5 Credit(s)
Clinical Lab required for NRS110A.
Corequisite: NRS 110A

NRS 111A - Foundations of Nursing in Chronic Illness 1

2 Credit(s)
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.
Prerequisite: NRS 110A and NRS 110B with a grade of C or better
Corequisite: NRS 111B

NRS 111B - Foundations of Nursing in Chronic Illness 1- Clinical Lab

4 Credit(s)
Clinical Lab required for NRS111A
Corequisite: NRS 111A

NRS 112A - Foundations of Nursing in Acute Care 1

2 Credit(s)
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.
Prerequisite: NRS 111A /NRS 111B and (BI 101F or BI 101K or BI 102G or BI 112 or BI 211) with a grade of C or better
Corequisite: NRS 112B

NRS 112B - Foundations of Nursing in Acute Care 1 Clinical Lab

4 Credit(s)
Clinical Lab required for NRS112A
Corequisite: NRS 112A

NRS 115 - LPN Transition to OCNE

6 Credit(s)
This course will be taught in combination with NRS 112A Acute 1 theory course for 2 credits and NRS 112B Clinical for 4 credits. You will register for NRS 115 but you will be fully integrated into NRS 112. Please refer to the syllabi for NRS 112A/B for further information. NRS 112A/B introduces the learner to assessment and common interventions (including relevant technical procedures) for care of patients across the lifespan 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
Corequisite: NRS 231 and NRS 233

NRS 221A - Foundations of Nursing in Chronic Illness 2 and End of Life

4 Credit(s)
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.
Prerequisite: (BI 101F or BI 101K or BI 102G or BI 112 or BI 211) and (NRS 112A /NRS 112B or NRS 115) and NRS 230 and NRS 231 and NRS 232 and NRS 233 with a grade of C or better
Corequisite: NRS 221B

NRS 221B - Foundations of Nursing in Chronic Illness 2 and End-of-Life Clinical Lab

5 Credit(s)
Clinical Lab required for NRS221A
Corequisite: NRS 221A

NRS 222A - Foundations of Nursing in Acute Care 2 and End-of-Life

4 Credit(s)
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.
Prerequisite: NRS 221A and NRS 221B
Corequisite: NRS 222B

NRS 222B - Foundations of Nursing in Acute Care 2 and End-of-Life Clinical Lab

5 Credit(s)
Clinical Lab required for NRS222A.
Corequisite: NRS 222A

NRS 224A - Integrative Practicum 1

2 Credit(s)
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 lifelong 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.
Prerequisite: NRS 222A and NRS 222B
Corequisite: NRS 224B

NRS 224B - Integrative Practicum 1 Lab

7 Credit(s)
Clinical Lab required for NRS224A.
Corequisite: NRS 224A.

NRS 230 - Clinical Pharmacology 1

3 Credit(s)
Admission in Nursing Program required 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 Credit(s)
Admission in Nursing Program required. 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.
Prerequisite: NRS 230 and admission in the Nursing Program.

NRS 232 - Pathophysiological Processes 1

3 Credit(s)
Admission in Nursing Program required. 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.
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.

NRS 233 - Pathophysiological Process 2

3 Credit(s)
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.
Prerequisite: NRS 232 and admission in the Nursing Program.

PN 101A - Practical Nursing 1

7 Credit(s)
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.
Prerequisite: (WR 121 or WR 121_H) and HP 100 and BI 233 and PSY 215 and (MTH 052 or MTH 065 or MTH 095 or higher) or placement test with a grade of C or better.
Corequisite: PN 101B

PN 101B - Practical Nursing 1 Lab

5 Credit(s)
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. **Corequisite:** PN 101A

PN 102A - Practical Nursing 2

7 Credit(s)
This course is the second of three terms in the Practical Nursing Program. This course introduces pathophysiological processes that contribute to many different disease states across the lifespan and human responses to those processes. Content continues the application of the nursing process and pharmacological therapies of patients within the practical nursing scope of practice in selected medical-surgical areas. These areas include care of patients with immunological, hematological, neurological, visual/auditory, cardiovascular, endocrine, respiratory, musculoskeletal, gastrointestinal, and renal disorders. Fluid and electrolyte balance and pain management techniques are also included in this course. Cultural, ethical, and health care delivery issues are explored through case scenarios with the application of the nursing process to chronic illness care. Students will learn to make critical thinking-based clinical decisions in the context of nursing by selecting and interpreting focused nursing assessments based on knowledge of pathophysiological processes.
Prerequisite: PN 101A and PN 101B
Corequisite: PN 102B

PN 102B - Practical Nursing 2 Lab

5 Credit(s)
On campus lab and community clinical experiences will be planned by the faculty to meet specific competencies and benchmarks. These experiences will take place in the nursing lab and long-term care (LTC) facilities. Focus is on laboratory and clinical implementation of theory and nursing skills related to assessments, communicating with and caring for individuals with chronic illnesses, diagnostic labs (EKG, obtaining cultures, urinalysis, and visual acuity). Demonstration of interventions; surgical asepsis, wound care, parenteral medication administration (IM, SQ, & ID), enteral (via tubes through the oral, nasogastric, or surgical routes) medication administration, oxygen administration, respiratory care, urinary catheter insertion and care, nasogastric feeding and ostomy care. Continued clinical foci will be total patient care, collecting assessment data, documentation, using the nursing process to implement patient care, and medication administration. The nursing program assumes that acquisition of skill competencies is an ongoing process which requires student motivation and frequent faculty evaluation. Skills taught during this course which will require formal check off in lab prior to patient care will include surgical asepsis, wound care, parenteral medication administration (IM, SQ and ID), and urinary catheterization. These and other previously demonstrated nursing psychomotor skills must be successfully demonstrated and incorporated into the delivery of nursing care by the end of the term.
Corequisite: PN 102A

PN 103A - Practical Nursing 3

7 Credit(s)
This course is the final term in the Practical Nursing Program. This course builds on previously learned content by identifying assessment and common interventions (including relevant technical procedures) for care of patients across the lifespan who require acute care, including high-risk childbirth and mental health disorders. 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. Leadership, delegation, supervision, quality improvement, standards for and scope of practice for the LPN are included. A variety of teaching methodology will be used to include but not limited to: lecture and discussion, media presentations, small group work, journal article review, and case study analysis. This course includes classroom, online, on-campus and off-campus clinical learning.
Prerequisite: PN 102A and PN 102B
Corequisite: PN 103B

PN 103B - Practical Nursing 3 Lab

6 Credit(s)
On-campus and off-campus clinical experiences will be planned by the faculty to meet specific competencies and benchmarks. These experiences will take place in the nursing lab, simulation lab, ambulatory care, acute care, and long-term care (LTC) facilities. Focus is on laboratory and clinical implementation of theory and nursing skills (venipuncture, intravenous therapy and IV medication administration). A final clinical practicum experience designed to facilitate the transitional process from student practical nurse to beginning licensed practical nurse is included at the end of the term. This individualized clinical experience will focus on clinical decision-making, nursing actions

based on learned theory, concepts of nursing process, health of individuals, and health of communities. Students will be guided by a preceptor in their final practicum.
Corequisite: PN 103A

