Lane Community College

2024-2025

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Welcome from President Bulger

I want to extend my warm congratulations to you for making the decision to attend Lane, one of Oregon's leading community colleges. At LCC, you will have the opportunity to receive an exceptional education, gain valuable job skills, enhance your foundational knowledge, improve your business, or simply broaden your horizons.

There are endless possibilities for you at Lane. Whether you are looking to transfer to a four-year college or university, complete technical training, prepare for college, earn your GED, develop skills to operate a small business, or expand your knowledge and enrich your life, Lane has got you covered.

Our programs are top-notch and industry-based, which means our graduates possess a competitive advantage 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 Nursing program is approved by the Oregon State Board of Nursing. These are just a few examples of the quality offerings you can expect at Lane.

We are also dedicated to diversity and equity in our student body, faculty, and support services. Our team of highly qualified and devoted faculty and staff is committed to ensuring your success. We also strive to make tuition as affordable as possible through scholarships, state grants, and federal student aid. As we embark on this academic year, I encourage you to take advantage of the many opportunities available to you. Get involved in campus activities, join student organizations, and connect with your peers. Our college is not just a place for learning; it is a community where friendships are formed, ideas are exchanged, and dreams are pursued.

At Lane Community College, we believe that education can transform lives, and we are here to support you every step of the way. We look forward to seeing all that you will accomplish during your time at Lane!

Best regards,

Dr. Stephanie Bulger

President

4000 East 30th Ave.

Eugene, Oregon 97405

Phone 541-463-3000

About Lane

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 390,000 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 900 employees who serve over 15,000 students annually. Approximately 60% are regular credit students, 15% are College Now credit students, 16% are non-credit Continuing Education students, and 9% 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.

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.

- 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

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

Academic Calendar

For more information and dates, go to Registration, Schedules, and the Academic Calendar

	Summer Term	Fall Term	Winter Term	Spring Term
Registration Begins	May 6	May 6	November 4	November 4
Term starts	June 24	September 30	January 6	March 31
Finals week - for days and times, go to Final Exam Schedule	Varies	December 9-13	March 17-21	June 9-13
Term ends	September 14	December 14	March 22	June 14
Commencement				June 14

Vision, Mission, Values

Vision

Transforming lives through learning.

Mission

Lane is the Community's college. We provide quality, comprehensive, accessible, inclusive, learning-centered educational opportunities that promote equitable 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 & 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

College Leadership

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.

- Stephanie Bulger, President
- **Shelley Tinkham**, Vice President of Academic Affairs
- **Colman Joyce**, Vice President of Student Affairs
- **Shane Turner,** Associate Vice President of Human Resources
- **Jennifer Frei,** Associate Vice President, Academic Affairs
- **Grant Matthews,** Associate Vice President, Career Technical Education and Workforce Development
- **Kara Flath**, Associate Vice President of Finance and Accounting
- **Jonathon Campbell**, Director of Budget and Resource Planning
- **Brent Munoz**, Vice President of Information Technology
- **Jennifer Hayward**, Associate Vice President of Facilities
- **Michael Blade**, General Counsel
- **Wendy Jett**, Executive Director of the LCC Foundation
- **Brett Rowlett**, Executive Director of External Affairs

Lane Community College Board of Education

Lane Community College Budget Committee

Instructional Staff - The list of Instructional Staff is maintained by the Human Resources Department, located on the LCC Main Campus, Building 3, 1st Floor, 541-463-5586, TDD 541-463-3999

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.

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 (p. 5).

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

Contact Lane

See the Lane Community College Directory to locate contact information for all Lane Community College departments and employees.

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.

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 the 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 it is 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 entered into the online catalog and its accompanying catalog addendum, as well as available online in myGradPlan. In the event that a degree or certificate program is suspended or closed, the requirements for that program must be fulfilled within the timeframe of 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.

Programs of Study

LCC offers nearly 100 programs of study, including transfer and general studies programs, career-technical education (CTE) degrees and certificates, and non-credit training certificates.

Important Information for All Programs

Changes - Programs and courses are subject to change within the year. All changes are reflected in the Addendum of the current catalog.

Grading - All programs require default **grading** (must be completed with a letter grade of C- or better, or Pass) unless specified otherwise.

Total Credits - program total credits can vary due to choosing lower- or higher-credit course options (i.e. WR 115W (p. 177) at 3 credits versus WR 115 (p. 177) at 4 credits). Program totals listed in the catalog usually represent the lowest total credits needed to complete a program.

Honors - Some courses have an Honors version (the notation "H" is added in the course number). While not called out in programs, Honors courses will be accepted wherever the regular version of the course is listed.

Writing - Students who have received a B.A., a B.S., or a higher degree from an appropriately accredited U.S. college or university shall have fulfilled their writing requirement for 1 general education towards an associate of applied science degree or professional-technical certificate.

Types of Degrees and Certificates Offered

Applied Baccalaureate (AB)

Applied Baccalaureate (AB) degrees are intended to prepare graduates for direct entry into the workforce. AB degrees may also help to prepare students for career advancement, occupational licensure, or further study at the master's level. AB degrees build upon the skills gained in two-year Associate of Applied Science (AAS) degrees or comparable associate degrees.

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.

Associate of Science Oregon Transfer (ASOT)

The Associate of Science Oregon Transfer (ASOT) degree is a state-approved associate degree that is intended to prepare students to transfer to public universities in Oregon, with a focus in a specific transfer major (LCC offers Business and Computer Science only). The ASOT is a block-transfer degree, which means a student with an ASOT will have met the lower-division general education requirements for baccalaureate degree programs at Oregon public universities, along with requirements tailored at each intended transfer institution. Students transferring with an ASOT degree will have junior standing for registration purposes only. The ASOT (in Business or Computer Science) does not guarantee admission to Oregon universities, admission to a competitive 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 in Business or Computer Science.

Associate of Arts Transfer/Associate of Science Transfer (AAT/AST)

The Associate of Arts Transfer (AAT) and Associate of Science Transfer (AST) degrees were created to meet the requirements of House Bill 2998 to prepare students for transfer to a public university in Oregon and have junior standing in a specific Bachelor of Arts or Bachelor of Science degree program.

Associate of General Studies

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.

Associate of Applied Science (AAS)

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.

Certificates of Completion

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.

Types of Certificates:

- 1-year Certificates (45-60 credits)
- Short-Term Certificates (12-44 credits)
- Career Pathway Certificates (12-44 credits)

Career Pathway Certificates of Completion (CPC) are fully embedded in programs of 45 credits or more. 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.

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. 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.

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 an academic advisor for planning their courses. The Oregon Transfer Module includes 45 credits of course work, equivalent to 3 academic quarters.

Programs A-Z

Transfer and General Studies Programs

Associate of Arts Oregon Transfer (AAOT)

- Associate of Arts Oregon Transfer (AAOT) (p. 12)
- Elementary Education, AAOT (p. 70)

Associate of Science Oregon Transfer (ASOT)

- Business, ASOT (p. 57)
- Computer Science, ASOT (p. 62)

Associate of Arts Transfer (AAT) / Associate of Science Transfer (AST)

These programs follow the Associate of Arts (AAT) / Associate of Science (AST) Requirements (p. 13) unless otherwise specified. See individual AAT/AST degrees for specific program requirements.

- Biology, AST (p. 100)
- Business, AST (p. 58)
- English Literature, AAT (p. 77)

Associate of Science (AS)

All AS programs follow the Associate of Science (AS) Requirements (p. 14) unless otherwise specified. See individual AS degrees for specific program requirements.

- Music, AS (p. 97)

Associate Degree Approved Course Lists

- Arts and Letters List (p. 17)
- Health/Wellness/Fitness List (p. 18)
- Oral Communication List (p. 19)
- Social Science List (p. 20)
- Science/Math/Computer Science List (p. 19)

Associate of General Studies (AGS)

- Associate of General Studies (AGS) (p. 16)

Career Technical Education Programs

Bachelor of Applied Science (BAS)

- Applied Business Management, BAS (p. 56)

Associate of Applied Science (AAS)

All AAS programs follow the Associate of Applied Science (AAS) Requirements (p. 10) unless otherwise specified. See individual AAS degrees for specific program requirements.

- Accounting, AAS (p. 59)
- Automotive Technology, AAS (p. 29)
- Aviation Maintenance Technician, AAS (p. 49)
- Aviation Professional Pilot, AAS (p. 49)
- Aviation Unmanned Aircraft Systems, AAS (p. 52)
- Business Management, AAS (p. 61)
- CNC Machining and Inspection, AAS (p. 30)
- Computer Network Operations, AAS (p. 63)
- Construction Technology, AAS (p. 31)
- Construction Trades, General Apprenticeship, AAS (p. 40)
- Criminal Justice, AAS (p. 102)
- Cybersecurity, AAS (p. 67)
- Dental Hygiene, AAS (p. 82)
- Diesel Technology, AAS (p. 32)
- Drafting, AAS (p. 33)
- Early Childhood Education, AAS (p. 72)
- Electrician Apprenticeship Technologies, AAS (p. 43)
- Energy Management with Building Controls Technology, AAS (p. 75)
- Fabrication/Welding Technology, AAS (p. 37)
- Graphic Design, AAS (p. 92)
- Health Information Management (online), AAS (p. 83)
- Human Services, AAS (p. 103)
- Industrial Mechanics and Maintenance Technology Apprenticeship, AAS (p. 46)
- Multimedia Design, AAS (p. 93)
- Multimedia Design and Production: Animation Option, AAS (p. 94)
- Music Technology and Sound Engineering, AAS (p. 98)
- Nursing, AAS (p. 87)
- Paramedicine, AAS (p. 89)
- Physical Therapist Assistant, AAS (p. 90)
- Software Development, AAS (p. 65)
- Sustainability Coordinator, AAS (p. 76)

1-Year Certificates

All certificate programs follow the Certificate of Completion Requirements (p. 11) unless otherwise specified. See individual certificates for specific program requirements.

- Accounting, 1-yr Certificate (p. 60)
- Baking & Pastry, 1-yr Certificate (p. 68)
- Construction Technology, 1-yr Certificate (p. 32)
- Construction Trades, General Apprenticeship, 1-yr Certificate (p. 42)
- Culinary Arts, 1-yr Certificate (p. 69)
- Dental Assisting, 1-yr Certificate (p. 81)
- Drafting, 1-yr Certificate (p. 34)
- Early Childhood Education, 1-yr Certificate (p. 73)
- Electrician Apprenticeship Technologies, 1-yr Certificate (p. 45)
- Fabrication/Welding Technology, 1-yr Certificate (p. 38)
- Fitness and Lifestyle Specialist, 1-yr Certificate (p. 79)
- Health Information Management: Medical Coding, 1-yr Certificate (p. 84)
- Industrial Mechanics and Maintenance Technology Apprenticeship, 1-yr Certificate (p. 47)
- Medical Assistant, 1-yr Certificate (p. 85)
- Multimedia Design, 1-yr Certificate (p. 94)
- Practical Nursing, 1-yr Certificate (p. 88)
- Small Business Management, 1-yr Certificate (p. 62)
- Web Design, 1-yr Certificate (p. 95)
- Welding Processes, 1-yr Certificate (p. 38)

Career Pathway Certificates

All CPCs follow the Career Pathway Certificate of Completion Requirements (p. 11) unless otherwise specified. See individual certificates for specific program requirements.

- Aviation Commercial Pilot, CPC (p. 51)
- Aviation Instrument Rating, CPC (p. 51)
- Aviation Private Pilot, CPC (p. 52)
- Aviation Unmanned Aircraft Systems: Aerial Photography, CPC (p. 53)
- Aviation Unmanned Aircraft Systems: Autopilot, CPC (p. 54)
- Aviation Unmanned Aircraft Systems: Commercial UAS Operator, CPC (p. 54)
- Aviation Unmanned Aircraft Systems: GIS, CPC (p. 55)
- Aviation Unmanned Aircraft Systems: Maintenance, CPC (p. 55)
- CNC Machining and Inspection 1, CPC (p. 31)
- Computer Network Monitoring and Management, CPC (p. 64)
- Construction Trades, General Apprenticeship: Trade Worker Apprenticeship Technologies, CPC (p. 43)
- Culinary Arts: Commercial Cooking, CPC (p. 70)
- Drafting for Commercial Construction, CPC (p. 35)
- Drafting for Manufacturing, CPC (p. 35)
- Drafting for Residential Construction, CPC (p. 36)
- Early Childhood Education: Guidance and Curriculum, CPC (p. 74)
- Early Childhood Education: Infant and Toddler, CPC (p. 74)
- Early Childhood Teacher Aide, CPC (p. 75)
- Electrician Apprenticeship Technologies: Trade Worker Apprenticeship Technologies, CPC (p. 46)
- Fitness and Lifestyle Specialist: Group Exercise Instructor, CPC (p. 80)
- Fitness and Lifestyle Specialist: Healthy Aging, CPC (p. 80)
- Human Services: Addiction Studies, CPC (p. 105)
- Industrial Mechanics and Maintenance Technology Apprenticeship: Trade Worker
- Apprenticeship Technologies, CPC (p. 48)
- Medical Assistant: Basic Health Care, CPC (p. 86)
- Music Technology and Sound Engineering: MIDI Production, CPC (p. 100)
- Music Technology and Sound Engineering: MIDI and Audio Production, CPC (p. 99)
- Paramedicine: Emergency Medical Technician, CPC (p. 90)
- Software Development: Database Specialist, CPC (p. 66)
- Software Development: Front End Web Development, CPC (p. 66)
- Welding Processes: Shielded Metal Arc Welder, CPC (p. 39)
- Welding Processes: Wire Drive Welder, CPC (p. 39)

Short-Term Certificates

All certificate programs follow the Certificate of Completion Requirements (p. 11) unless otherwise specified. See individual certificates for specific program requirements.

- Commercial Baking, Certificate of Completion (p. 69) (p. **Error! Bookmark not defined.**)
- CTE Educator Certificate of Completion (p. **Error! Bookmark not defined.**)
- Entry-Level Trades Worker, Certificate of Completion (p. 36)
- Front Office Support Specialist, Certificate of Completion (p. 95)
- Geographic Information Science, Certificate of Completion (p. 105)
- Introduction to Manufacturing and Welding (Stick Welding), Certificate of Completion (p. **Error! Bookmark not defined.**)
- Introduction to Manufacturing and Welding (Wire Welding), Certificate of Completion (p. **Error! Bookmark not defined.**)
- Limited Electrician Apprenticeship Technologies, Certificate of Completion (p. 46)
- Mobile Application Development Certificate of Completion (p. **Error! Bookmark not defined.**)
- Occupational Skills Training, Certificate of Completion (p. 96)
- Wildland Fire Management, Certificate of Completion (p. 102)

Non-Credit Programs

- English as a Second Language (Community) (p. 106)
- English as a Second Language (Intensive) (p. 106)

Non-Credit Training Certificates

An NCTC is a form of recognition awarded by a community college made up of a single or series of courses that **do not offer college credit for completion**. These are short-term programs that provide skills training in response to regional occupational needs.

- Non-Credit Training Certificates (p. 106)

Non-Degree Transfer Options

If you are interested in transferring, be sure to work with an academic advisor on the best option for you.

- Core Transfer Map (CTM) (p. 15)
- Oregon Transfer Module (OTM) (p. 15)
- General Education Course Equivalencies to OSU (p. 25)
- General Education Course Equivalencies to UO (p. 26)

Career Technical Education Requirements

These are requirements for types of degrees and certificates offered at Lane. Specific programs may include additional requirements.

Degree Requirements

- Associate of Applied Science Degree Requirements (AAS) (p. 10)
- Applied Baccalaureate (AB) Degree Requirements (p. 9)

Certificate Requirements

- Career Pathway Certificate of Completion Requirements (p. 11)
- Certificate of Completion Requirements (p. 11)

Applied Baccalaureate (AB) Degree Requirements

Applied Baccalaureate (AB) degrees are intended to prepare graduates for direct entry into the workforce. AB degrees may also help to prepare students for career advancement, occupational licensure, or further study at the master's level. AB degrees build upon the skills gained in two-year Associate of Applied Science (AAS) degrees or comparable associate degrees. Lane Community College AB Degrees include those approved by the Higher Education Coordinating Commission (HECC), including Bachelors of Applied Science (BAS) degrees, the Bachelor of Science: Nursing (BSN) degree, and other applied bachelor level degree types that may be approved by the HECC in the future.

90 credits

Guidelines

An Applied Baccalaureate degree will be awarded based on the following criteria. Students in specific AB programs must also meet any program-specific criteria or GPA requirements for degree completion.

- Complete 180 college-level credits
- Complete a minimum of 60 credits of upper-division courses in the major
- Complete a minimum of 15 credits of General Education
- Complete Electives courses
- Complete required Cooperative Education or capstone courses when part of an AB requirement
- 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 applied to courses completed after admittance to an AB program; this limit does not include courses only offered P/NP. Some programs may not allow P grades; see specific programs for details.
- Cumulative GPA must be at least 2.0 when the Applied Baccalaureate degree is awarded

Admissions

Applicants who hold an Associate of Applied Science (AAS), Associate of Science (AS), or comparable associate degree from Lane or another regionally accredited institution with a cumulative GPA of 2.0 are eligible to apply for admission to an AB program. Programs may have additional admissions requirements, including external licensure requirements; see individual departments and AB degrees for details.

Applicants who have completed other degrees and certificates can determine their admissions eligibility and ensure completion of admissions requirements by working with an academic advisor and program staff prior to applying to their chosen AB program.

Applicants may be eligible to transfer in prior coursework or work experience and receive Credit for Prior Learning (CPL), dependent upon department review:

- Military credits may be transferred in
- Work experience may be evaluated and used to meet certain program requirements; see individual programs for information
- Professional licensure and licensure exam completion may be evaluated and used to meet program requirements; see individual programs for information
- Other CPL may be granted in accordance with current college policy; see the CPL procedure for details on earning credit

Learning Outcomes

All Applied Baccalaureate degrees have degree-specific program learning outcomes (PLOs) that are mapped to Lane's Institutional Learning Outcomes (p. 5). Learning outcomes at the course, program, and institutional level are aligned and assessed in a process of continuous improvement of student learning.

Program Requirements

General Education

General Education courses must be a minimum of 3 credits each. Students must complete one course from each of the following categories. Complete a minimum of 15 credits of General Education, one course from each discipline listed. Additional credits to meet the minimum of 15 credits may be completed from any of the following Discipline Studies lists: Arts & Letters; Social Science, or Science/Math/Computer Science.

Some programs may specify particular courses or may require completion of additional General Education courses. Students who complete a course that is listed in more than one discipline area can only count it to meet one General Education requirement.

Writing

Students who complete the Writing requirement will be able to:

- Read actively, think critically, and choose appropriate sources of information
- Communicate effectively in writing using communication strategies and media appropriate to the audience and purpose

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

WR 115	Introduction to College Composition	4
WR 115W	Introduction to College Writing: Workplace Emphasis	3
WR 121Z	Composition 1	4
WR 122Z	Composition 2	4
WR 227Z	Technical Writing	4

Communication

Students who complete the Communication requirement will be able to:

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

See your program for specific required courses. COMM courses may not be used to meet more than one General Education requirement. If not specified, take one course, selected from the following:

COMM 100Z	Introduction to Communication	4
COMM 105	Listening and Critical Thinking	4
COMM 111Z	Public Speaking	4
COMM 112	Persuasive Speech	4
COMM 115	Introduction to Intercultural Communication	4
COMM 130	Business and Professional Communication	4
COMM 218Z	Interpersonal Communication	4
COMM 219	Small Group Communication	4
COMM 220	Communication, Gender and Culture	4
COMM 260	Introduction to Conflict Management	4
COMM 265	Environmental Communication	4
COMM 285	Mediated Communication	4
COMM 296	Communication in Healthcare Settings	4

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 courses. If not specified, take one course, selected from the following:

MTH 105Z	Math in Society	4
	Or higher-level MTH course	

Human Relations

Students who complete the Human Relations (HR) 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

Students who took a course designated as meeting HR for a prior AAS or certificate program may count that course as meeting this requirement. If no course is specified, select from the Human Relations list (p. 11).

Program Core Requirements

AB degree programs include lower- and upper-division 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.

Electives

AB degree programs may include Electives. See individual program information for requirements. Courses completed to meet Electives may include any combination of lower-division or upper-division collegiate and/or career technical education courses. All courses must be 100-level or higher and may include:

- Up to 12 credits of Individual Music Lessons (MUP)
- Up to 12 credits of activity courses (PE, PEAT, PEO, D) may be included within the entire degree, with the exception of D 160, 251, 256, and 260

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- College-level courses are numbered 100 or higher. Courses numbered 001-099 are considered skills based/developmental.
- Courses numbered 180/280/380/480, 197/297/397/497, 199/299/399/499, or 198/298/398/498 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.
- Students may be granted Credit for Prior Learning for this program, in accordance with current college policy; see the CPL procedure for details on earning credit
- Policies on accepting Career Technical Education (CTE) credits vary at other institutions. See the list of Course Types by Prefix (p. 108). Consult an academic advisor if considering transferring after earning an AB.
- Only the Academic Requirements Review Committee (ARRC) may waive a college-related instruction requirement. Petitions are available online from Enrollment Services.
- Up to 18 credits of Cooperative Education may be applied to the AB degree. This does not include Co-op credits earned prior to admission into the AB program. Cooperative Education may be used as part of Program Core Courses, not as General Education.
- Students may only use one BI 101 (p. 123), one BI 102 (p. 123), and one BI 103 (p. 123) to meet requirements for any Lane degree.

Associate of Applied Science Degree Requirements (AAS)

All AAS programs follow the Associate of Applied Science (AAS) Requirements unless otherwise specified. See individual AAS degrees for specific program 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.

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.

Human Relations List - See Program Requirements.

Learning Outcomes

Lane degrees and certificates are aligned with Lane's Institutional Learning Outcomes (p. 5) and Oregon Learning Outcomes (p. 5). Associate of Applied Science degrees also have program-specific learning outcomes. See individual programs for details.

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

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

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

Program Requirements

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

One course, minimum 3 credits.
Typically specified by the program. If not specified, WR 115W (p. 177), WR 115 (p. 177) (Summer 1999 or after) or higher.

Math

One course, minimum 3 credits.
Typically specified by the program. If not specified, MTH 025 (p. 153) or higher.

Human Relations

One course, minimum 3 credits.
Typically specified by program. If not specified, choose from the Human Relations list (p. 11).

Program Core Courses

Core coursework varies from program to program and may include a combination of transfer and career technical courses 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 requirements and limitations.

Electives

AAS degree programs may include electives. They can be open electives or a set list created by the coordinator. See individual program information for specific course requirements.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- 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 counts 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 (p. 108). 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 online from Enrollment Services.
- 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 (p. 148) 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 (p. 123), one BI 102 (p. 123), and one BI 103 (p. 123) to meet requirements for any Lane degree.

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, offering a pathway to additional education and career advancement. 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.

Lane offers a variety of CPCs aimed at beginning, intermediate, and advanced knowledge and skills. To learn more about Career Pathway Certificates of Completion, visit the Workforce Development web page.

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 Institutional Learning Outcomes (p. 5) and Oregon Learning Outcomes (p. 5). Career Pathway Certificates also have program-specific learning outcomes. See individual programs for details.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- 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 (p. 108). Policies on accepting career technical credits vary at four-year institutions in Oregon.
- 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.

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.

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.

To view Human Relations and all other course options, see Program Requirements.

Learning Outcomes

Lane degrees and certificates are aligned with Lane's Institutional Learning Outcomes (p. 5) and Oregon Learning Outcomes (p. 5). Certificates of Completion also have program-specific learning outcomes. See individual programs for details.

Program Requirements

General Education

Writing

One course, minimum 3 credits.
Typically specified by the program. If not specified, WR 115W (p. 177), WR 115 (p. 177) (Summer 1999 or after) or higher.

Mathematics

One course, minimum 3 credits.
Typically specified by the program. If not specified, MTH 025 (p. 153) or higher.

Human Relations

One course, minimum 3 credits.

Typically specified by program. If not specified, choose from the Human Relations list (p. 11).

Program Core Courses

Core coursework varies from program to program and may include a combination of transfer and career technical courses. Please view the Course Types by Prefix (p. 108) list. See individual program information for specific requirements and limitations.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- 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 and Credit-by-Assessment may comprise up to 25% of total degree credits.
- See the list of Course Types by Prefix (p. 108). Policies on accepting career technical credits vary at four-year institutions in Oregon.
- Only the Academic Requirements Review Committee (ARRC) may waive a college General Education requirement. Petitions are available online from Enrollment Services.
- 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.

Human Relations Requirement

This list may be applied in a variety of degrees, including: Associate of Applied Science Degree Requirements (AAS) (p. 10) and Certificate of Completion Requirements (p. 11).

Note - Typically, the Human Relations requirement is specified in a program. If not specified, choose one course from the following list.

Human Relations List

One course, minimum 3 credits.

Choose one course from the following:

BA 278	Leadership and Team Dynamics	4
CG 100	College Success	1-3
CG 203	Human Relations at Work	1-3
COMM 130	Business and Professional Communication	4
COMM 218Z	Interpersonal Communication	4
COMM 219	Small Group Communication	4
COMM 260	Introduction to Conflict Management	4
COMM 296	Communication in Healthcare Settings	4

Transfer, General Studies, & Discipline Studies Lists

Degree and Transfer Option Requirements

- Associate of Arts Oregon Transfer (AAOT) Requirements (p. 12)
- Associate of Arts (AAT) / Associate of Science (AST) Degree Requirements (p. 13)
- Associate of Science (AS) Degree Requirements (AS) (p. 14)
- Oregon Transfer Module (OTM) (p. 15)
- Core Transfer Map (CTM) (p. 15)

General Studies Degree Requirements

- Associate of General Studies (AGS) (p. 16)

Discipline Studies Course Lists

(Applicable in a variety of degrees and certs - see individual degree, transfer or certificate requirements)

- Arts & Letters (p. 17)
- Health/Wellness/Fitness (p. 18)
- Oral Communication (p. 19)
- Science/Math Computer Science (p. 19)
- Social Science (p. 20)
- Cultural Literacy - Courses designated as meeting the CL requirement are listed within the Arts & Letters, Social Science, and Science/Math/Computer Science lists

Transfer Course Equivalencies to UO/OSU

- AAOT/University of Oregon Combination Course List (p. 22)
- General Education Course Equivalencies to UO (p. 26)
- General Education Course Equivalencies to OSU (p. 25)

Transfer Default Academic Plans

- Transfer Default Academic Plans (DAP) – View plans

Associate of Arts Oregon Transfer (AAOT) Requirements

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.

Approved courses for associate degrees: Students are 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.

90 credits

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Note - Students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

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 the 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.

Cost

Estimated Cost: $15,408

- Resident Tuition: $11,925
- Technology Fees: $1,170
- General Student Fees: $813
- Online Course Fees: if applicable
- Books/Course Materials: $1,500

Costs provided are estimates only. Learn more and view current tuition and fee information online. General Education degree costs are based on 90 credits and 6 terms.

Learning Outcomes

Lane degrees and certificates are aligned with Lane's Institutional Learning Outcomes (p. 5) and Oregon Learning Outcomes (p. 5). 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, courses and programs are aligned with Lane's Institutional Learning Outcomes (p. 5).

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

Program Requirements

Foundational Skills

Writing

Complete two or more courses, totaling at least eight credits

WR 121Z	Composition 1	4
WR 122Z	Composition 2	4
	Or	
WR 227Z	Technical Writing	4

WR – See Footnote 1.

Oral Communication

Complete **one** course from the Oral Communication List (p. 19)

Mathematics

Choose **one** course (3 credits minimum) in college-level mathematics (100- or 200-level in MTH (p. 153) or STAT (p. 173)).

Health/Wellness/Fitness

Complete one or more courses, totaling at least three credits from Health/Wellness/Fitness List (p. 18)

Discipline Studies

Cultural Literacy

Students must select one course from any of the discipline studies that is designated as meeting the statewide criteria for cultural literacy.

Arts and Letters

Complete **three courses** from the Arts and Letters list (p. 17)

Note - must choose courses from two or more disciplines

Social Science

Complete **four courses** from the Social Science list (p. 20)

Note - must choose courses from two or more disciplines

Science/Math/Computer Science

Complete **four courses** from the Science/Math/Computer Science list (p. 19)

Note - must choose courses from two or more disciplines, including at least three laboratory courses in biological &/or physical science

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 (p. 108). 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.

Footnote

1 – A minimum of 8 credits of Writing is required. In the event a previous writing course was taken for 3 credits, students will need 3 courses: WR 121Z (p. 177), WR 122Z (p. 177), and WR 123 (p. 177) or WR 227Z (p. 177). Note: WR 227Z (p. 177) will meet additional requirements for some Computer Science baccalaureate programs. Contact your academic advisor for details.

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 WR115 (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 online from Enrollment Services.
- 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
- 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 (p. 148) 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 Arts (AAT) / Associate of Science (AST) Degree Requirements

The Associate of Arts Transfer (AAT) and Associate of Science Transfer (AST) degrees were created to meet the requirements of House Bill 2998 to prepare students for transfer to a public university in Oregon and have junior standing in a specific Bachelor of Arts or Bachelor of Science degree program. These are general requirements for all Associate of Arts Transfer (AAT) or Associate of Science Transfer (AST) degrees. See individual AAT/AST programs for specific requirements.

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Note - Students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

Guidelines

Either degree will be awarded based on the following criteria. Students also meet any major-specific criteria for degree completion.

- Complete a minimum of 90 credits to be awarded the Associate of Arts or Associate of Science Transfer degree. The requirements of the specific award may not exceed 108 quarter credits.
- Complete a minimum of 24 credits at Lane.
- All courses must be passed with a grade of "C-" or better.
- Maximum 16 credits "Pass" may be used towards the degree. This limit does not include courses only offered P/NP.
- Students must have a minimum cumulative GPA of 2.00 at the time the AST or AAT is awarded.
- All courses should be aligned with the student's intended program of study and the degree requirements of the baccalaureate institution to which the student plans to transfer. A student is encouraged to work with an advisor in the selection of courses.
- The Associate of Arts and Associate of Science Transfer degrees include 8 courses/minimum 30 credits of embedded coursework called the Core Transfer Map (CTM). Unless noted otherwise in the specific Major Requirements Module for an individual AST or AAT award, courses used to satisfy CTM requirements may also be used to satisfy major requirements.
- Each Associate of Arts and Associate of Science Transfer degree must include a Major Requirements Module. The specific courses and categories required for this module are determined by the Major-specific Memoranda of Understanding. All individual courses required in the Major Requirements Module will apply to major, general education, and/or degree requirements at each of the Oregon public universities.

Learning Outcomes

Lane degrees and certificates are aligned with Lane's Institutional Learning Outcomes (p. 5). AAT/AST degrees also have program-specific learning outcomes. See individual programs for details.

Program Requirements

Core Transfer Map Requirements

Writing - WR 121Z (p. 177) (4 credits)

Math - Choose **one** course from MTH (p. 153) or STAT (p. 173) prefix; 100-level or higher (4-5 credits)

Arts & Letters - Choose **two** courses from Arts & Letters list (p. 17) (6-8 credits)

Social Science - Choose **two** courses from Social Science list (p. 20) (6-8 credits)

Natural Sciences - Choose **two** lab courses from Science/Math/Computer list (p. 19) (8 credits)

Cultural Literacy - 1 course from the courses above must also be an approved Cultural Literacy course (lists found within Arts & Letters and Social Science)

To earn this notation on a transcript, students must meet all of the requirements in this section

with a minimum of 30 credits.

- More information about Core Transfer Maps (p. 15).
- All CTM courses must be a minimum of 3 credits.
- The CTM includes 6 specific course categories and students must complete at least 8 courses across those 6 categories. If the completion of the 8 required courses does not total 30 credits, any additional course designated as meeting the statewide criteria for Arts and Letters, Social Sciences, or Math/Science/Computer Science may be used to bring the total to 30 credits.
- A completed CTM will apply to at least 30 credits of general education requirements for a bachelor's degree at any Oregon public university.
- Individual AST or AAT majors may designate that specific courses must be taken to fulfill the CTM requirements for that major, as outlined in the major-specific requirements in the specific MTM MOU.
- This notation is not automatically awarded. 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

Major Requirements

- Students must complete the specific requirements appropriate to the individual designated AST or AAT major, as outlined in the Major Requirements Module in this Handbook.
- Individual AST or AAT majors may designate that specific courses must be taken to fulfill the CTM requirements for that major, as outlined in the Major Requirements Module in this Handbook.
- All specific courses designated in the Major Requirements Module for an individual AST or AAT will be transferable and apply to requirements in the major at any Oregon public university, except as noted in the "Notes and Clarifications" for the Major Requirements Module.

Electives

- Any college-level course designated by the college as acceptable.
- Up to 12 credits of Career Technical Education. See the list of Course Types by Prefix (p. 108). Policies on accepting career technical credits vary at four-year institutions in Oregon. Consult an academic advisor about taking these courses within the degree.
- Individual AST or AAT majors may recommend specific elective courses and/or indicate where specific elective courses may be required by individual public universities in Oregon.

Associate of Science (AS) Degree Requirements

Associate of Science (AS) degrees are intended to support transfer to the University of Oregon, Oregon State University, or other Oregon universities as stated in individual AS degree programs. AS degree programs may also aid in transfer to other universities or colleges, though students should work closely with academic advisors on an appropriate transfer plan. Students who complete this degree may have met lower-division general education requirements and pre-major or major requirements at the receiving institution, but completion of an AS degree does not guarantee junior standing in a major. The AS requirements apply to all Lane AS degree programs unless otherwise specified. See individual AS programs for specific requirements.

A student selecting this degree option still must meet the receiving university's admission requirements, including course standing, grade-point average, and any additional admission requirements. Students are encouraged to apply to university dual-enrollment programs and to consult with academic advisors at Lane and at their intended transfer institution.

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Note - Students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

Guidelines

The degree will be awarded based on the following criteria. Students also meet any major-specific criteria for degree completion.

- Complete a total of 90-108 credits of college-level coursework
- Complete at least 24 credits at Lane
- General Education courses must be a minimum of 3 credits, except for Health, Physical Education, and Dance courses, which may be any number of credits
- Elective courses may be any number of credits
- All courses applied to the degree must be completed with a grade of C- or better, or Pass (P)
- Maximum 16 credits P may be applied toward the degree, with the exception of courses only offered P/NP; P is equivalent to C- or higher
- Cumulative GPA must be at least 2.0 for the Associate of Science degree to be awarded

Learning Outcomes

Lane degrees and certificates are aligned with Lane's Institutional Learning Outcomes (p. 5). AS degrees also have program-specific learning outcomes. See individual programs for details.

Program Requirements

Core Transfer Map Requirements

Writing - WR 121Z (p. 177) (4 credits)

Math - 100-level or higher (4 credits)

Arts & Letters - Choose **two** courses from Arts & Letters list (p. 17) (6-8 credits)

Social Science - Choose **two** courses from Social Science list (p. 20) (6-8 credits)

Natural Sciences - Choose **two** lab courses from Science/Math/Computer list (p. 19) (8 credits)

Cultural Literacy - 1 course from the courses above must also be an approved Cultural Literacy course (lists found within Arts & Letters and Social Science)

To earn this notation on a transcript, students must meet all of the requirements in this section with a minimum of 30 credits.

- More information about Core Transfer Maps. (p. 15)
- All CTM courses must be a minimum of 3 credits.
- The CTM includes 6 specific course categories and students must complete at least 8 courses across those 6 categories. If the completion of the 8 required courses does not total 30 credits, any additional course designated as meeting the statewide criteria for Arts and Letters, Social Sciences, or Math/Science/Computer Science may be used to bring the total to 30 credits.
- A completed CTM will apply to at least 30 credits of general education requirements for a bachelor's degree at any Oregon public university.
- Individual AS majors may designate that specific courses must be taken to fulfill the CTM requirements for that major, as outlined in the major-specific requirements in the program.
- This notation is not automatically awarded. 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

Major Requirements

Complete major courses as specified in individual AS degrees. Major courses are meant to transfer to the intended receiving institution, though transferability is not guaranteed. See an academic advisor for help with academic planning.

Electives

Complete Electives as specified in individual AS degrees. These limitations apply to all Associate of Science degrees. Additional requirements or limitations for Electives will be stated within the individual AS degrees and should be aligned with the intended major at the receiving institution.

- Up to 12 credits of Career Technical Education. See the list of Course Types by Prefix (p. 108). Policies on accepting career-technical credits vary at four-year institutions in Oregon. Consult an academic advisor about taking these courses as electives.
- 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 activity courses (PE, PEAT, PEO, D) may be included within the entire degree, with the exception of D 160 (p. 135), D 251 (p. 136), D 256 (p. 136), and D 260 (p. 136)
- Transfer institution requirements. Consult an academic advisor for a list of recommended coursework. Transfer institution requirements may change without notice.

Notes

1. College-level courses are numbered 100 or higher. Courses numbered 001-099 identify developmental courses (e.g. MTH 060), with the exception of ENG 110, 116, 117; MTH 100, RD 115, WR 110, 120 and WR 115 (p. 177) (taken before summer 1999), which are also considered developmental.
2. 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.
3. 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
4. Credit-by-Exam and Credit-by-Assessment may comprise no more than 25% of total degree credits.
5. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
6. 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.
7. 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.
8. 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.
9. 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.
10. General information on transferring credits in from a prior institution

Core Transfer Map (CTM) Requirements

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

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Note - Students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

General Pathway

Writing - WR 121Z (p. 177) (4 credits)

Math - Choose **one** course from MTH (p. 153) or STAT (p. 173) prefix; 100-level or higher from which MTH 095 (p. 154) or MTH 098 (p. 154) is a prerequisite(4-5 credits)

Arts & Letters - Choose **two** courses from Arts & Letters list (p. 17) (6-8 credits)

Social Science - Choose **two** courses from Social Science list (p. 20) (6-8 credits)

Natural Sciences - Choose **two** lab courses from Science/Math/Computer list (p. 19) (8 credits)

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 listed in the AAOT General Education Requirements. (p. 12) This course can be one of the 6 required courses in Arts and Letters, Social Sciences, or Natural Sciences.

Additional Requirements

- 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: Arts and Letters List (p. 17), Social Science List (p. 20), or Science/Math/Computer Science List (p. 19).
- 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.