Nutrition

FN 105 - Nutrition for Foodservice Professionals

3 Credit(s)
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 & share budget friendly recipes.

FN 110 - Personal Nutrition

3 Credit(s)
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.

FN 130 - Family Food and Nutrition

3 Credit(s)
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.

FN 190 - Sports Nutrition

2 Credit(s)
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.

FN 225 - Nutrition

4 Credit(s)
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.

Philosophy

PHL 201 - Ethics

4 Credit(s)
Ethics is the study of morality, including an analysis of the concepts of good and evil, right and wrong, justice, responsibility, duty, character and successful living. Topics include whether morality is relative to culture or to the individual, moral skepticism, the relationship between morality and religion, theories about what makes particular actions right or wrong, the source of moral knowledge and how morality affects the way we approach controversial social issues.

PHL 202 - Theories of Knowledge

4 Credit(s)
Theories of knowledge (epistemology) address issues such as the nature of truth and rational justification, whether knowledge comes primarily through reason or the senses and how our common sense beliefs about the world might be proven. Additional topics may include how much control we have over our beliefs, whether duties or rights apply to beliefs and the relationship between faith and reason.

PHL 203 - Theories of Reality

4 Credit(s)
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.

PHL 221 - Critical Thinking

4 Credit(s)
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.

Physical Education

PE 101 - Cardio Core Conditioning

1 Credit(s)
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. Repescwatable up to 12 credits.

PE 102 - Combination Aerobics

1 Credit(s)
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. Repeatable up to 12 credits.

PE 103 - Cardio Kickboxing

1 Credit(s)
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. Repeatable up to 12 credits.

PE 104 - Body Sculpt

1 Credit(s)
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. Repeatable up to 12 credits.

PE 105 - Step and Sculpt

1 Credit(s)
Step & Sculpt is designed to increase muscular endurance and strength as well as enhance cardiovascular endurance. Participants learn and execute both step aerobics combinations and resistance exercises to experience the benefits of both approaches. Repeatable up to 12 credits.

PE 106 - Yogilates

1 Credit(s)
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. Repeatable up to 12 credits.

PE 107 - Zumba Fitness

1 Credit(s)
Ditch the Workout, Join the Party." Zumba will have you grooving to the beats of Salsa, Merengue, Reggaeton 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. Repeatable up to 12 credits.

PE 108 - Conditioning

1 Credit(s)
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. Repeatable up to 12 credits.

PE 110 - Walk Jog

1 Credit(s)
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. Repeatable up to 12 credits.

PE 111 - Group Cycling

1 Credit(s)
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. Repeatable up to 12 credits.

PE 112 - Fitness Circuits

1 Credit(s)
This is an advanced fitness class that utilizes fitness circuits to improve overall endurance, strength, and flexibility. Circuit difficulty will progress throughout the quarter.

Various exercise equipment will be used. Concepts on nutrition, stress management and weight control are introduced. Repeatable up to 12 credits.

PE 113 - Fitness Education: Introduction

1 Credit(s)
Students are guided in creating a balanced, personal fitness program in a supportive and noncompetitive environment. This class is self-paced and does not meet at a particular time. Refer to the class Moodle page for more specific details. Workout on your own time in the fitness center to fulfill course requirements and meet personal goals. All levels are welcome. Repeatable up to 12 credits.

PE 114 - Fitness Education: Continuing/Returning

1 Credit(s)
For students who have completed PE 113 and wish to continue their fitness program. Course opportunities include: Personal training, fitness and health seminars, and fitness assessments. This class is self-paced and does not meet at a particular time. Refer to the class Moodle page for more specific details. Repeatable up to 12 credits.
Prerequisite: PE 113

PE 115 - Jogging

1 Credit(s)
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. Repeatable up to 12 credits.

PE 116 - Stability Ball Fitness

1 Credit(s)
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. Repeatable up to 12 credits.

PE 117 - Strength Training

1 Credit(s)
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. Repeatable up to 12 credits.

PE 118 - Power Conditioning

1 Credit(s)
Prerequisites: Any of the sports classes This 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 well-being. Repeatable up to 12 credits.
Prerequisite: Any of the sports classes

PE 119 - Strength Training for Women

1 Credit(s)
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. Repeatable up to 12 credits.

PE 120 - Archery

1 Credit(s)
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. Repeatable up to 12 credits.

PE 122 - Badminton

1 Credit(s)
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. Repeatable up to 12 credits.

PE 125 - Fencing Beginning

1 Credit(s)
Instruction in basic foil fencing skills, including offensive and defensive skills, rules, etiquette, judging, and bout experience. Class includes warm-up and stretching skills. Repeatable up to 12 credits.

PE 126 - Golf Beginning

1 Credit(s)
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. Repeatable up to 12 credits.

PE 127 - Karate

1 Credit(s)
Basic skills of karate including blocks, punches, strikes, and kicks. Discussions include technique and power, history of karate, and the students' legal rights and responsibilities for self-defense in Oregon. This class includes sparring strategies. Repeatable up to 12 credits.

PE 129 - Personal Defense

1 Credit(s)
Instruction in fundamental personal defense skills and prevention methods to improve one's safety. Students develop skills which promote self-assurance to reduce panic. The Legal rights and responsibilities in Oregon will also be presented. Repeatable up to 12 credits.

PE 130 - Disc Golf

1 Credit(s)
Basic skills of Disc Golf. This class will include discussion of rules, strategy and etiquette for organized play. Techniques learned in putting, throwing and footwork will prepare students for active game play. Students will be prepared for tournament play and enjoyment of this exciting, competitive sport. Repeatable up to 12 credits.

PE 133 - Meditation

1 Credit(s)
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 well-being. Repeatable up to 12 credits.

PE 134 - Tai Chi Chuan

1 Credit(s)
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 well-being and stress reduction. Repeatable up to 12 credits.

PE 136 - Yoga

1 Credit(s)
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. Repeatable up to 12 credits.

PE 137 - Gentle Yoga

1 Credit(s)
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. Repeatable up to 12 credits.

PE 138 - Ballroom Dancing

1 Credit(s)
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. Repeatable up to 12 credits.

PE 139 - Latin Dance

1 Credit(s)
Introductory course in basic Latin dance forms including Salsa, Cha-Cha, Rumba, Cumbia, and Merengue. Emphasis on basic steps, proper technique and timing. Learn how basic social dance skills contribute to better overall posture, balance and coordination and how social dance contributes to an active lifestyle, improves confidence and well-being and reduces stress. Repeatable up to 12 credits.

PE 141 - Swing Dancing

1 Credit(s)
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. Repeatable up to 12 credits.

PE 142 - Basketball

1 Credit(s)
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. Repeatable up to 12 credits.

PE 143 - Flag Football

1 Credit(s)
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. Repeatable up to 12 credits.

PE 144 - Soccer

1 Credit(s)
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. Repeatable up to 12 credits.

PE 145 - Softball Beginning

1 Credit(s)
This co-ed class is for students starting the game as well as those wanting to improve their skills for summer recreational play. Fundamentals such as catching, throwing, fielding, hitting and base running will be practiced. Outfield play, infield play and game strategy will be covered. Repeatable up to 12 credits.

PE 146 - Ultimate Frisbee

1 Credit(s)
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. Repeatable up to 12 credits.

PE 147 - Volleyball

1 Credit(s)
Includes the fundamentals, rules, and strategy of volleyball. Develops specific skills necessary for successful recreational and/or competitive experience in volleyball. Repeatable up to 12 credits.

PE 225 - Fencing Intermediate

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PE 125 with a grade of C- or instructor approval.

PE 234 - Tai Chi Chuan Intermediate

1 Credit(s)
Intermediate concepts of Yang Style Tai Chi Chuan. Use of body strength, flexibility and mental control skills. Coordination of eyes, movement, breathing & internal energy. Relaxation, nutrition improved health & concentration, increased energy, flexibility and clarity of mind. Repeatable up to 12 credits.
Prerequisite: PE 134 with a C- or better or instructor approval.

PE 237 - Yoga Intermediate

1 Credit(s)
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. Repeatable up to 12 credits.

PE 242 - Basketball Intermediate

1 Credit(s)
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. Repeatable up to 12 credits.

PE 247 - Volleyball Intermediate

1 Credit(s)
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. Repeatable up to 12 credits.

Physical Education - Athletics

PEAT 100 - Cross Country - Women's Conditioning 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 101 - Cross Country - Women's Skills 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 105 - Cross Country - Men's Conditioning 1

1 Credit(s)
A conditioning class designed for students interested in participating in competitive cross-country running. Emphasis on conditioning and endurance. Previous cross country experience recommended. Repeatable up to 12 credits.

PEAT 106 - Cross Country - Men's Skills 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 110 - Volleyball - Women's Conditioning 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 111 - Volleyball - Women's Skills 1

1 Credit(s)
This is 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. Repeatable up to 12 credits.

PEAT 115 - Soccer - Women's Conditioning 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 116 - Soccer - Women's Skills 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 120 - Soccer - Men's Conditioning 1

1 Credit(s)
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 Credit(s)
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. Repeatable up to 12 credits.

PEAT 125 - Basketball – Men's Conditioning 1

1 Credit(s)
A conditioning class designed for students interested in participating in competitive basketball. Strong emphasis on conditioning, endurance and fundamentals. Previous competitive playing experience recommended. Repeatable up to 12 credits.

PEAT 126 - Basketball - Men's Skills 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 130 - Basketball - Women's Conditioning 1

1 Credit(s)
A conditioning class designed for students interested in participating in competitive basketball. Strong emphasis on conditioning, endurance and fundamentals. Previous competitive playing experience recommended. Repeatable up to 12 credits.

PEAT 131 - Basketball Women's Skills 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 135 - Track and Field - Women's Conditioning 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 136 - Track and Field - Women's Skills 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 140 - Track and Field - Men's Conditioning 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 141 - Track and Field - Men's Skills 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 145 - Baseball - Men's Conditioning 1

1 Credit(s)
A conditioning class designed for students interested in participating in competitive baseball. Emphasis on conditioning and development of fundamentals. Previous competitive playing experience recommended. Repeatable up to 12 credits.

PEAT 146 - Baseball - Men's Skills 1

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 200 - Cross Country Women's Conditioning 2

1 Credit(s)
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. Repeatable up to 12 credits.

PEAT 201 - Cross Country Women's Skills 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 101 or similar cross country running experience highly recommended.

PEAT 205 - Cross Country - Men's Conditioning 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 105

PEAT 206 - Cross Country- Men's Skills 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 106

PEAT 210 - Volleyball - Women's Conditioning 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 110

PEAT 211 - Volleyball - Women's Skills 2

1 Credit(s)
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.
Prerequisite: PEAT 111

PEAT 215 - Soccer - Women's Conditioning 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 115 or similar experience.

PEAT 216 - Soccer - Women's Skills 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 116 or similar experience.

PEAT 220 - Soccer - Men's Conditioning 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 120

PEAT 221 - Soccer-men's Skills 2

1 Credit(s)
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.
Prerequisite: PEAT 121

PEAT 225 - Basketball - Men's Conditioning 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 125 or similar experience

PEAT 226 - Basketball - Men's Skills 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 126 or similar experience

PEAT 230 - Basketball - Women's Conditioning 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 130 or similar experience

PEAT 231 - Basketball - Women's Skills 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 131 or similar experience

PEAT 235 - Track and Field - Women's Conditioning 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 135 or similar experience

PEAT 236 - Track and Field - Women's Skills 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 136 or similar experience

PEAT 240 - Track and Field - Men's Conditioning 2

1 Credit(s)
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.
Prerequisite: PEAT 141

PEAT 241 - Track and Field - Men's Skills 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 141

PEAT 245 - Baseball - Men's Conditioning 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 145 or similar experience

PEAT 246 - Baseball - Men's Skills 2

1 Credit(s)
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. Repeatable up to 12 credits.
Prerequisite: PEAT 146 or similar experience

Physical Education - Outdoor Education

PEO 101 - Downhill Skiing/Snowboarding Beg.-Int.-Adv

1 Credit(s)
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. Equipment rentals not included. Repeatable up to 12 credits.

Physical Therapist Assistant

PTA 100 - Introduction to Physical Therapy

3 Credit(s)
This course introduces the roles and responsibilities of physical therapy providers. Topics include history, practice patterns, laws, professionalism, communication, and information literacy.
Prerequisite: Admission to the PTA program.
Prerequisite/Corequisite: PTA 101L or PTA 101LR with a grade of C or better.
Corequisite: PTA 101

PTA 101 - Introduction to Clinical Practice 1

5 Credit(s)
This course introduces physical therapy practice patterns for acute and chronic soft tissue injuries across the healing continuum. Students are introduced to principles of body mechanics, gross mobility training, positioning, biophysical agents, and aquatic therapy. Evidence-based practice is also introduced.
Prerequisite: Admission into the PTA program.
Prerequisite/Corequisite: PTA 101L or PTA 101LR with a grade of C or better.
Corequisite: PTA 100

PTA 101L - Introduction to Clinical Practice 1 Lab

2 Credit(s)
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 biophysical agents, exercise, gross mobility training, positioning, compression and taping, and effective communication/documentation.
Prerequisite: Admission into the PTA program
Corequisite: PTA 101

PTA 101LR - Introduction to Clinical Practice 1 Lab-Rogue

2 Credit(s)
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. Course taught at Rogue Community College.
Prerequisite: Admission into PTA program
Corequisite: PTA 101