STEM Pathway

Writing - WR 121Z (4 credits)

Math - Choose **one** course from MTH (p. 153) or STAT (p. 173) prefix; 100-level or higher from which MTH 095 (p. 154) or MTH 098 (p. 154) is a prerequisite(4-5 credits)

Arts & Letters - Choose **two** courses from Arts & Letters list (p. 17) (6-8 credits)

Social Science - Choose **two** courses from Social Science list (p. 20) (6-8 credits)

Natural Sciences - Choose **two** lab courses from Science/Math/Computer list (p. 19) (8 credits)

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 listed in the AAOT General Education requirements. (p. 12) This course can be one of the 6 required courses in Arts and Letters, Social Sciences, or Natural Sciences.

Additional Requirements

- 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: Arts and Letters List (p. 17), Social Science List (p. 20), or Science/Math/Computer Science List (p. 19).
- 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 (OTM) Requirements

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 an 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: Transfer, General Studies, & Discipline Studies Lists (p. 11).

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Note - Students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

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.

Program Requirements

Foundational Skills

Writing

Complete **two** or more courses, totaling at least eight credits

WR 121Z	Composition 1	4
WR 122Z	Composition 2	4
	Or	
WR 227Z	Technical Writing	4

WR: See Footnote 1.

Oral Communications

Complete **one** course from the Oral Communication list (p. 19)

Mathematics

Choose **one** course (3 credits minimum) in college-level mathematics (100- or 200-level in MTH (p. 153) or STAT (p. 173)).

Discipline Studies

Arts and Letters

Complete **three courses** from the Arts and Letters list (p. 17)

Social Sciences

Complete **three courses** from the Social Science list (p. 20)

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 (p. 19)

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 (p. 17)
- Social Science (p. 20)
- Science/Math/Computer Science (p. 19)

Footnote

1 – A minimum of 8 credits of Writing is required. In the event a previous writing course was taken for 3 credits, students will need 3 courses: WR 121Z (p. 177), WR 122Z (p. 177), and WR 123 (p. 177) or WR 227Z (p. 177). Note: WR 227Z (p. 177) will meet additional requirements for some Computer Science baccalaureate programs. Contact your academic advisor for details.

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 online from Enrollment Services.

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.

90 credits

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Note - Students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

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 Pass 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.

Cost

Estimated Cost: $15,408

- Resident Tuition: $11,925
- Technology Fees: $1,170
- General Student Fees: $813
- Online Course Fees: if applicable
- Books/Course Materials: $1,500

Costs provided are estimates only. Learn more and view current tuition and fee information online. General Education degrees costs are based on 90 credits and 6 terms

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 (p. 5).

Program Requirements

Foundational Skills

WR 121Z	Composition 1	4
	Health/PE/Dance - see list	3
MTH 052	Math for Health and Physical Sciences Or Any higher-level Math course	4

Health/PE/Dance (p. 18) – choose from: Health (HE), Physical Ed (PE, PEAT, PEO), or Dance (D). Can be any combination to reach 3 credits

MTH: See Footnote 1.

Discipline Studies

Must be completed with a grade of D- or better or Pass.

Complete 16 credits, one course from each discipline below. Additional credits to meet the minimum of 16 credits may be completed from any of the three disciplines.

Arts and Letters

Choose one course from the Arts and Letters list (p. 17)

Social Science

Choose one course from the Social Science list (p. 20)

Science/Math/Computer Science

Choose one course (lab or non-lab) from the Science/Math/Computer Science list (p. 19)

Science Limitations: see Footnote 2.

Additional Discipline Studies

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

- Arts and Letters (p. 17)
- Social Science (p. 20)
- Science/Math/Computer Science (p. 19)

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.
- Up to 12 credits of Individual Music Lessons (MUP).
- 12 credits of activity courses (PE, PEAT, PEO, D) may be included within the entire degree, with the exception of D 160 (p. 135), D 251 (p. 136), D 256 (p. 136), and D 260 (p. 136).
- See Course Types by Prefix (p. 108). Policies on accepting career technical credits vary at four-year institutions in Oregon. Consult an academic advisor about taking these courses as electives.

Footnotes

1 – MTH 052 to MTH 098 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.

2 – Science/Math Computer Science limitations:

- College-level mathematics (MTH 105Z (p. 154) or higher) may be used to meet this requirement.
- Students who complete more than one CS 161 or CS 162 programming language course should be aware that transfer institutions may count multiple 161 or 162 courses as repeats, ***and may not accept them in transfer***. Students wishing to complete multiple programming courses should first take a CS 161/162 series and then enroll in CS 133/233 course series for any subsequent programming languages.

Notes

- College-level courses are numbered 100 or higher. Courses numbered 001-099 identify developmental courses (e.g. MTH 060), 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 transferring in credits from a prior institution.
- 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.

Arts and Letters List

This list may be applied in a variety of degrees. To view individual Degree Requirements (and where this list is required) see Transfer, General Studies, & Discipline Studies Lists (p. 11) and Career Technical Education Requirements (p. 9).

Arts and Letters

Art

ART 111	Introduction to Visual Arts	3
ART 115	Core Studio: 2D Design	4
ART 116	Core Studio: Color Theory	4
ART 117	Core Studio: 3D Design	4
ART 118	Artist Books and Pop-up	4
ART 120	Intermediate Artist Books and Pop-up	4
ART 131	Core Studio: Drawing 1	4
ART 220	Documentary Photography	3
ART 231	Drawing 2: Composition and Thematic Development	4
ART 234	Drawing 2: Life Drawing	4
ART 237	Illustration 1	4
ART 240	Natural Science Drawing	4
ART 248	Stone Sculpture	3
ART 250	Ceramics: Hand Building	3
ART 251	Ceramics: Wheel Throwing	3
ART 253	Ceramics: Intermediate	3
ART 261	Photography 1	3
ART 270	Printmaking: Traditional and Digital Etching	4
ART 271	Printmaking: Woodcut and Linocut	4
ART 272	Printmaking: Experimental Processes	4
ART 275	Screen Printing 1	4
ART 276	Sculpture: Introduction	3
ART 277	Sculpture: Welding	3
ART 278	Sculpture: Wood	3
ART 281	Painting 1: Color and Form	4
ART 282	Landscape and Architectural Photography	4
ART 284	Painting 2: Composition and Thematic Development	4
ART 285	Screen Printing 2	4
ART 291	Sculpture: Metal Casting	5
ART 293	Sculpture: Figure	3
ART 294	Watercolor 1	4
ART 295	Watercolor 2	4

Art History

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

Chinuk Wawa

CW 201	Chinuk Wawa	4
CW 202	Chinuk Wawa	4
CW 203	Chinuk Wawa	4

Cinema Studies

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

Communications

COMM 100Z	Introduction to Communication	4
COMM 105	Listening and Critical Thinking	4
COMM 111Z	Public Speaking	4
COMM 112	Persuasive Speech	4
COMM 115	Introduction to Intercultural Communication	4
COMM 130	Business and Professional Communication	4
COMM 218Z	Interpersonal Communication	4
COMM 219	Small Group Communication	4
COMM 220	Communication, Gender and Culture	4
COMM 265	Environmental Communication	4
COMM 285	Mediated Communication	4
COMM 296	Communication in Healthcare Settings	4

Creative Writing

CRWR 240	Creative Writing: Nonfiction	4

CRWR 241	Creative Writing: Fiction	4
CRWR 242	Creative Writing: Poetry	4

Dance

D 160	Dance Composition	3
D 251	Looking at Dance	4
D 260	Group Choreography	3

English

ENG 100	Children's Literature	4
ENG 104Z	Introduction to Fiction	4
ENG 105Z	Introduction to Drama	4
ENG 106Z	Introduction to Poetry	4
ENG 151	Black American Literature	4
ENG 194	Literature of Comedy	4
ENG 203	Shakespeare	4
ENG 204	Survey of British Literature	4
ENG 205	Survey of British Literature	4
ENG 215	Latino/a Literature	4
ENG 222	Literature and Gender	4
ENG 232	Native American Literature, Myth and Folklore	4
ENG 240	Nature Literature	4
ENG 244	Asian American Literature	4
ENG 250	Introduction to Folklore and Mythology	4
ENG 253	Survey of American Literature	4
ENG 260	Introduction to Women Writers	4
ENG 261	Science Fiction	4
ENG 270	Bob Dylan: American Poet	4
ENG 282	Introduction to Comics-Graphic Novels	4

Ethnic Studies

ES 244	Native American Leadership 1: Building Leadership Through Indigenous Oratory	4

Film Arts

FA 264	Women Make Movies	4
FA 270C	Film Genres: Comedy	4
FA 270S	Film Genres: Horror	4
FA 270N	Film Genres: Noir	4
FA 276	Gender, Race, and Class in U.S. Cinema	4

French

FR 201	Second-Year French	4
FR 202	Second-Year French	4
FR 203	Second-Year French	4

Humanities

HUM 100	Humanities Through the Arts	4

Journalism

J 216	Newswriting 1	3

Music

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

Philosophy

PHL 201	Ethics	4
PHL 202	Theories of Knowledge	4
PHL 203	Theories of Reality	4
PHL 221	Critical Thinking	4

Spanish

SPAN 201	Spanish, Second-Year	4
SPAN 202	Spanish, Second-Year	4
SPAN 203	Spanish, Second-Year	4
SPAN 218	Spanish for Spanish-Speakers	4

Theatre Arts

TA 140	Acting Shakespeare	4
TA 141	Acting 1	4
TA 142	Acting 2	4
TA 143	Acting 3	4
TA 144	Improv	4
TA 241	Acting for Musical Theatre	4
TA 242	Acting in Non-Realism	4
TA 243	Acting for the Camera	4
TA 272	Introduction to Theatre	4

Arts and Letters + Cultural Literacy

Courses approved for the Cultural Literacy requirement are listed here. A Cultural Literacy course may also be used to satisfy one Discipline Studies requirement, but the credits will only be counted once toward the 90-credit total required to earn the degree.

Arts and Letters

ARH 203	Survey of American Indian Art and Architecture: North and Central America	4
ARH 207	History of Indian Art	3
ARH 208	History of Chinese Art	3
ARH 209	History of Japanese Art	3
ARH 217	History of Middle Eastern and Islamic Art	3
CW 201	Chinuk Wawa	4
CW 202	Chinuk Wawa	4
CW 203	Chinuk Wawa	4
COMM 115	Introduction to Intercultural Communication	4
COMM 220	Communication, Gender and Culture	4
D 251	Looking at Dance	4
ENG 151	Black American Literature	4
ENG 215	Latino/a Literature	4
ENG 222	Literature and Gender	4
ENG 232	Native American Literature, Myth and Folklore	4
ENG 244	Asian American Literature	4
ENG 250	Introduction to Folklore and Mythology	4
ENG 260	Introduction to Women Writers	4
ES 244	Native American Leadership 1: Building Leadership Through Indigenous Oratory	4
FA 264	Women Make Movies	4
FA 276	Gender, Race, and Class in U.S. Cinema	4
MUS 103	Songwriting Techniques and Analysis 1	3
MUS 205	Introduction to Jazz History	3
MUS 260	History of Hip-Hop and Rap Music	3
MUS 264	Roots of Rock (Roots-1963)	4
MUS 265	Golden Age of Rock & Roll (1964-1974)	4
MUS 266	Rockin' the New Millennium (1974-2006)	4
TA 272	Introduction to Theatre	4

Health/Wellness/Fitness List

This list may be applied in a variety of degrees. To view individual Degree Requirements (and where this list is required) see Transfer, General Studies, & Discipline Studies Lists (p. 11) and Career Technical Education Requirements (p. 9)

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

Health/Wellness/Fitness

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

Physical Education

Physical Education (PE)

Physical Education - Athletics (PEAT)

Physical Education - Outdoor Education (PEO)

PE 101	Cardio Core Conditioning	1
PE 102	Combination Aerobics	1
PE 103	Cardio Kickboxing	1

PE 104	Body Sculpt	1
PE 105	Step and Sculpt	1
PE 106	Yogilates	1
PE 107	Zumba Fitness	1
PE 108	Conditioning	1
PE 110	Walk Jog	1
PE 111	Group Cycling	1
PE 112	Fitness Circuits	1
PE 113	Fitness Education: Introduction	1
PE 114	Fitness Education: Continuing/Returning	1
PE 115	Jogging	1
PE 116	Stability Ball Fitness	1
PE 117	Strength Training	1
PE 118	Power Conditioning	1
PE 119	Strength Training for Women	1
PE 120	Archery	1
PE 122	Badminton	1
PE 124	Bowling	1
PE 125	Fencing Beginning	1
PE 126	Golf Beginning	1
PE 127	Karate	1
PE 129	Personal Defense	1
PE 130	Disc Golf	1
PE 133	Meditation	1
PE 134	Tai Chi Chuan	1
PE 136	Yoga	1
PE 137	Gentle Yoga	1
PE 138	Ballroom Dancing	1
PE 139	Latin Dance	1
PE 141	Swing Dancing	1
PE 142	Basketball	1
PE 143	Flag Football	1
PE 144	Soccer	1
PE 145	Softball Beginning	1
PE 146	Ultimate Frisbee	1
PE 147	Volleyball	1
PE 225	Fencing Intermediate	1
PE 234	Tai Chi Chuan Intermediate	1
PE 237	Yoga Intermediate	1
PE 242	Basketball Intermediate	1
PE 247	Volleyball Intermediate	1
PEO 101	Downhill Skiing/Snowboarding Beg.-Int.-Adv	1
PEAT 100	Cross Country - Women's Conditioning 1	1
PEAT 101	Cross Country - Women's Skills 1	1
PEAT 105	Cross Country - Men's Conditioning 1	1
PEAT 106	Cross Country - Men's Skills 1	1
PEAT 110	Volleyball - Women's Conditioning 1	1
PEAT 111	Volleyball - Women's Skills 1	1
PEAT 115	Soccer - Women's Conditioning 1	1
PEAT 116	Soccer - Women's Skills 1	1
PEAT 120	Soccer - Men's Conditioning 1	1
PEAT 121	Soccer - Men's Skills 1	1
PEAT 125	Basketball – Men's Conditioning 1	1
PEAT 126	Basketball - Men's Skills 1	1
PEAT 130	Basketball - Women's Conditioning 1	1
PEAT 131	Basketball Women's Skills 1	1
PEAT 135	Track and Field - Women's Conditioning 1	1
PEAT 136	Track and Field - Women's Skills 1	1
PEAT 140	Track and Field - Men's Conditioning 1	1
PEAT 141	Track and Field - Men's Skills 1	1
PEAT 145	Baseball - Men's Conditioning 1	1
PEAT 146	Baseball - Men's Skills 1	1
PEAT 200	Cross Country Women's Conditioning 2	1
PEAT 201	Cross Country - Women's Skills 2	1
PEAT 205	Cross Country - Men's Conditioning 2	1
PEAT 206	Cross Country - Men's Skills 2	1
PEAT 210	Volleyball - Women's Conditioning 2	1
PEAT 211	Volleyball - Women's Skills 2	1
PEAT 215	Soccer - Women's Conditioning 2	1
PEAT 216	Soccer - Women's Skills 2	1
PEAT 220	Soccer - Men's Conditioning 2	1
PEAT 221	Soccer - Men's Skills 2	1
PEAT 225	Basketball - Men's Conditioning 2	1
PEAT 226	Basketball - Men's Skills 2	1
PEAT 230	Basketball - Women's Conditioning 2	1
PEAT 231	Basketball - Women's Skills 2	1
PEAT 235	Track and Field - Women's Conditioning 2	1
PEAT 236	Track and Field - Women's Skills 2	1
PEAT 240	Track and Field - Men's Conditioning 2	1
PEAT 241	Track and Field - Men's Skills 2	1
PEAT 245	Baseball - Men's Conditioning 2	1
PEAT 246	Baseball - Men's Skills 2	1

Dance

D 152	Dance Basics	2
D 153	Pilates Workout	2
D 160	Dance Composition	3
D 176	Fluid Yoga	2
D 177	Contemporary Dance 1	2
D 178	Contemporary Dance 2	2
D 179	Contemporary Dance 3	2
D 183	Meditation in Motion	2
D 184	Hip Hop 1	2
D 185	Ballet 1	2
D 186	Ballet 2	2
D 187	Ballet 3	2
D 188	Jazz Dance 1	2
D 194	Hip Hop 2	2
D 257	Dance Improvisation	2
D 260	Group Choreography	3

Health

FLS 214	Physical Exercise and Healthy Aging	3
FN 225	Nutrition	4
HE 152	Drugs, Society and Behavior	3
HE 209	Human Sexuality	3
HE 212	Women's Health	3
HE 240	Holistic Health	3
HE 250	Personal Health	3
HE 252	First Aid	3
HE 255	Global Health and Sustainability	4
HE 275	Lifetime Health and Fitness	3

Oral Communication List

This list may be applied in a variety of degrees. To view individual Degree Requirements (and where this list is required) see Transfer, General Studies, & Discipline Studies Lists (p. 11) and Career Technical Education Requirements (p. 9).

Oral Communication

COMM 100Z	Introduction to Communication	4
COMM 111Z	Public Speaking	4
COMM 112	Persuasive Speech	4
COMM 130	Business and Professional Communication	4
COMM 218Z	Interpersonal Communication	4
COMM 219	Small Group Communication	4

Science/Math/Computer Science List

This list may be applied in a variety of degrees. To view individual Degree Requirements (and where this list is required) see Transfer, General Studies, & Discipline Studies Lists (p. 11) and Career Technical Education Requirements (p. 9).

Notes

- 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 (p. 126) + CH 227 (p. 126)).
- Students who complete more than one CS 161 or CS 162 programming language course should be aware that transfer institutions may count multiple 161 or 162 courses as repeats, **and may not accept them in transfer**. Students wishing to complete multiple programming courses should first take a CS 161/162 series and then enroll in CS 133/233 course series for any subsequent programming languages.

Science/Math/Computer Science

Lab Courses

Astronomy

ASTR 121	Astronomy of the Solar System	4
ASTR 122	Stellar Astronomy	4
ASTR 123	Cosmology and the Large-Scale Structure of	4

	the Universe	

Biology

BI 101	Cell Systems	4
BI 102	Organismal Systems	4
BI 103	Ecosystems	4
BI 112	Cell Biology for Health Occupations	4
BI 221	Principles of Biology	4
BI 222	Principles of Biology	4
BI 223A	Principles of Zoology	4
BI 223B	Principles of Botany	4
BI 231	Human Anatomy and Physiology 1	4
BI 232	Human Anatomy and Physiology 2	4
BI 233	Human Anatomy and Physiology 3	4
BI 234	Introductory Microbiology	4

Chemistry

CH 104	Introduction to General Chemistry	5
CH 106	Introduction to Organic and Biological Chemistry	5
CH 114/CJA 114	Introduction to Forensic Chemistry	4
CH 170	Introduction to Environmental Chemistry	4
CH 221 +	General Chemistry 1	4
CH 227	General Chemistry Laboratory 1	2
CH 222 +	General Chemistry 2	4
CH 228	General Chemistry Laboratory 2	2
CH 223 +	General Chemistry 3	4
CH 229	General Chemistry Laboratory 3	2
CH 241 +	Organic Chemistry	4
CH 247	Organic Chemistry Laboratory 1	2
CH 242 +	Organic Chemistry	4
CH 248	Organic Chemistry Laboratory 2	2
CH 243 +	Organic Chemistry	4
CH 249	Organic Chemistry Laboratory 3	2

Criminal Justice

CJA 214/CH 114	Introduction to Forensic Chemistry	4
CJA 214	Introduction to Forensic Science	4

Environmental Science

ENSC 181	Terrestrial Environment	4
ENSC 182	Atmospheric Environment and Climate Change	4
ENSC 183	Aquatic Environment	4

General Science

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

Geology

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

Geographic Information Science

GIS 151	Digital Earth	4
GIS 245	GIS 1	4
GIS 246	GIS 2	4

Horticulture

HORT 120	Gardening and Sustainable Food Systems	4

Physics

PH 101	Fundamentals of Physics	4
PH 102	Fundamentals of Physics	4
PH 103	Fundamentals of Physics	4
PH 201	General Physics	5
PH 202	General Physics	5
PH 203	General Physics	5
PH 211	General Physics with Calculus	5
PH 212	General Physics with Calculus	5
PH 213	General Physics with Calculus	5

Soil Science

SOIL 205	Introduction to Soil Science	4

Non-Lab Courses

Anthropology

ANTH 101	Physical Anthropology	4
ANTH 102	World Archaeology	4

Chemistry

CH 112	Chemistry for Health Occupations	4

Computer Science

CS 160	Orientation to Computer Science	4
CS 161C/CS 133C	Computer Science 1	4
CS 161N/CS 133N	Computer Science 1	4
CS 161P/CS 133P	Computer Science 1	4
CS 162C/CS 233C	Computer Science 2	4
CS 162N/CS 233N	Computer Science 2	4
CS 162P/CS 233P	Computer Science 2	4
CS 260	Data Structures 1	4

Dance

D 256	Anatomy of the Moving Body	4

Geography

GEOG 141	Natural Environment	4

General Science

GS 201	Scientific Skepticism - Someone is Wrong on the Internet	4

Mathematics

MTH 105Z	Math in Society	4
MTH 106	Math in Society 2	4
MTH 107	Math in Society 3	4
MTH 111Z	Precalculus I: Functions	4
MTH 112Z	Precalculus II: Trigonometry	4
MTH 211	Fundamentals of Elementary Mathematics 1	4
MTH 212	Fundamentals of Elementary Mathematics 2	4
MTH 213	Fundamentals of Elementary Mathematics 3	4
MTH 231	Discrete Mathematics 1	4
MTH 232	Discrete Mathematics 2	4
MTH 241	Elementary Calculus 1	4
MTH 242	Elementary Calculus 2	4
MTH 251	Differential Calculus	5
MTH 252	Integral Calculus	5
MTH 253	Calculus: Sequences and Series	4
MTH 254	Vector Calculus 1 (Introduction to Vectors and Multidimensions)	4
MTH 255	Vector Calculus 2 (Introduction to Vector Analysis)	4
MTH 256	Applied Differential Equations	4
STAT 243Z	Elementary Statistics 1	4
STAT 265	Statistics for Scientists and Engineers	4

Psychology

PSY 212	Learning and Memory	3

Gen Chem/O-Chem: See Footnote 1.

Programming Courses: See Footnote 2.

Science + Cultural Literacy

Courses approved for the Cultural Literacy requirement are listed here. A Cultural Literacy course may also be used to satisfy one Discipline Studies requirement, but the credits will only be counted once toward the 90-credit total required to earn the degree.

Science/Math/Computer Science

Non-Lab Courses

ANTH 102	World Archaeology	4

Social Science List

This list may be applied in a variety of degrees. To view individual Degree Requirements (and where this list is required) see Transfer, General Studies, & Discipline Studies Lists (p.

11) and Career Technical Education Requirements (p. 9).

Social Science

Anthropology

ANTH 101	Physical Anthropology	4
ANTH 102	World Archaeology	4
ANTH 103	Cultural Anthropology	4
ANTH 162	Introduction to Medical Anthropology	4
ANTH 235	Introduction to Native North America	4

Business

BA 101Z	Introduction to Business	4

Criminal Justice

CJA 100	Introduction to Criminal Justice	4
CJA 200	Introduction to Criminology	4

Economics

ECON 200	Introduction to Economics	3
ECON 201	Introduction to Microeconomics	4
ECON 202	Introduction to Macroeconomics	4
ECON 204	Introduction to International Economics	4
ECON 260	Introduction to Environmental and Natural Resource Economics	4

Education

ED 100	Introduction to Teaching	3
ED 216	Foundations of Education	3
ED 230	Language and Literacy	3
ED 233	Adolescent Learning and Development	3
ED 258	Multicultural Education	3
ED 269	Inclusion and Special Needs	3

Ethnic Studies

ES 101	Historical Racial and Ethnic Issues	4
ES 102	Contemporary Racial and Ethnic Issues	4
ES 224	Black Male Studies: Lies, Literature, and Legacy	4
ES 244	Native American Leadership 1: Building Leadership Through Indigenous Oratory	4
ES 251	Introduction to African-American Studies	4
ES 254	Introduction to Chicanx/Latinx Studies	4
ES 256	Introduction to Native American Studies	4

Geography

GEOG 141	Natural Environment	4
GEOG 142	Introduction to Human Geography	4
GEOG 201	World Regional Geography	4

Geographic Information Science

GIS 151	Digital Earth	4
GIS 245	GIS 1	4
GIS 246	GIS 2	4

Health

HE 152	Drugs, Society, and Behavior	3
HE 212	Women's Health	3
HE 255	Global Health and Sustainability	4

History

HST 101	Western Civilization: Ancient Mediterranean	4
HST 102	Western Civilization: Making of Modern Europe	4
HST 103	Western Civilization: Europe and the World	4
HST 104	World History	4
HST 105	World History	4
HST 106	World History	4
HST 201	History of the United States	4
HST 202	History of the United States	4
HST 203	History of the United States	4
HST 266	US Women's History	4

Philosophy

PHL 201	Ethics	4
PHL 202	Theories of Knowledge	4
PHL 203	Theories of Reality	4
PHL 221	Critical Thinking	4

Political Science

PS 101	Modern World Governments	4
PS 201	U.S. Government and Politics	4
PS 203	State and Local Government and Politics	3
PS 205	Introduction to International Relations	4
PS 206	Introduction to Political Thought	4
PS 225	Political Ideology	4
PS 275	Legal Processes Through Civil Rights and Liberties	4
PS 297	Environmental Politics	4

Psychology

PSY 201Z	Introduction to Psychology I	4
PSY 202Z	Introduction to Psychology II	4
PSY 215	Lifespan Developmental Psychology	4
PSY 239	Introduction to Abnormal Psychology	3

Sociology

SOC 204	Introduction to Sociology	4
SOC 205	Social Stratification and Social Systems	4
SOC 206	Institutions and Social Change	4
SOC 207	Women and Work	3
SOC 208	Sport and Society	4
SOC 210	Marriage, Family, and Intimate Relations	4
SOC 211	Social Deviance	3
SOC 213	Race and Ethnicity	4
SOC 218	Sociology of Gender	4

Student Leadership Development

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

Women's Studies

WS 101	Introduction to Women's Studies	4

Social Science + Cultural Literacy

Courses approved for the Cultural Literacy requirement are listed here. A Cultural Literacy course may also be used to satisfy one Discipline Studies requirement, but the credits will only be counted once toward the 90-credit total required to earn the degree.

Social Science

ANTH 102	World Archaeology	4
ANTH 103	Cultural Anthropology	4
ANTH 162	Introduction to Medical Anthropology	4
ANTH 235	Introduction to Native North America	4
ED 258	Multicultural Education	3
ES 101	Historical Racial and Ethnic Issues	4
ES 102	Contemporary Racial and Ethnic Issues	4
ES 224	Black Male Studies: Lies, Literature, and Legacy	4
ES 244	Native American Leadership 1: Building Leadership Through Indigenous Oratory	4
ES 251	Introduction to African-American Studies	4
ES 254	Introduction to Chicanx/Latinx Studies	4
ES 256	Introduction to Native American Studies	4
GEOG 142	Introduction to Human Geography	4
GEOG 201	World Regional Geography	4
HST 104	World History	4
HST 105	World History	4
HST 106	World History	4
HST 201	History of the United States	4
HST 202	History of the United States	4
HST 203	History of the United States	4
HST 266	US Women's History	4
PS 205	Introduction to International Relations	4
SOC 207	Women and Work	3
SOC 208	Sport and Society	4
SOC 213	Race and Ethnicity	4

SOC 218	Sociology of Gender	4
SLD 103	Post-Racial America: Challenges & Opportunities	4
SLD 111	Chicano/Latino Leadership 1: Quien Soy? Quienes	4
SLD 112	Chicano/Latino Leadership 2: Cultural Heroes	4
SLD 113	Chicano/Latino Leadership 3: Affirmative & Resistance	4
SLD 121	African American Leadership: History, Philosophy, & Practice	4
WS 101	Introduction to Women's Studies	4

AAOT/University of Oregon Combination Course List

Arts and Letters (AAOT/UO)

This particular list of AAOT Arts and Letters courses shows what individually transfers into UO's Areas of Inquiry outside of earning the AAOT (which is a block transfer degree). While there are many similar courses, satisfying requirements can differ. Please work with an academic advisor for guidance on choosing appropriate courses based on individual transfer plans.

UO manages how courses individually transfer to their institution and may update the list at any time. Please consult UO's transfer equivalency table for the most up-to-date equivalencies.

Transfers to UO as Art History

ARH 200	History of Design Arts	3
ARH 203	Survey of American Indian Art and Architecture: North and Central America	4
ARH 204	History of Western Art 1	3
ARH 205	History of Western Art 2	3
ARH 206	History of Western Art 3	3
ARH 207	History of Indian Art	3
ARH 208	History of Chinese Art	3
ARH 209	History of Japanese Art	3
ARH 211	Early Modern Art: 1850-1910	3
ARH 212	Twentieth-Century Art	3
ARH 217	History of Middle Eastern and Islamic Art	3
ARH 218	History of Photography:1700-1910	3
ARH 220	History of Photography: 1950-Present	3
ART 111	Introduction to Visual Arts	3

Transfers to UO as Cinema Studies

CINE 265	Film History 1: The Silent Era to Early Sound	4
CINE 266	Film History 2: The Sound Era through the 1960s	4
CINE 267	Film History 3: 1960s-the present	4
FA 264	Women Make Movies	4
FA 270C	Film Genres: Comedy	4
FA 270S	Film Genres: Horror	4
FA 270N	Film Genres: Noir	4
FA 276	Gender, Race, and Class in U.S. Cinema	4

Transfers to UO as Dance

D 251	Looking at Dance	4

Transfers to UO as English

ENG 100	Children's Literature	4
ENG 104Z	Introduction to Fiction	4
ENG 105Z	Introduction to Drama	4
ENG 106Z	Introduction to Poetry	4
ENG 151	Black American Literature	4
ENG 194	Literature of Comedy	4
ENG 203	Shakespeare	4
ENG 204	Survey of British Literature	4
ENG 205	Survey of British Literature	4
ENG 215	Latino/a Literature	4
ENG 222	Literature and Gender	4
ENG 232	Native American Literature, Myth and Folklore	4
ENG 240	Nature Literature	4
ENG 244	Asian American Literature	4
ENG 253	Survey of American Literature	4
ENG 260	Introduction to Women Writers	4
ENG 261	Science Fiction	4
ENG 270	Bob Dylan: American Poet	4
ENG 282	Introduction to Comics-Graphic Novels	4

Transfers to UO as Folklore

ENG 250	Introduction to Folklore and Mythology	4

Transfers to UO as French

NOTE: Courses used to fulfill Arts and Letters requirements cannot also be used to meet Foreign Language requirements for a B.A. degree. UO considers FR 203 and FR 288 as repeats.

FR 201	Second-Year French	4
FR 202	Second-Year French	4
FR 203	Second-Year French	4

Transfers to UO as Humanities

HUM 100	Humanities Through the Arts	4

Transfers to UO as Music

MUS 101	Music Fundamentals	3
MUS 103	Songwriting Techniques and Analysis 1	3
MUS 201	Exploring Music: Introduction to Music History	3
MUS 202	Exploring Music: Introduction to Music History	3
MUS 203	Exploring Music: Introduction to Music History	3
MUS 260	History of Hip-Hop and Rap Music	3
MUS 264	Roots of Rock (Roots-1963)	4
MUS 265	Golden Age of Rock & Roll (1964-1974)	4
MUS 266	Rockin' the New Millennium (1974-2006)	4
MUS 268	History of Electronic Music	3

Transfers to UO as Jazz Studies

MUS 205	Introduction to Jazz History	3

Transfers to UO as Native American Studies

NOTE: Courses used to fulfill Arts and Letters requirements cannot also be used to meet Foreign Language requirements for a B.A. degree.

CW 201	Chinuk Wawa	4
CW 202	Chinuk Wawa	4
CW 203	Chinuk Wawa	4

Transfers to UO as Philosophy

PHL 201	Ethics	4
PHL 202	Theories of Knowledge	4
PHL 203	Theories of Reality	4
PHL 221	Critical Thinking	4

Transfers to UO as Spanish

NOTE: Courses used to fulfill Arts and Letters requirements cannot also be used to meet Foreign Language requirements a B.A. degree.

SPAN 201	Spanish, Second-Year	4
SPAN 202	Spanish, Second-Year	4
SPAN 203	Spanish, Second-Year	4
SPAN 218	Spanish for Spanish-Speakers	4

Transfers to UO as Speech

COMM 100Z	Introduction to Communication	4
COMM 111Z	Public Speaking	4
COMM 115	Introduction to Intercultural Communication	4
COMM 218Z	Interpersonal Communication	4
COMM 220	Communication, Gender and Culture	4
COMM 296	Communication in Healthcare Settings	4

Transfers to UO as Theater Arts

TA 272	Introduction to Theatre	4

Social Science (AAOT/UO)

This particular list of AAOT Social Science courses shows what individually transfers into UO's Areas of Inquiry outside of earning the AAOT (which is a block transfer degree). While there are many similar courses, satisfying requirements can differ. Please work with an academic advisor for guidance on choosing appropriate courses based on individual transfer plans.

UO manages how courses individually transfer to their institution and may update the list at any time. Please consult UO's transfer equivalency table for the most up-to-date equivalencies.

Transfers to UO as Anthropology

ANTH 102	World Archaeology	4
ANTH 103	Cultural Anthropology	4

Transfers to UO as Business

BA 101Z	Introduction to Business	4

Transfers to UO as Economics

ECON 200	Introduction to Economics	3
ECON 201	Introduction to Microeconomics	4
ECON 202	Introduction to Macroeconomics	4
ECON 204	Introduction to International Economics	4
ECON 260	Introduction to Environmental and Natural Resource Economics	4

Transfers to UO as Educational Studies

ED 100	Introduction to Teaching	3
ED 233	Adolescent Learning and Development	3
ED 258	Multicultural Education	3
ED 269	Inclusion and Special Needs	3

Transfers to UO as Ethnic Studies

ES 101	Historical Racial and Ethnic Issues	4
ES 102	Contemporary Racial and Ethnic Issues	4
ES 254	Introduction to Chicanx/Latinx Studies	4
ES 251	Introduction to African-American Studies	4
ES 224	Black Male Studies: Lies, Literature, and Legacy	4
ES 256	Introduction to Native American Studies	4
ES 244	Native American Leadership 1: Building Leadership Through Indigenous Oratory	4
SLD 112	Chicano/Latino Leadership 2: Cultural Heroes	4
SLD 113	Chicano/Latino Leadership 3: Affirmative & Resistance	4
SLD 121	African American Leadership: History, Philosophy, & Practice	4

Transfers to UO as Geography

GEOG 142	Introduction to Human Geography	4
GEOG 201	World Regional Geography	4
GIS 151	Digital Earth	4

Transfers to UO as History

HST 101	Western Civilization: Ancient Mediterranean	4
HST 102	Western Civilization: Making of Modern Europe	4
HST 103	Western Civilization: Europe and the World	4
HST 104	World History	4
HST 105	World History	4
HST 106	World History	4
HST 201	History of the United States	4
HST 202	History of the United States	4
HST 203	History of the United States	4
HST 266	US Women's History	4

Transfers to UO as Political Science

PS 101	Modern World Governments	4
PS 201	U.S. Government and Politics	4
PS 203	State and Local Government and Politics	3
PS 205	Introduction to International Relations	4
PS 206	Introduction to Political Thought	4
PS 225	Political Ideology	4
PS 275	Legal Processes Through Civil Rights and Liberties	4

Transfers to UO as Psychology

PSY 202Z	Introduction to Psychology II	4
PSY 215	Lifespan Developmental Psychology	4
PSY 239	Introduction to Abnormal Psychology	3

Transfers to UO as Sociology

SLD 103	Post-Racial America: Challenges & Opportunities	4
SLD 111	Chicano/Latino Leadership 1: Quien Soy? Quienes	4
SOC 204	Introduction to Sociology	4
SOC 205	Social Stratification and Social Systems	4
SOC 206	Institutions and Social Change	4
SOC 207	Women and Work	3
SOC 208	Sport and Society	4
SOC 210	Marriage, Family, and Intimate Relations	4
SOC 211	Social Deviance	3
SOC 213	Race and Ethnicity	4
SOC 218	Sociology of Gender	4

Transfers to UO as Women's and Gender Studies

HE 212	Women's Health	3
WS 101	Introduction to Women's Studies	4

Science (AAOT/UO)

This particular list of AAOT Science courses shows what individually transfers into UO's Areas of Inquiry outside of earning the AAOT (which is a block transfer degree). While there are many similar courses, satisfying requirements can differ. Please work with an academic advisor for guidance on choosing appropriate courses based on individual transfer plans.

UO manages how courses individually transfer to their institution and may update the list at any time. Please consult UO's transfer equivalency table for the most up-to-date equivalencies.

Transfers to UO as Anthropology

ANTH 101	Physical Anthropology	4

Transfers to UO as Astronomy

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

Transfers to UO as Biology

BI 101	Cell Systems	4
BI 102	Organismal Systems	4
BI 103	Ecosystems	4
BI 112	Cell Biology for Health Occupations	4
BI 221	Principles of Biology	4
BI 222	Principles of Biology	4
BI 223A	Principles of Zoology	4
BI 223B	Principles of Botany	4
BI 231	Human Anatomy and Physiology 1	4
BI 232	Human Anatomy and Physiology 2	4
BI 233	Human Anatomy and Physiology 3	4
BI 234	Introductory Microbiology	4

Transfers to UO as Chemistry

CH 104	Introduction to General Chemistry	5
CH 106	Introduction to Organic and Biological Chemistry	5
CH 112	Chemistry for Health Occupations	4
CH 114	Introduction to Forensic Chemistry	4
CH 170	Introduction to Environmental Chemistry	4
CH 221	General Chemistry 1	4
CH 222	General Chemistry 2	4
CH 223	General Chemistry 3	4
CH 241	Organic Chemistry	4
CH 242	Organic Chemistry	4
CH 243	Organic Chemistry	4

Chemistry Note: Chemistry labs not required as part of the Science Area of Inquiry. However, please connect with an academic advisor to determine if chemistry labs are required for your major.