PTA 103 - Introduction to Clinical Practice 2

5 Credit(s)
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.
Prerequisite: PTA 101 and (PTA 101L or PTA 101LR) with a grade of C or better, and (BI 102I or BI 233 or HP 152) with a grade of C- or Pass.
Corequisite: PTA 103L or PTA 103LR

PTA 103L - Introduction to Clinical Practice 2 Lab

2 Credit(s)
This co-requisite lab to PTA 103 allows students to develop competency in clinical skills, tests, and measures for optimizing movement in patients/clients with common cardiopulmonary and age-related contributors encountered in inpatient and outpatient healthcare settings. Students develop effective communication with the patients and the healthcare team through simulated case-based skills practice.
Prerequisite/Corequisite: PTA 101 and PTA 101L with a grade of C or better.
Corequisite: PTA 103

PTA 103LR - Introduction to Clinical Practice 2 Lab-Rogue

2 Credit(s)
PTA 103 This co-requisite lab to PTA 103 allows students to develop competency in clinical skills, tests, and measures for optimizing movement in patients/clients with common cardiopulmonary and age-related contributors encountered in inpatient and outpatient healthcare settings. Students develop effective communication with the patients and the healthcare team through simulated case-based skills practice.
Prerequisite/Corequisite: PTA 101 and PTA 101LR with a grade of C or better.
Corequisite: PTA 103

PTA 104 - PT Interventions-Orthopedic Dysfunctions

5 Credit(s)
This course is 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.
Prerequisite/Corequisite: PTA 103 and PTA 132 with a grade of C or better.
Corequisite: PTA 104L or PTA 104LR

PTA 104L - PT Interventions-Orthopedic Dysfunctions Lab

2 Credit(s)
This co-requisite lab for PTA 104 allows for practical application of physical therapy interventions related to orthopedic conditions. Orthotics/prosthetics, traction, balance, therapeutic exercise, body mechanics, patient safety education/home management, and gait training are also covered.
Prerequisite/Corequisite: (PTA 132 and PTA 132L) or PTA 132LR with a grade of C or better.
Corequisite: PTA 104

PTA 104LR - PT Interventions-Orthopedic Dysfunctions Lab-Rogue

2 Credit(s)
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. Course taught at Rogue Community College.
Prerequisite/Corequisite: PTA 132 And (PTA 132L) Or (PTA 132LR) with a grade of C or better.
Corequisite: PTA 104

PTA 132 - Applied Kinesiology 1

3 Credit(s)
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.
Prerequisite/Corequisite: PTA 101 and (PTA 101L or PTA 101LR) with a grade of C or better.
Corequisite: PTA 132L or PTA 132LR

PTA 132L - Applied Kinesiology 1 Lab

2 Credit(s)
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.
Prerequisite/Corequisite: PTA 101 and PTA 101L with a grade of C or better.
Corequisite: PTA 132

PTA 132LR - Applied Kinesiology 1 Lab

2 Credit(s)
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. Course taught at Rogue Community College.
Prerequisite: PTA 101 and PTA 101LR for a grade of C or better.
Prerequisite/Corequisite: PTA 132 with a grade of C or better.

PTA 133 - Applied Kinesiology 2

3 Credit(s)
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.
Prerequisite/Corequisite: PTA 132 and (PTA 132L or PTA 132LR) with a grade of C or better.
Corequisite: PTA 133L or PTA 133LR

PTA 133L - Applied Kinesiology 2 Lab

2 Credit(s)
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.
Prerequisite: PTA 132 and PTA 132L with a grade of C or better.
Corequisite: PTA 133

PTA 133LR - Applied Kinesiology 2 Lab

2 Credit(s)
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. Course taught at Rogue Community College.
Prerequisite/Corequisite: PTA 132 AND PTA 132LR for a grade of C.
Corequisite: PTA 133

PTA 200 - Professionalism, Ethics, and Exam Preparation

4 Credit(s)
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.
Prerequisite: Admission into the PTA Program; second-year student.
Corequisite: PTA 203

PTA 201 - Physical Therapy and the Older Adult

2 Credit(s)
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.
Prerequisite: Admission into PTA Program; second-year student.

PTA 203 - Contemporary Topics in Physical Therapy

2 Credit(s)
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.
Prerequisite: Admission into PTA Program, second year student.
Corequisite: PTA 200

PTA 204 - PT Interventions - Neurological Dysfunctions

5 Credit(s)
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.
Prerequisite/Corequisite: PTA 104 and (PTA 104L or PTA 104LR) or PTA 133 and (PTA 133L or PTA 133LR) with a grade of C or better.
Corequisite: PTA 204L

PTA 204L - PT Interventions - Neurological Dysfunctions Lab

2 Credit(s)
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.
Prerequisite: PTA 104, PTA 104L, PTA 133, and PTA 133L with a grade of C or better.
Corequisite: PTA 204

PTA 204LR - PT Interventions - Neurological Dysfunctions Lab-Rogue

2 Credit(s)
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. Course taught at Rogue Community College.
Prerequisite: PTA 104 and PTA 104LR ANDPTA 133 AND PTA 133LR with a grade of C or better.
Corequisite: PTA 204

PTA 205 - PT Interventions - Complex Medical Dysfunctions

4 Credit(s)
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.
Prerequisite/Corequisite: PTA 104 and (PTA 104L or PTA 104LR) and PTA 133 and (PTA 133L or PTA 133LR) with a grade of C or better.

PTA 205L - PT Interventions - Complex Medical Disfunctions Lab

2 Credit(s)
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.
Prerequisite: PTA 104L, PTA 104, PTA 133, and PTA 133L with a grade of C or better.

PTA 205LR - PT Interventions - Complex Medical Disfunctions Lab-Rogue

2 Credit(s)
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. Course taught at Rogue Community College.
Prerequisite: PTA 104 and PTA 104LR AND PTA 133 AND PTA 133LR with a grade of C or better.
Corequisite: PTA 205

Physics

PH 101 - Fundamentals of Physics

4 Credit(s)
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. Emphasis is on everyday phenomena and conceptual understanding more than calculations. PH 101 focuses on the nature of science, data analysis, Newton's 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. Lab included.
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test.

PH 102 - Fundamentals of Physics

4 Credit(s)
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. Lab included.
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test.

PH 103 - Fundamentals of Physics

4 Credit(s)
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. Lab included.
Prerequisite: MTH 052 or above with grade of 'C-' or better or pass placement test.

PH 201 - General Physics

5 Credit(s)
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. Lab included.
Prerequisite: MTH 112 with grade of 'C-' or better or pass placement test.

PH 202 - General Physics

5 Credit(s)
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. Lab included.
Prerequisite: PH 201 with grade of 'C-' or better.

PH 203 - General Physics

5 Credit(s)
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. Lab included.
Prerequisite: PH 202 with grade of 'C-' or better.