Transfers to UO as Computer and Information Science

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

Computer Science Note: CS courses used to fulfill the science requirements cannot also be used to meet Mathematics or Computer and Information Science requirements for the B.S. degree. Students who complete more than one CS 161 or CS 162 programming language course should be aware that transfer institutions may count multiple 161 or 162 courses as repeats, and may not accept them in transfer. Students wishing to complete multiple

programming courses should first take a CS 161/162 series and then enroll in CS 133/233 course series for any subsequent programming languages.

Transfers to UO as Dance

D 256	Anatomy of the Moving Body	4

Transfers to UO as Earth Sciences

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

Transfers to UO as General Sciences

ENSC 181	Terrestrial Environment	4
ENSC 182	Atmospheric Environment and Climate Change	4
ENSC 183	Aquatic Environment	4
GS 101	General Science (Nature of the Northwest)	4
GS 106	Earth, Sea, Sky	4
GS 108	Oceanography	4
GS 142	Earth Science: Earth Revealed	4
GS 201	Scientific Skepticism - Someone is Wrong on the Internet	4
HORT 120	Gardening and Sustainable Food Systems	4
SOIL 205	Introduction to Soil Science	4

Transfers to UO as Geography

GEOG 141	Natural Environment	4

Transfers to UO as Mathematics

MTH 105Z	Math in Society	4
MTH 106	Math in Society 2	4
MTH 107	Math in Society 3	4
MTH 211	Fundamentals of Elementary Mathematics 1	4
MTH 212	Fundamentals of Elementary Mathematics 2	4
MTH 213	Fundamentals of Elementary Mathematics 3	4
MTH 231	Discrete Mathematics 1	4
MTH 232	Discrete Mathematics 2	4
MTH 241	Elementary Calculus 1	4
MTH 242	Elementary Calculus 2	4
STAT 243Z	Elementary Statistics 1	4
MTH 251	Differential Calculus	5
MTH 252	Integral Calculus	5
MTH 253	Calculus: Sequences and Series	4
STAT 265	Statistics for Scientists and Engineers	4

Math Note: MTH courses used to fulfill the science requirements cannot also be used to meet Mathematics or Computer and Information Science requirements for the B.S. degree. Students may receive credit for MTH 241 or MTH 251 but not both. Students may receive credit for MTH 242 or MTH 252, but not both.

Transfers to UO as Physics

PH 101	Fundamentals of Physics	4
PH 102	Fundamentals of Physics	4
PH 103	Fundamentals of Physics	4
PH 201	General Physics	5
PH 202	General Physics	5
PH 203	General Physics	5
PH 211	General Physics with Calculus	5
PH 212	General Physics with Calculus	5
PH 213	General Physics with Calculus	5

Transfers to UO as Psychology

PSY 212	Learning and Memory	3

Cultural Literacy (AAOT/UO)

The University of Oregon's Cultural Literacy requirement has students completing two courses from two different areas (Global Perspectives and US: Difference, Inequality, Agency) by the time students graduate. This can be completed at LCC and within the AAOT. Please note that not all UO Cultural Literacy meet AAOT Cultural Literacy, so work with an academic advisor for course suggestions.

Global Perspectives (GP)

Arts and Letters

Transfers to UO as Art History

ARH 207	History of Indian Art	3
ARH 208	History of Chinese Art	3
ARH 209	History of Japanese Art	3
ARH 217	History of Middle Eastern and Islamic Art	3

Transfers to UO as Cinema Studies

FA 264	Women Make Movies	4

Transfers to UO as English

ENG 260	Introduction to Women Writers	4

Transfers to UO as Speech

COMM 115	Introduction to Intercultural Communication	4

Social Science

Transfers to UO as Anthropology

ANTH 102	World Archaeology	4
ANTH 103	Cultural Anthropology	4

Transfers to UO as Geography

GEOG 142	Introduction to Human Geography	4
GEOG 201	World Regional Geography	4

Transfers to UO as History

HST 101	Western Civilization: Ancient Mediterranean	4
HST 104	World History	4
HST 105	World History	4
HST 106	World History	4

Transfers to UO as Political Science

PS 101	Modern World Governments	4

Transfers to UO as Sociology

SLD 111	Chicano/Latino Leadership 1: Quien Soy? Quienes	4

US: Difference, Inequality, Agency (US)

Arts and Letters

Transfers to UO as Art History

ARH 203	Survey of American Indian Art and Architecture: North and Central America	4

Transfers to UO as Cinema Studies

FA 276	Gender, Race, and Class in U.S. Cinema	4

Transfers to UO as English

ENG 215	Latino/a Literature	4
ENG 222	Literature and Gender	4
ENG 232	Native American Literature, Myth and Folklore	4
ENG 244	Asian American Literature	4

Transfers to UO as Folklore

ENG 250	Introduction to Folklore and Mythology	4

Transfers to UO as Music

MUS 260	History of Hip-Hop and Rap Music	3
MUS 264	Roots of Rock (Roots-1963)	4
MUS 265	Golden Age of Rock & Roll (1964-1974)	4
MUS 266	Rockin' the New Millennium (1974-2006)	4

Transfers to UO as Jazz Studies

MUS 205	Introduction to Jazz History	3

Transfers to UO as Speech

COMM 220	Communication, Gender and Culture	4

Social Science

Transfers to UO as Anthropology

Transfers to UO as Educational Studies

ED 258	Multicultural Education	3

Transfers to UO as Ethnic Studies

ES 101	Historical Racial and Ethnic Issues	4
ES 102	Contemporary Racial and Ethnic Issues	4

ES 254	Introduction to Chicanx/Latinx Studies	4
ES 251	Introduction to African-American Studies	4
ES 224	Black Male Studies: Lies, Literature, and Legacy	4
ES 256	Introduction to Native American Studies	4
ES 244	Native American Leadership 1: Building Leadership Through Indigenous Oratory	4
SLD 112	Chicano/Latino Leadership 2: Cultural Heroes	4
SLD 113	Chicano/Latino Leadership 3: Affirmative & Resistance	4
SLD 121	African American Leadership: History, Philosophy, & Practice	4

Transfers to UO as History

HST 201	History of the United States	4
HST 202	History of the United States	4
HST 203	History of the United States	4
HST 266	US Women's History	4

Transfers to UO as Sociology

SLD 103	Post-Racial America: Challenges & Opportunities	4
SOC 204	Introduction to Sociology	4
SOC 205	Social Stratification and Social Systems	4
SOC 207	Women and Work	3
SOC 213	Race and Ethnicity	4
SOC 218	Sociology of Gender	4

Transfers to UO as Women's and Gender Studies

HE 212	Women's Health	3
WS 101	Introduction to Women's Studies	4

General Education Course Equivalencies to OSU

This list is comprised of courses that transfer to meet the Oregon State University's Baccalaureate Core requirements at Oregon State University. As OSU manages how courses transfer to their institution, they may update transfer lists at any time. Please consult OSU's transfer equivalency table for the most up-to-date equivalencies. We will update this list regularly.

OSU Transfer Admissions Requirements and Deadlines

Please follow the OSU Transfer Student Admissions Requirements.

Transferable Courses

- No single course may be used to satisfy more than one subject area even though some courses have been approved in more than one area
- No more than two courses from any one subject area may be used to meet categories

Contact Academic Advisors

Please contact an academic advisor to learn which courses best meet your educational goals for transfer admissions, general education, and major requirements

Last updated April 25, 2024

Writing I

WR 121Z	Composition 1	4

Writing II

WR 122Z	Composition 2	4
WR 123	Composition: Research Writing	4
WR 227Z	Technical Writing	4
BA 214	Business Communications	4
CRWR 240	Creative Writing: Nonfiction	4
CRWR 241	Creative Writing: Fiction	4
CRWR 242	Creative Writing: Poetry	4
J 216	Newswriting 1	3

Writing III

COMM 111Z	Public Speaking	4
COMM 112	Persuasive Speech	4
COMM 218Z	Interpersonal Communication	4
COMM 219	Small Group Communication	4

Mathematics

MTH 105Z	Math in Society	4
MTH 106	Math in Society 2	4
MTH 111Z	Precalculus I: Functions	4
MTH 112Z	Precalculus II: Trigonometry	4
MTH 211	Fundamentals of Elementary Mathematics 1	4
MTH 241	Elementary Calculus 1	4
MTH 251	Differential Calculus	5

Fitness

HE 275	Lifetime Health and Fitness	3

Science

Choose one course from Physical Science, one from Biological Sciences, plus an Additional Physical or Biological Science

Physical Science

ASTR 121	Astronomy of the Solar System	4
ASTR 122	Stellar Astronomy	4
CH 104	Introduction to General Chemistry	5
CH 170	Introduction to Environmental Chemistry	4
CH 221	General Chemistry 1	4
CH 222	General Chemistry 2	4
CH 223	General Chemistry 3	4
ENSC 181	Terrestrial Environment	4
ENSC 182	Atmospheric Environment and Climate Change	4
ENSC 183	Aquatic Environment	4
G 101	Earth's Dynamic Interior	4
G 102	Earth's Dynamic Surface	4
G 103	Evolving Earth	4
G 146	Rocks and Minerals	4
G 147	National Parks Geology	4
G 201	Earth Materials and Plate Tectonics	4
G 202	Earth's Surface Systems	4
G 203	Evolution of the Earth	4
GIS 151	Digital Earth	4
GS 106	Earth, Sea, Sky	4
GS 108	Oceanography	4
GS 142	Earth Science: Earth Revealed	4
PH 101	Fundamentals of Physics	4
PH 102	Fundamentals of Physics	4
PH 103	Fundamentals of Physics	4
PH 201	General Physics	5
PH 202	General Physics	5
PH 203	General Physics	5
PH 211	General Physics with Calculus	5
PH 212	General Physics with Calculus	5
PH 213	General Physics with Calculus	5
SOIL 205	Introduction to Soil Science	4

Biological Science

BI 101	Cell Systems	4
BI 102	Organismal Systems	4
BI 103	Ecosystems	4
BI 221	Principles of Biology	4
BI 222	Principles of Biology	4
BI 223B	Principles of Botany	4
BI 223A	Principles of Zoology	4
BI 234	Introductory Microbiology	4

Western Culture

ARH 204	History of Western Art 1	3
ARH 205	History of Western Art 2	3
ARH 206	History of Western Art 3	3
ENG 204	Survey of British Literature	4
ENG 205	Survey of British Literature	4
ENG 250	Introduction to Folklore and Mythology	4
HST 101	Western Civilization: Ancient Mediterranean	4
HST 102	Western Civilization: Making of Modern Europe	4
HST 103	Western Civilization: Europe and the World	4
HST 201	History of the United States	4
HST 202	History of the United States	4
HST 203	History of the United States	4
PHL 201	Ethics	4
PS 206	Introduction to Political Thought	4

Cultural Diversity

ANTH 102	World Archaeology	4
ARH 203	Survey of American Indian Art and	4

	Architecture: North and Central America	
ARH 207	History of Indian Art	3
ARH 208	History of Chinese Art	3
ARH 209	History of Japanese Art	3
ARH 217	History of Middle Eastern and Islamic Art	3
ENG 232	Native American Literature, Myth and Folklore	4
ENG 244	Asian American Literature	4
ES 101	Historical Racial and Ethnic Issues	4
ES 244	Native American Leadership 1: Building Leadership Through Indigenous Oratory	4
ES 251	Introduction to African-American Studies	4
GEOG 142	Introduction to Human Geography	4
GEOG 201	World Regional Geography	4
HST 104	World History	4
HST 105	World History	4
HST 106	World History	4

Literature and the Arts

ARH 204	History of Western Art 1	3
ARH 205	History of Western Art 2	3
ARH 206	History of Western Art 3	3
ARH 207	History of Indian Art	3
ARH 208	History of Chinese Art	3
ARH 209	History of Japanese Art	3
ARH 211	Early Modern Art: 1850-1910	3
ARH 212	Twentieth-Century Art	3
ARH 217	History of Middle Eastern and Islamic Art	3
ARH 218	History of Photography:1700-1910	3
ART 111	Introduction to Visual Arts	3
CINE 265	Film History 1: The Silent Era to Early Sound	4
CINE 267	Film History 3: 1960s-the present	4
ENG 104Z	Introduction to Fiction	4
ENG 105Z	Introduction to Drama	4
ENG 106Z	Introduction to Poetry	4
ENG 151	Black American Literature	4
ENG 203	Shakespeare	4
ENG 215	Latino/a Literature	4
ENG 222	Literature and Gender	4
ENG 253	Survey of American Literature	4
ENG 260	Introduction to Women Writers	4
FA 264	Women Make Movies	4
FA 270C	Film Genres: Comedy	4
FA 270S	Film Genres: Horror	4
FA 270N	Film Genres: Noir	4
HUM 100	Humanities Through the Arts	4
MUS 201	Exploring Music: Introduction to Music History	3
MUS 202	Exploring Music: Introduction to Music History	3
MUS 203	Exploring Music: Introduction to Music History	3
MUS 205	Introduction to Jazz History	3
MUS 264	Roots of Rock (Roots-1963)	4
MUS 265	Golden Age of Rock & Roll (1964-1974)	4
MUS 266	Rockin' the New Millennium (1974-2006)	4
TA 272	Introduction to Theatre	4

Social Processes and Institutions

ANTH 103	Cultural Anthropology	4
ECON 200	Introduction to Economics	3
ECON 201	Introduction to Microeconomics	4
ECON 202	Introduction to Macroeconomics	4
ECON 204	Introduction to International Economics	4
ECON 260	Introduction to Environmental and Natural Resource Economics	4
HE 209	Human Sexuality	3
HE 255	Global Health and Sustainability	4
PS 201	U.S. Government and Politics	4
PS 205	Introduction to International Relations	4
PS 297	Environmental Politics	4
PSY 201Z	Introduction to Psychology I	4
PSY 202Z	Introduction to Psychology II	4
SOC 204	Introduction to Sociology	4
SOC 205	Social Stratification and Social Systems	4
SOC 206	Institutions and Social Change	4

Difference Power and Discrimination

ES 102	Contemporary Racial and Ethnic Issues	4
ES 251	Introduction to African-American Studies	4
ES 254	Introduction to Chicanx/Latinx Studies	4
HST 201	History of the United States	4
HST 202	History of the United States	4
HST 203	History of the United States	4
SOC 213	Race and Ethnicity	4

General Education Course Equivalencies to UO

This list is comprised of courses that transfer to meet the University of Oregon's Areas of Inquiry (general education) requirements. As UO manages how courses transfer to their institution, they may update transfer lists at any time. Please consult UO's transfer equivalency table for the most up-to-date equivalencies. We will update this list regularly.

UO Transfer Admissions Requirements and Deadlines

Please follow the UO Transfer Requirements.

Contact Academic Advisors

Please contact an academic advisor to learn which courses best meet your educational goals for transfer admissions, general education, and major requirements.

Last updated: May 14, 2024

Writing

WR 121Z	Composition 1	4
WR 122Z	Composition 2	4
	Or	
WR 123	Composition: Research Writing	4

Note: WR 123 (p. 177) has a prerequisite of WR 122Z (p. 177) at LCC. UO does not.

Mathematics

MTH 105Z	Math in Society	4
	Or higher	

Arts and Letters

Transfers as Art History

ARH 200	History of Design Arts	3
ARH 203	Survey of American Indian Art and Architecture: North and Central America	4
ARH 204	History of Western Art 1	3
ARH 205	History of Western Art 2	3
ARH 206	History of Western Art 3	3
ARH 207	History of Indian Art	3
ARH 208	History of Chinese Art	3
ARH 209	History of Japanese Art	3
ARH 211	Early Modern Art: 1850-1910	3
ARH 212	Twentieth-Century Art	3
ARH 217	History of Middle Eastern and Islamic Art	3
ARH 218	History of Photography:1700-1910	3
ARH 220	History of Photography: 1950-Present	3
ART 111	Introduction to Visual Arts	3

Transfers as Cinema Studies

CINE 265	Film History 1: The Silent Era to Early Sound	4
CINE 266	Film History 2: The Sound Era through the 1960s	4
CINE 267	Film History 3: 1960s-the present	4
FA 264	Women Make Movies	4
FA 270C	Film Genres: Comedy	4
FA 270S	Film Genres: Horror	4
FA 270N	Film Genres: Noir	4
FA 276	Gender, Race, and Class in U.S. Cinema	4

Transfers as Speech

COMM 100Z	Introduction to Communication	4
COMM 111Z	Public Speaking	4
COMM 115	Introduction to Intercultural Communication	4
COMM 218Z	Interpersonal Communication	4
COMM 220	Communication, Gender and Culture	4

Transfers as Native American Studies

CW 201	Chinuk Wawa	4
CW 202	Chinuk Wawa	4
CW 203	Chinuk Wawa	4

Transfers as Dance

D 251	Looking at Dance	4

Transfers as English

ENG 100	Children's Literature	4
ENG 104Z	Introduction to Fiction	4
ENG 105Z	Introduction to Drama	4
ENG 106Z	Introduction to Poetry	4
ENG 151	Black American Literature	4
ENG 194	Literature of Comedy	4
ENG 203	Shakespeare	4
ENG 204	Survey of British Literature	4
ENG 205	Survey of British Literature	4
ENG 215	Latino/a Literature	4
ENG 222	Literature and Gender	4
ENG 232	Native American Literature, Myth and Folklore	4
ENG 240	Nature Literature	4
ENG 244	Asian American Literature	4
ENG 253	Survey of American Literature	4
ENG 260	Introduction to Women Writers	4
ENG 261	Science Fiction	4

Transfers as Folklore

ENG 250	Introduction to Folklore and Mythology	4

Transfers as French

FR 201	Second-Year French	4
FR 202	Second-Year French	4
FR 203	Second-Year French	4

Note: UO considers FR 203 and FR 288 as repeats.

Transfers as Humanities

HUM 100	Humanities Through the Arts	4

Transfers as Music

MUS 101	Music Fundamentals	3
MUS 103	Songwriting Techniques and Analysis 1	3
MUS 201	Exploring Music: Introduction to Music History	3
MUS 202	Exploring Music: Introduction to Music History	3
MUS 203	Exploring Music: Introduction to Music History	3
MUS 260	History of Hip-Hop and Rap Music	3
MUS 264	Roots of Rock (Roots-1963)	4
MUS 265	Golden Age of Rock & Roll (1964-1974)	4
MUS 266	Rockin' the New Millennium (1974-2006)	4
MUS 268	History of Electronic Music	3

Transfers as Jazz Studies

MUS 205	Introduction to Jazz History	3

Transfers as Philosophy

PHL 201	Ethics	4
PHL 202	Theories of Knowledge	4
PHL 203	Theories of Reality	4
PHL 221	Critical Thinking	4

Transfers as Spanish

SPAN 201	Spanish, Second-Year	4
SPAN 202	Spanish, Second-Year	4
SPAN 203	Spanish, Second-Year	4
SPAN 218	Spanish for Spanish-Speakers	4

Transfers as Theater Arts

TA 272	Introduction to Theatre	4

Social Science

Transfers as Anthropology

ANTH 102	World Archaeology	4
ANTH 103	Cultural Anthropology	4

Transfers as Business

BA 101Z	Introduction to Business	4

Transfers as Economics

ECON 200	Introduction to Economics	3
ECON 201	Introduction to Microeconomics	4
ECON 202	Introduction to Macroeconomics	4
ECON 204	Introduction to International Economics	4
ECON 260	Introduction to Environmental and Natural Resource Economics	4

Transfers as Educational Studies

ECE 253	Diversity Issues in Early Childhood Education	3
ED 100	Introduction to Teaching	3
ED 233	Adolescent Learning and Development	3
ED 258	Multicultural Education	3
ED 269	Inclusion and Special Needs	3
HDFS 226	Child Development	3
HDFS 227	Children Under Stress	3
HDFS 228	Young Children with Special Needs	3

Note - ECE and HDFS are considered Career Technical Education (CTE); up to 12 credits of CTE courses may be included in an AAOT. See Course Type by Prefix (p. 108) for all CTE prefixes.

Transfers as Ethnics Studies

ES 101	Historical Racial and Ethnic Issues	4
ES 102	Contemporary Racial and Ethnic Issues	4
ES 224	Black Male Studies: Lies, Literature, and Legacy	4
ES 244	Native American Leadership 1: Building Leadership Through Indigenous Oratory	4
ES 251	Introduction to African-American Studies	4
ES 254	Introduction to Chicanx/Latinx Studies	4
ES 256	Introduction to Native American Studies	4
SLD 112	Chicano/Latino Leadership 2: Cultural Heroes	4
SLD 113	Chicano/Latino Leadership 3: Affirmative & Resistance	4
SLD 121	African American Leadership: History, Philosophy, & Practice	4

Transfers as Geography

GEOG 142	Introduction to Human Geography	4
GEOG 201	World Regional Geography	4
GIS 151	Digital Earth	4

Transfers as Global Studies

HE 255	Global Health and Sustainability	4

Transfers as History

HST 101	Western Civilization: Ancient Mediterranean	4
HST 102	Western Civilization: Making of Modern Europe	4
HST 103	Western Civilization: Europe and the World	4
HST 104	World History	4
HST 105	World History	4
HST 106	World History	4
HST 201	History of the United States	4
HST 202	History of the United States	4
HST 203	History of the United States	4
HST 266	US Women's History	4

Transfers as Political Science

PS 101	Modern World Governments	4
PS 201	U.S. Government and Politics	4
PS 203	State and Local Government and Politics	3
PS 205	Introduction to International Relations	4
PS 206	Introduction to Political Thought	4
PS 225	Political Ideology	4
PS 275	Legal Processes Through Civil Rights and Liberties	4
PS 297	Environmental Politics	4

Transfers as Psychology

PSY 202Z	Introduction to Psychology II	4
PSY 215	Lifespan Developmental Psychology	4
PSY 239	Introduction to Abnormal Psychology	3

Transfers as Sociology

SLD 101	Native Circles: It's Your Life	3
SLD 103	Post-Racial America: Challenges & Opportunities	4
SLD 111	Chicano/Latino Leadership 1: Quien Soy? Quienes	4
SOC 204	Introduction to Sociology	4
SOC 205	Social Stratification and Social Systems	4
SOC 206	Institutions and Social Change	4
SOC 207	Women and Work	3

SOC 208	Sport and Society	4
SOC 210	Marriage, Family, and Intimate Relations	4
SOC 211	Social Deviance	3
SOC 213	Race and Ethnicity	4
SOC 218	Sociology of Gender	4

Transfers as Women's, Gender, and Sexuality Studies

HE 212	Women's Health	3
WS 101	Introduction to Women's Studies	4

Science

Transfers as Anthropology

ANTH 101	Physical Anthropology	4

Transfers as Astronomy

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

Transfers as Biology

BI 101	Cell Systems	4
BI 102	Organismal Systems	4
BI 103	Ecosystems	4
BI 112	Cell Biology for Health Occupations	4
BI 221	Principles of Biology	4
BI 222	Principles of Biology	4
BI 223A	Principles of Zoology	4
BI 223B	Principles of Botany	4
BI 231	Human Anatomy and Physiology 1	4
BI 232	Human Anatomy and Physiology 2	4
BI 233	Human Anatomy and Physiology 3	4
BI 234	Introductory Microbiology	4

Transfers as Chemistry

CH 104	Introduction to General Chemistry	5
CH 106	Introduction to Organic and Biological Chemistry	5
CH 112	Chemistry for Health Occupations	4
CH 114	Introduction to Forensic Chemistry	4
CH 150	Preparatory Chemistry	3
CH 170	Introduction to Environmental Chemistry	4
CH 221	General Chemistry 1	4
CH 222	General Chemistry 2	4
CH 223	General Chemistry 3	4
CH 241	Organic Chemistry	4
CH 242	Organic Chemistry	4
CH 243	Organic Chemistry	4

Transfers as Computer Science

CS 133JS	Beg. Programming: JavaScript	4
CS 160	Orientation to Computer Science	4
CS 161C/CS 133C	Computer Science 1	4
CS 161N/CS 133N	Computer Science 1	4
CS 161P/CS 133P	Computer Science 1	4
CS 162C/CS 233C	Computer Science 2	4
CS 162N/CS 233N	Computer Science 2	4
CS 162P/CS 233P	Computer Science 2	4
CS 233JS	Intermediate Programming: JavaScript	4
CS 233S	Python for Systems Administrators	4
CS 234N	Advanced Programming: C#	4
CS 260	Data Structures 1	4

Note: Students who complete more than one CS 161/CS 162 programming language series should be aware that transfer institutions may count multiple 161 or 162 courses as repeats, and may not accept them in transfer. Students wishing to complete multiple programming courses should first take a CS 161/162 series and then enroll in CS 133/233 course series for any subsequent programming languages.

Transfers as Dance

D 256	Anatomy of the Moving Body	4

Transfers as Earth Sciences

ENSC 181	Terrestrial Environment	4
ENSC 182	Atmospheric Environment and Climate Change	4
G 101	Earth's Dynamic Interior	4
G 102	Earth's Dynamic Surface	4
G 103	Evolving Earth	4
G 146	Rocks and Minerals	4
G 147	National Parks Geology	4
G 148	Geologic Hazards	4
G 201	Earth Materials and Plate Tectonics	4
G 202	Earth's Surface Systems	4
G 203	Evolution of the Earth	4
GS 142	Earth Science: Earth Revealed	4

Transfers as General Sciences

ENSC 183	Aquatic Environment	4
GS 101	General Science (Nature of the Northwest)	4
GS 106	Earth, Sea, Sky	4
GS 108	Oceanography	4
GS 109	Meteorology	5
GS 201	Scientific Skepticism - Someone is Wrong on the Internet	4
HORT 120	Gardening and Sustainable Food Systems	4
SOIL 205	Introduction to Soil Science	4

Transfers as Geography

GEOG 141	Natural Environment	4

Transfers as Human Physiology

FN 225	Nutrition	4
HP 150	Human Body Systems 1	3
HP 152	Human Body Systems 2	3

Transfers as Mathematics

MTH 105Z	Math in Society	4
MTH 106	Math in Society 2	4
MTH 107	Math in Society 3	4
MTH 211	Fundamentals of Elementary Mathematics 1	4
MTH 212	Fundamentals of Elementary Mathematics 2	4
MTH 213	Fundamentals of Elementary Mathematics 3	4
MTH 231	Discrete Mathematics 1	4
MTH 232	Discrete Mathematics 2	4
MTH 241	Elementary Calculus 1	4
MTH 242	Elementary Calculus 2	4
MTH 251	Differential Calculus	5
MTH 252	Integral Calculus	5
MTH 253	Calculus: Sequences and Series	4
STAT 243Z	Elementary Statistics 1	4
STAT 265	Statistics for Scientists and Engineers	4

Note: Students may receive credit for MTH 241 or MTH 251 (p. 155) but not both. Students may receive credit for MTH 242 (p. 155) or MTH 252 (p. 155) but not both.

Transfers as Physics

PH 101	Fundamentals of Physics	4
PH 102	Fundamentals of Physics	4
PH 103	Fundamentals of Physics	4
PH 201	General Physics	5
PH 202	General Physics	5
PH 203	General Physics	5
PH 211	General Physics with Calculus	5
PH 212	General Physics with Calculus	5
PH 213	General Physics with Calculus	5

Transfers as Psychology

PSY 201Z	Introduction to Psychology I	4
PSY 212	Learning and Memory	3

Cultural Literacy

Global Perspectives

Arts and Letters

Transfers as Art History

ARH 207	History of Indian Art	3
ARH 208	History of Chinese Art	3
ARH 209	History of Japanese Art	3
ARH 217	History of Middle Eastern and Islamic Art	3

Transfers as Cinema Studies

FA 264	Women Make Movies	4

Transfers as Speech

COMM 115	Introduction to Intercultural Communication	4

Transfers as English

ENG 260	Introduction to Women Writers	4

Social Science

Transfers as Anthropology

ANTH 102	World Archaeology	4
ANTH 103	Cultural Anthropology	4

Transfers as Geography

GEOG 142	Introduction to Human Geography	4
GEOG 201	World Regional Geography	4

Transfers as Global Studies

HE 255	Global Health and Sustainability	4

Transfers as History

HST 101	Western Civilization: Ancient Mediterranean	4
HST 104	World History	4
HST 105	World History	4
HST 106	World History	4

Transfers as Political Science

PS 101	Modern World Governments	4

Transfers as Sociology

SLD 111	Chicano/Latino Leadership 1: Quien Soy? Quienes	4

US: Difference, Inequality, Agency

Arts and Letters

Transfers as Art History

ARH 203	Survey of American Indian Art and Architecture: North and Central America	4

Transfers as Cinema Studies

FA 276	Gender, Race, and Class in U.S. Cinema	4

Transfers as Speech

COMM 220	Communication, Gender and Culture	4

Transfers as English

ENG 215	Latino/a Literature	4
ENG 222	Literature and Gender	4
ENG 232	Native American Literature, Myth and Folklore	4
ENG 244	Asian American Literature	4

Transfers as Folklore

ENG 250	Introduction to Folklore and Mythology	4

Transfers as Music

MUS 260	History of Hip-Hop and Rap Music	3
MUS 264	Roots of Rock (Roots-1963)	4
MUS 265	Golden Age of Rock & Roll (1964-1974)	4
MUS 266	Rockin' the New Millennium (1974-2006)	4

Transfers as Jazz Studies

MUS 205	Introduction to Jazz History	3

Transfers as Spanish

SPAN 218	Spanish for Spanish-Speakers	4

Social Science

Transfers as Anthropology

Transfers as Educational Studies

ECE 253	Diversity Issues in Early Childhood Education	3
ED 233	Adolescent Learning and Development	3
ED 258	Multicultural Education	3

Note - ECE is considered Career Technical Education (CTE); up to 12 credits of CTE courses may be included in an AAOT. See Course Type by Prefix (p. 108) for all CTE prefixes.

Transfers as Ethnics Studies

ES 101	Historical Racial and Ethnic Issues	4
ES 102	Contemporary Racial and Ethnic Issues	4
ES 224	Black Male Studies: Lies, Literature, and Legacy	4
ES 244	Native American Leadership 1: Building Leadership Through Indigenous Oratory	4
ES 251	Introduction to African-American Studies	4
ES 254	Introduction to Chicanx/Latinx Studies	4
ES 256	Introduction to Native American Studies	4
SLD 112	Chicano/Latino Leadership 2: Cultural Heroes	4
SLD 113	Chicano/Latino Leadership 3: Affirmative & Resistance	4
SLD 121	African American Leadership: History, Philosophy, & Practice	4

Transfers as History

HST 266	US Women's History	4

Transfers as Sociology

SLD 101	Native Circles: It's Your Life	3
SLD 103	Post-Racial America: Challenges & Opportunities	4
SOC 204	Introduction to Sociology	4
SOC 205	Social Stratification and Social Systems	4
SOC 207	Women and Work	3
SOC 213	Race and Ethnicity	4
SOC 218	Sociology of Gender	4

Transfers as Women's, Gender, and Sexuality Studies

WS 101	Introduction to Women's Studies	4
HE 212	Women's Health	3

Advanced Technology

Associate of Applied Science degrees (AAS)

- Automotive Technology, AAS (p. 29)
- CNC Machining and Inspection, AAS (p. 30)
- Construction Technology, AAS (p. 31)
- Diesel Technology, AAS (p. 32)
- Drafting, AAS (p. 33)
- Fabrication/Welding Technology, AAS (p. 37)

1-year Certificates

- Construction Technology, 1-yr Certificate (p. 32)
- Drafting, 1-yr Certificate (p. 34)
- Fabrication/Welding Technology, 1-yr Certificate (p. 38)
- Welding Processes, 1-yr Certificate (p. 38)

Career Pathway Certificates (CPC)

- CNC Machining and Inspection 1, CPC (p. 31)
- Drafting for Commercial Construction, CPC (p. 35)
- Drafting for Manufacturing, CPC (p. 35)
- Drafting for Residential Construction, CPC (p. 36)
- Welding Processes: Shielded Metal Arc Welder, CPC (p. 39)
- Welding Processes: Wire Drive Welder, CPC (p. 39)

Certificate of Completion

- Entry-Level Trades Worker, Certificate of Completion (p. 36)

Automotive Technology, AAS

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.

90 credits

Program Contacts

- Program Coordinator: Egan Riordon, riordone@lanecc.edu, 541-463-5092; Kelly Mathers, mathersk@lanecc.edu, 541-463-5377
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 20,786

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260

- General Student Fees: $ 900
- Books / Course Materials: $ 469.00 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 1,579 (Class Fees and Materials)
- Differential Fees: $ 3,528

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Use automotive service resources to complete lab projects and be familiar with computer accessed information, internet accessed information and information available in print related to automotive repair from library resources, as well as regional and national networks

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 - Interpret the concepts of a problem-solving task and translate them into mathematical equations

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 085	Applied Geometry for Technicians	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

AM 143	Brakes	1-8
AM 145	Engine Repair	1-12
AM 147	Suspension and Steering	1-6
AM 149	Manual Drive Trains and Axles	1-6
AM 242	Automatic Transmissions/ Transaxles	1-12
AM 243	Electrical and Electronic Systems	1-12
AM 244	Engine Performance	1-12
AM 246	Heating and Air Conditioning	1-4
AM 280	Co-op Ed: Automotive	3-12
WLD 121	Shielded Metal Arc Welding 1 (stick welding)	4
	Or	
WLD 143	Wire Drive Welding 1	4

AM courses: See Footnote 3.

AM 280: Complete a minimum of 3 credits. See Footnote 4.

Electives

Students using lower-credit courses to meet General Education requirements may need to take additional electives (100-level or higher) to reach the 90-credit minimum.

Footnotes

1 – WR 115W (p. 177) or any higher writing is also accepted

2 – MTH 095 (p. 154) or MTH 098 (p. 154) or any other higher math (MTH/STAT) is also accepted

3 – Students must complete the maximum credits listed for all AM courses. Enrollment is by department consent only. See an Academic Advisor or Program Coordinator

4 – AM 280 (p. 111) - Complete a minimum of 3 credits. Under the supervision of the Automotive Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits in AM 280 (p. 111) may be earned in lieu of required Automotive Technology course credits. See an Academic Advisor or Program Coordinator

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- 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.

Certification

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

CNC Machining and Inspection, AAS

This program will provide students with training, hands-on experience, and certificates for Computer Numeric Control (CNC) machining, CAD/CAM, and tight tolerance inspection work. Graduates will obtain an AAS degree, along with several different certificates from industry and institutions.

90 credits

Program Contacts

- Program Contact: Wendy Milbrat, milbratw@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 21,110

- Resident Tuition: $ 13,050
- Technology Fees $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 0
- Books / Course Materials: $ 500 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 5,400 (course fees, materials)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Set up and operate Computer Numeric Control (CNC) lathes and mills

PLO 2 - Design and program in a CAD/CAM environment

PLO 3 - Inspect CNC machined parts to print specifications

PLO 4 - Reverse engineer pre-existing parts to create high tolerance prints

PLO 5 - Engage in creative and critical thinking to overcome obstacles in manufacturing

PLO 6 - Demonstrate effective use of communication and time management skills to complete individual and group projects under strict deadlines

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
	Human Relations - choose one course from list	3-4
MTH 098	Math Literacy	5
	Or	
MTH 025	Basic Mathematics Applications	3

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

CNC 111	Introduction to CNC Operator	5
CNC 112	Introduction to 3D Modeling for Machinists	4
CNC 113	Introduction to Production Inspection	4
CNC 121	Basic CNC Lathe/Mill Operation and production	5
CNC 122	Introduction to CAM Toolpaths	4
CNC 123	Inspection 2	4
CNC 131	Basic CNC lathe/Mill Projects	5
CNC 132	CAD/CAM CNC Lathe/Mill Projects	4

CNC 133	Inspection 3	4
CNC 211	CNC 3 Axis lathe/4 Axis Mill	5
CNC 212	Toolpaths for 3 Axis lathe/4 Axis Mill	4
CNC 213	Inspection 4	4
CNC 221	CNC 4 Axis Lathe/5 Axis Mill	5
CNC 222	Toolpaths for CNC 4 Axis Lathe/5 Axis Mill	4
CNC 223	Inspection 5	4
CNC 231	Advanced CNC lathe/Mill Projects	5
CNC 232	CAD/CAM Advanced Lathe/Mill Projects	4
CNC 233	Inspection 6	4

Electives

Students may need to take additional electives to reach the 90-credit minimum. Any 100- or 200-level course is accepted. Choosing courses from the Advanced Technology Directed Elective List (p. 39) is recommended.

Footnotes

1 – WR 115W (p. 177) or a higher writing is also accepted

2 – Any math (MTH/STAT) higher than MTH 025 (p. 153) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is the parent program for the CNC Machining and Inspection 1, CPC (p. 31)

CNC Machining and Inspection 1, CPC

This program will provide students with training, hands-on experience, and certificates for Computer Numeric Control (CNC) machining, CAD/CAM, and tight tolerance inspection work. Graduates will obtain a CPC, along with several different certificates from industry and institutions.

39 credits

Program Contacts

- Program Contact: Wendy Milbrat, milbratw@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 9,851

- Resident Tuition: $ 5,655
- Technology Fees: $ 546
- General Student Fees: $ 450
- Online Course Fee: $ 0
- Books / Course Materials: $ 500 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 2,700 (Course Fees / Materials)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Set up and operate Computer Numeric Control (CNC) lathes and mills

PLO 2 - Design and program in a CAD/CAM environment

PLO 3 - Inspect Computer Numeric Control (CNC) machined parts to print specifications

PLO 4 - Reverse engineer pre-existing parts to create high tolerance prints

PLO 5 - Engage in creative and critical thinking to overcome obstacles in manufacturing

PLO 6 - Demonstrate effective use of communication and time management skills to complete individual and group projects under strict deadlines

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

CNC 111	Introduction to CNC Operator	5
CNC 112	Introduction to 3D Modeling for Machinists	4
CNC 113	Introduction to Production Inspection	4
CNC 121	Basic CNC Lathe/Mill Operation and production	5
CNC 122	Introduction to CAM Toolpaths	4
CNC 123	Inspection 2	4
CNC 131	Basic CNC lathe/Mill Projects	5
CNC 132	CAD/CAM CNC Lathe/Mill Projects	4
CNC 133	Inspection 3	4

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the CNC Machining and Inspection, AAS (p. 30).

Construction Technology, AAS

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.

90 credits

Program Contacts

- Program Coordinator: Paul Rea, reap@lanecc.edu, 541-463-5504
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 16,200

- Resident Tuition: $ 13,050
- Technology Fees $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $80
- Books / Course Materials: $ 600 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 310 (course fees, materials)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

PLO 7 - Use mathematics and interpretive skills to solve construction problems

PLO 8 - Use appropriate library and information resources to research professional issues

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 085	Applied Geometry for Technicians	4
	Human Relations - choose one course from list	3-4
	Health/PE/Dance - see list	3

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Health/PE/Dance – choose from: Health (HE), Physical Ed (PE, PEAT, PEO), or Dance (D). Can be any combination to reach 3 credits

Program Core Courses

CS 120	Concepts of Computing: Information Processing	4
CST 110	Blueprint Reading 1	3
CST 111	Construction Orientation and Environment	2

CST 116	Construction Estimating	4
CST 118A	Building Construction A	1-5
CST 118B	Building Construction B	1-5
CST 118C	Building Construction C	1-5
CST 119	Building Construction Surveying	3
CST 122	Construction Codes	2
CST 211	Blueprint Reading 2	3
CST 280	Co-op Ed: Construction	3-12
DRF 160	Computer-Aided Drafting and Design	4
DRF 137	Architectural Plans	4
	Or	
DRF 211	Sustainable Building Systems	4

CST 118A-C: Complete 5 credits each, for a total of 15 credits

CST 280: Complete a minimum of 9 credits. See Footnote 3.

Electives

1. Complete 18 credits from the Advanced Technology Directed Elective List (p. 39)

2. Complete 6 credits of any 100- or 200- level course

Footnotes

1 – WR 115W (p. 177)or a higher writing is also accepted

2 – MTH 097 (p. 154) or MTH 112Z (p. 154) are also accepted

3 – CST 280 (p. 134): complete a minimum of 9 credits. In certain circumstances, additional Co-op experience may be substituted for major coursework. For more information, please see an Academic Advisor or the Program Coordinator.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is the parent program for the Construction Technology, 1-yr Certificate (p. 32).
- 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.

Construction Technology, 1-yr Certificate

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.

47 credits

Program Contact

- Program Coordinator: Paul Rea, reap@lanecc.edu, 541-463-5504
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 8,913

- Resident Tuition: $ 6,815
- Technology Fees: $ 658
- General Student Fees: $ 450
- Online Course Fee: $ 80
- Books / Course Materials: $ 600 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 310 (Course Fees and Materials)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 085	Applied Geometry for Technicians	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

CS 120	Concepts of Computing: Information Processing	4
CST 110	Blueprint Reading 1	3
CST 111	Construction Orientation and Environment	2
CST 116	Construction Estimating	4
CST 118A	Building Construction A	1-5
CST 118B	Building Construction B	1-5
CST 118C	Building Construction C	1-5
CST 119	Building Construction Surveying	3
CST 122	Construction Codes	2
CST 211	Blueprint Reading 2	3

CST 118A-B-C: Complete 5 credits in each course, for 15 credits total.

Footnotes

1 – WR 115W (p. 177) or higher writing is also accepted

2 – MTH 097 (p. 154) or MTH 112Z (p. 154) are also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Construction Technology, AAS degree (p. 31).
- A high school diploma or equivalent is recommended for all applicants to this program.

Diesel Technology, AAS

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.

93 credits

Program Contacts

- Program Coordinator: Steve Webb, webbs@lanecc.edu, 541-463-5708
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $21,267

- Resident Tuition: $ 13,485
- Technology Fees: $ 1,302
- General Student Fees: $ 900
- Online Course Fee: $ 0
- Books / Course Materials: $ 500 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 1,552 (class fees and materials)
- Differential Fees: $3,528

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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, and gear ratios, and perform precision measurement

PLO 3 - Identify and explain technologies used in trucking, construction, logging, agriculture equipment, generators and marine applications in the following subjects:

- Fuel Systems
- Brake Systems
- Powertrain and Chassis Systems
- Hydraulic Systems
- Electrical/Electronic Systems
- HVAC Systems
- 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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 085	Applied Geometry for Technicians	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

All DS and WLD courses must be completed with the maximum credits listed.

DS 154	Heavy Duty Braking Systems	1-12
DS 155	Heavy Equipment Hydraulics	1-12
DS 158	Heavy Equipment Chassis and Power Trains	1-12
DS 256	Diesel and Auxiliary Fuel Systems	1-12
DS 257	Diesel Electrical Systems	1-12
DS 259	Diesel Engines and Engine Overhaul	1-12

Complete one of the following options:

Welding (11-12 credits):

WLD 121	Shielded Metal Arc Welding 1 (stick welding)	4
WLD 143	Wire Drive Welding 1	4
	And	
WLD 122	Shielded Metal Arc Welding 2 (stick welding)	4
	Or	
MFG 101	Safety and Basic Shop Practice	3

Cooperative Education (12 credits):

DS 280	Co-op Ed: Diesel	3-12

Co-op: See Footnote 3.

Footnotes

1 – WR 115W (p. 177) or higher writing is also accepted

2 – MTH 097 (p. 154) or MTH 112Z (p. 154) are also accepted

3 – Co-op experience may be substituted for major coursework. For more information, please see your Academic Advisor or Program Coordinator

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- Students who complete this program will be prepared to take the AED Foundation exam for the AED Foundation Certified Technician designation.
- 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

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.

90 credits

Program Contacts

- Program Coordinator: AJ Ullman, ullmannaj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 19,221

- Resident Tuition: 13,050
- Technology Fees: $ 1,260
- General Student Fees: $900
- Online Course Fee: $ 510
- Books / Course Materials: $ 1,250 (Books are not required, but recommended. Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 100 (Certifications, Licensure, Exams)
- Other Cost / Expenses: $ 1,250 (Computer/Internet)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

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

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 121Z	Composition 1	4
WR 227Z	Technical Writing	4
CS 120	Concepts of Computing: Information Processing	4

	Human Relations - choose one course from list	3-4

CS 120: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

Mathematics

Algebra - Complete one of the following:

MTH 060	Beginning Algebra	4
MTH 075	Applied Algebra for Technicians	4
MTH 098	Math Literacy	5
MTH 111Z	Precalculus I: Functions	4

Note: MTH 065, MTH 095, or any 200-level Math/Statistics are also accepted

Geometry - Complete one of the following:

MTH 085	Applied Geometry for Technicians	4
MTH 097	Geometry	4
MTH 112Z	Precalculus II: Trigonometry	4

Program Core Courses

COOP 206	Co-op Ed: Internship Seminar	2
CST 122	Construction Codes	2
DRF 121	Mechanical Drafting	4
DRF 137	Architectural Plans	4
DRF 160	Computer-Aided Drafting and Design	4
DRF 203	Electrical Drafting	2
DRF 205	Drafting: Structures	4
DRF 207	Drafting: Strength of Materials	4
DRF 210	Commercial Buildings	4
DRF 211	Sustainable Building Systems	4
DRF 220	Building Information Modeling	4
DRF 235	Mechanical Design Skills	4
DRF 236	Machine Elements	4
DRF 245	Solid Modeling	4
DRF 248	Hydraulics Drafting	1
DRF 280	Co-op Ed: Drafting	3-12

COOP 206: complete a minimum of 2 credits

DRF 280: complete a minimum of 3 credits

Electives

Complete 13 credits from the the list below:
- 3 credits may be from any 100- or 200- level course
- 10 credits or more from the list below

ART 117	Core Studio: 3D Design	4
ART 216	Digital Design Tools	3
CH 150	Preparatory Chemistry	3
CIS 140W	Introduction to Operating Systems: Windows Clients	4
CIS 195	Web Authoring 1	4
CS 179	Introduction to Computer Networks	4
CST 116	Construction Estimating	4
CST 201	Sustainable Building Practices	3
DS 154	Heavy Duty Braking Systems	1-12
DS 257	Diesel Electrical Systems	1-12
DS 259	Diesel Engines and Engine Overhaul	1-12
GIS 151	Digital Earth	4
GIS 245	GIS 1	4
MFG 101	Safety and Basic Shop Practice	3
MUL 101	Introduction to Media Arts	3
MUL 212	Digital Imaging	4
PH 101	Fundamentals of Physics	4
PH 102	Fundamentals of Physics	4
PH 103	Fundamentals of Physics	4
PH 201	General Physics	5
PH 202	General Physics	5
PH 203	General Physics	5
WLD 143	Wire Drive Welding 1	4
WLD 151	Fundamentals of Metallurgy	1-3

DRF 298 (p. 110) - Drafting Independent Study (instructor consent required)

Footnotes

1 – Any Computer Science (CS only) above CS 120 (p. 131) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for: Drafting, 1-yr Certificate (p. 34), Drafting for Commercial Construction, CPC (p. 35), Drafting for Manufacturing, CPC (p. 35), and Drafting for Residential Construction, CPC (p. 36).
- 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.

Drafting, 1-yr Certificate

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.

45 credits

Program Contacts
- Program Coordinator: AJ Ullman, ullmannaj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 9,825
- Resident Tuition: $ 6,525
- Technology Fees: $ 630
- General Student Fees: $ 450
- Online Course Fee: $ 220
- Books / Course Materials: $ 650 (Books are not required, but recommended. Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 100 (Certifications, Licensure, Exams)
- Other Cost / Expenses: $ 1250 (Computer/Internet)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

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

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 121Z	Composition 1	4
	Human Relations - choose one course from list	3-4

CS 120	Concepts of Computing: Information Processing	4

List of accepted Human Relations Courses (p. 11)

CS 120: See Footnote 1.

Mathematics

Algebra - Complete one of the following:

MTH 060	Beginning Algebra	4
MTH 075	Applied Algebra for Technicians	4
MTH 098	Math Literacy	5
MTH 111Z	Precalculus I: Functions	4

Note: MTH 065, MTH 095, or any 200-level Math/Statistics are also accepted

Geometry - Complete one of the following:

MTH 085	Applied Geometry for Technicians	4
MTH 097	Geometry	4
MTH 112Z	Precalculus II: Trigonometry	4

Program Core Courses

CST 122	Construction Codes	2
DRF 121	Mechanical Drafting	4
DRF 137	Architectural Plans	4
DRF 160	Computer-Aided Drafting and Design	4
DRF 203	Electrical Drafting	2
DRF 245	Solid Modeling	4
COOP 206	Co-op Ed: Internship Seminar	2

COOP 206: Complete a minimum of 2 credits.

Electives

Complete 4-6 credits from the the list below:

ART 117	Core Studio: 3D Design	4
ART 216	Digital Design Tools	3
CH 150	Preparatory Chemistry	3
CIS 140W	Introduction to Operating Systems: Windows Clients	4
CIS 195	Web Authoring 1	4
CS 179	Introduction to Computer Networks	4
CST 116	Construction Estimating	4
CST 201	Sustainable Building Practices	3
DS 154	Heavy Duty Braking Systems	1-12
DS 257	Diesel Electrical Systems	1-12
DS 259	Diesel Engines and Engine Overhaul	1-12
GIS 151	Digital Earth	4
GIS 245	GIS 1	4
MFG 101	Safety and Basic Shop Practice	3
MUL 101	Introduction to Media Arts	3
MUL 212	Digital Imaging	4
PH 101	Fundamentals of Physics	4
PH 102	Fundamentals of Physics	4
PH 103	Fundamentals of Physics	4
PH 201	General Physics	5
PH 202	General Physics	5
PH 203	General Physics	5
WLD 143	Wire Drive Welding 1	4
WLD 151	Fundamentals of Metallurgy	1-3

DRF 298 (p. 110) - Drafting Independent Study (instructor consent required)

Footnotes

1 – Any computer science (CS) course higher than CS 120 (p. 131) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is embedded in the Drafting, AAS degree (p. 33).

Drafting for Commercial Construction, CPC

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.

16 credits

Program Contacts

- Program Coordinator: AJ Ullman, ullmannaj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 4,729

- Resident Tuition: $ 2,320
- Technology Fees: $ 224
- General Student Fees: $ 300
- Online Course Fee: $ 160
- Books / Course Materials: $ 475 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Other Cost / Expenses: $ 1250 (Computer/Internet)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

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

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

Program Core Courses

DRF 160	Computer-Aided Drafting and Design	4
DRF 205	Drafting: Structures	4
DRF 210	Commercial Buildings	4
DRF 220	Building Information Modeling	4

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Drafting, AAS degree (p. 33).
- A high school diploma or equivalent is recommended for all applicants to this program.

Drafting for Manufacturing, CPC

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.

12 credits

Program Contacts

- Program Coordinator: AJ Ullman, ullmannaj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 3,628

- Resident Tuition: $ 1,740
- Technology Fees: $ 168
- General Student Fees: $ 150
- Online Course Fee: $ 120
- Books / Course Materials: $ 100 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.
- Program Specific Fees: $ 100 (Certifications, Licensure, Exams)
- Other Cost / Expenses: $ 1,250 (Computer/Internet)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

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

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

Program Core Courses

DRF 121	Mechanical Drafting	4
DRF 160	Computer-Aided Drafting and Design	4
DRF 245	Solid Modeling	4

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Drafting, AAS degree (p. 33).
- A high school diploma or equivalent is recommended for all applicants to this program.

Drafting for Residential Construction, CPC

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.

12 credits

Program Contacts

- Program Coordinator: AJ Ullman, ullmannaj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 3,803

- Resident Tuition: $ 1,740
- Technology Fees: $ 168
- General Student Fees: $ 150
- Online Course Fee: $ 120
- Books / Course Materials: $ 375 (Books are not required, but recommended. Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Other Cost / Expenses: $ 1,250 (Computer/Internet)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

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

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

Program Core Courses

DRF 137	Architectural Plans	4
DRF 160	Computer-Aided Drafting and Design	4
DRF 205	Drafting: Structures	4

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Drafting, AAS degree (p. 33).
- A high school diploma or equivalent is recommended for all applicants to this program.

Entry-Level Trades Worker, Certificate of Completion

This certificate is designed for those individuals pursuing apprenticeship and working towards courses that contribute to the application process. This program allows students to gain maximum points towards the apprenticeship process for some trades. Students get an introduction to the various apprenticeship programs available and gain basic skills to be successful candidates. It also provides a pathway for students interested in pursuing advanced technology programs of study and provides employability skills for entering the workforce.

19-24 credits

Program Contacts

- Program Coordinator: Joy Crump, crumpj@lanecc.edu, 541-463-5496
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 4,783

- Resident Tuition: $ 3,335
- Technology Fees: $ 322
- General Student Fees: $ 271
- Online Course Fee : $ 120
- Books / Course Materials: $ 555 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 151 (Course Fees)

Costs provided are estimates only, and may differ depending on course type and/or modality.

Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Meet basic entry-level skills and earn points to apply for an apprenticeship program

PLO 2 - Gain exposure to the advanced technical classes offered at LCC to better identify a construction field of interest

PLO 3 - Earn industry-recognized credentials for employment in the construction fields, including NCCER, OSHA-10, and first aid/CPR certification

PLO 4 - Apply work-ready skills for the construction fields

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

General Education

HE 252	First Aid	3
	Human Relations - choose one course	3-4

List of accepted Human Relations Courses (p. 11)

Program Core Courses

APR 101	Trade Skills Fundamentals	4
COOP 206	Co-op Ed: Internship Seminar	2
CST 110	Blueprint Reading 1	3

Choose TWO courses from the following:

APR 105	Electrical Wiring for the Trades	4
APR 106	Plumbing Trade Introduction	2
CNC 101	CNC Concepts	3
CST 111	Construction Orientation and Environment	2
CST 211	Blueprint Reading 2	3
DRF 160	Computer-Aided Drafting and Design	4
GWE 180	Co-op Ed: General Work Experience	1-12
MFG 101	Safety and Basic Shop Practice	3
MTH 075	Applied Algebra for Technicians	4
MTH 085	Applied Geometry for Technicians	4
MTH 095	Intermediate Algebra	5
MTH 097	Geometry	4
MTH 112Z	Precalculus II: Trigonometry	4
WLD 121	Shielded Metal Arc Welding 1 (stick welding)	4
WLD 143	Wire Drive Welding 1	4

GWE 180: complete a minimum of 3 credits. 3 credits of another 280 Co-op course is also accepted.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- In order to apply for an apprenticeship program, students need algebra which can be completed either in high school or college. Some AAS apprenticeship programs requires higher math. Please consult with an academic advisor.

Licensing and Certification

- NCCER Embedded in the Trade Skills Fundamentals class. This certificate is an industry-standard credential. TSF class will administer, an online exam. NCCER will award the 10 credentials.
- OSHA 10 Embedded in the Trade Skills Fundamentals class. This certificate is an industry-standard credential. TSF class will administer the online curriculum and exam. OSHA will award the credential.
- First Aid/CPR/AED Is embedded in HE 252 (p. 148). Course will administer tests and award certificates.
- BOLI pre-apprenticeship certificate, Lane-PACT.

Fabrication/Welding Technology, AAS

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.

90 credits

Program Contacts

- Program Coordinator: Doug Ford, 541-463-5498; forddo@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 19,596

- Resident Tuition: $13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 0
- Books / Course Materials: $ 0
- Program Specific Fees: $ 3,586 (course fees)
- Other Cost / Expenses: $800 (tools)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

PLO 3 - Use appropriate library and information resources to research professional issues and support lifelong learning

PLO 4 - Use blueprint-reading skills, cost estimating, applied science of materials, and mathematics necessary to the profession

PLO 5 - Demonstrate and use industry safety standards

PLO 6 - Use mathematical formulas to calculate area, volume, and weight of metal objects

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 085	Applied Geometry for Technicians	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

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
WLD 113	Fabrication/Welding 2	12
WLD 114	Fabrication/Welding 3	12
WLD 215	Fabrication/Welding 4	12
WLD 216	Fabrication/Welding 5	12
WLD 217	Fabrication/Welding 6	12

Welding Lab / Shop Safety / Co-op - Complete one of the following:

WLD 142	Pipe Welding Lab: Carbon Steel	3
MFG 101	Safety and Basic Shop Practice	3
WLD 280	Co-op Ed: Welding	3-12

WLD 280: must complete a minimum of 3 credits

WLD: See Footnote 3.

Electives

Complete **5 credits** from the Advanced Technology Directed Elective List (p. 39)

Note: Additional WLD courses completed under electives must still be completed with a letter grade of C- or better. P/NP is not accepted. WLD 139 (p. 176) is only offered P/NP, and must be completed with a Pass grade. All other Electives may be completed with a grade of C- or better, or Pass.

Footnotes

1 – WR 115W (p. 177) or higher writing is also accepted

2 – MTH 097 (p. 154) or MTH 112Z (p. 154) are also accepted
It is recommended students complete the math requirement prior to taking WLD courses

3 – Cooperative Education (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

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for the Fabrication/Welding Technology, 1-yr Certificate (p. 38).
- 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 an Academic Advisor for help with transfer to OIT.

Fabrication/Welding Technology, 1-yr Certificate

The purpose of this program is to prepare graduates for employment as Welders/Fabricators.

46 credits

Program Contacts

- Program Coordinator: Doug Ford, 541-463-5498; forddo@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 10,043

- Resident Tuition: $ 6,670
- Technology Fees: $ 644
- General Student Fees: $ 450
- Online Course Fee: $ 0
- Books / Course Materials: $ 0
- Program Specific Fees: $ 1,939 (Course fees)
- Other Cost / Expenses: $ 340 (Tools)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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.

PLO 3 - Use appropriate library and information resources to research professional issues and support lifelong learning

PLO 4 - Use blueprint-reading skills, cost estimating, applied science of materials, and mathematics necessary to the profession

PLO 5 - Demonstrate and use industry safety standards

PLO 6 - Use mathematical formulas to calculate area, volume, and weight of metal objects

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 085	Applied Geometry for Technicians	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.
MTH: See Footnote 2.
List of accepted Human Relations Courses (p. 11)

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
WLD 113	Fabrication/Welding 2	12
WLD 114	Fabrication/Welding 3	12

Footnotes

1 – WR 115W (p. 177) or higher writing is also accepted

2 – MTH 097 (p. 154) or MTH 112Z (p. 154) are also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Fabrication/Welding Technology, AAS degree (p. 37).
- A high school diploma or equivalent is recommended for all applicants to this program.

Welding Processes, 1-yr Certificate

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.

47 credits

Program Contacts

- Program Coordinator: Doug Ford, 541-463-5498; forddo@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 10,788

- Resident Tuition: $ 6,815
- Technology Fees: $ 658
- General Student Fees: $ 600
- Online Course Fee: $ 0
- Books / Course Materials: $ 0
- Program Specific Fees: $ 2,415 (Course fees)
- Other Cost / Expenses: $ 300.00 (Tools)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 085	Applied Geometry for Technicians	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.
MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

Must be completed with a letter grade of C- or better. P/NP is not accepted.

WLD 111	Blueprint Reading for Welders	3
WLD 121	Shielded Metal Arc Welding 1 (stick welding)	4
WLD 122	Shielded Metal Arc Welding 2 (stick welding)	4
WLD 143	Wire Drive Welding 1	4
WLD 154	Wire Drive Welding 2	4
WLD 159	Wire Drive Welding 3	4
WLD 160	Wire Drive Welding 4	4
WLD 242	Gas Tungsten Arc Welding 1	3
WLD 256	Gas Tungsten Arc Welding 2	3
WLD 257	Gas Tungsten Arc Welding 3	3

Electives

Complete 1-4 credits from the Advanced Technology Directed Elective List (p. 39).

Note: WLD courses from the list must be completed with a letter grade of C- or better. P/NP is not accepted. WLD 139 is only offered P/NP. All other Electives may be completed with a grade of C- or better, or Pass.

Footnotes

1 – WR 115W (p. 177) or higher writing is also accepted

2 – MTH 097 (p. 154) or MTH 112Z (p. 154) are also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for Welding Processes: Shielded Metal Arc Welder, CPC (p. 39) and Welding Processes: Wire Drive Welder, CPC (p. 39).
- A high school diploma or equivalent is recommended for all applicants to this program.

Welding Processes: Shielded Metal Arc Welder, CPC

The purpose of this program is to prepare graduates for employment for entry-level positions in the metal fabrication industry.

15 credits

Program Contacts

- Program Coordinator: Doug Ford, 541-463-5498; forddo@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 3,346

- Resident Tuition: $ 2,175
- Technology Fees: $ 210
- General Student Fees: $ 150
- Online Course Fee: $ 0
- Books / Course Materials: $ 0
- Program Specific Fees: $ 811

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 must be completed with a letter grade of C- or better. P/NP is not accepted.

MTH 085	Applied Geometry for Technicians	4
WLD 121	Shielded Metal Arc Welding 1 (stick welding)	4
WLD 122	Shielded Metal Arc Welding 2 (stick welding)	4
WLD 141	Welder Qualification (Cert): SMAW	3

MTH: See Footnote 1

Footnotes

1 – MTH 097 (p. 154) or MTH 112Z (p. 154) are also accepted. WLD 111 (p. 175) can be used as a substitute for math. Math may be completed with a grade of C- or better, or Pass

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Welding Processes, 1-yr Certificate (p. 38).
- 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

The purpose of this program is to prepare graduates for employment for entry-level positions in the metal fabrication industry.

15 credits

Program Contacts

- Program Coordinator: Doug Ford, 541-463-5498; forddo@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 3,437

- Resident Tuition: $ 2,175
- Technology Fees: $ 210
- General Student Fees: $ 150
- Online Course Fee: $ 0
- Books / Course Materials: $ 0
- Program Specific Fees: $ 902 (Course fees)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 must be completed with a letter grade of C- or better. P/NP is not accepted.

MTH 085	Applied Geometry for Technicians	4
WLD 143	Wire Drive Welding 1	4
WLD 154	Wire Drive Welding 2	4
WLD 140	Welder Qualification (Cert): Wire Drive Processes	3

MTH: See Footnote 1.

Footnotes

1 – MTH 097 (p. 154) or MTH 112Z (p. 154) are also accepted. WLD 111 (p. 175) by be used as a substitute for math. Math may be completed with a grade of C- or better, or Pass

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Welding Processes, 1-yr Certificate (p. 38).
- 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.

Directed Elective List for Advanced Technology Programs (non-degree)

This list of approved electives is to be used with the following programs:

- CNC Machining and Inspection, AAS (p. 30)
- Construction Technology, AAS (p. 31)
- Fabrication/Welding, AAS (p. 37)
- (p. 37) (p. 38) (p. 37)Welding Processes, 1-yr Certificate (p. 38)

List Limitations

Courses in the list below may already appear as requirements Construction and Fabrication/Welding. In these instances, they cannot be taken twice nor counted in two areas. Please choose different electives. A list at the bottom shows what courses are found in the Directed Elective List but already required in one of those programs.

Approved List

APR 101	Trade Skills Fundamentals	4

APR 105	Electrical Wiring for the Trades	4
APR 106	Plumbing Trade Introduction	2
ART 117	Core Studio: 3D Design	4
ART 216	Digital Design Tools	3
BA 101Z	Introduction to Business	4
BT 165	Introduction to the Accounting Cycle	4
CH 150	Preparatory Chemistry	3
CIS 140W	Introduction to Operating Systems: Windows Clients	4
CIS 195	Web Authoring 1	4
CNC 101	CNC Concepts	3
COOP 206	Co-op Ed: Internship Seminar	2
CS 120	Concepts of Computing: Information Processing	4
CS 179	Introduction to Computer Networks	4
CST 110	Blueprint Reading 1	3
CST 111	Construction Orientation and Environment	2
CST 116	Construction Estimating	4
CST 119	Building Construction Surveying	3
CST 201	Sustainable Building Practices	3
CST 211	Blueprint Reading 2	3
DRF 160	Computer-Aided Drafting and Design	4
DRF 205	Drafting: Structures	4
DRF 207	Drafting: Strength of Materials	4
DRF 210	Commercial Buildings	4
DRF 220	Building Information Modeling	4
DS 154	Heavy Duty Braking Systems	1-12
DS 257	Diesel Electrical Systems	1-12
DS 259	Diesel Engines and Engine Overhaul	1-12
ET 129/APR 190	Electrical Theory	4
G 101	Earth's Dynamic Interior	4
G 102	Earth's Dynamic Surface	4
G 103	Evolving Earth	4
G 146	Rocks and Minerals	4
GIS 151	Digital Earth	4
GIS 245	GIS 1	4
HE 152	Drugs, Society and Behavior	3
HE 252	First Aid	3
MFG 101	Safety and Basic Shop Practice	3
MTH 060	Beginning Algebra	4
MTH 075	Applied Algebra for Technicians	4
MTH 085	Applied Geometry for Technicians	4
MTH 095	Intermediate Algebra	5
MUL 101	Introduction to Media Arts	3
MUL 212	Digital Imaging	4
NRG 121	Air Conditioning System Analysis	3
NRG 124	Energy Efficiency Methods	4
PH 101	Fundamentals of Physics	4
PH 102	Fundamentals of Physics	4
PH 103	Fundamentals of Physics	4
PH 201	General Physics	5
PH 202	General Physics	5
PH 203	General Physics	5
SPAN 101	Spanish, First-Year	5
SPAN 102	Spanish, First-Year	5
SPAN 103	Spanish, First-Year	5
SPAN 201	Spanish, Second-Year	4
SPAN 202	Spanish, Second-Year	4
SPAN 203	Spanish, Second-Year	4
WLD 111	Blueprint Reading for Welders	3
WLD 121	Shielded Metal Arc Welding 1 (stick welding)	4
WLD 122	Shielded Metal Arc Welding 2 (stick welding)	4
WLD 139	Welding Lab	1-3
WLD 140	Welder Qualification (Cert): Wire Drive Processes	3
WLD 141	Welder Qualification (Cert): SMAW	3
WLD 143	Wire Drive Welding 1	4
WLD 151	Fundamentals of Metallurgy	1-3
WLD 154	Wire Drive Welding 2	4
CST 298		1-12
DRF 298		1-12

Note: CST 298 and DRF 298 require instructor approval before enrolling.

Already required in Construction:

CST 110	Blueprint Reading 1	3
CST 111	Construction Orientation and Environment	2
CST 119	Building Construction Surveying	3

Already required in Fabrication/Welding:

MFG 101	Safety and Basic Shop Practice	3
WLD 111	Blueprint Reading for Welders	3
WLD 121	Shielded Metal Arc Welding 1 (stick welding)	4
WLD 122	Shielded Metal Arc Welding 2 (stick welding)	4
WLD 143	Wire Drive Welding 1	4

Apprenticeship

Associate of Applied Science degrees (AAS)

- Construction Trades, General Apprenticeship, AAS (p. 40)
- Electrician Apprenticeship Technologies, AAS (p. 43)
- Industrial Mechanics and Maintenance Technology Apprenticeship, AAS (p. 46)

1-year Certificates

- Construction Trades, General Apprenticeship, 1-yr Certificate (p. 42)
- Electrician Apprenticeship Technologies, 1-yr Certificate (p. 45)
- Industrial Mechanics and Maintenance Technology Apprenticeship, 1-yr Certificate (p. 47)

Career Pathway Certificate (CPC)

- Construction Trades, General Apprenticeship: Trade Worker Apprenticeship Technologies, CPC (p. 43)
- Electrician Apprenticeship Technologies: Trade Worker Apprenticeship Technologies, CPC (p. 46)
- Industrial Mechanics and Maintenance Technology Apprenticeship: Trade Worker Apprenticeship Technologies, CPC (p. 48)

Certificate of Completion

- Electrician Apprenticeship Technologies: Limited Electrician Apprenticeship Technologies, Certificate of Completion (p. 46)

Construction Trades, General Apprenticeship, AAS

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.

90 credits

Program Contacts

- Program Coordinator: Joy Crump, 541-463-5496; crumpj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 15,070

- Resident Tuition: $ 9,860
- Technology Fees: $ 952
- General Student Fees: $ 1,801
- Online Course Fee: $ 540
- Books / Course Materials: $ 1,500 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 417 (Additional Welding, Construction and Apprenticeship class fees)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 on the Oregon Bureau of Labor and Industries website.

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 060	Beginning Algebra	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

Must be completed with a letter grade of C or better. P/NP is not accepted. Choose one of the following trades and complete all the courses listed.

Carpenter (36 credits)

APR 115	Carpentry Skill Fundamentals	3
APR 116	Carpentry Framing Fundamentals	3
APR 117	Carpentry Framing and Introduction to Concrete	3
APR 118	Carpentry Framing and Finishing	3
APR 119	Carpentry Commercial Plans and Exterior Finish	3
APR 120	Carpentry Interior Finish	3
APR 201	Carpentry Basic Rigging and Practices	3
APR 202	Carpentry Concrete Practices	3
APR 203	Carpentry Forms and Tilt-up Panels	3
APR 204	Carpentry Advanced Layout and Building Systems	3
APR 205	Carpentry Advanced Planning and Management	3
APR 206	Carpentry Equipment and Site Layout	3

Glazier (25 credits)

APR 101	Trade Skills Fundamentals	4
CST 110	Blueprint Reading 1	3
CST 211	Blueprint Reading 2	3
MTH 075	Applied Algebra for Technicians	4
MTH 085	Applied Geometry for Technicians	4
NRG 111	Residential/Light Commercial Energy Analysis	3
WLD 121	Shielded Metal Arc Welding 1 (stick welding)	4

HVAC Technician/Installer (44 credits)

APR 101A	Trade Skills Fundamentals	4
APR 140	Electrical Systems Installation Methods	4
APR 141	Limited Voltage Electrical Circuits	4
APR 142	Devices, Testing Equipment and Code	4
APR 143	Limited Voltage Cabling	4
APR 144	Communications	4
APR 190/ET 129	Electrical Theory	1-4
APR 210	HVAC Systems 1	4
APR 211	HVAC Systems 2	4
APR 212	HVAC Systems 3	4
APR 213	HVAC Systems 4	4

APR 190: must complete 4 credits. Also see Footnote 3.

Plumber (40 credits)

APR 160	Plumbing Skill Fundamentals	4
APR 161	Plumbing Materials and Fixtures	4
APR 162	Plumbing Basic Waste Water Systems	2
APR 163	Plumbing Calculations and Print Reading	4
APR 164	Plumbing Basic Installation 1	4
APR 165	Plumbing Basic Installation 2	2
APR 260	Plumbing Water Supply Systems	4
APR 261	Plumbing Piping Sizing and Systems	4
APR 262	Plumbing Advanced Waste Systems	2
APR 263	Plumbing Code and Test Preparation	2-4

APR 263: must complete 10 credits

Sheet Metal Worker (45 credits)

APR 101A	Trade Skills Fundamentals	4
APR 170	Introduction to Sheet Metal Apprenticeship	4
APR 171	Sheet Metal Basic Layout	4
APR 173	Sheet Metal Formulas	4
APR 270	Architectural Sheet Metal	4
APR 271	Sheet Metal Building Codes and Installation	4
APR 272	Sheet Metal Duct Design	4
APR 273	General Sheet Metal Fabrication	4
APR 274	Sheet Metal Shop Fabrication	4
APR 275	Sheet Metal Project Supervision	4
CST 110	Blueprint Reading 1	3
APR 186	Wire Drive Welding 1	1-4
	Or	
WLD 143	Wire Drive Welding 1	4

APR 186: must complete 2 credits

Electives

Must be completed with a letter grade of C- or better or Pass.
Complete additional courses to meet the minimum 90 credits required for the program. Choose from the following:

APR 101	Trade Skills Fundamentals	4
APR 106	Plumbing Trade Introduction	2
BA 101Z	Introduction to Business	4
CS 120	Concepts of Computing: Information Processing	4
CST 110	Blueprint Reading 1	3
CST 111	Construction Orientation and Environment	2
CST 116	Construction Estimating	4
CST 119	Building Construction Surveying	3
CST 211	Blueprint Reading 2	3
HE 152	Drugs, Society and Behavior	3
HE 252	First Aid	3
MTH 085	Applied Geometry for Technicians	4
MTH 095	Intermediate Algebra	5
NRG 121	Air Conditioning System Analysis	3
NRG 124	Energy Efficiency Methods	4
WLD 121	Shielded Metal Arc Welding 1 (stick welding)	4
WLD 122	Shielded Metal Arc Welding 2 (stick welding)	4
WLD 139	Welding Lab	1-3
WLD 143	Wire Drive Welding 1	4
	Any course(s), 100-level or higher	

Note: Any course(s), 100-level or higher, selected from Arts and Letters List (p. 17), Social Science List (p. 20), or Science/Math/Computer Science List (p. 19).

Journey Level Card from Oregon BOLI

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 may be able to substitute coursework for the journeyman card (up to 22 credits). Contact the program coordinator for assistance.

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

2 – Any math (MTH/STAT) above MTH 060 (p. 153) is also accepted

3 – Accepted alternative for APR 190 is APR 130 - Electrical Principles (5 credits)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit

the Programs of Study (p. 7) page.

- This is the parent program for the Construction Trades, General Apprenticeship, 1-yr Certificate (p. 42) and the Construction Trades, General Apprenticeship: Trade Worker Apprenticeship Technologies, CPC (p. 43).
- 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 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.

Construction Trades, General Apprenticeship, 1-yr Certificate

The purpose of this program is to provide a structured system of training in construction trades or occupations, leading to certification status.

Credits vary depending on trade area

Program Contacts

- Program Coordinator: Joy Crump, 541-463-5496; crumpj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 11,620

- Resident Tuition: $ 7,395
- Technology Fees: $ 714
- General Student Fees: $ 1,801
- Online Course Fee: $ 510
- Books / Course Materials: $1,200 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 (BOLI) and accepted by a Joint Apprenticeship Training Committee. Information is available on the Oregon Bureau of Labor and Industries website.

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 060	Beginning Algebra	4
	Human Relations - choose one course	3-4

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

Must be completed with a letter grade of C or better. P/NP is not accepted.

Choose one of the following trades and complete all the courses listed.

Carpenter (36 credits)

APR 115	Carpentry Skill Fundamentals	3
APR 116	Carpentry Framing Fundamentals	3
APR 117	Carpentry Framing and Introduction to Concrete	3
APR 118	Carpentry Framing and Finishing	3
APR 119	Carpentry Commercial Plans and Exterior Finish	3
APR 120	Carpentry Interior Finish	3
APR 201	Carpentry Basic Rigging and Practices	3
APR 202	Carpentry Concrete Practices	3
APR 203	Carpentry Forms and Tilt-up Panels	3
APR 204	Carpentry Advanced Layout and Building Systems	3
APR 205	Carpentry Advanced Planning and Management	3
APR 206	Carpentry Equipment and Site Layout	3

HVAC (44 credits)

APR 101A	Trade Skills Fundamentals	4
APR 140	Electrical Systems Installation Methods	4
APR 141	Limited Voltage Electrical Circuits	4
APR 142	Devices, Testing Equipment and Code	4
APR 143	Limited Voltage Cabling	4
APR 144	Communications	4
APR 190/ET 129	Electrical Theory	1-4
APR 210	HVAC Systems 1	4
APR 211	HVAC Systems 2	4
APR 212	HVAC Systems 3	4
APR 213	HVAC Systems 4	4

APR 190: must complete 4 credits. Also see Footnote 3.

Plumber (40 credits)

APR 160	Plumbing Skill Fundamentals	4
APR 161	Plumbing Materials and Fixtures	4
APR 162	Plumbing Basic Waste Water Systems	2
APR 163	Plumbing Calculations and Print Reading	4
APR 164	Plumbing Basic Installation 1	4
APR 165	Plumbing Basic Installation 2	2
APR 260	Plumbing Water Supply Systems	4
APR 261	Plumbing Piping Sizing and Systems	4
APR 262	Plumbing Advanced Waste Systems	2
APR 263	Plumbing Code and Test Preparation	2-4

APR 263: must complete 10 credits

Sheet Metal Worker (45 credits)

APR 101A	Trade Skills Fundamentals	4
APR 170	Introduction to Sheet Metal Apprenticeship	4
APR 171	Sheet Metal Basic Layout	4
APR 173	Sheet Metal Formulas	4
APR 270	Architectural Sheet Metal	4
APR 271	Sheet Metal Building Codes and Installation	4
APR 272	Sheet Metal Duct Design	4
APR 273	General Sheet Metal Fabrication	4
APR 274	Sheet Metal Shop Fabrication	4
APR 275	Sheet Metal Project Supervision	4
CST 110	Blueprint Reading 1	3
APR 186	Wire Drive Welding 1	1-4
	Or	
WLD 143	Wire Drive Welding 1	4

APR 186: must complete 2 credits

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

2 – Any math (MTH/STAT) above MTH 060 (p. 153) is also accepted

3 – Accepted alternative for APR 190 is APR 130 - Electrical Principles (5 credits)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is contained in the Construction Trades, General Apprenticeship, AAS (p. 40).