PH 211 - General Physics with Calculus

5 Credit(s)
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 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. Lab included.
Corequisite: MTH 251.

PH 212 - General Physics with Calculus

5 Credit(s)
PH 212 introduces rotational motion, fluid pressure and Bernoulli's equation, oscillatory motion, and fundamentals of waves and optics. See information about the Physics with Calculus sequence in the PH 211 description. The class environment includes labs, demonstrations, discussion, and individual and group activities. Lab included.
Prerequisite: PH 211 and MTH 251 with grades of 'C-' or better;
Corequisite: MTH 252.

PH 213 - General Physics with Calculus

5 Credit(s)
PH 213 is the last term of the calculus-based General Physics sequence and focuses primarily on electricity and magnetism. See information about the Physics with Calculus sequence in the PH 211 course description. The class environment includes labs, demonstrations, discussion, and individual and group activities. Lab included.
Prerequisite: PH 212 and MTH 252 with grade of 'C-' or better
Prerequisite/Corequisite: MTH 253 or MTH 254

Political Science

PS 101 - Modern World Governments

4 Credit(s)
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 Credit(s)
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.

PS 202 - U.S. Government and Politics

3 Credit(s)
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.

PS 203 - State and Local Government and Politics

3 Credit(s)
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 Credit(s)
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 Credit(s)
This course is designed to introduce students to political theory from ancient to modern times. Readings may be assigned from ancient, Medieval, modern, and contemporary works in political theory. Issues discussed may include the formation of government, the relationship between the citizen and state, and the proper role of government.

PS 211 - Peace and Conflict Studies: Global

4 Credit(s)
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 225 - Political Ideology

4 Credit(s)
Political ideologies are comprehensive systems of political beliefs. This course focuses on the major ideologies of the modern era, including liberalism, conservatism, fascism, Marxism, democratic socialism, anarchism, multiculturalism, and environmentalism. It examines the basic tenets of each ideology, its historical context, and its relevance to current political and social discourse.

PS 275 - Legal Processes Through Civil Rights and Liberties

4 Credit(s)
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 297 - Environmental Politics

4 Credit(s)
This course focuses on current environmental problems, frameworks for understanding these problems, and appropriate political responses. These frameworks are used to investigate possible ways to create sustainable economic, political, and social systems.

Psychology

PSY 110 - Exploring Psychology

3 Credit(s)
A basic introduction to psychology that encourages an appreciation and understanding of the scientific approach to the study of human behavior. Topics include the biological basis of behavior, states of consciousness, human development, learning and memory, motivation and emotion, personality and psychological disorders. Learning through online videos, online activities and textbook reading.

PSY 201 - General Psychology

4 Credit(s)
The topics in this course (part of a 3 course offering) include: history and perspectives of psychology; research methods in psychology; the neurobiological basis of behavior; sensation and perception; human development; and states of consciousness.

PSY 202 - General Psychology

4 Credit(s)
The topics in this course (part of a 3 course offering) include: learning, memory, cognition, emotion, and motivation.

PSY 203 - General Psychology

4 Credit(s)
The topics in this course (part of a 3 course offering) include: personality, social psychology; stress and coping; psychological disorders and their treatment.

PSY 212 - Learning and Memory

3 Credit(s)
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.
Prerequisite: Recommend at least one introductory psychology course before taking this course.

PSY 215 - Lifespan Developmental Psychology

4 Credit(s)
An introduction to psychological aspects of human development from conception through old age. Topics covered include brain, perceptual, cognitive, memory, socio-emotional, and personality development. Theoretical and methodological issues pertaining to the study of development will also be covered.

PSY 231 - Human Sexual Behavior

4 Credit(s)
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.
Prerequisite: PSY 201 or instructor consent.

PSY 239 - Introduction to Abnormal Psychology

3 Credit(s)
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.
Prerequisite: Recommend at least one intro psychology course before taking this course.

Reading Skills

RD 087 - Preparatory Academic Reading

3 Credit(s)
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.
Corequisite: EL 115R

Regional Technical and Early College

RTEC 101 - Gateway to College and Careers

1 Credit(s)
This 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 time management, accessing information and resources, 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 programs. Recommended for high school seniors planning to enroll at Lane.

Sociology

SOC 108A - Selected Topics in Women's Studies, Women's Bodies, Women's Selves

3 Credit(s)
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 Credit(s)
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.

SOC 205 - Social Stratification and Social Systems

4 Credit(s)
Explores patterns of social inequality, or stratification, using sociological research and theory. Focuses on race, class, and gender inequality.

SOC 206 - Institutions and Social Change

4 Credit(s)
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.

SOC 208 - Sport and Society

4 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
This course explores a comparative history of racial dynamics with particular emphases on the way in which race, ethnicity, and class, inform these histories. A comparative sociological approach will be used in order to explore the process of racial information. Throughout the course we will recuperate the histories of racialized groups and expose sites of oppression, struggle, and resistance.

SOC 215 - Social Class

4 Credit(s)
Examines the centrality of social class in contemporary society. Topics include: conceptions of class, class structure, class consciousness, class inequality and social mobility, worker alienation and exploitation, ideology, the relations between class and culture, the role of money and power elites in politics, the role of transnational corporations in the world, and class-based social movements and revolutions.

SOC 218 - Sociology of Gender

4 Credit(s)
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 Credit(s)
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 Credit(s)
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.

Soil Science

SOIL 205 - Introduction to Soil Science

4 Credit(s)
Introduction to the 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 assignments provide hands-on experience with fundamental soil-science principles and the impact of human activities on soil quality and sustainability. Laboratory activities use classic soil science techniques. Lab included.

Spanish

SPAN 101 - Spanish, First-Year

5 Credit(s)
Spanish 101 is the first course in a three course sequence that provides the first year of college-level language classes. This sequence emphasizes the development of listening, speaking, reading, writing, and intercultural communication skills. In Spanish 101, students will learn to converse and write about a variety of common, every-day topics using the vocabulary and grammatical structures introduced in the course. Emphasis is also placed on writing, reading, listening, and learning about Hispanic cultures.