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.

Construction Trades, General Apprenticeship: Trade Worker Apprenticeship Technologies, CPC

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.

Credits vary depending on trade area

Program Contacts

- Program Coordinator: Joy Crump, 541-463-5496; crumpj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 5,040

- Resident Tuition: $ 2,900
- Technology Fees: $ 280
- General Student Fees: $ 900
- Online Course Fee $ 200
- Books / Course Materials: $ 700 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 and 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 (BOLI) and accepted by a Joint Apprenticeship Training Committee. Information is available on the Oregon Bureau of Labor and Industries website.

Program Requirements

Program Core Courses

Must be completed with a letter grade of C or better. P/NP is not accepted.

Choose one of the following trades and complete all courses listed.

Carpenters (18 credits)

APR 115	Carpentry Skill Fundamentals	3
APR 116	Carpentry Framing Fundamentals	3
APR 117	Carpentry Framing and Introduction to Concrete	3
APR 118	Carpentry Framing and Finishing	3
APR 119	Carpentry Commercial Plans and Exterior Finish	3
APR 120	Carpentry Interior Finish	3

Glazier (25 credits)

APR 101	Trade Skills Fundamentals	4
CST 110	Blueprint Reading 1	3
CST 211	Blueprint Reading 2	3
MTH 075	Applied Algebra for Technicians	4
MTH 085	Applied Geometry for Technicians	4
NRG 111	Residential/Light Commercial Energy Analysis	3
WLD 121	Shielded Metal Arc Welding 1 (stick welding)	4

HVAC Technician/Installer (12 credits)

APR 101A	Trade Skills Fundamentals	4
APR 140	Electrical Systems Installation Methods	4
APR 190/ET 129	Electrical Theory	1-4

APR 190: must complete 4 credits. Also see Footnote 3.

Plumbers (20 credits)

APR 160	Plumbing Skill Fundamentals	4
APR 161	Plumbing Materials and Fixtures	4
APR 162	Plumbing Basic Waste Water Systems	2
APR 163	Plumbing Calculations and Print Reading	4
APR 164	Plumbing Basic Installation 1	4
APR 165	Plumbing Basic Installation 2	2

Sheet Metal Workers (12 credits)

APR 101A	Trade Skills Fundamentals	4
APR 170	Introduction to Sheet Metal Apprenticeship	4
APR 171	Sheet Metal Basic Layout	4

Footnotes

1 – Accepted alternative for APR 190 is APR 130 - Electrical Principles (5 credits)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is contained in the Construction Trades, General Apprenticeship, AAS (p. 40).

Electrician Apprenticeship Technologies, AAS

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.

90 credits

Program Contacts

- Program Coordinator: Joy Crump, 541-463-5496; crumpj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 14,659

- Resident Tuition: $ 9,860
- Technology Fees: $ 952
- General Student Fees: $ 1,351
- Online Course Fee: $ 550
- Books / Course Materials: $ 1,800 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 146(Apprenticeship Dept fees, Additional class-specific fees, Fabrication/Welding Program fee)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 a minimum of a C grade for one year of high school algebra (or equivalent).

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 060	Beginning Algebra	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

Must be completed with a letter grade of C or better. P/NP is not accepted.

Choose one of the following trades and complete all the courses listed.

Inside Wire Electrician (47 credits)

APR 130	Electrical Principles	5
APR 131	Electrical Principles/Residential Wiring	5
APR 132	Electrical Residential Wiring Lab	3
APR 133	Electrical Generators, Transformers, and Motors 1	5
APR 134	Electrical Generators, Transformers and Motors 2	5
APR 135	Electrical, Generators, Transformers, and Motors Lab	3
APR 220	Electrical Apprenticeship Code and Exam Preparation	2-3
APR 225	Electrical Motor Controls	5
APR 226	Electrical Grounding/Bonding and Blueprint Reading	5
APR 227	Electrical System Troubleshooting	3

APR 220: must complete 8 credits

Limited Energy Technician License A (38 credits)

APR 101A	Trade Skills Fundamentals	4
APR 140	Electrical Systems Installation Methods	4
APR 141	Limited Voltage Electrical Circuits	4
APR 142	Devices, Testing Equipment and Code	4
APR 143	Limited Voltage Cabling	4
APR 144	Communications	4
APR 220	Electrical Apprenticeship Code and Exam Preparation	2-3
APR 240	Audio and Intrusion Systems	4
APR 241	Fire Alarm Systems and Nurse Call	4
APR 242	Limited Voltage System Integration	4

APR 220: must complete 2 credits

Limited Energy Technician License B (26 credits)

APR 101A	Trade Skills Fundamentals	4
APR 140	Electrical Systems Installation Methods	4
APR 141	Limited Voltage Electrical Circuits	4
APR 142	Devices, Testing Equipment and Code	4
APR 143	Limited Voltage Cabling	4
APR 144	Communications	4
APR 220	Electrical Apprenticeship Code and Exam Preparation	2-3

APR 220: must complete 2 credits

Limited Maintenance Electrician (18 credits)

APR 190/ET 129	Electrical Theory	1-4
APR 192	Grounding and Bonding	3
APR 194	Industrial Wiring	3
APR 220	Electrical Apprenticeship Code and Exam Preparation	2-3
APR 285	Motors	3
APR 286	Motors 2	3

APR 190: must complete 4 credits. Also see Footnote 3.

APR 220: must complete 2 credits

Manufacturing Plant Electrician (36 credits)

APR 190/ET 129	Electrical Theory	1-4
APR 192	Grounding and Bonding	3
APR 194	Industrial Wiring	3
APR 220	Electrical Apprenticeship Code and Exam Preparation	2-3
APR 285	Motors	3
APR 286	Motors 2	3
APR 287	Motors 3	3
APR 290	Programmable Controllers 1	3
APR 291	Programmable Controllers 2	3
APR 292	Programmable Controllers 3	3

APR 190: must complete 4 credits. Also see Footnote 3.

APR 220: must complete 8 credits

Electives

Must be completed with a letter grade of C- or better or Pass.

Complete additional courses to meet the minimum 90 total credits required for the program. Choose from the following:

APR 101	Trade Skills Fundamentals	4
APR 105	Electrical Wiring for the Trades	4
CS 120	Concepts of Computing: Information Processing	4
CST 110	Blueprint Reading 1	3
CST 111	Construction Orientation and Environment	2
CST 211	Blueprint Reading 2	3
DRF 160	Computer-Aided Drafting and Design	4
HE 152	Drugs, Society and Behavior	3
HE 252	First Aid	3
MTH 085	Applied Geometry for Technicians	4
MTH 111Z	Precalculus I: Functions	4
MTH 112Z	Precalculus II: Trigonometry	4
WLD 121	Shielded Metal Arc Welding 1 (stick welding)	4
	Any course(s), 100-level or higher	

Note: Any course(s), 100-level or higher, selected from Arts and Letters List (p. 17), Social Science List (p. 20), or Science/Math/Computer Science List (p. 19).

Journey Level Card from Oregon BOLI

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 may be able to substitute coursework for the journeyman card (up to 22 credits). Contact the program coordinator for assistance.

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

2 – Any math (MTH/STAT) above MTH 060 (p. 153) is also accepted

3 – Accepted alternative for APR 190 is APR 130 - Electrical Principles (5 credits)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for the Electrician Apprenticeship Technologies: Trade Worker Apprenticeship Technologies, CPC (p. 46), Electrician Apprenticeship Technologies, 1-yr

Certificate (p. 45), and Limited Electrician Apprenticeship Technologies, Certificate of Completion (p. 46).
- 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.

Electrician Apprenticeship Technologies, 1-yr Certificate

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.

Credits vary depending on trade area

Program Contacts
- Program Coordinator: Joy Crump, 541-463-5496; crumpj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 9,896
- Resident Tuition: $ 7,105
- Technology Fees: $ 686
- General Student Fees: $ 450
- Online Course Fee: $ 490
- Books / Course Materials: $ 1,165 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 060	Beginning Algebra	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

Must be completed with a letter grade of C or better. P/NP is not accepted.

Choose one of the following trades and complete all the courses listed.

Limited Energy Technician License A (38 credits)

APR 101A	Trade Skills Fundamentals	4
APR 140	Electrical Systems Installation Methods	4
APR 141	Limited Voltage Electrical Circuits	4
APR 142	Devices, Testing Equipment and Code	4
APR 143	Limited Voltage Cabling	4
APR 144	Communications	4
APR 220	Electrical Apprenticeship Code and Exam Preparation	2-3
APR 240	Audio and Intrusion Systems	4
APR 241	Fire Alarm Systems and Nurse Call	4
APR 242	Limited Voltage System Integration	4

APR 220: must complete 2 credits

Manufacturing Plant Electrician (36 credits)

APR 190/ET 129	Electrical Theory	1-4
APR 192	Grounding and Bonding	3
APR 194	Industrial Wiring	3
APR 220	Electrical Apprenticeship Code and Exam Preparation	2-3
APR 285	Motors	3
APR 286	Motors 2	3
APR 287	Motors 3	3
APR 290	Programmable Controllers 1	3
APR 291	Programmable Controllers 2	3
APR 292	Programmable Controllers 3	3

APR 190: must complete 4 credits. Also see Footnote 3.

APR 220: must complete 8 credits

Inside Wire Electrician (47 credits)

APR 130	Electrical Principles	5
APR 131	Electrical Principles/Residential Wiring	5
APR 132	Electrical Residential Wiring Lab	3
APR 133	Electrical Generators, Transformers, and Motors 1	5
APR 134	Electrical Generators, Transformers and Motors 2	5
APR 135	Electrical, Generators, Transformers, and Motors Lab	3
APR 220	Electrical Apprenticeship Code and Exam Preparation	2-3
APR 225	Electrical Motor Controls	5
APR 226	Electrical Grounding/Bonding and Blueprint Reading	5
APR 227	Electrical System Troubleshooting	3

APR 220: must complete 8 credits

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

2 – Any math (MTH/STAT) above MTH 060 (p. 153) is also accepted

3 – Accepted alternative for APR 190 is APR 130 - Electrical Principles (5 credits)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is embedded in the Electrician Apprenticeship Technologies, AAS (p. 43).

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.

Electrician Apprenticeship Technologies: Limited Electrician Apprenticeship Technologies, Certificate of Completion

Students may earn a Certificate of Completion in Limited Electrician Apprenticeship Technologies by successfully completing core related training credits.

Credits vary depending on trade area

Program Contacts

- Program Coordinator: Joy Crump, 541-463-5496; crumpj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 5,209

- Resident Tuition: $ 3,770
- Technology Fees: $ 364
- General Student Fees: $ 35
- Online Course Fee: $ 260
- Books / Course Materials: $ 780 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

Must be completed with a letter grade of C or better. P/NP is not accepted.

Choose one of the following trades and complete all the courses listed.

Limited Energy Technician License B (26 credits)

APR 101A	Trade Skills Fundamentals	4
APR 140	Electrical Systems Installation Methods	4
APR 141	Limited Voltage Electrical Circuits	4
APR 142	Devices, Testing Equipment and Code	4
APR 143	Limited Voltage Cabling	4
APR 144	Communications	4
APR 220	Electrical Apprenticeship Code and Exam Preparation	2-3

Limited Maintenance Electrician (18 credits)

APR 190/ET 129	Electrical Theory	1-4
APR 192	Grounding and Bonding	3
APR 194	Industrial Wiring	3
APR 220	Electrical Apprenticeship Code and Exam Preparation	2-3
APR 285	Motors	3
APR 286	Motors 2	3

APR 190: must complete 4 credits. Also see Footnote 1.

APR 220: complete a minimum of 2 credits (in either option)

Footnotes

1 – Accepted alternative for APR 190 is APR 130 - Electrical Principles (5 credits)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Electrician Apprenticeship Technologies, AAS (p. 43).

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.

Electrician Apprenticeship Technologies: Trade Worker Apprenticeship Technologies, CPC

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.

Credits vary depending on trade area

Program Contacts

- Program Coordinator: Joy Crump, 541-463-5496; crumpj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 4,866

- Resident Tuition: $ 3,480
- Technology Fees: $ 336
- General Student Fees: $ 30
- Online Course Fee: $ 240
- Books / Course Materials: $ 780 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 (BOLI) and accepted by a Joint Apprenticeship Training Committee. Information is available on the Oregon Bureau of Labor and Industries website.

Footnotes

1 – Accepted alternative for APR 190 is APR 130 - Electrical Principles (5 credits)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Electrician Apprenticeship Technologies, AAS (p. 43).

Industrial Mechanics and Maintenance Technology Apprenticeship, AAS

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.

90 credits

Program Contacts

- Program Coordinator: Joy Crump, 541-463-5496; crumpj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 15,600

- Resident Tuition: $ 9,860
- Technology Fees: $ 952
- General Student Fees: $ 1,201
- Online Course Fee: $ 110
- Books / Course Materials: $ 2,400 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 1,077 (Fabrication-Welding Program fee, Electronics Class fee)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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.

Program Requirements

General Education

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

WR 115	Introduction to College Composition	4
MTH 085	Applied Geometry for Technicians	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

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
APR 151	Millwright Machine Theory and Trade Calculations	5
APR 152	Millwright: Power Transmissions and Boilers-Steam	5
APR 185	Shielded Metal Arc Welding 1	1-4
APR 186	Wire Drive Welding 1	1-4
APR 250	Millwright: Industrial Print Reading, Schematics, and Estimating	5
APR 251	Millwright: Pneumatics and Lubrications	5
APR 252	Hydraulics for Millwrights	5
APR 253	Millwright Piping Systems	5

APR 185 & APR 186 (p. 115): must complete 2 credits each

Electives

Must be completed with a letter grade of C- or better or Pass.

Select courses (17-19 credits) from the list below to reach 90 total credits for the program.

APR 101	Trade Skills Fundamentals	4
APR 190/ET 129	Electrical Theory	1-4
CNC 101	CNC Concepts	3
CS 120	Concepts of Computing: Information Processing	4
DRF 160	Computer-Aided Drafting and Design	4
HE 252	First Aid	3
MTH 112Z	Precalculus II: Trigonometry	4
WLD 122	Shielded Metal Arc Welding 2 (stick welding)	4
WLD 139	Welding Lab	1-3
WLD 140	Welder Qualification (Cert): Wire Drive Processes	3
WLD 141	Welder Qualification (Cert): SMAW	3
WLD 151	Fundamentals of Metallurgy	1-3
WLD 154	Wire Drive Welding 2	4
	Any course(s), 100-level or higher	

APR 190: must complete 4 credits. Also see Footnote 2.

Note: Any course(s), 100-level or higher, selected from Arts and Letters List (p. 17), Social Science List (p. 20), or Science/Math/Computer Science List (p. 19).

Journey Level Card from Oregon BOLI

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 may be able to substitute coursework for the journeyman card (up to 22 credits). Contact the program coordinator for assistance.

Footnotes

1 – Any writing above WR 115 is also accepted

2 – Accepted alternative for APR 190 is APR 130 - Electrical Principles (5 credits)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for the Industrial Mechanics and Maintenance Technology Apprenticeship, 1-yr Certificate (p. 47) and Industrial Mechanics and Maintenance Technology Apprenticeship: Trade Worker Apprenticeship Technologies, CPC (p. 48).
- 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.

Industrial Mechanics and Maintenance Technology Apprenticeship, 1-yr Certificate

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.

50 credits

Program Contacts

- Program Coordinator: Joy Crump, 541-463-5496; crumpj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 11,669

- Resident Tuition: $7,250
- Technology Fees: $ 700
- General Student Fees: $ 1,201
- Online Course Fee: $ 110
- Books / Course Materials: $ 2,100 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 308 (Fabrication-Welding Program fee)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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.

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 085	Applied Geometry for Technicians	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

Must be completed with a letter grade of C or better. P/NP not accepted.

Millwright (39 credits)

APR 150	The Millwright and Shop Safety	5
APR 151	Millwright Machine Theory and Trade Calculations	5
APR 152	Millwright: Power Transmissions and Boilers-Steam	5
APR 185	Shielded Metal Arc Welding 1	1-4
APR 186	Wire Drive Welding 1	1-4
APR 250	Millwright: Industrial Print Reading, Schematics, and Estimating	5
APR 251	Millwright: Pneumatics and Lubrications	5
APR 252	Hydraulics for Millwrights	5
APR 253	Millwright Piping Systems	5

APR 185: must complete 2 credits

APR 186: must complete 2 credits

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Industrial Mechanics and Maintenance Technology Apprenticeship, AAS (p. 46).

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.

Industrial Mechanics and Maintenance Technology Apprenticeship: Trade Worker Apprenticeship Technologies, CPC

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.

15 credits

Program Contacts

- Program Coordinator: Joy Crump, 541-463-5496; crumpj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 3,435

- Resident Tuition: $ 2,175
- Technology Fees: $ 210
- General Student Fees: $ 450
- Books / Course Materials: $ 600 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 (BOLI) and accepted by a Joint Apprenticeship Training Committee. Information is available on the Oregon Bureau of Labor and Industries website.

Program Requirements

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
APR 151	Millwright Machine Theory and Trade Calculations	5
APR 152	Millwright: Power Transmissions and Boilers-Steam	5

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Industrial Mechanics and Maintenance Technology Apprenticeship, AAS (p. 46).

Aviation Academy

Associate of Applied Science degrees (AAS)

- Aviation Maintenance Technician, AAS (p. 49)
- Aviation Professional Pilot, AAS (p. 49)
- Aviation Unmanned Aircraft Systems, AAS (p. 52)

Career Pathway Certificates (CPC)

- Aviation Commercial Pilot, CPC (p. 51)
- Aviation Instrument Rating, CPC (p. 51)

- Aviation Private Pilot, CPC (p. 52)
- Aviation Unmanned Aircraft Systems: Aerial Photography, CPC (p. 53)
- Aviation Unmanned Aircraft Systems: Autopilot, CPC (p. 54)
- Aviation Unmanned Aircraft Systems: Commercial UAS Operator, CPC (p. 54)
- Aviation Unmanned Aircraft Systems: GIS, CPC (p. 55)
- Aviation Unmanned Aircraft Systems: Maintenance, CPC (p. 55)

Aviation Maintenance Technician, AAS

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.

96 credits

Program Contacts

- Program Coordinator: Jeffrey Hogue, Program Coordinator, hoguejd@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 22,544

- Resident Tuition: $ 13,920
- Technology Fees: $ 1,344
- General Student Fees: $ 900
- Books / Course Materials: $ 300
- Program Specific Fees: $ 5,550 (Course Fees and Exams/Licensure)
- Other Cost / Expenses: $ 500 (Tools and Supplies)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

Admission Information

There will be a separate supplemental program admission form submitted by the student to the Program Director, and approval is required to be enrolled in the Associates of Applied Science (AAS) in Aviation Maintenance Technician.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

General Education

WR 115	Introduction to College Composition	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

Note - completing all AV courses fulfills the Math degree requirement

Program Core Courses

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

AV 283: See Footnote 2.

Footnotes

1 – WR 115W (p. 177) or higher writing is also accepted

2 – 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 (p. 122) may be authorized in lieu of AV 283 (p. 122). Co-op may be taken summer term.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- Required for admission: Placement into WR 097 (p. 154) or WR 115 (p. 177), 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 the application with the FAA liaison.
- General Education courses (except mathematics) are not required for two-year FAA Airframe and Powerplant airman's certificate exams.
- Writing requirements 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.

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

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)

91 credits

Program Contacts

- Program Director: Joshua M. Rickert, Director Lane Aviation Academy, rickertj@lanecc.edu; 541-463-4319
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 103,170 (Track A)

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

- Resident Tuition: $ 13,195
- Technology Fees: $ 1,274
- General Student Fees: $ 1,143
- Online Course Fee: $ 450
- Books / Course Materials: $ 1,800 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 85,008 (Application Fee, Course Fees and Exams/Licensure)
- Other Cost / Expenses: $ 300 (Ipad)

Estimated Cost: $ 105,615 (Track B)

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

- Resident Tuition: $ 13,195
- Technology Fees: $ 1,274
- General Student Fees: $ 1,143
- Online Course Fee: $ 450
- Books / Course Materials: $ 1,800.00 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

- Program Specific Fees: $ 87,453 (Application Fee, Course Fees and Exams/Licensure)
- Other Cost / Expenses: $ 300 (Ipad)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

PLO 6 - Explore and critically appraise various aviation careers and businesses

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 is a limited-enrollment program. Please visit the Aviation Academy website for more information and to apply. There is a $75.00 application fee.

The Aviation Professional Pilot Information Bulletin (APPIB) provides details of current flight training costs (hourly aircraft rental and instructional rates, etc.). The APPIB is provided to all students upon application via Lane's Etrieve Central document system and/or upon contacting Lane's Aviation Academy.

To align training with the weather, the Aviation Professional Pilot program only accepts new students summer term. On a limited basis, some students may begin flying spring term, but no other courses will be offered until summer. Students with previous training should contact the academy, as other options may be available.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

General Education

WR 115	Introduction to College Composition	4
MTH 060	Beginning Algebra	4
	Or	
MTH 098	Math Literacy	5

WR: See Footnote 1.

MTH: See Footnote 2.

Program Core Courses

AP 110A	Flight Lab - Pre-Solo	1
	Or	
AP 110B	Flight Lab - Pre-Solo	1
AP 112	Private Pilot Ground School	5
AP 113	Airman Certification Standards and Maneuvers	1
AP 115	Introduction to Aviation and Careers	1
AP 116	Aviation History	4
AP 120A	Flight Lab - Private Pilot Certificate	1
	Or	
AP 120B	Flight Lab - Private Pilot Certificate	1
AP 121	Simulator Lab - Private	1
AP 125	Aircraft Systems & Structures 1	2
AP 126	Aviation Weather Services	2
AP 127	Aerodynamics	3
AP 130	Flight lab - Attitude Control	1
AP 132	Instrument Ground School	5
AP 135	Advanced Avionics	1
AP 140	Flight Lab - Instrument Rating	1
AP 141	Simulator Lab - Instrument	1
AP 210	Flight Lab - Cross-Country	1
AP 212	Commercial Pilot Ground School	5
AP 215	Aircraft Systems & Structures 2	2
AP 220	Flight Lab - Maneuvers	1
AP 221	Simulator Lab - Commercial	1
AP 222	CFI/CFII Ground School	3
AP 225	FOI & Human Factors	3
AP 230	Flight Lab - Commercial Pilot Certificate	1
AP 232	Multi-Engine Ground School	2
AP 235	Accident Investigations	3
AP 240	Flight Lab - Multi-Engine Rating & CFI/CFII Certificate	1
BA 101Z	Introduction to Business	4
BA 254	General Aviation Management	3
GS 109	Meteorology	5
UAS 123	UAS Part 107 License Lab	1

AP 110A (p. 111)/AP 110B (p. 111): See Footnote 3.

AP 120A (p. 111)/AP 120B (p. 111): See Footnote 3.

AP 225 (p. 112): See Footnote 4.

Electives

Complete 17 credits from the following list:

AP 280	Co-op Ed: Pro Pilot	3-12
BA 206	Management Fundamentals	4
BA 211Z	Principles of Financial Accounting	4
BA 213Z	Principles of Managerial Accounting	4
BA 214	Business Communications	4
BA 226	Business Law	4
BA 260	Small Business Management	4
BA 278	Leadership and Team Dynamics	4
BA 281	Personal Finance	4
BT 123	MS EXCEL for Business	4
BT 181	Customer Service	4
BT 223	MS EXCEL for Business-Expert	4
BT 291	Operations Management	4
CIS 101	Computer Fundamentals	4
CIS 125D	Software Tools 1: Databases	4
COMM 100Z	Introduction to Communication	4
COMM 105	Listening and Critical Thinking	4
COMM 111Z	Public Speaking	4
COMM 115	Introduction to Intercultural Communication	4
COMM 218Z	Interpersonal Communication	4
COMM 219	Small Group Communication	4
COMM 260	Introduction to Conflict Management	4
PH 101	Fundamentals of Physics	4
PH 102	Fundamentals of Physics	4
PH 103	Fundamentals of Physics	4
ECON 200	Introduction to Economics	3
ECON 201	Introduction to Microeconomics	4
ECON 202	Introduction to Macroeconomics	4
ENSC 182	Atmospheric Environment and Climate Change	4
FIRE 100	Introduction to Wildland Fire	4
FIRE 111	Wildland Fire Communication	1
PSY 201Z	Introduction to Psychology I	4

Footnotes

1 – WR 115W (p. 177) or higher writing is also accepted

2 – Any Math (MTH/STAT) course higher than MTH 060 (p. 153) is also accepted

3 – Track A (AP 110A (p. 111)/AP 120A (p. 111)) courses designed for students under 6'2" AND 180 lbs

Track B (AP 110B (p. 111)/AP 120B (p. 111)) courses designed for all other students

4 – AP 225 (p. 112) satisfies the Human Relations requirement

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for the Aviation Commercial Pilot, CPC (p. 51), Aviation Instrument Rating, CPC (p. 51), and Aviation Private Pilot, CPC (p. 52).

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. Test are administered by the FAA or FAA Designated Pilot Examiners at the cost of the student.

Aviation Commercial Pilot, CPC

This program provides students with an FAA Commercial Pilot Certificate.

Length: 14 credits

Program Contacts

- Program Director: Joshua M. Rickert, Director Lane Aviation Academy, rickertj@lanecc.edu; 541-463-4319
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated: $ 40,065

- Resident Tuition: $ 2,030
- Technology Fees: $ 196
- General Student Fees: $ 414
- Online Course Fee: $ 100
- Books / Course Materials: $ 200 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 37,125 (Application Fee, Course Fees and Exams/Licensure)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 is a limited-enrollment program. Please visit the Aviation Academy website for more information and to apply. There is a $75.00 application fee.

To align training with weather, the Aviation Professional Pilot program only accepts new students summer term. On a limited basis, some students may begin flying spring term, but no other courses will be offered until summer. Students with previous training should contact the academy, as other options may be available.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

AP 210	Flight Lab - Cross-Country	1
AP 212	Commercial Pilot Ground School	5
AP 215	Aircraft Systems & Structures 2	2
AP 220	Flight Lab - Maneuvers	1
AP 221	Simulator Lab - Commercial	1
AP 230	Flight Lab - Commercial Pilot Certificate	1
AP 235	Accident Investigations	3

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program represents the minimum core elements for an FAA Commercial Pilot Certificate.
- This program is fully contained in the Aviation Professional Pilot, AAS (p. 49). 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 (p. 112), AP 220 (p. 112), AP 230 (p. 112), and AP 212 (p. 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 FAA Designated Pilot Examiner (DPE).

Aviation Instrument Rating, CPC

This program provides students with an FAA Instrument Rating.

14 credits

Program Contacts

- Program Director: Joshua M. Rickert, Director Lane Aviation Academy, rickertj@lanecc.edu; 541-463-4319
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 22,866

- Resident Tuition: $ 2,030
- Technology Fees: $ 196
- General Student Fees: $ 308
- Online Course Fee: $ 50
- Books / Course Materials: $ 200 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 20,082 (Application Fee, Course Fees and Exams/Licensure)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 is a limited-enrollment program. Please visit the Aviation Academy website for more information and to apply. There is a $75.00 application fee.

To align training with weather, the Aviation Professional Pilot program only accepts new students summer term. On a limited basis, some students may begin flying spring term, but no other courses will be offered until summer. Students with previous training should contact the academy, as other options may be available.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

AP 130	Flight lab - Attitude Control	1
AP 132	Instrument Ground School	5
AP 135	Advanced Avionics	1
AP 140	Flight Lab - Instrument Rating	1
AP 141	Simulator Lab - Instrument	1
GS 109	Meteorology	5

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.

- 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 (p. 49). 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 (p. 111), AP 140 (p. 111), and AP 132 (p. 111) are required to take the FAA practical test, but full course completion is recommended. FAA Practical Test is administered by the FAA or an FAA Designated Pilot Examiner (DPE).

Aviation Private Pilot, CPC

This program provides students with an FAA Private Pilot Certificate.

17 credits

Program Contacts

- Program Director: Joshua M. Rickert, Director Lane Aviation Academy, rickertj@lanecc.edu; 541-463-4319
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 21,375 (Track A)

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

- Resident Tuition: $ 2,465
- Technology Fees: $ 238
- General Student Fees: $ 287
- Online Course Fee: $ 140
- Books / Course Materials: $ 1,000 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 16,946 (Application Fee, Course Fees, and Exams/Licensure)
- Other Cost / Expenses: $ 300.00 (Computer or Ipad + internet)

Estimated Cost: $ 23,820 (Track B)

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

- Resident Tuition: $ 2,465
- Technology Fees: $ 286
- General Student Fees: $ 257
- Online Course Fee: $ 140
- Books / Course Materials: $ 1,000 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 19,391 (Application Fee, Course Fees, and Exams/Licensure)
- Other Cost / Expenses: $ 300.00 (Computer or Ipad + internet)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

PLO 6 - Explore and critically appraise various aviation careers and businesses

Admission Information

This is a limited-enrollment program. Please visit the Aviation Academy website for more information and to apply. There is a $75.00 application fee.

To align training with weather, the Aviation Professional Pilot program only accepts new students summer term. On a limited basis, some students may begin flying spring term, but no other courses will be offered until summer. Students with previous training should contact the academy, as other options may be available.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

AP 110A	Flight Lab - Pre-Solo	1
	Or	
AP 110B	Flight Lab - Pre-Solo	1
AP 112	Private Pilot Ground School	5
AP 113	Airman Certification Standards and Maneuvers	1
AP 115	Introduction to Aviation and Careers	1
AP 120A	Flight Lab - Private Pilot Certificate	1
	Or	
AP 120B	Flight Lab - Private Pilot Certificate	1
AP 121	Simulator Lab - Private	1
AP 125	Aircraft Systems & Structures 1	2
AP 126	Aviation Weather Services	2
AP 127	Aerodynamics	3

AP 110A/AP 110B: See Footnote.

AP 120A/AP 120B: See Footnote.

Footnotes

Track A (AP 110A (p. 111)/120A (p. 111)) courses designed for students at or above 180 lbs, over 6'2", over 39" sitting height.

Track B (AP 110B (p. 111)/120B (p. 111)) courses designed for students under 180 lbs, under 6'2", under 39" sitting height.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program represents the minimum core elements for a Private Pilot Certificate.
- This program is fully contained in the Aviation Professional Pilot, AAS (p. 49). Students in the degree program will complete these certificate requirements in their first two terms.

Certifications

Private Pilot Certificate (Single-Engine Land)

(AP 110A (p. 111) or AP 110B (p. 111)) and (AP 120A (p. 111) or AP 120B (p. 111)) and AP 112 (p. 111) are required to take the FAA practical test, but full course completion is recommended. FAA Practical Test is administered by the FAA or an FAA Designated Pilot Examiner (DPE).

Aviation Unmanned Aircraft Systems, AAS

This program provides students with training and ratings/certificates for UAS Operation, UAS Maintenance, and UAS Manufacture to aviation and industry standards. Graduates obtain a Commercial Part 107 UAS Operator License and multiple Institutional CPC certificates aligned to UAS Industry needs.

90 credits

Program Contacts

- Program Coordinator: Solomon Singer, singers@lanecc.edu; 541-463-4319
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 24,365

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 930
- Online Course Fee: $ 0
- Books / Course Materials: $ 1,500 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 6,425
- Other Costs: $ 1,200 (Android Tablet, $200, High performance laptop, $1000 required)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Integrate unmanned flights into the NAS safely and effectively utilizing industry-standard documentation methods, including FAA waivers

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 a variety of current unmanned aircraft and equipment

PLO 5 - Apply the principles of photography and videography in unmanned operations

PLO 6 - Utilize spatial data and GIS technology to create deliverable geospatial products

PLO 7 - Effectively apply and utilize Crew Resource Management (CRM) and Aeronautical Decision-Making (ADM) strategies to ensure safe and effective UAS operations and procedures

PLO 8 - Utilize effective and industry-standard UAS maintenance procedures, operations, and documentation

Admission Information

There will be a separate program application submitted by the student to the Program Director, and approval is required to be enrolled in the Aviation Unmanned Aircraft Systems, AAS. More information can be found on the Aviation Unmanned Aircraft Systems website.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

General Education

WR 115	Introduction to College Composition	4
MTH 060	Beginning Algebra	4
	Or	
MTH 098	Math Literacy	5

WR: See Footnote 1.

MTH: See Footnote 2.

Program Core Courses

AP 127	Aerodynamics	3
AP 225	FOI & Human Factors	3
BA 101Z	Introduction to Business	4
BA 254	General Aviation Management	3
GS 109	Meteorology	5
UAS 101	Introduction to UAS and Careers	1
UAS 121	Multirotor Systems	3
UAS 122	Ground Control Radio Systems	2
UAS 123	UAS Part 107 License Lab	1
UAS 124A	Intro Flight Lab	1
UAS 124B	Advanced Operations Flight Lab	1
UAS 124C	Fixed Wing Lab	1
UAS 124D	UAS Field Operations	1
UAS 124E	Advanced Sensor Lab	1
UAS 124F	Professional Development	2
UAS 201	UAS Ground School	5
UAS 210	UAS Airframe Testing and Manufacture	5
UAS 211	UAS Autopilot Ardupilot and Piccolo	3
UAS 212	UAS Power Systems	5
UAS 213	UAS Standards and Documentation	2
UAS 214	UAS Avionics and Electrical Systems	4
UAS 215	UAS Computer Aided Design/ Computer Aided Manufacture, Solidworks	4
UAS 230	UAS Data Acquisition and Analysis	3
UAS 231	Advanced Sensor	3
UAS 235	Capstone Project	5

AP 225: See Footnote 3.

Electives

Option 1 (12 credits) - complete all of the following:

GIS 151	Digital Earth	4
GIS 245	GIS 1	4
GIS 246	GIS 2	4

Option 2 (11 credits) - choose from the following:

CIS 101	Computer Fundamentals	4
CIS 125A	Software Tools: App Development	4
CS 120	Concepts of Computing: Information Processing	4
CS 160	Orientation to Computer Science	4
DRF 160	Computer-Aided Drafting and Design	4
DRF 245	Solid Modeling	4
ET 129/APR 190	Electrical Theory	4
MUL 105	Digital Photography	4
MUL 215	Digital Photography 2	3
UAS 280	Co-op Ed: Unmanned Aerial Systems	3-12

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

2 – Any Math (MTH/STAT) course higher than MTH 060 (p. 153) is also accepted

3 – AP 225 (p. 112) satisfies the Human Relations requirement

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for Aviation Unmanned Aircraft Systems: Aerial Photography, CPC (p. 53), Aviation Unmanned Aircraft Systems: Autopilot, CPC (p. 54), Aviation Unmanned Aircraft Systems: Commercial UAS Operator, CPC (p. 54), Aviation Unmanned Aircraft Systems: GIS, CPC (p. 55), and Aviation Unmanned Aircraft Systems: Maintenance, CPC (p. 55).

Licensing and Certifications

- FCC Amateur Technician Radio License obtained after UAS 122
- Students will be prepared to take the FAA Commercial UAS (Part 107) Pilot License exam after UAS 123 (p. 175)
- FAA Recreational UAS Operator Certificate after UAS 124A (p. 175)
- Students will be prepared to take the optional Pix4D Basic Certificate after UAS 230 (p. 175)

Aviation Unmanned Aircraft Systems: Aerial Photography, CPC

This Aerial Photography CPC provides a stackable certificate that demonstrates proficiency in aerial photography, videography, and UAS operation proficiency.

12 credits

Program Contacts

- Program Coordinator: Solomon Singer, singers@lanecc.edu; 541-463-4319
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 3,718

- Resident Tuition: $ 1,740
- Technology Fees: $ 168
- General Student Fees: $ 330
- Online Course Fee: $ 0
- Books / Course Materials: $ 400 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $1,080 (Program + Photography Course Fees)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Integrate unmanned flights into the NAS safely and effectively utilizing industry-standard documentation methods, including FAA waivers

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 a variety of current unmanned aircraft and equipment

PLO 4 - Apply the principles of photography and videography in unmanned operations

PLO 5 - Effectively apply and utilize Crew Resource Management (CRM) and Aeronautical

Decision-Making (ADM) strategies to ensure safe and effective UAS operations and procedures

Admission Information

There will be a separate program application submitted by the student to the Program Director, and approval is required to be enrolled in the Aviation Unmanned Aircraft Systems, AAS. More information can be found on the Aviation Unmanned Aircraft Systems website.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

MUL 105	Digital Photography	4
MUL 215	Digital Photography 2	3
UAS 124A	Intro Flight Lab	1
UAS 124B	Advanced Operations Flight Lab	1
UAS 124D	UAS Field Operations	1
UAS 124F	Professional Development	2

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Aviation Unmanned Aircraft Systems, AAS (p. 52).

Aviation Unmanned Aircraft Systems: Autopilot, CPC

This autopilot CPC provides a stackable certificate that demonstrates proficiency in several industry-standard autopilots and related software.

12 credits

Program Contacts

- Program Coordinator: Solomon Singer, singers@lanecc.edu; 541-463-4319
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 5,288

- Resident Tuition: $ 1,740
- Technology Fees: $ 168
- General Student Fees: $ 480
- Online Course Fee: $ 0 (if applicable)
- Books / Course Materials: $ 300 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 2,400
- Other Fee / Expenses: $ 200 (Android Tablet Required)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Integrate unmanned flights into the NAS safely and effectively utilizing industry-standard documentation methods, including FAA waivers

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 a variety of current unmanned aircraft and equipment

PLO 4 - Effectively apply and utilize Crew Resource Management (CRM) and Aeronautical Decision-Making (ADM) strategies to ensure safe and effective UAS operations and procedures

Admission Information

There will be a separate program application submitted by the student to the Program Director, and approval is required to be enrolled in the Aviation Unmanned Aircraft Systems, AAS. More information can be found on the Aviation Unmanned Aircraft Systems website.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

UAS 121	Multirotor Systems	3
UAS 122	Ground Control Radio Systems	2
UAS 211	UAS Autopilot Ardupilot and Piccolo	3
UAS 214	UAS Avionics and Electrical Systems	4

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Aviation Unmanned Aircraft Systems, AAS (p. 52).

Certifications

FCC Amateur Technician Radio License obtained after UAS 122 (p. 174)

Aviation Unmanned Aircraft Systems: Commercial UAS Operator, CPC

This Commercial UAS Operator CPC provides a stackable certificate that demonstrates proficiency in operations, flight procedures, equipment familiarity, and industry-standard operator and Unmanned Pilot training.

31 credits

Program Contacts

- Program Coordinator: Solomon Singer, singers@lanecc.edu; 541-463-4319
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated: $ 10,134

- Resident Tuition: $ 4,495
- Technology Fees: $ 434
- General Student Fees: $ 480
- Online Course Fee: $ 0
- Books / Course Materials: $ 300 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 4,225
- Other Fee / Expenses: $ 200 (Tablet(Android Tablet, required)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1: Integrate unmanned flights into the NAS safely and effectively utilizing industry-standard documentation methods, including FAA waivers

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 a variety of current unmanned aircraft and equipment

PLO 5: Apply the principles of photography and videography in unmanned operations

PLO 6: Utilize spatial data and GIS technology to create deliverable geospatial products

PLO 7: Effectively apply and utilize Crew Resource Management (CRM) and Aeronautical Decision-Making (ADM) strategies to ensure safe and effective UAS operations and procedures

PLO 8: Utilize effective and industry-standard UAS maintenance procedures, operations, and documentation

Admission Information

There will be a separate program application submitted by the student to the Program Director, and approval is required to be enrolled in the Aviation Unmanned Aircraft Systems, AAS. More information can be found on the Aviation Unmanned Aircraft Systems website.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

UAS 101	Introduction to UAS and Careers	1

UAS 121	Multirotor Systems	3
UAS 122	Ground Control Radio Systems	2
UAS 123	UAS Part 107 License Lab	1
UAS 124A	Intro Flight Lab	1
UAS 124B	Advanced Operations Flight Lab	1
UAS 124C	Fixed Wing Lab	1
UAS 124D	UAS Field Operations	1
UAS 124E	Advanced Sensor Lab	1
UAS 201	UAS Ground School	5
UAS 211	UAS Autopilot Ardupilot and Piccolo	3
UAS 230	UAS Data Acquisition and Analysis	3
UAS 231	Advanced Sensor	3
GS 109	Meteorology	5

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Aviation Unmanned Aircraft Systems, AAS (p. 52).

Certifications

FCC Amateur Technician Radio License obtained after UAS 122 (p. 174)

Aviation Unmanned Aircraft Systems: GIS, CPC

This Aviation UAS GIS CPC provides a stackable certificate that demonstrates proficiency in Geospatial Software, Unmanned Aircraft mapping and mission operations in actual field conditions, and data-gathering processes and GIS product generation.

23 credits

Program Contacts

- Program Coordinator: Solomon Singer, singers@lanecc.edu; 541-463-4319
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 7,842

- Resident Tuition: $ 3,335
- Technology Fees: $ 322
- General Student Fees: $ 480
- Online Course Fee: $ 0
- Books / Course Materials: $ 600 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 1,905
- Other Costs: $ 1,200 (Android Tablet, $200, High performance laptop, $1000 required)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1: Integrate unmanned flights into the NAS safely and effectively utilizing industry-standard documentation methods, including FAA waivers

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 a variety of current unmanned aircraft and equipment

PLO 4: Utilize spatial data and GIS technology to create deliverable geospatial products

PLO 5: Effectively apply and utilize Crew Resource Management (CRM) and Aeronautical Decision-Making (ADM) strategies to ensure safe and effective UAS operations and procedures

Admission Information

There will be a separate program application submitted by the student to the Program Director, and approval is required to be enrolled in the Aviation Unmanned Aircraft Systems, AAS. More information can be found on the Aviation Unmanned Aircraft Systems website.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

GIS 151	Digital Earth	4
GIS 245	GIS 1	4
GIS 246	GIS 2	4
UAS 123	UAS Part 107 License Lab	1
UAS 124A	Intro Flight Lab	1
UAS 124B	Advanced Operations Flight Lab	1
UAS 124D	UAS Field Operations	1
UAS 124E	Advanced Sensor Lab	1
UAS 230	UAS Data Acquisition and Analysis	3
UAS 231	Advanced Sensor	3

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Aviation Unmanned Aircraft Systems, AAS (p. 52).

Aviation Unmanned Aircraft Systems: Maintenance, CPC

This Aviation UAS Maintenance CPC provides a stackable certificate that demonstrates proficiency in UAS preventive, routine, and technician-level maintenance, documentation, and aviation-standard procedures related to UAS operations.

31 credits

Program Contacts

- Program Coordinator: Solomon Singer, singers@lanecc.edu; 541-463-4319
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 9,834

- Resident Tuition: $ 4,495
- Technology Fees: $ 434
- General Student Fees: $ 480
- Online Course Fee: $ 0
- Books / Course Materials: $ 300 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 3,925
- Other Fee / Expenses: $ 200 (Android Tablet, required)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1: Safely and effectively plan and execute field missions in a variety of situations utilizing current unmanned aircraft systems

PLO 2: Design, assemble, build, program, and fly hobby and commercial grade unmanned equipment

PLO 3: Work safely and effectively within a crew/team environment utilizing a variety of current unmanned aircraft and equipment

PLO 4: Effectively apply and utilize Crew Resource Management (CRM) and Aeronautical Decision-Making (ADM) strategies to ensure safe and effective UAS operations and procedures

PLO 5: Utilize effective and industry-standard UAS maintenance procedures, operations, and documentation

Admission Information

There will be a separate program application submitted by the student to the Program Director, and approval is required to be enrolled in the Aviation Unmanned Aircraft Systems, AAS. More information can be found on the Aviation Unmanned Aircraft Systems website.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

AP 127	Aerodynamics	3
UAS 121	Multirotor Systems	3
UAS 122	Ground Control Radio Systems	2
UAS 210	UAS Airframe Testing and Manufacture	5
UAS 211	UAS Autopilot Ardupilot and Piccolo	3
UAS 212	UAS Power Systems	5

UAS 213	UAS Standards and Documentation	2
UAS 214	UAS Avionics and Electrical Systems	4
UAS 215	UAS Computer Aided Design/ Computer Aided Manufacture, Solidworks	4

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Aviation Unmanned Aircraft Systems, AAS (p. 52).

Business

Bachelor of Applied Science degree (BAS)

- Applied Business Management, BAS (p. 56)

Transfer Degrees

- Business, ASOT (p. 57)
- Business, AST (p. 58)

Associate of Applied Science degrees (AAS)

- Accounting, AAS (p. 59)
- Business Management, AAS (p. 61)

1-year Certificates

- Accounting, 1-yr Certificate (p. 60)
- Small Business Management, 1-yr Certificate (p. 62)

Applied Business Management, BAS

The Bachelor of Applied Science in Applied Business Management is a professional baccalaureate degree that prepares students for in-demand management positions in both the private and public sector. A focus on problem solving, technology usage, and experiential learning helps graduates develop the knowledge, skills, and abilities to implement practical solutions to today's complex business challenges. This degree offers a mix of professional and technical skills to help students succeed in a rapidly changing business environment. Career pathways include positions in supervision, project management, and sales, among others. Students will integrate applied classroom learning with focused co-operative education experiences with local employers, providing a unique educational experience that will leave students with both academic qualifications and practical experience upon graduation.

Total to earn BAS: 180 credits (total credits includes associate degree or its equivalent plus completion of required program courses)

Note - additional general education courses may be required if not previously completed (15-16 credits)

Program Contacts

- Program Coordinators: Corey Murphy, murphycj@lanecc.edu; Jill Gillett, gillettj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Guidelines

- Along with an associate degree or its equivalent required for entry, complete additional program-required, college-level coursework (24 credits must be completed at LCC) to reach a minimum of 180 credits.
- General Education courses must be a minimum of 3 credits. Elective courses may be any number of credits.
- 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 degree is awarded.

Cost

Estimated Cost: $ 19,218

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 1,050
- Online Course Fee: $ 900
- Books / Materials: $ 2,007

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Admissions Information

Applicants who hold an Associate of Applied Science (AAS), Associate of Science (AS), or comparable associate degree from Lane or another regionally accredited institution with a cumulative GPA of 2.0 are eligible to apply for admission. Although this program is a continuation of Lane's Business Management and Accounting AAS degrees, students may enter from any associate's degree program. Additional coursework may be required to fulfill business core and general education requirements.

To be admitted to the program, students must submit a completed application, submit transcripts from all colleges and universities attended, complete an informational interview, and confirm their decision to enroll in the program. When there are more applicants than available seats, applications will be prioritized based on application date and GPA.

Applicants may be eligible to transfer prior coursework or work experience and receive Credit for Prior Learning (CPL), dependent upon department review:

- Military credits may be transferred
- Work experience may be evaluated and used to meet certain program requirements; see individual programs for information
- Other CPL may be granted in accordance with current college policy; see the CPL procedure for details on earning credit

Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Evaluate and implement effective communication across all levels of the organization

PLO 2 - Explain the value of diversity and community as related to business ventures, with attention to dynamics of power and privilege

PLO 3 - Implement organizational management, human resource skills, and leadership strategies using skills grounded in current theories and techniques for stability, growth, and change

PLO 4 - Demonstrate critical thinking, teamwork, information literacy, and technical knowledge commensurate with management positions

PLO 5 - Use analytical tools and information systems to evaluate and implement decision-making strategies to solve problems

PLO 6 - Develop realistic comprehensive project plans, identify risk areas, monitor the plans, and deal with problems through appropriate use of project management techniques

PLO 7 - Apply principles of law and ethics to promote organizational outcomes and support social responsibility

PLO 8 - Apply quantitative financial analysis to making business decisions

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

Program Core Courses

BA 226	Business Law	4
BA 260	Small Business Management	4
BT 123	MS EXCEL for Business	4
BT 223	MS EXCEL for Business-Expert	4
CS 275	Introduction to Database Systems and Modeling	4
BT 165	Introduction to the Accounting Cycle	4
	Or	
BA 211Z	Principles of Financial Accounting	4
MGMT 311	Human Resource Management	4
MGMT 321	Accounting Concepts-Managers	4
MGMT 330	Digital Marketing	4
MGMT 347	International Business	4
MGMT 360	Financial Management	4
MGMT 388	Project Management 1	4
MGMT 400	Operations Management	4
MGMT 405	Management Communications	4
MGMT 407	Business Analytics	4
MGMT 411	Marketing Management	4
MGMT 432	Social Enterprise	4
MGMT 446	Cross-Cultural Management	4
MGMT 453	Strategic Management	4
MGMT 480	Co-op Ed: Applied Business Management	3-12
MGMT 488	Project Management 2	4

MGMT 480 (p. 153): complete a minimum of 6 credits

BT 123 (p. 124), BA 226 (p. 123), & (BT 165 (p. 124) or BA 211Z (p. 123) - see Footnote 2.

BT 223 (p. 124) & CS 275 (p. 132) - see Footnote 3.

Electives

Directed Electives

Complete one course from the following:

BT 206	Co-op Ed: Business Seminar	2
COMM 130	Business and Professional Communication	4
COMM 260	Introduction to Conflict Management	4
ECON 201	Introduction to Microeconomics	4
ECON 202	Introduction to Macroeconomics	4
PHL 201	Ethics	4
PHL 221	Critical Thinking	4
WR 227Z	Technical Writing	4

Additional math accepted: MTH 106 (p. 154) or higher

Open Electives

Students using lower-credit courses to meet General Education requirements may need to take additional 100-level or higher electives to reach the 90-credit minimum (overall 180 credits). Note - Gen Ed/Grad Requirement courses cannot be double-dipped here.

General Education

The following general education courses must be completed by graduation (these credits are not counted in the 90 required credits to complete the BAS).

Note - Some students will have completed the requirements within their associate's degree. Some may need to add the following courses to earn the bachelor's degree. Work with an academic advisor.

WR 121Z	Composition 1	4
MTH 105Z	Math in Society	4
	Any Communication course 100-level or higher	
	Human Relations - choose one course from list	3-4

MTH 105Z: see Footnote 1.

List of accepted (p. 10)Communication Courses (found under General Education (p. 9))

List of accepted Human Relations Courses (p. 11)

Footnotes

1 – Any math (MTH/STAT) course higher than MTH 105Z (p. 154) is also accepted

2 – Students who have previously completed these 12cr in a prior degree - the courses are considered completed but the credits are not applied here. Students would need an additional 12 credits in Open Electives

3 – BT 223 (p. 124) and CS 275 (p. 132) require at least MTH 095 (p. 154) for entry into the course

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program follows Bachelor of Science (BAS) Requirements (p. 9) unless otherwise specified.

Business, ASOT

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.

90 credits

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

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.
- 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 Pass 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.

Cost

Estimated Cost: $ 16,710

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Books / Course Materials: $ 1,500

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Learning Outcomes

This degree is aligned with Lane's Institutional Learning Outcomes (p. 5) and the State General Education Learning Outcomes (p. 5).

Program Requirements

Foundational Skills

Writing (8 credits)

WR 121Z	Composition 1	4
WR 122Z	Composition 2	4
	Or	
WR 227Z	Technical Writing	4

WR: See Footnote 1.

Mathematics

STAT 243Z	Elementary Statistics 1	4

MTH: See Footnote 2.

Complete TWO additional courses from the following:

MTH 105Z	Math in Society	4
MTH 106	Math in Society 2	4
MTH 107	Math in Society 3	4
MTH 111Z	Precalculus I: Functions	4
MTH 112Z	Precalculus II: Trigonometry	4

Oral Communication

Complete one course from the Oral Communication List (p. 19).

Computer Applications

CIS 101	Computer Fundamentals	4
	Or	
CS 120	Concepts of Computing: Information Processing	4

CS: See Footnote 3.

Discipline Studies

Cultural Literacy

Students must select one course from any of the discipline studies that is designated as meeting the statewide criteria for cultural literacy.

Arts and Letters

Complete three courses from two or more disciplines from the Arts and Letters List (p. 17).

Social Science

Complete four courses from two or more disciplines from the Social Science List (p. 20).

ECON 201	Introduction to Microeconomics	4
ECON 202	Introduction to Macroeconomics	4
	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 (p. 19).

Major Requirements

Complete five Business courses (20 credits):

BA 101Z	Introduction to Business	4
BA 211Z	Principles of Financial Accounting	4
BA 213Z	Principles of Managerial Accounting	4

Complete TWO courses from the following:

BA 206	Management Fundamentals	4
BA 214	Business Communications	4
BA 223	Marketing	4
BA 226	Business Law	4
BA 260	Small Business Management	4
BA 278	Leadership and Team Dynamics	4
BA 280	Co-op Ed: Business Management	3-12
BA 281	Personal Finance	4

BA: See Footnote 4.

BA 280 (p. 123): complete a minimum of 4 credits.

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 (p. 108). 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 activity courses (PE, PEAT, PEO, D) may be included within the entire degree, with the exception of D 160 (p. 135), D 251 (p. 136), D 256 (p. 136), and D 260 (p. 136).
- Transfer institution requirements. Consult Lane's Academic Advising department for a list of recommended coursework. Transfer institution requirements may change without notice.

Footnotes

1 – A minimum of 8 credits of Writing is required. In the event a previous writing course was taken for 3 credits, students will need 3 courses: WR 121Z (p. 177), WR 122Z (p. 177) and WR 123 (p. 177) or WR 227Z (p. 177). Note: WR 227Z (p. 177) will meet additional requirements for some Computer Science baccalaureate programs. Contact your academic advisor for details.

2 – Any 200-level math (MTH (p. 153)or STAT (p. 173)courses) are also accepted. Students who intend to transfer to Oregon State University should work with an academic advisor prior to taking STAT 243Z (p. 173). OSU requires business-specific statistics, and academic advisors can help with reverse transfer.

3 – 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 (p. 108) for information about CTE course prefixes.

4 – Additional courses considered on a case-by-case basis. Contact the Business Department for details.

Notes

1. College-level courses are numbered 100 or higher. Courses numbered 001-099 identify developmental courses (e.g. RD 090), with the exception of ENG 110, 116, 117; MTH 100, RD 115, WR 110, 120 and WR 115 (taken before summer 1999), which are also considered developmental.
2. 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.
3. 200-level second language courses count toward the Arts and Letters requirement. American Sign Language (ASL) is considered a second language.
4. 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.
5. Credit-by-Exam and Credit-by-Assessment may comprise no more than 25% of total degree credits.
6. Only the Academic Requirements Review Committee (ARRC) may waive a college-related instruction requirement. Petitions are available online from Enrollment Services.
7. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
8. 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.
9. 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.
10. General Information on transferring in credits from a prior institution.
11. 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.
12. 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 an academic advisor.

Business, AST

This degree is dependent on students selecting and working with their transfer institution early in the program. Contact an academic advisor for help determining a degree plan.

This program outlines specific course requirements for students who plan to transfer to a four-year public university in Oregon and earn a Bachelor of Science in Business. Students should work with an academic advisor to ensure they fulfill the requirements for this program and for their intended transfer institution. Students seeking alternative accepted pathways should consult with an academic advisor.

90 credits

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

Guidelines

- Complete a total of 90 credits of college-level coursework (24 credits must be completed at LCC).
- General Education courses must be a minimum of 3 credits. Elective courses may be any number of credits.
- Business major requirements must be completed with a grade of C- or better. P/NP is not accepted. All other courses may be completed with a grade of C- or better, or Pass. Note - grade requirements may differ by transfer institution.
- 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 degree is awarded.

Cost

Estimated Cost: $ 16,710

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Books / Course Materials: $ 1,500

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Explain basic business functions and their integration into the business environment

PLO 2 - Integrate diverse cultural perspectives and ethical reasoning and actions into business decisions

PLO 3 - Demonstrate effective oral and written communication skills

PLO 4 - Apply critical thinking and analytical reasoning skills to business decisions

Program Requirements

Core Transfer Map Requirements

Writing - WR 121Z (p. 177) (4 credits)

Math - MTH 111Z (p. 154) or MTH 241 (4-5 credits)

Arts & Letters - Choose two (2) courses from the Arts and Letters List (p. 17) (6-8 credits)

Social Science - ECON 201 (p. 139) and ECON 202 (p. 140) (8 credits)

Natural Sciences - Choose two (2) lab courses from Science/Math/Computer Science List (p. 19) (8 credits)

Cultural Literacy - 1 course from the courses above must also be an approved Cultural Literacy course (see specific lists for those designated as meeting CL)

Core Transfer Map: See Footnote 1.

ECON 201 (p. 139)/ECON 202 (p. 140): See Footnote 2.

Major Requirements

Must be completed with a grade of C- or better. Pass not accepted.

General

WR 227Z	Technical Writing	4
COMM 111Z	Public Speaking	4

Math

MTH 241	Elementary Calculus 1	4
	Or	
STAT 243Z	Elementary Statistics 1	4

MTH 241: See Footnote 3.

Business

BA 101Z	Introduction to Business	4
BA 211Z	Principles of Financial Accounting	4
BA 213Z	Principles of Managerial Accounting	4
BA 226	Business Law	4
BT 123	MS EXCEL for Business	4

Electives

The following serve as prerequisites for some of the major requirements offered at LCC:

ECON 200	Introduction to Economics	3

Complete one course from the following:

BT 120	MS WORD for Business	4
CIS 101	Computer Fundamentals	4
CS 120	Concepts of Computing: Information Processing	4

Any college-level courses that bring total credits to 90 credits, with the following limitations:

- Up to 12 credits of Career Technical Education. See the list of Course Types by Prefix (p. 108). Policies on accepting career-technical credits vary at four-year institutions in Oregon. Consult an academic advisor about taking these courses as electives.
- 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 activity courses (PE, PEAT, PEO, D) may be included within the entire degree, with the exception of D 160 (p. 135), D 251 (p. 136), D 256 (p. 136), and D 260 (p. 136).
- WR 115 may be included in the degree as an elective if completed summer 1999 or later.
- Transfer institution requirements. Consult Lane's Academic Advising department for a list of recommended coursework. Transfer institution requirements may change without notice.

Recommended Electives by Institution:

University of Oregon

- STAT 243Z (p. 173) - Elementary Statistics 1 (4 Credits)
- Business Courses
- Additional General Education as needed by UO. See list of LCC courses that transfer. Connect with UO to determine exactly what to take.

Oregon State University

- BA 223 (p. 123) - Marketing (4 Credits)
- BA 260 (p. 123) - Small Business Management (4 Credits)
- Additional General Education as needed by OSU. See list of LCC courses that transfer. Connect with OSU to determine exactly what to take.

Portland State University

- Business Courses
- Additional General Education as needed by PSU. Connect with PSU to determine exactly what to take.

For all other Oregon universities, please connect with your desired transfer institution to determine any additional requirements that can be completed at the community college.

Footnotes

1 – To earn the CTM notation on a transcript, students must meet all the CTM requirements with a minimum of 30 credits. This notation is not automatically awarded. 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

2 – ECON 201 (p. 139) and ECON 202 (p. 140) fulfil the 2 Social Science courses required for Core Transfer Map

3 – MTH 241 cannot count toward both Major and Core Transfer requirements

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- Students must complete all required courses to earn this degree. Equivalent courses of 3 credits or higher may be transferred in and used to meet core or major requirements. To earn a Core Transfer Map (CTM) transcript notation, students must complete required courses and have a minimum of 30 CTM credits.
- 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.
- 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 online from Enrollment Services.
- Repeatable courses may be used once to meet a Core Transfer Map requirement. Any additional allowable repeats may be used to meet Elective requirements.
- Some courses are included on more than one Core Transfer Map list. These courses may be used only once to meet a specific Core Transfer Map requirement. Please contact your academic advisor for details.
- Courses numbered 197, 198, 199, 280, 297, 298, or 299 count as electives and do not meet Core Transfer Map requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved to meet Core Transfer Map requirements.

Accounting, AAS

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

90 credits

Program Contacts

- Program Coordinators: Jill Gillett gillettj@lanecc.edu and Jeff Lanz lanzj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 19,953

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 900
- Books / Course Materials: $ 2,042 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

PLO 5 - Use computerized and manual systems to record accounting data and prepare accounting statements and reports

PLO 6 - Operate effectively within time constraints to meet the accounting needs of financial, tax, payroll, and legal compliance requirements

Program Requirements

Courses in this program require default grading (completed with a letter grade of C- or better, or Pass) unless a section specifies otherwise below.

General Education

WR 121Z	Composition 1	4
	Mathematics 1 – MTH 098 or MTH 095 or higher	4-5
	Mathematics 2 – MTH 105Z or higher math	4-5
	Health/PE/Dance - see list	3

Math 1 – *choice of: MTH 098 (p. 154) or MTH 095 (p. 154) or any Math (MTH/STAT) higher than MTH 095 (p. 154)*

Math 2 – choice of: MTH 105Z (p. 154) or any Math (MTH/STAT) higher than MTH 105Z (p. 154)

Health/PE/Dance *– Health (HE), Physical Ed (PE/PEAT/PEO) or Dance (D). Any combo to reach* ***3 credits***

Program Core Courses

Must be completed with a grade of C- or better. P/NP not accepted.

EL 121	Effective Digital Learning	1-3
BA 101Z	Introduction to Business	4
BA 211Z	Principles of Financial Accounting	4
BA 213Z	Principles of Managerial Accounting	4
BA 214	Business Communications	4
BA 226	Business Law	4
BA 278	Leadership and Team Dynamics	4
BA 280AC	Co-op Ed: Accounting	3-12
BA 281	Personal Finance	4
BT 108	Business Proofreading and Editing	4
BT 120	MS WORD for Business	4
BT 123	MS EXCEL for Business	4
BT 165	Introduction to the Accounting Cycle	4
BT 167	Computerized Accounting and Payroll	4
BT 206	Co-op Ed: Business Seminar	2
BT 223	MS EXCEL for Business-Expert	4
BT 230	Digital Office	4
BT 272	Tax concepts and Preparation	4
BT 286	Professional Bookkeeping	4

EL 121 – complete 1 credit; business focused section is recommended

BA 280AC –complete a minimum of 3 credits

BA 278 – See Footnote 1.

BT 120/BT 123 – See Footnote 2.

Electives

Complete 4 credits. Must be completed with a letter grade of C- or better. P/NP not accepted.

ART 288	Introduction to Web Design and Social Media	3
BA 260	Small Business Management	4
BT 181	Customer Service	4
CG 203	Human Relations at Work	1-3
CIS 275E	Data Exploration and Visualization	4
COMM 260	Introduction to Conflict Management	4
COMM 285	Mediated Communication	4
CS 275	Introduction to Database Systems and Modeling	4
ECON 200	Introduction to Economics	3
ECON 201	Introduction to Microeconomics	4
ECON 202	Introduction to Macroeconomics	4
STAT 243Z	Elementary Statistics 1	4

Students using lower-credit courses to meet General Education requirements may need to take additional 100-level or higher electives to reach the 90-credit minimum. Complete any course(s) 100-level or higher to reach 90 total credits.

Footnotes

1 – BA 278 (p. 123) meets the Human Relations requirement

2 – Before enrolling in BT 120 (p. 124) - MS WORD for Business or BT 123 (p. 124) - 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

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- These courses may only be offered once per year: BT 167 (p. 124); BT 223 (p. 124); BT 230 (p. 124); BT 272 (p. 125); BT 286 (p. 125). Contact the department or academic advisors for a class schedule.

Accounting, 1-yr Certificate

The purpose of this program is to give existing and potential small business owners the academic tools necessary to succeed. The classes were chosen to address fundamentals of business, functional areas of business, and overarching environment in which businesses exist.

46 credits

Program Contacts

- Program Coordinators: Jill Gillett gillettj@lanecc.edu and Jeff Lanz lanzj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 10,296

- Resident Tuition: $ 6,670
- Technology Fees: $ 644
- General Student Fees: $ 450
- Online Course Fee: $ 460
- Books / Materials: $ 872 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Understand the threats small business faces
PLO 2 - Apply analytical and conceptual reasoning to problems to arrive at sound business solutions
PLO 3 - Describe the entirety of the student's proposed business using business concepts

Program Requirements

Courses in this program require default grading (completed with a letter grade of C- or better, or Pass) unless a section specifies otherwise below.

General Education

WR 121Z	Composition 1	4
MTH 098	Math Literacy	5
BA 278	Leadership and Team Dynamics	4

MTH: See Footnote 1.

BA 278: See Footnote 2.

Program Core Courses

Must be completed with a grade of C- or better. P/NP not accepted.

BA 101Z	Introduction to Business	4
BA 211Z	Principles of Financial Accounting	4
BT 120	MS WORD for Business	4
BT 123	MS EXCEL for Business	4
BT 165	Introduction to the Accounting Cycle	4
BT 167	Computerized Accounting and Payroll	4
BT 230	Digital Office	4
BT 272	Tax concepts and Preparation	4
EL 121	Effective Digital Learning	1-3

BT 120 (p. 124) / BT 123 (p. 124): See Footnote 3.

EL 121 – complete 1 credit; business focused section is recommended

Footnotes

1 – Any math (MTH/STAT) above MTH 098 (p. 154) is also accepted
2 – BA 278 (p. 123) meets the Human Relations requirement and cannot be substituted
3 – Before enrolling in BT 120 (p. 124) or BT 123 (p. 124), 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

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.

Business Management, AAS

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.

90 credits

Program Contacts

- Program Coordinators: LuAnne Johnson (johnsonlm@lanecc.edu, 541-463-5767) and Chris Culver (culverc@lanecc.edu, 541-463-5153)
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 19,713

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 900 (if applicable)
- Books / Materials: $ 1,715 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

PLO 5 - Apply adaptive marketing, financial, managerial, and leadership theories in a business context

PLO 6 - Demonstrate an understanding of the functions of leading, planning, organizing, and controlling in an organization

Program Requirements

Courses in this program require default grading (completed with a letter grade of C- or better, or Pass) unless a section specifies otherwise below.

General Education

WR 121Z	Composition 1	4
	Mathematics 1 – MTH 098 or MTH 095 or higher	4-5
	Mathematics 2 – MTH 105Z or higher math	4-5
	Health/PE/Dance - see list	3

Math 1 - choose from: MTH 098 (p. 154) or MTH 095 (p. 154) or Any math (MTH/STAT) course higher than MTH 095 (p. 154)

Math 2 - choose from: MTH 105Z (p. 154) or any math (MTH/STAT) course higher than MTH 105Z (p. 154)

Health/PE/Dance (p. 18) – choose from: Health (HE), Physical Ed (PE, PEAT, PEO), or Dance (D). Can be any combination to reach 3 credits

Program Core Courses

Must be completed with a letter grade of C- or better. P/NP not accepted.

EL 121	Effective Digital Learning	1-3
BA 101Z	Introduction to Business	4
BA 206	Management Fundamentals	4
BA 214	Business Communications	4
BA 223	Marketing	4
BA 226	Business Law	4
BA 278	Leadership and Team Dynamics	4
BA 280	Co-op Ed: Business Management	3-12
BA 281	Personal Finance	4
BT 108	Business Proofreading and Editing	4
BT 120	MS WORD for Business	4
BT 123	MS EXCEL for Business	4
BT 206	Co-op Ed: Business Seminar	2
BT 291	Operations Management	4
BA 211Z	Principles of Financial Accounting	4
	Or	
BT 165	Introduction to the Accounting Cycle	4
	Complete one Economics course - see list	3-4

EL 121: See Footnote 1.

BA 278: See Footnote 2.

BA 280 (p. 123): See Footnote 3.

BT 120/BT 123: See Footnote 4.

Economics course options: ECON 200 (p. 139), ECON 201 (p. 139), or ECON 202 (p. 140)

Electives

Complete 14-16 credits. Must be completed with a letter grade of C- or better. P/NP not accepted.

ART 288	Introduction to Web Design and Social Media	3
BA 238	Sales	4
BA 260	Small Business Management	4
BT 167	Computerized Accounting and Payroll	4
BT 181	Customer Service	4
BT 223	MS EXCEL for Business-Expert	4
BT 230	Digital Office	4
CG 203	Human Relations at Work	1-3
CIS 275E	Data Exploration and Visualization	4
COMM 260	Introduction to Conflict Management	4
COMM 285	Mediated Communication	4
CS 275	Introduction to Database Systems and Modeling	4
STAT 243Z	Elementary Statistics 1	4

Students using lower-credit courses to meet General Education requirements may need to take additional 100-level or higher electives to reach the 90-credit minimum. Complete any course(s) 100-level or higher to reach 90 total credits.

Footnotes

1 – EL 121 (p. 141): complete 1 credit; recommended to take a business focused section if available

2 – BA 278 (p. 123) meets the Human Relations requirement

3 – BA 280 (p. 123): complete a minimum of 3 credits

4 – Before enrolling in BT 120 (p. 124) - MS WORD for Business or BT 123 (p. 124) - 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

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- These courses may only be offered once per year. Check with the department for course schedule. BA 223 (p. 123); BA 238 (p. 123); BT 181 (p. 124); BT 291 (p. 125)*
- *BT 291 is required

Small Business Management, 1-yr Certificate

The purpose of this program is to give existing and potential small business owners the academic tools necessary to succeed. The classes were chosen to address fundamentals of business, functional areas of business, and overarching environment in which businesses exist.

45 credits

Program Contacts

- Program Coordinators: Tim Hovet hovett@lanecc.edu, 541-463-5537
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 10,117

- Resident Tuition: $ 6,670
- Technology Fees: $ 644
- General Student Fees: $ 450
- Online Course Fee: $ 460
- Books / Materials: $ 993 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Understand the threats small business faces
PLO 2 - Apply analytical and conceptual reasoning to problems to arrive at sound business solutions
PLO 3 - Describe the entirety of the student's proposed business using business concepts

Program Requirements

Courses in this program require default grading (completed with a letter grade of C- or better, or Pass) unless a section specifies otherwise below.

General Education

WR 121Z	Composition 1	4
MTH 065	Elementary Algebra	4
BA 278	Leadership and Team Dynamics	4

MTH: See Footnote 1.

BA 278: See Footnote 2.

Program Core Courses

Must be completed with a grade of C- or better. P/NP not accepted.

BA 101Z	Introduction to Business	4
BA 223	Marketing	4
BA 226	Business Law	4
BA 260	Small Business Management	4
BT 123	MS EXCEL for Business	4
BT 165	Introduction to the Accounting Cycle	4
BT 167	Computerized Accounting and Payroll	4
EL 121	Effective Digital Learning	1-3

BT 123 - See Footnote 3.

EL 121 - complete 1 credit; business focused section is recommended

Electives

Complete 4 credits from the following options:

- BT 181 Customer Service (p. 124)
- Any 200-level or higher course offered in the Business Department (BT (p. **Error! Bookmark not defined.**) or BA (p. **Error! Bookmark not defined.**))

Footnotes

1 – Any math (MTH/STAT) above MTH 065 (p. 153) is also accepted

2 – BA 278 (p. 123) meets the Human Relations requirement and cannot be substituted

3 – Before enrolling in BT 123 (p. 124) - 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

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.

Computer Information Technology

Transfer Degree

- Computer Science, ASOT (p. 62)

Associate of Applied Science degrees (AAS)

- Computer Network Operations, AAS (p. 63)
- Cybersecurity, AAS (p. 67)
- Software Development, AAS (p. 65)

Career Pathway Certificates (CPC)

- Computer Network Monitoring and Management, CPC (p. 64)
- Software Development: Database Specialist, CPC (p. 66)
- Software Development: Front End Web Development, CPC (p. 66)

Computer Science, ASOT

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.

90 credits

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

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 Pass 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.

Cost

Estimated Cost: $ 16,710

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Books / Course Materials: $ 1,500

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Learning Outcomes

This degree is aligned with Lane's Institutional Learning Outcomes (p. 5) and the State General Education Learning Outcomes (p. 5).

Program Requirements

Foundational Skills

Writing (8 credits)

WR 121Z	Composition 1	4
WR 122Z	Composition 2	4
	Or	
WR 227Z	Technical Writing	4

WR: See Footnote 1.

Mathematics

MTH 251	Differential Calculus	5
MTH 252	Integral Calculus	5

MTH: See Footnote 2.

Oral Communication

Complete one course from the Oral Communication List (p. 19).

Health/Wellness/Fitness

Complete one or more courses, totaling at least three credits, from the Health/Wellness/Fitness List (p. 18).

Discipline Studies

Cultural Literacy

Students must select one course from any of the discipline studies that is designated as meeting the statewide criteria for cultural literacy.

Arts and Letters

Complete three (3) courses from two or more disciplines from the Arts and Letters List (p. 17).

Social Science

Complete four (4) courses from two or more disciplines from the Social Science List (p. 20).

Science/Math/Computer Science

Complete four (4) 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 (p. 19).

Major Requirements

Must be completed with a letter grade of C or better. P/NP is not accepted.

CS 160	Orientation to Computer Science	4
CS 161C/CS 133C	Computer Science 1	4
CS 162C/CS 233C	Computer Science 2	4
CS 260	Data Structures 1	4

CS 161C/CS 162C: See Footnote 3.

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 (p. 108). 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 activity courses (PE, PEAT, PEO, D) may be included within the entire degree, with the exception of D 160 (p. 135), D 251 (p. 136), D 256 (p. 136), and D 260 (p. 136)
- Transfer institution requirements. Consult Lane's Academic Advising department for a list of recommended coursework. Transfer institution requirements may change without notice.

Footnotes

1 – A minimum of 8 credits of Writing is required. In the event a previous writing course was taken for 3 credits, students will need 3 courses: WR 121Z (p. 177), WR 122Z (p. 177) and WR 123 (p. 177) or WR 227Z (p. 177). Note: WR 227Z (p. 177) will meet additional requirements for some Computer Science baccalaureate programs. Contact your academic advisor for details

2 – Check with your academic advisor about math grade requirements for individual transfer institutions as they may differ. More math may also be needed for the major

3 – CS 161N (p. 131)/CS 162N (p. 131) and CS 161P (p. 131)/CS 162P (p. 131) is also accepted. 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

Notes

1. College-level courses are numbered 100 or higher. Courses numbered 001-099 identify developmental courses (e.g. RD 090), with the exception of ENG 110, 116, 117; MTH 100, RD 115, WR 110, 120 and WR 115 (taken before summer 1999), which are also considered developmental.
2. 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.
3. 200-level second language courses count toward the Arts and Letters requirement. American Sign Language (ASL) is considered a second language.
4. 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.
5. Credit-by-Exam and Credit-by-Assessment may comprise no more than 25% of total degree credits.
6. Only the Academic Requirements Review Committee (ARRC) may waive a college-related instruction requirement. Petitions are available online from Enrollment Services.
7. Repeatable courses may be used once to meet a Discipline Studies requirement. Any additional allowable repeats may be used to meet Elective requirements.
8. 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.
9. 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.
10. General Information on transferring in credits from a prior institution.
11. 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.
12. 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.
13. HE 252 (p. 148) can be used in the Health/Wellness/Fitness category if taken in Summer 1997 or after. Prior to this, HE 252 (p. 148) would be considered an elective.

Computer Network Operations, AAS

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.

90 credits

Program Contacts

- Program Coordinator: Joseph Colton, coltonj@lanecc.edu, 541-463-5249
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 17,322

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 900
- Books / Materials: $ 1,055 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 156 (data fee)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 095	Intermediate Algebra	5
	Or	
MTH 098	Math Literacy	5
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

Must be completed with a grade of C- or better. P/NP not accepted.

CIS 140U	Introduction to Unix/Linux	4
CS 240U	Advanced Unix/Linux: Server Management	4
CS 240W	Advanced Windows: Server Management	4
CS 273	Introduction to Virtualization and Cloud Computing	4
CS 275	Introduction to Database Systems and Modeling	4
CS 284	Network Security Fundamentals	4
CS 288	Network Monitoring and Management	4
CS 280CN	Co-op Ed: Computer Network Operations	3-12

CS 280CN: complete a minimum of 3 credits

Complete one of the following:

CS 161P/CS 133P	Computer Science 1	4
CS 161C/CS 133C	Computer Science 1	4
CS 161N/CS 133N	Computer Science 1	4

Complete one of the following:

CS 162P/CS 233P	Computer Science 2	4
CS 162C/CS 233C	Computer Science 2	4
CS 162N/CS 233N	Computer Science 2	4

Recommended: CS 161P and CS 162P

Complete all of the following:

Must be completed with a grade of C- or better or Pass (P).