SPAN 102 - Spanish, First-Year

5 Credit(s)
Spanish 102 is the second course in a three-course sequence that provides the first year of college-level language classes. This sequence emphasizes the development of listening, speaking, reading, writing, and intercultural communication skills. In Spanish 102 students will build on material learned in their prior study, to converse in and write about a variety of common, every-day topics using the vocabulary and grammatical structures introduced in the course. These courses (101, 102, 103, as well as the second year sequence: 201, 202, 203) are designed as a sequence, therefore they must be taken sequentially and may not be taken concurrently.
Prerequisite: SPAN 101 with a passing grade of C- or above, or placement by instructor

SPAN 103 - Spanish, First-Year

5 Credit(s)
Spanish 103 is the third course in a three-course sequence that provides the first year of college-level language classes. This sequence emphasizes the development of listening, speaking, reading, writing, and intercultural communication skills. In Spanish 103 students will build on material learned in their prior study, to converse in and write about a variety of common, every-day topics using the vocabulary and grammatical structures introduced in the course. These courses (101, 102, 103, as well as the second year sequence: 201, 202, 203) are designed as a sequence, therefore they must be taken sequentially and may not be taken concurrently.
Prerequisite: SPAN 102 with a passing grade of C- or above, or placement by instructor

SPAN 201 - Spanish, Second-Year

4 Credit(s)
SPAN 201 is the first course of a three-term sequence (SPAN 201-SPAN 202-SPAN 203) that provides the second year of college-level language classes. SPAN 201-SPAN 202-SPAN 203 builds on Spanish language skills acquired through the beginning, first year sequence (SPAN 101-SPAN 102-SPAN 103) and expands upon them to develop student skills at an intermediate language level. This sequence emphasizes the development of listening, speaking, reading, writing, and intercultural communication skills at the intermediate level. SPAN 201-SPAN 202-SPAN 203 are designed as a sequence, therefore they must be taken sequentially and may not be taken concurrently.
Prerequisite: SPAN 103 at C- or better or Pass or placement by testing

SPAN 202 - Spanish, Second-Year

4 Credit(s)
SPAN 202 is the second course of a three-term sequence (SPAN 201-SPAN 202-SPAN 203) that provides the second year of college-level language classes. SPAN 202 continues the development of and expands upon the five language skills practiced in SPAN 201 (see course description) through emphasis on the development of listening, speaking, reading, writing, and intercultural communication skills at the intermediate level. SPAN 201-SPAN 202-SPAN 203 are designed as a sequence, therefore they must be taken sequentially and may not be taken concurrently.
Prerequisite: SPAN 201 at C- or better or Pass or placement by testing

SPAN 203 - Spanish, Second-Year

4 Credit(s)
SPAN 203 is the third course of a three-term sequence (SPAN 201-SPAN 202-SPAN 203) that provides the second year of college-level language classes. SPAN 203 continues the development of and expands upon the five language skills practiced through emphasis on the development of listening, speaking, reading, writing, and intercultural communication skills at the intermediate level. SPAN 201-SPAN 202-SPAN 203 are designed as a sequence, therefore they must be taken sequentially and may not be taken concurrently.
Prerequisite: SPAN 202 at C- or better or Pass or placement by testing

SPAN 218 - Spanish for Spanish-Speakers

4 Credit(s)
This course focuses on the continued development of reading, writing, and speaking skills in Spanish for students with native/near-native command of these skills, with an emphasis on comparing and contrasting features of Spanish that are of special interest to Spanish-speakers in the US. Course content will include a study of spelling (including accents), develop vocabulary, and foster the development of academic and professional registers of the language. Students will do this via a study of topics of special relevance to Spanish

Speakers in the US using a wide variety of materials such as literary texts from a range of genres, news items (including images), music, podcasts, and art work.

SPAN 221 - Spanish for Health Professions 1

4 Credit(s)
This course is geared toward students or individuals in the health professions who wish to increase their effectiveness in communicating with Spanish-speaking patients and their families in the clinical encounter. Course participants will study basic Spanish and terminology specific to the medical field, as well as cultural understandings of medicine and illness in the Spanish-speaking world. Working with interpreters and showing compassion through language will also be discussed.
Prerequisite: SPAN 102 or higher. Placement into SPAN 103 also accepted.

Student Leadership Development

SLD 101 - Native Circles: It's Your Life

3 Credit(s)
Is an introduction to resources and the local Native community. With a Native perspective, students learn to achieve goals, assess skills and to balance own identity with benefiting from educational or other institutions. The impact of class differences and race on personal success is examined.

SLD 103 - Post-Racial America: Challenges & Opportunities

4 Credit(s)
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 108 - Puertas Abiertas Éxito

2 Credit(s)
Puertas Abiertas Éxito offers opportunities for Latino students to contextualize academic performance and affinity to school systems. Topics include ethnic identity/diversity; bicultural leadership in school; demystifying college information and financial aid; and socio-historic-cultural forces embedded in education.

SLD 111 - Chicano/Latino Leadership 1: Quien Soy? Quienes

4 Credit(s)
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 Credit(s)
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 Credit(s)
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 Credit(s)
African American Leadership: History, Philosophy, and Practice is a course designed to examine the history, philosophy, key leadership strategies and practices of African American leaders. This course focuses on Leadership Theory; Foundations of AA Leadership and AA Leadership in Practice.

Theatre Arts

TA 121 - Introduction to Costume Design

3 Credit(s)
Student will learn basic sewing, costume rendering and execution of a design.

TA 140 - Acting Shakespeare

4 Credit(s)
Introduction to the skills of performing Shakespearean language. Training includes script analysis, acting, voice, body, and interpersonal skills. Actors receive personal coaching on contemporary approaches to performing Shakespeare.
Prerequisite: No prior experience required, but TA 141 or equivalent suggested

TA 141 - Acting 1

4 Credit(s)
Introduction to the fundamentals of acting and the use of acting skills for personal and professional growth. Class exercises focus on body, voice, memorization, increased self-awareness, relaxation, and giving and receiving constructive feedback. Students learn to apply principles from Stanislavski's system for actors through character and scene analysis. No prior experience necessary.

TA 142 - Acting 2

4 Credit(s)
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.
Prerequisite: TA 141

TA 143 - Acting 3

4 Credit(s)
Continuation of in-depth character analysis 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.
Prerequisite: TA 142

TA 144 - Improv

4 Credit(s)
Students learn theatre games, scene development, and other improv techniques. This course develops self-confidence, small group communication skills and problem solving skills. It is beneficial for actors and professionals of all fields. No prior experience necessary.

TA 150 - Technical Production

3 Credit(s)
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 Credit(s)
Designed to provide practical application of classroom theory. Should be taken by participants in a theatrical production of this department scheduled for public performance.
Prerequisite: Instructor Consent

TA 227 - Stage Makeup

3 Credit(s)
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 Credit(s)
This course augments previous training by focusing on characterization using dramatic literature with heightened language such as plays by Ibsen, Chekhov, and Wilde. Other topics include development of the actor's voice, release of tension, script analysis, and analyzing the work of other actors.
Prerequisite: TA 143

TA 242 - Intermediate Acting 2

4 Credit(s)
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.
Prerequisite: TA 241

TA 243 - Acting for the Camera

4 Credit(s)
Introduction to skills required to act in electronic media. Students learns the fundamentals of creating believable and completing characters for camera. Topics include articulation, relaxation, script analysis, and providing feedback to fellow actors. Final project begins the creation of an "actor's reel" for auditions and agent submissions.
Prerequisite: TA 141

TA 253 - Theatre Rehearsal and Performance

1-3 Credit(s)
Designed to provide practical application of classroom theory and skills. Should be taken by participants in a theatrical production of this department that is scheduled for public performance.
Prerequisite: Instructor Consent

TA 272 - Introduction to Theatre

4 Credit(s)
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.

Video Production

VP 151 - Video Production 1: Camera

3 Credit(s)
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, pre-production, and production practices through hands-on learning to develop basic field video production and editing 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.
Prerequisite: MUL 103 and MUL 105 and AUD 120 and FA 250

VP 152 - Video Production 2: Editing

3 Credit(s)
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.
Prerequisite: VP 151

Water Conservation

WATR 101 - Introduction to Water Resources

3 Credit(s)
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 Credit(s)
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 Credit(s)
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 110 - Codes and Policies of Water

3 Credit(s)
This course will explore the broad range of codes and policies that govern water conservation and reuse systems. State codes and local policies and ordinances can either support or restrict water conservation and on-site reuse efforts. Understanding the applicability of codes and how to interpret them is an important skill for people working in the water conservation sector. Students will apply theoretical work by real-world use of learning.
Prerequisite: WATR 105 or instructor consent.