CIS 100	Computing Careers Exploration	1
CS 179	Introduction to Computer Networks	4
CS 189	Routing and Switching Essentials	4
CS 206	Co-op Ed: Computer Information Technology Seminar	2
CS 279	Scaling Networks	4

CS 179/CS 189 (p. 132)/CS 279 (p. 132): See Footnote 3. (CCNA certificate)

Electives

Must be completed with a grade of C- or better. P/NP not accepted.

Program Electives

Complete 12 credits from the following options (electives cannot double dip with degree requirements above):

-Any Computer Science (CS)
-Any Computer Information Systems (CIS)
-Any additional Mathematics (MTH 025 or higher)

Faculty Recommends:

CIS 140W	Introduction to Operating Systems: Windows Clients	4
CIS 195	Web Authoring 1	4
CIS 287	Microcomputer Hardware	4
CS 133JS	Beg. Programming: JavaScript	4
CS 233JS	Intermediate Programming: JavaScript	4
CS 285	Cybersecurity Operations	4
CS 286	Firewalls and VPNs	4
CS 290	Ethical Hacking Fundamentals	4

Open Electives

Complete 12 credits of any course(s) 100-level or higher to reach 90 total credits. Work with an academic advisor.

Note: Students using lower-credit courses to meet General Education requirements may need to take additional electives to meet the 90-credit minimum.

Footnotes

1 – Any writing higher than WR 115 (p. 177) is also accepted. WR 121Z (p. 177) is recommended

2 – Any math (MTH/STAT) higher than MTH 095 (p. 154) is also accepted

3 – Students who have a CCNA certificate can get credit for the following courses: CS 179 (p. 132), CS 189 (p. 132), CS 279 (p. 132). Contact the Program Coordinator.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for the Computer Network Monitoring and Management, CPC (p. 64).
- First-year students: A personal laptop is strongly recommended for students in this program. Please contact the Program Coordinator for options and system requirements.
- Students planning to pursue a bachelor's degree in Computer Science are advised to consult with their academic advisor for additional program requirements.
- Students who complete more than one CS 161 or CS 162 programming language course should be aware that transfer institutions may count multiple 161 or 162 courses as repeats, **and may not accept them in transfer.** Students wishing to complete multiple programming courses should first take a CS 161/162 series and then enroll in CS 133/233 course series for any subsequent programming languages.

Computer Network Monitoring and Management, CPC

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.

12 credits

Program Contacts

- Program Coordinator: Joseph Colton, coltonj@lanecc.edu, 541-463-5249
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 2,596

- Resident Tuition: $1,740
- Technology Fees: $168
- General Student Fees: $ 300
- Online Course Fees: $ 120
- Books / Course Materials: $ 216 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 52 (data fee)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

Must be completed with a grade of C- or better. P/NP not accepted.

Note: CIS 140U (p. 127) and CS 179 (p. 132) are not embedded but serve as prerequisites for some courses in this program. These must be completed before taking the required course. Work with your academic advisor.

CS 240U	Advanced Unix/Linux: Server Management	4
CS 240W	Advanced Windows: Server Management	4
CS 288	Network Monitoring and Management	4

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Computer Network Operations, AAS degree (p. 63).
- Students who complete more than one CS 161 or CS 162 programming language course should be aware that transfer institutions may count multiple 161 or 162 courses as repeats, and may not accept them in transfer. Students wishing to complete multiple programming courses should first take a CS 161/162 series and then enroll in CS 133/233 course series for any subsequent programming languages.

Software Development, AAS

The purpose of this program is to prepare students for entry-level positions as software developers.

90 credits

Program Contacts

- Program Coordinator: Brian Bird, birdb@lanecc.edu, 541-463-3024
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 16,966

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 900
- Books / Materials: $ 700 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.
- Program Specific Fees: $ 156 (data fee)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 121Z	Composition 1	4
WR 227Z	Technical Writing	4
MTH 095	Intermediate Algebra	5
	Human Relations - choose one course from list	3-4

MTH: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

Complete all of the following:

Must be completed with a grade of B- or better. P/NP not accepted.

CS 161N/CS 133N	Computer Science 1	4
CS 162N/CS 233N	Computer Science 2	4
CS 234N	Advanced Programming: C#	4
CS 246	System Design	4
CS 295N	Web Development 1: ASP.NET	4
CS 296N	Web Development 2: ASP.NET	4
CS 297	Programming Capstone	4

Complete all of the following:

Must be completed with a grade of C- or better. P/NP not accepted.

CIS 195	Web Authoring 1	4
CS 133JS	Beg. Programming: JavaScript	4
CS 233JS	Intermediate Programming: JavaScript	4
CS 275	Introduction to Database Systems and Modeling	4
CS 276	Database Systems and Modeling	4
CS 280PR	Co-op Ed: Computer Programming	3-12

Choose one course from the list:

CS 160	Orientation to Computer Science	4
CIS 125A	Software Tools: App Development	4
CIS 125G	Software Tools 1: Game Development	4

CS 280PR: complete a minimum of 4 credits

CS 160/CIS 125A: See Footnote 2.

Complete all of the following:

Must be completed with a grade of C-/P or better.

CIS 100	Computing Careers Exploration	1
CS 206	Co-op Ed: Computer Information Technology Seminar	2

Electives

Must be completed with a grade of C- or better. P/NP not accepted.

Program Electives

Choose 12 credits from the following:

ART 288	Introduction to Web Design and Social Media	3
CIS 135G	Software Tools 2: Game Development	4
CIS 140U	Introduction to Unix/Linux	4
CIS 275E	Data Exploration and Visualization	4
CS 133C/CS 161C	Beginning Programming: C++	4
CS 133P/CS 161P	Beginning Programming: Python	4
CS 135M	Beginning Mobile Application Development	4
CS 233C/CS 162C	Intermediate Programming: C++	4
CS 233P/CS 162P	Intermediate Programming: Python	4
CS 235M	Advanced Mobile Application Development	4
CS 240U	Advanced Unix/Linux: Server Management	4
CS 260	Data Structures 1	4
CS 295R	Web Development 1: React	4

CS 133C/233C/133P/233P: See Footnote 3.

Open Electives

Complete about 3 credits of any course(s) 100-level or higher to reach 90 total credits. Work with an academic advisor.

Note: Students using lower-credit courses to meet General Education requirements may need to take additional electives to meet the 90-credit minimum.

Footnotes

1 – MTH 111Z (p. 154) or MTH 112Z (p. 154) or any 200-level MTH/STAT course (except

STAT 243Z (p. 173)) is also accepted

2 – Of the 3 options, CS 160 (p. 131) or CIS 125A (p. 127) is recommended

3 – Students who complete more than one CS 161 or CS 162 programming language course should be aware that transfer institutions may count multiple 161 or 162 courses as repeats, and may not accept them in transfer. Students wishing to complete multiple programming courses should first take a CS 161/162 series and then enroll in CS 133/233 course series for any subsequent programming languages. Cannot mix programming sequences (i.e. CS 133C and 233P)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for the Software Development: Database Specialist, CPC (p. 66) and Software Development: Front End Web Development, CPC (p. 66).
- 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.
- 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.

Certifications

By completing CS 275 (p. 132) and CS 276 (p. 132) students can take the Oracle Certified Foundations Associate Exam.

Software Development: Database Specialist, CPC

The purpose of this program is to prepare students for entry-level positions as database specialists.

16 credits

Program Contacts

- Program Coordinator: Lindy Stewart, stewartl@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 3,340

- Resident Tuition: $ 2,350
- Technology Fees: $ 224
- General Student Fees: $ 314
- Online Course Fees: $ 160
- Books / Materials: $ 284 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.
- Program Specific Fees: $ 52 (Data Fee)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

Must be completed with a grade of C- or better. P/NP not accepted.

CS 275	Introduction to Database Systems and Modeling	4
CS 276	Database Systems and Modeling	4

Programming Sequence

*Choose **two courses** of the same sequence*

CS 161C/CS 133C	Computer Science 1	4
CS 162C/CS 233C	Computer Science 2	4
CS 161N/CS 133N	Computer Science 1	4
CS 162N/CS 233N	Computer Science 2	4
CS 161P/CS 133P	Computer Science 1	4
CS 162P/CS 233P	Computer Science 2	4

Recommended: CS 161N (p. 131) and CS 162N (p. 131)

See Footnote 1.

Footnotes

1 – Each of these courses have a different prerequisite that must be completed first. Work with your academic advisor on what and when to take the prerequisite

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Software Development, AAS (p. 65).
- Students who complete more than one CS 161 or CS 162 programming language course should be aware that transfer institutions may count multiple 161 or 162 courses as repeats, and may not accept them in transfer. Students wishing to complete multiple programming courses should first take a CS 161/162 series and then enroll in CS 133/233 course series for any subsequent programming languages.

Certifications

By completing CS 275 (p. 132) and CS 276 (p. 132), students can take the Oracle Certified Foundations Associate Exam.

Software Development: Front End Web Development, CPC

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.

20 credits

Program Contacts

- Program Coordinator: Brian Bird, birdb@lanecc.edu, 541-463-3024
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 3,938

- Resident Tuition: $ 2,900
- Technology Fees: $ 280
- General Student Fees: $ 450
- Online Course Fee: $ 200
- Books / Materials: $ 30 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 78 (Data Fee)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

Must be completed with a grade of C- or better. P/NP not accepted.

Note: CIS 125A (p. 127) or CS 160 (p. 131) and Math are not embedded in the program but are prerequisites for some courses in this program. Work with your academic advisor.

CIS 195	Web Authoring 1	4
CS 133JS	Beg. Programming: JavaScript	4
CS 233JS	Intermediate Programming: JavaScript	4
CS 161N/CS 133N	Computer Science 1	4

CS 295R	Web Development 1: React	4

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Software Development, AAS (p. 65).
- Students who complete more than one CS 161 or CS 162 programming language course should be aware that transfer institutions may count multiple 161 or 162 courses as repeats, and may not accept them in transfer. Students wishing to complete multiple programming courses should first take a CS 161/162 series and then enroll in CS 133/233 course series for any subsequent programming languages.

Cybersecurity, AAS

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.

90 credits

Program Contacts

- Program Coordinator: Don Easton, eastond@lanecc.edu, 541-463-5532
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 17,279

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 900
- Books / Materials: $ 1,013 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 156 (Data Fee)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 121Z	Composition 1	4
MTH 095	Intermediate Algebra	5
	Or	
MTH 098	Math Literacy	5
	Human Relations - choose one course from list	3-4

MTH: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

Complete all of the following:

Must be completed with a grade of C- or better or Pass (P).

CIS 100	Computing Careers Exploration	1
CS 206	Co-op Ed: Computer Information Technology Seminar	2

Complete all of the following:

Must be completed with a grade of C- or better. P/NP not accepted.

CIS 140W	Introduction to Operating Systems: Windows Clients	4
	Or	
CIS 195	Web Authoring 1	4
CIS 140U	Introduction to Unix/Linux	4
CS 179	Introduction to Computer Networks	4
CS 184	Introduction to Cybersecurity	4
CS 189	Routing and Switching Essentials	4
CS 240U	Advanced Unix/Linux: Server Management	4
CS 240W	Advanced Windows: Server Management	4
CS 273	Introduction to Virtualization and Cloud Computing	4
CS 275	Introduction to Database Systems and Modeling	4
CS 288	Network Monitoring and Management	4
CS 280CN	Co-op Ed: Computer Network Operations	3-12

CS 280CN (p. 133): complete a minimum of 3 credits

Complete all of the following:

Must be completed with a grade of B- or better. P/NP not accepted.

CS 284	Network Security Fundamentals	4
CS 285	Cybersecurity Operations	4
CS 286	Firewalls and VPNs	4
CS 290	Ethical Hacking Fundamentals	4

Programming Sequence

Must be completed with a grade of C- or better. P/NP not accepted.

Complete two courses from the same sequence (CS 161P/162P recommended)

Complete one of the following:

CS 161P/CS 133P	Computer Science 1	4
CS 161C/CS 133C	Computer Science 1	4
CS 133JS	Beg. Programming: JavaScript	4

Complete one of the following:

CS 162P/CS 233P	Computer Science 2	4
CS 162C/CS 233C	Computer Science 2	4
CS 233JS	Intermediate Programming: JavaScript	4

Electives

Program Electives

Complete 4-5 credits from the following options (electives cannot double dip with degree requirements above):

-Any Computer Science (CS)
-Any Computer Information Systems (CIS)
-Any additional Mathematics (higher than MTH 095 (p. 154))

Open Electives

Complete 4 credits of any course 100-level or higher to reach 90 total credits. Work with an academic advisor.

Note: Students using lower-credit courses to meet General Education requirements may need to take additional electives to meet the 90-credit minimum.

Footnotes

1 – Any math (MTH/STAT) course higher than MTH 095 (p. 154) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- 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 planning to pursue a bachelor's degree in Computer Science are advised to consult with their academic advisor for additional program requirements.
- Students who complete more than one CS 161 or CS 162 programming language course should be aware that transfer institutions may count multiple 161 or 162 courses as repeats, **and may not accept them in transfer.** Students wishing to complete multiple programming courses should first take a CS 161/162 series and then enroll in CS 133/233 course series for any subsequent programming languages.

Certifications

- By completing CS 273 (p. 132), students can take the exam for the Amazon Web Services Cloud Practitioner certification
- By completing CS 273 (p. 132), students can take the exam for the VMWare Certified Associate (VCA) certification
- By completing CS 179 (p. 132), CS 189 (p. 132), and CS 279 (p. 132), students can take the exam for the Cisco Certified Network Associate (CCNA) certification
- By completing CS 285 (p. 133), students can take the exam for the Cisco Certified CyberOps Associate (CCCA) certification
- By completing CS 286 (p. 133), students can take the exam for the Palo Alto Networks Certified Cybersecurity Entry-level Technician (PCCET) certification

Culinary and Baking

1-year Certificates

- Baking & Pastry, 1-yr Certificate (p. 68)
- Culinary Arts, 1-yr Certificate (p. 69)

Career Pathway Certificates (CPC)

- Culinary Arts: Commercial Cooking, CPC (p. 70)

Certificate of Completion

- Commercial Baking, Certificate of Completion (p. 69)

Baking & Pastry, 1-yr Certificate

The Baking & Pastry one-year certificate program provides the education, skills and experience needed to secure an entry to mid-level position in the baking industry. It also provides a breadth of knowledge that will help graduates advance in their careers and open a wide variety of opportunities over time. The program offers a customized path through directed electives, for a focus in restaurants, management, nutrition, or teaching.

45 credits

Program Contacts:

- Program Coordinator: Ryan Josef-Maier, 541-463-3507, josef-maierr@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 9,880

- Resident Tuition: $ 6,525
- Technology Fees: $ 630
- General Student Fees: $ 450
- Online Course Fee: $ 0
- Books / Course Materials: $ 600 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $1,400 (culinary course fees)
- Other Cost / Expenses: $ 275 (uniform & shoes)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 - Apply fundamental theory, culinary skills and techniques, and time management principles to prepare industry-standard food products
PLO 3 - Safely and effectively operate current standard commercial bakery and cooking equipment including cooktops, food processors, ovens (baking, convection, and conventional), dough mixers, and a variety of kitchen hand tools
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

Admissions Information

- First qualified, first admitted entry; please read and complete the separate program application.
- Students should apply even if classes are full, as students will be added to a waitlist, or we may add additional sections as needed.
- There are non-refundable program fees to cover tools and uniforms. There is a uniform fitting around four weeks prior to classes commencing.
- This program has a Late Summer/Fall start.
- Must obtain Oregon Health Authority Food Handlers Certification before being accepted into the program.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

General Education

WR 115	Introduction to College Composition	4
	Human Relations - choose one course from list	3-4
MTH 098	Math Literacy	5
	Or	
MTH 025	Basic Mathematics Applications	3

List of accepted Human Relations Courses (p. 11)
WR: see Footnote 1.
MTH: see Footnote 2.

Program Core Courses

CA 101	Survey of Professional Cooking	2
CA 121	Composition of Cake	2
CA 122	Artisan Breads	2
CA 123	International Baking and Pastry	2
CA 124	Seasonal Baking and Pastry 1	2
CA 125	Seasonal Baking and Pastry 2	2
CA 163A	Beginning Baking and Pastry	3
CA 163B	Intermediate Baking and Pastry	2
CA 163C	Advanced Baking and Pastry	2
CA 280	Co-op Ed: Culinary Arts	1-7

CA 280: complete a minimum of 3 credits

Electives

Choose courses from the following list to reach 45 total credits (about 11-13 credits of electives)

BA 101Z	Introduction to Business	4
BA 206	Management Fundamentals	4
BT 120	MS WORD for Business	4
BT 123	MS EXCEL for Business	4
CA 102	Survey of Professional Baking	2
CG 100	College Success	1-3
CG 203	Human Relations at Work	1-3
ECON 200	Introduction to Economics	3
ED 100	Introduction to Teaching	3
FN 110	Personal Nutrition	3
FN 130	Family Food and Nutrition	3
FN 190	Sports Nutrition	2
FN 225	Nutrition	4
HE 252	First Aid	3
HORT 120	Gardening and Sustainable Food Systems	4

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

2 – Any math (MTH/STAT) above MTH 025 (p. 153) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study page.
- Students interested in this program will also be enrolled in Career Coaching through the Career Pathways Department.

Commercial Baking, Certificate of Completion

This program is for students who want to gain entry into the food service industry as beginning bakers and pastry cooks.

17 credits

Program Contacts

- Program Coordinator: Ryan Josef-Maier, 541-463-3507, josef-maierr@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 4,883

- Resident Tuition: $ 2,465
- Technology Fees: $ 238
- General Student Fees: $ 450
- Online Course Fee: $ 0
- Books / Course Materials: $ 205 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 1250 (culinary course fees)
- Other Cost / Expenses: $ 275 (uniform & shoes)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

- First qualified, first admitted entry; please read and complete the separate program application.
- Students should apply even if full, as students will be added to a waitlist, or we may add additional sections as needed.
- There are non-refundable program fees to cover tools and uniforms. There is a uniform fitting around four weeks prior to classes commencing.
- This program has a Late Summer/Fall start.
- Must obtain Oregon Health Authority Food Handlers Certification before being accepted into the program.
- Students pursuing the one-year certificate generally choose to initially concentrate in either Culinary or Baking.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

CA 163A	Beginning Baking and Pastry	3
CA 163B	Intermediate Baking and Pastry	2
CA 163C	Advanced Baking and Pastry	2
CA 121	Composition of Cake	2
CA 122	Artisan Breads	2
CA 123	International Baking and Pastry	2
CA 124	Seasonal Baking and Pastry 1	2
CA 125	Seasonal Baking and Pastry 2	2

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Baking & Pastry 1-yr Certificate (p. 68).
- Students interested in this program will also be enrolled in Career Coaching through the Career Pathways Department.

Culinary Arts, 1-yr Certificate

The Culinary Arts one-year certificate program provides the education, skills and experience needed to secure an entry to mid-level position in the culinary industry. It also provides a breadth of knowledge that will help graduates advance in their careers and open a wide variety of opportunities over time. The program offers a customized path through directed electives, for a focus in restaurants, management, nutrition, or teaching.

45 credits

Program Contacts:

- Program Coordinator: Ryan Josef-Maier, 541-463-3507, josef-maierr@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 10,475

- Resident Tuition: $ 6,525
- Technology Fees: $ 630
- General Student Fees: $ 434
- Online Course Fee: $ 70
- Books / Course Materials: $ 700 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 1,650 (culinary course fees)
- Other Cost / Expenses: $ 450 (Knife Kit, uniform & shoes)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:
PLO 1 - Independently produce a wide range of food items employing current technologies and traditional cooking methods
PLO 2 - Apply fundamental theory, culinary skills and techniques, and time management principles to prepare industry-standard food products
PLO 3 - Safely and effectively operate current standard commercial bakery and cooking equipment including cooktops, food processors, ovens (baking, convection, and conventional), dough mixers, and a variety of kitchen hand tools
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

- First qualified, first admitted entry; please read and complete the separate program application.
- Students should apply even if classes are full, as students will be added to a waitlist, or we may add additional sections as needed.
- There are non-refundable program fees to cover tools and uniforms. There is a uniform fitting around four weeks prior to classes commencing.
- This program has a Late Summer/Fall start.
- Must obtain Oregon Health Authority Food Handlers Certification before being accepted into the program.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

General Education

WR 115	Introduction to College Composition	4
	Human Relations - choose one course from list	3-4
MTH 098	Math Literacy	5
	Or	
MTH 025	Basic Mathematics Applications	3

List of accepted Human Relations Courses (p. 11)
WR: see Footnote 1.
MTH: see Footnote 2.

Program Core Courses

CA 102	Survey of Professional Baking	2
CA 160	Introduction to Cooking Theories 1	7
CA 162	Introduction to Cooking Theories 2	7
CA 294	Advanced Cooking Theories 3	8
CA 280	Co-op Ed: Culinary Arts	1-7

CA 280: complete a minimum of 3 credits

Electives

Choose courses from the following list to reach 45 total credits (about 7-9 credits of electives)

BA 206	Management Fundamentals	4
BT 120	MS WORD for Business	4
BT 123	MS EXCEL for Business	4
CA 101	Survey of Professional Cooking	2
CG 100	College Success	1-3
CG 203	Human Relations at Work	1-3
ECON 200	Introduction to Economics	3
ED 100	Introduction to Teaching	3
FN 110	Personal Nutrition	3
FN 130	Family Food and Nutrition	3
FN 190	Sports Nutrition	2
FN 225	Nutrition	4
HE 252	First Aid	3
HORT 120	Gardening and Sustainable Food Systems	4

Footnotes

1 - Any writing above WR 115 (p. 177) is also accepted

2 - Any math (MTH/STAT) above MTH 025 (p. 153) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- Students interested in this program will also be enrolled in Career Coaching through the Career Pathways Department.

Culinary Arts: Commercial Cooking, CPC

The purpose of this program is to 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.

22 credits

Program Contacts

- Career Pathways Coach for Culinary: Laurie Kinder, kinderl@lanecc.edu This program is connected to Career Pathways Coaching. Contact your coach at careerpathways@lanecc.edu

Cost

Estimated Cost: $ 6,248

- Resident Tuition: $ 3,190
- Technology Fees: $ 308
- General Student Fees: $ 450
- Online Course Fee:
- Books / Course Materials: $ 350 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: 1,500 (culinary course fees)
- Other Cost / Expenses: $ 450 (Knife Kit, Uniforms + Shoes)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Safely and effectively operate current standard commercial cooking equipment including cooktops, 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 - Define and employ the basic terms and key concepts used in the preparation of volume foods

Admission Information

- First qualified, first admitted entry; please read and complete the separate program application.
- Students should apply even if full, as students will be added to a waitlist, or we may add additional sections as needed.
- There are non-refundable program fees to cover tools and uniforms. There is a uniform fitting around four weeks prior to classes commencing.
- This program has a Late Summer/Fall start.
- Must obtain Oregon Health Authority Food Handlers Certification before being accepted into the program.
- Students pursuing the one-year certificate generally choose to initially concentrate in either Culinary or Baking.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

CA 160	Introduction to Cooking Theories 1	7
CA 162	Introduction to Cooking Theories 2	7
CA 294	Advanced Cooking Theories 3	8

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Culinary Arts, 1-yr Certificate (p. 69).
- Students interested in this program will also be enrolled in Career Coaching through the Career Pathways Department.

Education

Transfer Degrees

- Elementary Education, AAOT (p. 70)

Associate of Applied Science degrees (AAS)

- Early Childhood Education, AAS (p. 72)

1-year Certificates

- Early Childhood Education, 1-yr Certificate (p. 73)

Career Pathway Certificates (CPC)

- Early Childhood Education: Guidance and Curriculum, CPC (p. 74)
- Early Childhood Education: Infant and Toddler, CPC (p. 74)
- Early Childhood Teacher Aide, CPC (p. 75)

Elementary Education, AAOT

This degree is dependent on students selecting and working with their transfer institution early in the program. Contact an academic advisor for help determining a degree plan.

This program outlines specific course requirements for students who plan to transfer to a four-year public university in Oregon and earn a Bachelor's degree in Elementary Education. Students should work with an academic advisor to ensure they fulfill the requirements for this program and for their intended transfer institution. Students seeking alternative accepted pathways should consult with an academic advisor.

90 credits

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

Guidelines

- Complete a total of 90 credits of college-level coursework (24 credits must be completed at LCC).
- General Education courses must be a minimum of 3 credits. Elective courses may be any number of credits.
- Elementary Education Major requirements (ED and MTH 211 (p. 154)-MTH 212 (p. 154)-MTH 213 (p. 154)) must be completed with a grade of C- or better. P/NP is not accepted. All other courses may be completed with a grade of C- or better, or Pass.
- Note - Grade requirements may differ by transfer institution. Work with your academic advisor.
- 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 degree is awarded.

Cost

Estimated Cost: $ 16,710

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 0
- Books / Materials: $1,500

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Apply critical thinking to analyze social issues necessary to support the function of public education

PLO 2 - Describe culturally-responsive pedagogy and integration of social justice into a teaching philosophy

PLO 3 - Identify the ethics and responsibilities necessary to obtain a professional license in the teaching field and clarify career confirmation

Program Requirements

Core Transfer Map Requirements

Writing

WR 121Z	Composition 1	4

Mathematics

MTH 211	Fundamentals of Elementary Mathematics 1	4

MTH 211 - See Footnote 1.

Arts and Letters

Choose ONE of the following courses:

ART 115	Core Studio: 2D Design	4
ART 131	Core Studio: Drawing 1	4

Choose ONE of the following courses:

ENG 104Z	Introduction to Fiction	4
ENG 105Z	Introduction to Drama	4
ENG 106Z	Introduction to Poetry	4

Social Science

Choose ONE of the following courses:

HST 201	History of the United States	4
HST 202	History of the United States	4
HST 203	History of the United States	4

Choose ONE of the following courses:

ANTH 103	Cultural Anthropology	4
GEOG 201	World Regional Geography	4

Natural Sciences

• Choose one Biology with lab course from the Science/Math/Computer Science List (p. 19)

• Choose **one** Geology with lab course from the Science/Math/Computer Science List (p. 19)

Cultural Literacy Requirement

Fulfilled by any of the following:

ANTH 103	Cultural Anthropology	4
GEOG 201	World Regional Geography	4
HST 201	History of the United States	4
HST 202	History of the United States	4
HST 203	History of the United States	4

Core Transfer Map: See Footnote 2.

Additional General Education

WR 122Z	Composition 2	4
COMM 111Z	Public Speaking	4

Health/Wellness/Fitness

Complete one or more courses, totaling at least three credits from Health/Wellness/Fitness list (p. 18)

Arts and Letters

Complete one course from the Arts and Letters list (p. 17)

Science/Math/Computer Science

Complete one lab science course from the Science/Math/Computer Science list (p. 71)

Social Science

Complete one course each from American Government and Psychology:

American Government:

PS 201	U.S. Government and Politics	4

Psychology:

PSY 201Z	Introduction to Psychology I	4
PSY 202Z	Introduction to Psychology II	4

Major Requirements

Must be completed with a grade of C- or better. Pass not accepted.

MTH 212	Fundamentals of Elementary Mathematics 2	4
MTH 213	Fundamentals of Elementary Mathematics 3	4
ED 100	Introduction to Teaching	3
	Or	
ED 216	Foundations of Education	3
ED 233	Adolescent Learning and Development	3
ED 258	Multicultural Education	3
ED 269	Inclusion and Special Needs	3
ED 280	Co-op Ed: Education	3-12

MTH: See Footnote 3.

ED 280: complete a minimum of 3 credits

Electives

Any college-level courses that bring total credits to 90 credits, with the following limitations:

- Up to 12 credits of Career Technical Education. See the list of Course Types by Prefix (p. 108). 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).
- Maximum 12 credits of activity courses (PE, PEAT, PEO, D) may be included within the entire degree, with the exception of D 160 (p. 135), D 251 (p. 136), D 256 (p. 136), and D 260 (p. 136).
- Transfer institution requirements. Consult Lane's Academic Advising department for a list of recommended coursework. Transfer institution requirements may change without notice.

Recommended electives by transfer institution:

- Please connect with your desired transfer institution to determine any additional requirements and/or recommended electives (such as ECE, HDFS, ES, and Children's Lit) that can be completed at the community college.

Footnotes

1 – While MTH 211 (p. 154) fulfills the math requirement for Core Transfer Maps, it is also a major requirement. Thus a grade of C- or higher (P not accepted) is required

2 – To earn the CTM notation on a transcript, students must meet all the CTM requirements with a minimum of 30 credits. This notation is not automatically awarded. 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

3 – MTH 211 (p. 154)-MTH 212 (p. 154)-MTH 213 (p. 154) series only starts in the fall. Work with an academic advisor to ensure you're ready to start the series in fall

Notes

- Students must complete all required courses to earn this degree. Equivalent courses of 3 credits or higher may be transferred in and used to meet core or major requirements. To earn a Core Transfer Map (CTM) transcript notation, students must complete required courses and have a minimum of 30 CTM credits.
- 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 online from Enrollment Services.
- 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.
- 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 (p. 148) can be used in the Health/Wellness/Fitness category if taken in Summer 1997 or after. Prior to this, HE 252 (p. 148) would be considered an elective.

Early Childhood Education, AAS

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, policymakers and advocates.

90 credits

Program Contacts

- Program Coordinator: Kathleen Lloyd, lloydk@lanecc.edu, 541-463-5287
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 18,030

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 900
- Books / Course Materials: $ 1,800 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 120 (MMR immunization if needed)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 - Apply research and observational skills to deepen an understanding of human development

PLO 5 - Examine ways to administer and manage the successful operations of child care programs

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
	Human Relations - choose one course from list	3-4
	Health/PE/Dance - see list	3
MTH 098	Math Literacy	5
	Or	
MTH 025	Basic Mathematics Applications	3

WR: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

List of accepted Health/PE/Dance courses (p. 18) – can be any combination to reach 3 credits

MTH: See Footnote 2.

Program Core Courses

ECE 105	Health and Safety Issues in Early Childhood Education	2
ECE 110	Observing Young Children's Behavior	1
ECE 120	Introduction to Early Childhood	2
ECE 130	Guidance of Young Children	3
ECE 150	Creative Activities for Children	3
ECE 160	Exploring Early Childhood Curriculum	4
ECE 170	Infants and Toddlers Development	4
ECE 210	Applying Early Childhood Curriculum	4
ECE 230	Family, School, Community Relations	3
ECE 240	Supervised Student Teaching	4
ECE 250	Infant and Toddler Environments	3
ECE 260	Administration of Child Care Programs	3
ECE 280	Co-op Ed: Early Childhood Education	1-7
FN 130	Family Food and Nutrition	3
HDFS 226	Child Development	3
HDFS 227	Children Under Stress	3
ECE 253	Diversity Issues in Early Childhood Education	3
	Or	
ED 258	Multicultural Education	3
HDFS 228	Young Children with Special Needs	3
	Or	
ED 269	Inclusion and Special Needs	3

ECE 240: complete a total of 12 credits. See Footnote 3.

ECE 280: complete a total of 6 credits. See Footnote 4.

Electives

Program Electives

Complete 6 credits from the following options:

Anthropology (ANTH (p. 111)), Art History (ARH (p. 118)), ART (p. 118), American Sign Language (ASL (p. 121)), Astronomy (ASTR (p. 121)), Business (BA (p. 122)), Business Tech (BT (p. 124)), Biology (BI (p. 123)), Career Guidance (CG (p. 125)), Chemistry (CH (p. 126)), Mandarin Chinese (CHN (p. 127)), Computer Info Tech (CIS (p. 127)), Communication (COMM (p. 129)), Creative Writing (CRWR (p. 130)), Computer Science (CS (p. 131)), Chinuk Wawa (CW (p. 134)), Education (ED (p. 140)), Effective Learning (EL (p. 140)), English (ENG (p. 142)), Ethnic Studies (ES (p. 144)), Food & Nutrition (FN (p. 146)), French (FR (p. 146)), Geology (G (p. 147)), Geography (GEOG (p. 147)), Geographic Info Science (GIS (p. 147)), Health (HE (p. 148)), Human Services (HS (p. 150)), History (HST (p. 151)), Humanities (HUM (p. 151)), MTH (p. 153) - Math (MTH 060 or higher only), Music (MUS (p. 159)), Physics (PH (p. 168)), Philosophy (PHL (p. 167)), Psychology (PSY (p. 170)), Student Life & Leadership (SLD (p. 172)), Sociology (SOC (p. 172)), Spanish (SPAN (p. 173)), Theatre Arts (TA (p. 174)), Writing (WR (p. 176)) (WR 121Z (p. 177) or higher only)

Specific courses faculty recommend:

ART 111 (p. 118), *ART 250* (p. 119), *ART 261* (p. 120)

CIS 101 (p. 127)

COMM 111Z (p. 130), *COMM 218Z* (p. 130)

CS 120 (p. 131)

ED 100 (p. 140), *ED 216* (p. 140), *ED 258* (p. 140), *ED 269* (p. 140)

ENG 100

ES 101, ES 244 (p. 144)

GEOG 141 (p. 147)
HST 266 (p. 151)
MUS 101 (p. 159), *MUS 131* (p. 160), *MUS 134* (p. 160)
PHL 201 (p. 168), *PHL 221*
PSY 201Z (p. 170), *PSY 215* (p. 170)
SLD 111 (p. 172)
SOC 204 (p. 172), *SOC 205* (p. 172), *SOC 210* (p. 173)

Open Electives

Complete 6 credits any 100- or 200-level courses of any course(s) 100-level or higher to reach 90 total credits. Work with an academic advisor.

Note: Students using lower-credit courses to meet General Education requirements may need to take additional electives to meet the 90-credit minimum.

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

2 – Any math (MTH/STAT) above MTH 025 (p. 153) is also accepted

3 – ECE 240 (p. 139): requires 12 credits (270 hours/90 hours per term for 3 terms) of student teaching. Please contact the Program Coordinator, Kathleen Lloyd, for further information and to schedule your hours. Documentation of MMR immunization required prior to enrolling in ECE 240. More information on the Early Childhood Education web page.

4 – 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. Documentation of MMR immunization required prior to enrolling in ECE 280. Cooperative education worksites and schedules vary. Contact Kathleen Lloyd.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for Early Childhood Education, 1-yr Certificate (p. 73), Early Childhood Teacher Aide, CPC (p. 75), Early Childhood Education: Guidance and Curriculum, CPC (p. 74), and Early Childhood Education: Infant and Toddler, CPC (p. 74).
- 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
- 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.

Credential

ECE students are encouraged to enroll in the Oregon Registry, a statewide professional recognition program that records and recognizes the growth and achievements of early childhood care and education professionals. Eleven college credits are available (Credit for Prior Learning - CPL) for those individuals who have already earned a step 7 or higher in the Oregon Registry (ORO) based on community training hours.

Early Childhood Education, 1-yr Certificate

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.

45 credits

Program Contacts

- Program Coordinator: Kathleen Lloyd, lloydk@lanecc.edu, 541-463-5287
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 9,575

- Resident Tuition: $ 6,525
- Technology Fees: $ 630
- General Student Fees: $ 450
- Online Course Fee: $ 450
- Books / Course Materials: $ 1,400 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 120 (MMR immunization if needed)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 - Apply research and observational skills to deepen an understanding of human development

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
	Human Relations - choose one course from list	3-4
MTH 098	Math Literacy	5
	Or	
MTH 025	Basic Mathematics Applications	3

WR: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

MTH: See Footnote 2.

Program Core Courses

ECE 105	Health and Safety Issues in Early Childhood Education	2
ECE 110	Observing Young Children's Behavior	1
ECE 120	Introduction to Early Childhood	2
ECE 130	Guidance of Young Children	3
ECE 150	Creative Activities for Children	3
ECE 160	Exploring Early Childhood Curriculum	4
ECE 170	Infants and Toddlers Development	4
ECE 240	Supervised Student Teaching	4
FN 130	Family Food and Nutrition	3
HDFS 226	Child Development	3
ECE 253	Diversity Issues in Early Childhood Education	3
	Or	
ED 258	Multicultural Education	3
HDFS 228	Young Children with Special Needs	3
	Or	
ED 269	Inclusion and Special Needs	3

ECE 240: See Footnote 3.

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

2 – Any math (MTH/STAT) above MTH 025 (p. 153) is also accepted

3 – ECE 240 (p. 139): requires 4 credits (90 hours) of student teaching. Please contact the Program Coordinator, Kathleen Lloyd, for further information and to schedule your hours. Documentation of MMR immunization required prior to enrolling in ECE 240. More information on the Early Childhood Education web page.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Early Childhood Education, AAS (p. 72)
- 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
- 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

Credential

ECE students are encouraged to enroll in the Oregon Registry, a statewide professional recognition program that records and recognizes the growth and achievements of early childhood care and education professionals. Eleven college credits are available (Credit for Prior Learning - CPL) for those individuals who have already earned a step 7 or higher in the Oregon Registry (ORO) based on community training hours.

Early Childhood Education: Guidance and Curriculum, CPC

The purpose of this program is to prepare graduates to work as early childhood education teaching assistants.

20 credits

Program Contacts

- Program Coordinator: Kathleen Lloyd, lloydk@lanecc.edu, 541-463-5287
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 4,600

- Resident Tuition: $ 2,900
- Technology Fees: $ 280
- General Student Fees: $ 314
- Online Course Fee: $ 200
- Books / Course Materials: $ 500 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 120 (MMR immunization if needed)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

ECE 120	Introduction to Early Childhood	2
ECE 130	Guidance of Young Children	3
ECE 150	Creative Activities for Children	3
ECE 160	Exploring Early Childhood Curriculum	4
ECE 210	Applying Early Childhood Curriculum	4
ECE 240	Supervised Student Teaching	4

ECE 240: See Footnote 1.

Footnotes

1 – ECE 240: requires 4 credits (90 hours) of student teaching. Please contact the Program Coordinator, Kathleen Lloyd, for further information and to schedule your hours.