WATR 150 - Water Resource Economics

4 Credit(s)
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.
Prerequisite: MTH 095 or MTH 098

WATR 154 - Alternative Water Sources

3 Credit(s)
The Alternative water sources course focuses on the use of rainwater, stormwater, greywater, blackwater, mechanical water, and recycled water for residential, commercial, and industrial applications. These waters can be reused on-site, typically for non-potable uses with appropriate health and safety precautions as well as technical requirements. As water suppliers seek to diversify their water portfolios there is an increased interest and demand for alternative supplies. Theoretical work will be enhanced by hands-on learning.
Prerequisite: WATR 101 or instructor consent

WATR 202 - Fostering Sustainable Practices

3 Credit(s)
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 210 - Water Conservation: Industrial / Commercial

3 Credit(s)
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 Credit(s)
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.
Prerequisite: WATR 101

WATR 220 - Water Conservation: Program Development

4 Credit(s)
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 Credit(s)
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.
Prerequisite: WATR 210

WATR 222 - Stormwater Best Management Practices

4 Credit(s)
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 phytoremediation. Labs include field trips, field work and guest lecturers.

WATR 261 - Regional Water Policy

3 Credit(s)
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.

Watershed Science Technician

WST 230 - Watersheds and Hydrology

4 Credit(s)
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. Lab included.
Prerequisite: ENSC 181 or ENSC 183 with grade of C- or better.

Women's Studies

WS 101 - Introduction to Women's Studies

4 Credit(s)
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

WR 087 - English Grammar and Paragraph Writing

3 Credit(s)
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.
Corequisite: EL 116

WR 093 - College Writing for ELL Students

3 Credit(s)
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.
Corequisite: EL 113

WR 097 - Introduction to Essay Writing

3 Credit(s)
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.
Corequisite: EL 117

WR 105 - Writing for Scholarships

2 Credit(s)
This course focuses on prewriting, descriptive writing, organizational strategies, sentence fluency, concision, and, importantly, revision. We will look at scholarship essays from former WR 105 students who have earned scholarships, to define what works and to employ these techniques in your own letters. We will collaborate to determine how to communicate your personal experiences such that they inspire you and touch the lives of others. 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. It is not uncommon for students to rewrite their essays multiple times. 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 Credit(s)
This course 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 citing and attribution conventions. Courses may include multimodal projects.
Prerequisite: Appropriate Lane Writing Placement or Pass or letter grade of C- or higher in WR 093 or WR 097, or successful completion of ABSE Reading and Writing for College Success AND Bridge to College.

WR 115W - Introduction to College Writing: Workplace Emphasis

3 Credit(s)
This course introduces students to the expectations of workplace reading, writing, and project management. Students will be introduced to rhetorical concepts and engage in a collaborative writing process to produce projects with a variety of purposes and audiences across multiple genres. Projects may include job letters, memos, technical reports, and other documents and multimodal projects drawn from students' chosen fields. Students will produce 2000-2500 words of revised, final draft copy or appropriate multimodal analogs for this amount of text; at least one of the projects will incorporate source material and practice attribution conventions. This course fulfills writing requirements for some Lane programs. Note: This three-credit writing course will count as a prerequisite for WR 121 at Lane only. Students who plan to transfer should be aware that most other colleges and universities in Oregon will not accept WR 115W as a prerequisite for WR 121.
Prerequisite: Appropriate Lane Writing Placement or Pass or letter grade of C- or higher in WR 093 or WR 097 or successful completion of ABSE Reading and Writing for College Success AND Bridge to College.

WR 121 - Academic Composition

4 Credit(s)
This course 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.
Prerequisite: Appropriate Lane Writing Placement or WR 115 or WR 115W

WR 122 - Argument, Research and Multimodal Composition

4 Credit(s)
This course 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, work in multiple genres, and utilize 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 at least 1500 words, demonstrating competence in both research and academic argumentation.
Prerequisite: WR 121 or WR 121_H

WR 123 - Composition: Research Writing

4 Credit(s)

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.

Prerequisite: WR 122 or WR 122_H

WR 227 - Technical Writing

4 Credit(s)

Students 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.

Prerequisite: WR 121 or WR 121_H

Community Connections

Academic Learning Skills

Main Campus, Building 11, Room 245, 541-463-5439, lanecc.edu/als

Academic Learning Skills (ALS) offers courses to improve student success in general education, career technical, and transfer courses. Students who take courses offered by Academic Learning Skills gain confidence and abilities to be successful in their classes. Students improve their reading, writing, vocabulary, critical thinking, math, digital learning skills and learning/study skills.

Adult Basic and Secondary Education

Main Campus, Building 11, Room 201, 541-463-5214, Downtown Center, Room 404, 541-463-6180, lanecc.edu/abse

The Adult Basic and Secondary Education (ABSE) department offers programs in multiple locations preparing to take the General Education Development (GED) exam, college preparation, career pathways and workforce exploration, and workplace skills development.

Lane Child and Family Center

Main Campus, Building 24, Room 114, 541-463-5517, lanecc.edu/cfe/lcfc or email childcareoncampus@lanecc.edu

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.

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. See lanecc.edu/cfe/lcfc/ccampis.

In addition, the Lane Child and Family Center has a Preschool Promise classroom which provides free child care for children 3-4 years old. See lanekids.org/preschool-promise.

Continuing Education

Contact: 541-463-6100 lanecc.edu/ce

Lane offers a variety of non-credit 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. Some courses are offered online.

Continuing Education includes short-term training and upgrading for a wide range of professional fields. In some cases, students can earn industry certification, continuing education units, or meet state and/or national professional examination preparation requirements. Enrollment in most courses is open to any interested person over 16 years old.

Lane offers professional training programs, including:

- Massage Therapy
- Medical Receptionist
- Nursing Assistant 1
- Nursing Assistant 2
- Personal Care Aide
- Pharmacy Technician
- Phlebotomy
- Project Management

English as a Second Language

Offered at the Downtown Center, Room 404 and at the Main Campus, Building 11, Room 201 and remotely.

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.

KLCC Radio (89.7 FM)

KLCC is a public radio station licensed to Lane Community College in Eugene, Oregon. With 81,000 watts of power, KLCC 89.7 FM is the most powerful public radio signal in Oregon.

KLCC serves more than 88,000 listeners each week within a 100 mile radius of Eugene. Besides our main transmitter in Eugene, we have translators in four communities throughout Western and Central Oregon (Cottage Grove, Oakridge, Riddle and Sisters), and five sister stations -- KLBR in Bend, KLFO in Florence, KLCO in Newport, KLFR in Reedsport, and KMPQ in Roseburg -- all broadcasting KLCC programming.

Lane Community College Foundation

Main Campus, Building 19, Room 270, 541-463-5135, lanecc.edu/foundation or email *foundation@laneccfoundation.org*

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 25,000 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: LCC 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/scholarships.

Library

Residents of the Lane Community College District who purchase a Community Borrower card, may:

Check out materials from the LCC Library.

Place interlibrary loan requests.

Community Borrowers who are affiliated with LCC (clinical affiliates and volunteers) may also access online databases from off-campus.

Summit borrowing and technology check outs are not available to Community Borrowers.

Learn more at library.lanecc.edu/circ/communityborrower

Senior Companion Program

The Senior Companion Program of Lane County improves the quality of life for the citizens of Lane County by providing supportive services and companionship to disabled and isolated adults. Senior Companions in Lane County benefit from service opportunities by participating in caregiving activities with other professionals and by building self-esteem through vital community service. Learn more at lanecc.edu/scp/about-program

Small Business Development Center

Downtown Center, 101 W. 10th Ave., Suite 133, 541-463-6200, lanesbdc.com

The Lane Small Business Development Center offers a multitude of support services for small businesses, from start-up to established, from small to medium, with 1-500 employees and up to 25 million in sales. Whether your business has been in existence for a hundred years, or is just starting out, the Lane SBDC has the right specialized tools and expertise to help you find success.

Services include:

Small Business Management Programs,

Entrepreneurial Workshops and Registration

Confidential, No-cost Business Advising and Resources

Lane Business Link

SHRM, CCB, Real Estate Broker Pre-License training

Global Trade Support

Capital Access Support

Market Research Support

Specialized Support Services

Specialized Support Services (S3) provides vocational training and employment support to adults with developmental/intellectual disabilities. Specialized Support Services operates as a cooperative venture between Lane Community College, the Lane County Office of Developmental Disabilities, and the State of Oregon & Seniors and Persons with Disabilities Division. Specialized Support Services offers individual training to develop social, work, teamwork and communication skills for future competitive employment.

Please contact Patsy Slaughter by leaving her a voicemail message at 541-463-5103 or by emailing her at *slaughterp@lanecc.edu* and she will get back to you within 24 hours.

Learn more at lanecc.edu/sss.

Governance and Staff

Lane Community College Board of Education

Seven elected, non-paid 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. Learn more at lanecc.edu/board.

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 typically the Third Wednesday evening of each month, normally in the Boardroom, Building 3, main campus. Additional meetings are held as needed.

Zone 1 - Western part of college district

Holli Johnson, African American/Black Student Success program coordinator, Eugene, appointed March 3, 2021, term expires June 30, 2021

Zone 2 - Northern part of college district

Angela VanKrause, healthcare/financial analyst, Eugene, elected May 2019, term expires June 30, 2023

Zone 3 - Marcola and Springfield part of college district

Mike Eyster, retired higher education administrator, Springfield, elected May 2017, term expires June 30, 2021

Zone 4 - Eastern part of college district

Matt Keating, creative marketing consultant, Eugene, elected May 2013, re-elected May 2017 term expires June 30, 2021

Zone 5 - Eastern part of college district

Chelsea Jennings, field director, Eugene, appointed July 2019, term expires June 30, 2021

Position 6 - At Large

Rosie Pryor, retired marketing and strategy officer, Eugene, elected May 2011, re-elected May 2015, term expires June 30, 2019, re-elected May 2019, term expires June 30, 2023

Position 7 - At Large

Lisa Fragala, teacher, Eugene, appointed October 2018, elected May 2019, term expires June 30, 2023

Administration

The college is administered by the president, under authority delegated by the Lane Community College Board of Education, with assistance from vice presidents, associate vice presidents, division deans, and directors.

Margaret Hamilton, President; Ph.D. Widener Univ.; M.S. Univ. of Delaware; B.S. State Univ. of New York

Paul Jarrell, Provost and Executive Vice President Academic and Student Affairs, Ph.D. Univ. of Oregon, B.S. Ohio Univ.

Jennifer Frei, Associate Vice President, Academic Affairs; Ph.D. Univ. of California Davis; M.A. California State Univ. Sacramento; B.A. Univ. of California Davis

Grant Matthews, Associate Vice President, Career Technical Education and Workforce Development; M.P.A Portland State Univ., B.A. Oregon State Univ., A.A. Chemeketa Community College

Mindie Dieu, Associate Vice President, Student Affairs, Ph.D. Univ. of Oklahoma, M.Ed. Univ. of Oklahoma; B.A. Oklahoma State Univ., A.A. Tulsa Community College

Richard Plott, Executive Director Institutional Effectiveness; Ph.D Univ. of Technology, Perth, Australia; M.A. Univ of Texas Dallas; B.A. Univ of Texas Dallas

Shane Turner, Chief Human Resource Officer; M.S. Northern Arizona Univ., B.A. Carroll College, A.A.S. Northwest College

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.

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

Guadalupe Martinez Zapata, Portland

George Russell, Eugene

Bridgett Wheeler, Coquille

Anthony Veliz, Woodburn

Jennifer Scurlock, Eugene

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 2021-2022 Budget Committee includes the Board of Education and the following members:

Ian Winbrock, term expires 2023, program assistant, Eugene

Hillary Kittleson, term expires 2022, retired finance director, Eugene

Kevin Matthews, term expires 2021, editor, Dexter

Holle Bauer Schaper, term expires 2023, statistician and website coordinator, Springfield

Clarissa Parker, term expires 2021, Development Director, Eugene-Spfd Youth Orchestra, Eugene

Siobhan Cancél, term expires 2021, Equity, Inclusion and Diversity Consultant, Eugene

Celine Swenson Harris, term expires 2023, legislative chief of staff, Springfield

Instructional Staff

View the list of Instructional Staff, which is maintained by the Human Resources Department, located on the LCC Main Campus, Building 3, 1st Floor, 541-463-5586, TDD 541-463-3999, lanecc.edu/hr.

Advisory Committees

Volunteers from regional and local businesses and industries are appointed by the Lane Community College Board of Education to 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. The college's career technical programs, as well as many noncredit programs, have advisory committees.