Documentation of MMR immunization required prior to enrolling in ECE 240. More information on the Early Childhood Education web page.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Early Childhood Education, AAS (p. 72).
- 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
- 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.

Credential

ECE students are encouraged to enroll in the Oregon Registry, a statewide professional recognition program that records and recognizes the growth and achievements of early childhood care and education professionals. Eleven college credits are available (Credit for Prior Learning - CPL) for those individuals who have already earned a step 7 or higher in the Oregon Registry (ORO) based on community training hours.

Early Childhood Education: Infant and Toddler, CPC

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.

17 credits

Program Contacts

- Program Coordinator: Kathleen Lloyd, lloydk@lanecc.edu, 541-463-5287
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $3,993

- Resident Tuition: $ 2,465
- Technology Fees: $ 238
- General Student Fees: $ 314
- Online Course Fee: $ 170
- Books / Course Materials: $ 700 (Some courses use Open Educational Resources (OER), which are free or low-cost materials)
- Program Specific Fees: $ 120 (MMR immunization if needed)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

ECE 130	Guidance of Young Children	3
ECE 170	Infants and Toddlers Development	4
ECE 250	Infant and Toddler Environments	3
HDFS 226	Child Development	3
ECE 240	Supervised Student Teaching	4

ECE 240: See Footnote 1.

Footnotes

1 – ECE 240: requires 4 credits (90 hours) of student teaching. Please contact the Program Coordinator, Kathleen Lloyd, for further information and to schedule your hours.

Documentation of MMR immunization required prior to enrolling in ECE 240. More information on the Early Childhood Education web page.

Credential

ECE students are encouraged to enroll in the Oregon Registry, a statewide professional recognition program that records and recognizes the growth and achievements of early childhood care and education professionals. Eleven college credits are available (Credit for Prior Learning - CPL) for those individuals who have already earned a step 7 or higher in the Oregon Registry (ORO) based on community training hours.

Early Childhood Teacher Aide, CPC

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

17 credits

Program Contacts

- Program Coordinator: Kathleen Lloyd, lloydk@lanecc.edu, 541-463-5287
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 3,893

- Resident Tuition: $ 2,465
- Technology Fees: $ 238
- General Student Fees: $ 300
- Online Course Fee: $ 170
- Books / Course Materials: $ 600 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 120 (MMR immunization if needed)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

ECE 105	Health and Safety Issues in Early Childhood Education	2
ECE 120	Introduction to Early Childhood	2
ECE 130	Guidance of Young Children	3
ECE 150	Creative Activities for Children	3
HDFS 226	Child Development	3
ECE 240	Supervised Student Teaching	4

ECE 240: See Footnote 1.

Footnotes

1 – ECE 240: requires 4 credits (90 hours) of student teaching. Please contact the Program Coordinator, Kathleen Lloyd, for further information and to schedule your hours.

Documentation of MMR immunization required prior to enrolling in ECE 240. More information on the Early Childhood Education web page.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Early Childhood Education, AAS (p. 72)
- 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.
- 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.

Credential

ECE students are encouraged to enroll in the Oregon Registry, a statewide professional recognition program that records and recognizes the growth and achievements of early childhood care and education professionals. Eleven college credits are available (Credit for Prior Learning - CPL) for those individuals who have already earned a step 7 or higher in the Oregon Registry (ORO) based on community training hours.

Energy and Sustainability

Associate of Applied Science degrees (AAS)

- Energy Management with Building Controls Technology, AAS (p. 75)
- Sustainability Coordinator, AAS (p. 76)

Energy Management with Building Controls Technology, AAS

This program is not accepting new students for the 2024-25 academic year. Please contact ***academic advising*** for alternative options.

Through this program, students will learn how commercial building systems consume energy by understanding how systems work and the interaction between systems. 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, and School Districts.

92-93 credits

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 17,217

- Resident Tuition: $ 13,485
- Technology Fees: $ 1,302
- General Student Fees: $ 900
- Online Course Fee: $ 930
- Books / Course Materials: $ 250 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Other Cost / Expenses: $ 350 (controls building kit)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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: Read elevations, sections, schedules, and construction notes

PLO 9: Analyze a variety of commercial HVAC and lighting systems from a controls perspective

PLO 10: Become familiar with modules and electronics commonly used to implement building automation schemes

PLO 11: Write building control systems schemes

PLO 12: Understand control system management software

PLO 13: Diagnose and troubleshoot existing building control systems

Admission Information

Apply online. Applicants must have completed MTH 065 (p. 153) or higher prior to enrollment. Individual courses may be taken with department/instructor approval.

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 121Z	Composition 1	4
WR 227Z	Technical Writing	4
MTH 095	Intermediate Algebra	5
PH 101	Fundamentals of Physics	4
PH 102	Fundamentals of Physics	4
	Human Relations - choose one course from list	3-4

General Ed Courses: See Footnote 1.

MTH: See Footnote 2.

PH: See Footnote 3.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

BT 123	MS EXCEL for Business	4
CS 179	Introduction to Computer Networks	4
CST 110	Blueprint Reading 1	3
NRG 101	Introduction to Energy Management	3
NRG 110	Energy Efficiency Industry Software Applications	4
NRG 111	Residential/Light Commercial Energy Analysis	3
NRG 112	Commercial Energy Use Analysis	4
NRG 121	Air Conditioning System Analysis	3
NRG 122	Commercial Air Conditioning System Analysis	3
NRG 123	Energy Control Strategies	4
NRG 124	Energy Efficiency Methods	4
NRG 131	Lighting Fundamentals	3
NRG 142	Energy Accounting	3
NRG 181	Direct Digital Controls 1	4
NRG 182	Commercial HVAC Controls	4
NRG 183	Controls Retuning and Troubleshooting	4
NRG 184	Direct Digital Controls 2	4
NRG 185	Lighting Controls	4

Complete one of the following:

CS 133JS	Beg. Programming: JavaScript	4
CS 161C/CS 133C	Computer Science 1	4
CS 161N/CS 133N	Computer Science 1	4
CS 161P/CS 133P	Computer Science 1	4
CS 275	Introduction to Database Systems and Modeling	4

CS 133JS & CS 275 (p. 132): See Footnote 4.

Footnotes

1 – Recommended that General Education requirements be completed prior to entering the program. WR 121Z (p. 177), WR 227Z (p. 177), and Human Relations may be taken any term

2 – MTH 111Z (p. 154) or higher is also accepted. Math must be completed by end of first year

3 – Other accepted combinations of Physics (p. 168) include:
PH 102 (p. 168) and PH 103 (p. 168)
PH 201 (p. 168) and PH 202 (p. 168)
PH 202 (p. 168) and PH 203 (p. 168)
PH 211 (p. 168) and PH 212 (p. 168)
PH 212 (p. 168) and PH 213 (p. 168)
Note: LCC may not offer Physics online. To learn more and for alternative options, please check with your academic advisor

4 – CS 133JS (p. 131) has additional prerequisites that are not embedded into the program

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- All NRG courses are offered fully online.
- 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 an 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).

Apprenticeship Option

The Building and Controls Apprenticeship (BECA) is a new Oregon State Bureau of Labor and Industries (BOLI) approved apprenticeship program. BECA consists of two required components:

- **Related Training:** online instruction through the LCC Energy Management Building Controls Technician program which results in the above AAS degree.
- **On-the-job (OJT) work experience:** 2,000 hours of work experience that begins after the first year of classroom instruction and is paid for by the Training Agent (employer). Advancement through the 2,000 hours includes incrementally increased compensation after each of four 500 hours of OJT.

Additionally, BECA recommends but does not require, that completers take a comprehensive cumulative exam administered by The Association of Energy Engineers (AEE). The AEE Certified Energy Manager (CEM) ANSI 17024 Accredited exam is the most sought-after credential in the Energy Efficiency industry. More information can be found on the Energy Management website.

Sustainability Coordinator, AAS

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.

90 credits

Program Contacts

- Program Coordinator: Luis Maggiori, maggioril@lanecc.edu, 541-463-5884
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 18,210

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 0
- Books / Course Materials: $ 3,000 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 121Z	Composition 1	4
COMM 265	Environmental Communication	4
MTH 098	Math Literacy	5
	Human Relations - choose one course from list	3-4

COMM 265: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

BI 103	Ecosystems	4
BT 120	MS WORD for Business	4
BT 123	MS EXCEL for Business	4
CH 170	Introduction to Environmental Chemistry	4
COOP 206	Co-op Ed: Internship Seminar	2
CST 201	Sustainable Building Practices	3
DRF 211	Sustainable Building Systems	4
ENSC 182	Atmospheric Environment and Climate Change	4
HE 255	Global Health and Sustainability	4
IDS 280S	Co-op Ed: Sustainability Coordinator	3-12
PS 297	Environmental Politics	4

COOP 206: must complete at least 2 credits

IDS 280S: must complete at least 3 credits

BI 103: See Footnote 3.

CH 170: See Footnote 4.

Environmental Science

Complete one of the following:

ENSC 181	Terrestrial Environment	4
GS 106	Earth, Sea, Sky	4
SOIL 205	Introduction to Soil Science	4

Complete one of the following:

ENSC 183	Aquatic Environment	4
GS 108	Oceanography	4

Earth Science and Geography

Complete one of the following:

G 102	Earth's Dynamic Surface	4
G 202	Earth's Surface Systems	4
GEOG 141	Natural Environment	4

Complete one of the following:

GEOG 142	Introduction to Human Geography	4
GIS 151	Digital Earth	4
GS 101	General Science (Nature of the Northwest)	4

Social Change and Economics

Complete one of the following:

ECON 260	Introduction to Environmental and Natural Resource Economics	4
GEOG 201	World Regional Geography	4

Complete one of the following:

HE 240	Holistic Health	3
HE 250	Personal Health	3

Complete one of the following:

SOC 205	Social Stratification and Social Systems	4
SOC 206	Institutions and Social Change	4

Program Electives

Complete 8-10 credits from the following:

ART 288	Introduction to Web Design and Social Media	3
BT 230	Digital Office	4
COMM 265	Environmental Communication	4
GIS 245	GIS 1	4
GIS 246	GIS 2	4
GS 201	Scientific Skepticism - Someone is Wrong on the Internet	4
HE 275	Lifetime Health and Fitness	3
HORT 120	Gardening and Sustainable Food Systems	4
MTH 105Z	Math in Society	4
MTH 111Z	Precalculus I: Functions	4
STAT 243Z	Elementary Statistics 1	4
NRG 111	Residential/Light Commercial Energy Analysis	3
NRG 112	Commercial Energy Use Analysis	4
NRG 121	Air Conditioning System Analysis	3
NRG 122	Commercial Air Conditioning System Analysis	3
PH 101	Fundamentals of Physics	4
PH 102	Fundamentals of Physics	4
PH 103	Fundamentals of Physics	4
	Any language courses, 100-level or higher	
	Any course or combo of courses from General Education or Program Core	

Note: Any language courses, 100-level or higher, including American Sign Language (ASL (p. 121)), Chinuk Wawa (CW (p. 134)), Mandarin Chinese (CHN (p. 127)), French (FR (p. 146)), or Spanish (SPAN (p. 173))

Note: Any course or combination of courses from the General Education or Program Core Course categories not already used to meet other program requirements is accepted

Footnotes

1 – COMM 265 (p. 130) is recommended but COMM 115 (p. 130) or ENG 240 (p. 143) or WR 227Z (p. 177) is also accepted

2 – MTH 095 (p. 154) or higher math/statistics is also accepted

3 – BI 103 (p. 123) - choose from the following sections: Biodiversity and Sustainability (recommended), Global Ecology or Forest Ecology

4 – CH 170 (p. 126) is recommended but CH 104 (p. **Error! Bookmark not defined.**) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- Students who complete GIS 151 (p. 147) to meet the Earth Science and Geography requirement, as well as GIS 245 (p. 147) and GIS 246 (p. 147) to meet the Elective requirement, will earn the Geographic Information Science, Certificate of Completion (p. 105).

English Literature

Transfer Degree

- English Literature, AAT (p. 77)

English Literature, AAT

This degree is dependent on students selecting and working with their transfer institution early in the program.

This program outlines specific course requirements for students who plan to transfer to a four-year public university in Oregon and earn a Bachelor of Arts in English Literature. Students should work with an LCC academic advisor to ensure they fulfill the requirements for this program and for their intended transfer institution. Students seeking alternative accepted pathways should consult with an academic advisor.

90 credits

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

- Note: Students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

Guidelines

- Complete a total of 90 credits of college-level coursework (24 credits must be completed at LCC).
- General Education courses must be a minimum of 3 credits. Elective courses may be any number of credits.
- English Literature major requirements must be completed with a grade of C- or better. P/NP is not accepted. All other courses may be completed with a grade of C- or better, or Pass.
  - Note - grade requirements may differ by transfer institution.
- 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 degree is awarded

Cost

Estimated Cost: $ 16,710

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fees: $ 0
- Books / Course Materials: $ 1,500

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Demonstrate understanding of literary works in context, including the ways texts engage notions of genre, culture, history, class, race, gender, and sexuality

PLO 2 - Use a variety of written, verbal, and multimodal forms to respond to and analyze literary texts and contexts

Program Requirements

Core Transfer Map Requirements

Writing - WR 121Z (p. 177) (4 credits)

Math - MTH 105Z (p. 154) or higher; STAT (p. 173) courses also accepted (4 credits)

Arts & Letters - Choose two (2) 200-level English (ENG) courses from (p. 17)the Arts and Letters List (p. 17) (8 credits) *cannot double dip with major requirements

Social Science - Choose two (2) courses from the Social Science List (p. 20) (6-8 credits)

Natural Sciences - Choose two (2) lab courses from (p. 19)the Science/Math/Computer Science List (p. 19) (8 credits)

Cultural Literacy - One (1) course from the courses above must also be an approved Cultural Literacy course (see specific lists for those designated as meeting CL)

Core Transfer Map: See Footnote 1.

Arts & Letters: See Footnote 2.

Major Requirements

Must be completed with a letter grade of C- or better. Pass not accepted.

Writing

WR 122Z	Composition 2	4

Literature Course A

Complete one (1) of the following:

ENG 203	Shakespeare	4
ENG 204	Survey of British Literature	4
ENG 205	Survey of British Literature	4
ENG 215	Latino/a Literature	4
ENG 222	Literature and Gender	4
ENG 232	Native American Literature, Myth and Folklore	4
ENG 240	Nature Literature	4
ENG 244	Asian American Literature	4
ENG 250	Introduction to Folklore and Mythology	4
ENG 253	Survey of American Literature	4
ENG 260	Introduction to Women Writers	4
ENG 261	Science Fiction	4
ENG 270	Bob Dylan: American Poet	4
ENG 282	Introduction to Comics-Graphic Novels	4

Literature Course B

Complete one (1) of the following:

ENG 204	Survey of British Literature	4
ENG 205	Survey of British Literature	4
ENG 253	Survey of American Literature	4

Second Language

Complete a second language series (201-203).

Note: students without any second language credits should begin the 100-level sequence (101-103) in their first year (credits will be applied towards electives). Students should complete language requirements before transferring. Students may also be able to demonstrate proficiency through an exam or other means.

2nd Year Language

CW 201	Chinuk Wawa	4
CW 202	Chinuk Wawa	4
CW 203	Chinuk Wawa	4
FR 201	Second-Year French	4
FR 202	Second-Year French	4
FR 203	Second-Year French	4
SPAN 201	Spanish, Second-Year	4
SPAN 202	Spanish, Second-Year	4
SPAN 203	Spanish, Second-Year	4

Language: See Footnote 3.

Electives

Any college-level courses that bring total credits to 90 credits, with the following limitations:

- Up to 12 credits of Career Technical Education. See the list of Course Types by Prefix (p. 108). Policies on accepting career-technical credits vary at four-year institutions in Oregon. Consult an academic advisor about taking these courses as electives.
- 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).
- 3 credits of activity courses (PE, PEAT, PEO, D) may be included within the entire degree, with the exception of D 160 (p. 135), D 251 (p. 136), D 256 (p. 136), and D 260 (p. 136).
- Transfer institution requirements. Consult Lane's Academic Advising department for a list of recommended coursework. Transfer institution requirements may change without notice.

Recommended Electives by Institution

University of Oregon -

- Additional General Education as needed by UO. See list of LCC courses that transfer - General Education Course Equivalencies to UO (p. 26). Connect with UO to determine what to take.

Oregon State University -

- COMM 111Z (p. 130)
- HE 275 (p. 148)
- **Two (2)** additional Arts and Letters (p. 17) - (The 8 credits of ENG courses that fulfill the Arts & Letters in Core Transfer Maps will only count towards the major at OSU. Thus, students need to take another two Arts and Letters courses in any approved subject)
- Additional General Education as needed by OSU. See list of LCC courses that transfer - General Education Course Equivalencies to OSU (p. 25). Connect with OSU to determine what to take.

Portland State University -

- Additional General Education as needed by PSU. Connect with PSU to determine what to take.

For all other Oregon universities, please connect with your desired transfer institution to determine any additional requirements that can be completed at the community college.

Footnotes

1 – To earn the CTM notation on a transcript, students must meet all the CTM requirements with a minimum of 30 credits. This notation is not automatically awarded. 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

2 – The 8 credits of ENG fulfill two areas but the credits cannot be double counted in the degree

3 – LCC offers 2nd year languages in Spanish, French, and Chinuk Wawa. Students transferring in other languages at the same second year level is also accepted. This includes Advanced Placement and International Baccalaureate

Notes

- This program follows Associate of Arts (AAT)/Associate of Science (AST) Requirements unless otherwise specified.
- Students must complete all required courses to earn this degree. Equivalent courses of 3 credits or higher may be transferred in and used to meet core or major requirements. To earn a Core Transfer Map (CTM) transcript notation, students must complete required courses and have a minimum of 30 CTM credits.
- Students considering pre-medical, pre-dental, and pre-pharmacy programs should consider the Organic Chemistry sequence. Courses in the sequence must be taken at the same institution.
- 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.
- 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 online from Enrollment Services.
- Repeatable courses may be used once to meet a Core Transfer Map requirement. Any additional allowable repeats may be used to meet Elective requirements.
- Some courses are included on more than one Core Transfer Map list. These courses may be used only once to meet a specific Core Transfer Map requirement. Please contact your academic advisor for details.
- Courses numbered 197, 198, 199, 280, 297, 298, or 299 count as electives and do not meet Core Transfer Map requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved to meet Core Transfer Map requirements.

Fitness and Lifestyle

1-year Certificate

- Fitness and Lifestyle Specialist, 1-yr Certificate (p. 79)

Career Pathway Certificates (CPC)

- Fitness and Lifestyle Specialist: Group Exercise Instructor, CPC (p. 80)
- Fitness and Lifestyle Specialist: Healthy Aging, CPC (p. 80)

Fitness and Lifestyle Specialist, 1-yr Certificate

The purpose of this program is to prepare students for various careers in the fitness industry, including personal training, group exercise instruction, coaching and wellness coaching.

45 credits

Program Contacts

- Program Coordinator: Jennifer Miner, minerja@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 8,484

- Resident Tuition: $ 6,525
- Technology Fee: $ 630
- General Student Fees: $ 450
- Online Course Fee: $ 80
- Books: $ 669 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Course Fees: $ 60
- Other Costs / Expenses: $ 70 (Uniform, Lock Room)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 and ethical professional conduct

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 020	Math Renewal	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11) (EMS 102 or HP 110 (p. 150) are also accepted)

Program Core Courses

Must be completed with a grade of C- or better. P/NP not accepted.

FLS 110	Coaching Healthy Eating	2
FLS 120	Fitness Assessment & Exercise Prescription - Field Techniques	3
FLS 130	Principles of Strength Training and Conditioning Instruction	2
FLS 140	Applied Exercise Physiology 1	3
FLS 150	Techniques of Group Exercise Leadership	2
FLS 160	Applied Anatomy and Kinesiology	3
FLS 170	Mental Dynamics of Exercise and Sport	3
FLS 185	Career Preparation	3
FLS 190	Injury Prevention and Management	3

Complete one of the following:

May be completed with a grade of C- or better, or Pass.

HE 161	Cardiopulmonary Resuscitation	1
HE 252	First Aid	3

HE 161: see Footnote 3.

Complete one of the following:

Must be completed with a grade of C- or better. P/NP not accepted.

FLS 280	Co-op Ed: Fitness	1-12
FLS 280A	Co-op Ed: Healthy Aging	1-12

FLS 280/FLS 280A: complete 4 credits. (instructor approval required for entry)

Complete one of the following:

May be completed with a grade of C- or better, or Pass. (except FLS 214 (p. 146) - Pass not accepted)

FLS 214	Physical Exercise and Healthy Aging	3
FN 225	Nutrition	4
HE 250	Personal Health	3
HE 255	Global Health and Sustainability	4
HE 275	Lifetime Health and Fitness	3

ART 288	Introduction to Web Design and Social Media	3
BA 101Z	Introduction to Business	4
BA 223	Marketing	4
BA 238	Sales	4
BT 150	Business Web Pages with WordPress	3

Electives

Complete two (2) different Physical Education (PE) courses, selected from the following:

PE 101	Cardio Core Conditioning	1
PE 104	Body Sculpt	1
PE 106	Yogilates	1
PE 107	Zumba Fitness	1
PE 108	Conditioning	1
PE 111	Group Cycling	1
PE 113	Fitness Education: Introduction	1
PE 117	Strength Training	1
PE 119	Strength Training for Women	1
PE 134	Tai Chi Chuan	1
PE 136	Yoga	1
PE 137	Gentle Yoga	1

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

2 – Any math (MTH/STAT) above MTH 020 (p. 153) is also accepted

3 – HE 161 (p. 148): students with a current CPR Certification may substitute the CPR requirement. Contact Program Coordinator for details

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for the Fitness and Lifestyle Specialist: Group Exercise Instructor, CPC (p. 80) and the Fitness and Lifestyle Specialist: Healthy Aging, CPC (p. 80).

Certifications

The FLS program is an ACE, American Council on Exercise, educational partner, 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.

Fitness and Lifestyle Specialist: Group Exercise Instructor, CPC

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.

18 credits

Program Contacts

- Program Coordinator: Jennifer Miner, minerja@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 3,951

- Resident Tuition: $ 2,610
- Technology Fee: $ 252
- General Student Fees: $ 300
- Online Course Fee: $ 50
- Books: $ 599 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Course Fees: $ 45
- Other Costs / Expenses: $ 95 (Equipment, Uniform, Locker Room)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

Must be completed with a grade of C- or better. P/NP not accepted.
HE may be completed with a grade of C- or better, or Pass.

FLS 120	Fitness Assessment & Exercise Prescription - Field Techniques	3
FLS 130	Principles of Strength Training and Conditioning Instruction	2
FLS 140	Applied Exercise Physiology 1	3
FLS 150	Techniques of Group Exercise Leadership	2
FLS 160	Applied Anatomy and Kinesiology	3
FLS 170	Mental Dynamics of Exercise and Sport	3
FLS 280	Co-op Ed: Fitness	1-12
HE 161	Cardiopulmonary Resuscitation	1
	Or	
HE 252	First Aid	3

FLS 280: complete 1 credit (instructor approval is required for entry)

HE 161: see Footnote 1.

Footnotes

1 – HE 161 (p. 148): students with a current CPR Certification may substitute the CPR requirement. Contact Program Coordinator for details

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is embedded in the Fitness and Lifestyle Specialist, 1-yr Certificate (p. 79).

Fitness and Lifestyle Specialist: Healthy Aging, CPC

The purpose of this certificate is to provide FLS students the opportunity to enhance their knowledge, skills and abilities in working specifically with mature adults. As our aging population is growing, this means that our students are likely to encounter older adults for personal training or in group fitness classes in a variety of settings and facilities. Students need to consider adaptability of fitness training and programming for elderly populations focusing on the functional approach, aerobic and non-aerobic fitness and muscular fitness. Considerations when training include comorbidities, disease progression and major body systems affected by the aging process.

17 credits

Program Contacts

- Program Coordinator: Jennifer Miner, minerja@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 3,563

- Resident Tuition: $ 2,465

- Technology Fee: $ 238
- General Student Fees: $ 300
- Online Course Fee: $ 60
- Books: $ 385 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Course Fees: 45
- Other Costs / Expenses: $ 70 (Uniform, Locker Room)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 - Demonstrate interpersonal skills in the areas of leadership, motivation, and communication

PLO 3 - Design and demonstrate safe and effective exercise programs for apparently healthy individuals and groups within current fitness industry standards and best practices

PLO 4 - Respond to the needs of a diverse clientele and demonstrate inclusive practices

PLO 5 - Apply basic behavior modification strategies to enhance exercise and health behavior change with clients, including nutrition and weight management

PLO 6 - Apply basic exercise principles related to applied kinesiology, physiology, injury prevention, conditioning, resistance training, and functional training

PLO 7 - Apply nationally recognized standards for fitness and overall health and communicate the benefits and precautions associated with exercise

PLO 8 - Communicate their scope of practice and role within the health and fitness field and the allied health care system and practice appropriate and ethical professional conduct

Program Requirements

Program Core Courses

Must be completed with a grade of C- or better. P/NP not accepted.
HE may be completed with a grade of C- or better, or Pass.

FLS 120	Fitness Assessment & Exercise Prescription - Field Techniques	3
FLS 130	Principles of Strength Training and Conditioning Instruction	2
FLS 160	Applied Anatomy and Kinesiology	3
FLS 170	Mental Dynamics of Exercise and Sport	3
FLS 214	Physical Exercise and Healthy Aging	3
HE 161	Cardiopulmonary Resuscitation	1
FLS 280A	Co-op Ed: Healthy Aging	1-12

FLS 280A: complete 2 credits (instructor approval required for entry)

HE 161: see Footnote 1.

Footnotes

1 – HE 161 (p. 148): students with a current CPR Certification may substitute the CPR requirement. Contact Program Coordinator for details

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is embedded in the Fitness and Lifestyle Specialist, 1-yr Certificate (p. 79).

Health Professions

Associate of Applied Science degrees (AAS)

- Dental Hygiene, AAS (p. 82)
- Health Information Management (online), AAS (p. 83)
- Nursing, AAS (p. 87)
- Paramedicine, AAS (p. 89)
- Physical Therapist Assistant, AAS (p. 90)

1-year Certificates

- Dental Assisting, 1-yr Certificate (p. 81)
- Health Information Management: Medical Coding, 1-yr Certificate (p. 84)
- Medical Assistant, 1-yr Certificate (p. 85)
- Practical Nursing, 1-yr Certificate (p. 88)

Career Pathway Certificates (CPC)

- Medical Assistant: Basic Health Care, CPC (p. 86)
- Paramedicine: Emergency Medical Technician, CPC (p. 90)

Dental Assisting, 1-yr Certificate

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.

49 credits (prerequisites: 11-16 credits)

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost for Core Program: $ 15,385

- Resident Tuition: $ 7,105
- Technology Fees: $ 686
- General Student Fees: $ 450
- Online Course Fee: $ 100
- Books / Course Materials: $ 600 (Some courses use Open Educational Resources (OER), which are free or low-cost materials)
- Program Specific Fees: $ 2,267 (certifications-licensure-exams, health insurance, application fee, background check, drug/alcohol screening, physical exams and immunizations)
- Other Cost / Expenses: $ 2,513 (instruments/tools, uniforms and shoes)
- Differential Fees: $ 1,664

Estimated Cost for Prerequisites: $ 3,405

- Resident Tuition: $ 2,755
- Technology Fees: $ 350
- General Student Fees: $ 300

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 view the application information on our website. 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. 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

All courses must be completed with a letter grade of C or better. P/NP is not accepted.

Prerequisites Prior to Applying

WR 115	Introduction to College Composition	4
MTH 052	Math for Health and Physical Sciences	4

WR: See Footnote 1.

MTH: See Footnote 2.

Complete one of the following sequences:

1. Dental Health Sciences - 1 course: (recommended)

DA 110	Dental Health Sciences	3

2. Human Body Systems - 2 courses:

HP 150	Human Body Systems 1	3
HP 152	Human Body Systems 2	3

3. Anatomy & Physiology - 2 courses:

BI 231	Human Anatomy and Physiology 1	4
BI 232	Human Anatomy and Physiology 2	4

Recommended Prerequisites

The following courses are recommended, but not required for program entry.

HP 100	Medical Terminology 1	3
HP 110	Health Office Procedures	3
EL 115	Effective Learning	3

Program Core Courses

DA 102	Advanced Clinical Experiences	3
DA 103	Dentistry Law and Ethics	2
DA 105	Infection Control	2
DA 107	Dental Health Education 1	1
DA 108	Dental Health Education 2	2
DA 115	Dental Anatomy	3
DA 192	Dental Materials	3
DA 193	Dental Materials 2	3
DA 194	Dental Office Procedures	2
DA 195	Chairside Procedures 1	5
DA 196	Chairside Procedures 2	7
DA 206	Co-op Ed: Dental Assisting Seminar	1
DA 210	Dental Radiology 1	4
DA 211	Dental Radiology 2	3
DA 280	Co-op Ed: Dental Assisting	1-12

DA 280: complete a minimum of 8 credits

Note - completing all DA courses fulfills the Human Relations degree requirement

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted. A prior bachelor's degree (verified by a transcript from a U.S.-accredited institution) or higher, may be used to meet the Writing requirement

2 – MTH 098 (p. 154) or any math (MTH/STAT) above MTH 052 (p. 153) is also accepted

Notes

- 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.

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).

Dental Hygiene, AAS

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.

98 credits (prerequisites: 41-44 credits)

Program Contacts

- Program Coordinator: Michelle Cummins, MEd BSDH, RDH EP, cumminsm@lanecc.edu, 541-463-5752
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost for Program: $ 50,097

- Resident Tuition: $ 14,210
- Technology Fees: $ 1,372
- General Student Fees: $ 900
- Online Course Fee: $ 580
- Books / Course Materials: $ 2,100 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Course Fees: $ 3, 825
- Program Specific Costs: $ 4,644 (certifications-licensure-exams, health Insurance, application fee, background check, drug/alcohol screening, meds record tracker and industry student membership)
- Other Cost / Expenses: $ 7,400 (uniforms/shoes, instruments/tools)
- Differential Fees: $ 15,066

Estimated Cost for Program Prerequisites: $ 7,446

- Resident Tuition: $ 6,380
- Technology Fees: $ 616
- General Student Fees: $ 450
- Online Course Fee: $ 0

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

Admission Information

See the Dental Hygiene application website for the admission application packet.

Program Requirements

All courses must be completed with a letter grade of C or better. P/NP is not accepted.

Prerequisites Prior to Program Start

Must be completed with a grade of C or better. P/NP not accepted.

BI 233	Human Anatomy and Physiology 3	4
BI 234	Introductory Microbiology	4
WR 123	Composition: Research Writing	4
	Or	
WR 227Z	Technical Writing	4

BI 233: See Footnote 2.

BI 234: See Footnote 3.

WR 123: See Footnote 4.

Prerequisites Prior to Applying

Must be completed with a grade of C or better. P/NP not accepted.

WR 121Z	Composition 1	4
MTH 052	Math for Health and Physical Sciences	4
FN 225	Nutrition	4

MTH: See Footnote 1.

Complete both of the following:

BI 231	Human Anatomy and Physiology 1	4
BI 232	Human Anatomy and Physiology 2	4

- While not a program prerequisite, BI 112 (p. 123) is a prerequisite for LCC's BI 231 (p. 124). Students who have transferred in A&P courses do not need to take BI 112 (p. 123).

Complete one of the following:

CH 104	Introduction to General Chemistry	5
CH 112	Chemistry for Health Occupations	4

- Students may complete 4 credits of any Chemistry course 100-level or higher

Complete one of the following:

SOC 204	Introduction to Sociology	4
SOC 205	Social Stratification and Social Systems	4
SOC 206	Institutions and Social Change	4

Complete one of the following

PSY 201Z	Introduction to Psychology I	4
PSY 202Z	Introduction to Psychology II	4

Complete one of the following

COMM 100Z	Introduction to Communication	4
COMM 111Z	Public Speaking	4
COMM 218Z	Interpersonal Communication	4

Program Core Courses

Must be completed with a grade of C or better. P/NP not accepted.

DH 107	Dental Infection Control and Safety	1
DH 113	Dental Anatomy and Histology	2
DH 132	Dental Materials for the Dental Hygienist	2
DH 139	Special Needs Patient and Dental Emergencies	2
DH 228	Oral Biology 1	4
DH 229	General and Oral Pathology	3
DH 233	Anesthesia/Analgesia for Dental Hygiene Therapy	3
DH 234	Trends and Issues in Dental Hygiene	2
DH 254	Pharmacology	3
	Clinical Dental Hygiene:	
DH 118A	Clinical Dental Hygiene 1	4
DH 118B	Clinical Dental Hygiene 1 Lab	2
DH 119A	Clinical Dental Hygiene 2	3
DH 119B	Clinical Dental Hygiene 2 Lab	5
DH 120A	Clinical Dental Hygiene 3 Lecture/seminar	3
DH 120B	Clinical Dental Hygiene 3 Clinic Lab	5
DH 220A	Clinical Dental Hygiene 4 Lecture/seminar	2
DH 220B	Clinical Dental Hygiene 4 Lab	6
DH 221A	Clinical Dental Hygiene 5	2
DH 221B	Clinical Dental Hygiene 5 Lab	6
DH 222A	Clinical Dental Hygiene 6	1
DH 222B	Clinical Dental Hygiene 6 Lab	6
	Community Dental Health:	
DH 237	Community Dental Health 1	3
DH 238	Community Dental Health 2	1
DH 239	Expanded Practice Concepts and Roles	3
	Oral Radiology:	
DH 243A	Oral Radiology 1 Lecture	2
DH 243B	Oral Radiology 1 Lab	1
DH 244A	Oral Radiology 2 Lecture	1
DH 244B	Oral Radiology 2 Lab	1
	Periodontology:	
DH 270	Periodontology 1	2
DH 271	Periodontology 2	2
	Restorative Dentistry:	
DH 275	Restorative Dentistry 1	3
DH 276	Restorative Dentistry 2	3
DH 277	Restorative Dentistry 3	1

DH 120A: See Footnote 5.

Footnotes

1 – Any math (MTH/STAT) above MTH 052 (p. 153) is also accepted

2 – BI 233 (p. 124): credits are applied towards prerequisites total

3 – BI 234 (p. 124): credits are applied towards program core total

4 – WR 123 (p. 177) / WR 227Z (p. 177): credits are applied towards program core total. WR 123 has an additional prerequisite (not embedded in the program), while WR 227Z (p. 177) does not

5 – DH 120A (p. 136) satisfies the Human Relations requirement and may not be substituted

Notes

- Students must be accepted in Dental Hygiene Program to enroll in DH courses.
- 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.

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.

Health Information Management (online), AAS

Health Information Management (HIM) is a diverse yet evolving field that incorporates medicine, management, finance, information technology and law into one dynamic career path. Through our flexible, online program, we'll train you to design and oversee health information systems while ensuring that they meet medical, legal, and ethical standards. You'll also learn to improve efficiency in health care facilities with medical coding (ICD-10, PCS and CPT) along with billing and reimbursement methodologies. HIM professionals also protect and control the security and quality of records as well as supervise data entry and related personnel. The HIM program curriculum also includes: clinical information requirements; data collection, data retrieval, release of information, health information content and structure; legal requirements, as well as HIM professional standards.

90 credits (prerequisites: 12 credits)

Program Contacts

- Program Coordinator: Rick Riordan, riordanrf@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost for Program: $ 19,010

- Resident Tuition: $ 13,050
- Technology Fees: $1,260
- General Student Fees: $ 0
- Online Course Fee: $ 900
- Books / Course Materials: $ 3,643 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 157 Application fee, background check, drug/alcohol screening, background check, drug/alcohol screening, COMPLIO account)

Estimated Cost for Prerequisites: $ 2,478

- Resident Tuition: $ 1,740
- Technology Fees: $ 168
- General Student Fees: $ 450
- Online Course Fee: $ 120

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Engage in critical thinking, problem solving, and effective human relations skills related to health information management

PLO 2 - Evaluate principles of healthcare privacy, confidentiality, legal, ethical issues and data security

PLO 3 - Apply quantitative and qualitative methodologies to process healthcare information

PLO 4 - Explain healthcare delivery systems and regulatory environments

PLO 5 - Utilize healthcare billing, coding, and reimbursement guidelines

PLO 6 - Integrate knowledge of healthcare terminology and medical conditions

PLO 7 - Identify principles of leadership and management in HIM

Admission Information

Students are admitted once per year in the Fall Term. Admission is restricted and is based on a program application. Please see the HIM admissions and application information.

Program Requirements

Prerequisites Prior to Applying

Must be completed with a grade of C or better. P/NP is not accepted.

WR 115	Introduction to College Composition	4
MTH 060	Beginning Algebra	4
	Or	
MTH 098	Math Literacy	5
CIS 101	Computer Fundamentals	4
	Or	
CS 120	Concepts of Computing: Information Processing	4

WR: See Footnote 1.

MTH: See Footnote 2.

Program Core Courses

Must be completed with a grade of C or better. P/NP is not accepted.

HP 100	Medical Terminology 1	3
HP 150	Human Body Systems 1	3
HP 152	Human Body Systems 2	3
HP 153	Introduction to Pharmacology	3
HIM 107	Integrated Electronic Health Records	4
HIM 120	Introduction to Health Information Management	4
HIM 125	Healthcare Data Analytics	4
HIM 154	Introduction to Disease Processes	4
HIM 160	Healthcare Insurance and Billing	4
HIM 183	Introduction to Health Information Systems	4
HIM 200	Healthcare Statistics	4
HIM 210	Leadership for Health Information Management	4
HIM 222	Reimbursement Methodologies	5
HIM 225	Legal & Ethical Aspects of Health Information Management	4
HIM 230	Quality Improvement in Healthcare	4
HIM 241	Health Information Management Applications 1	4
HIM 242	Health Information Management Applications 2	4
HIM 260	Medical Record Auditing	4
HIM 270	ICD-10 Coding	5
HIM 271	ICD-10-PCS Coding	5
HIM 273	CPT and HCPCS Coding	5

HIM program core course limitations: see Footnote 3.

HIM 120 (p. 149): See Footnote 4.

HP 150 (p. 150) / HP 152 (p. 150): See Footnote 5.

Cooperative Education

Must be completed with a grade of C or better. P/NP is not accepted.

COOP 206	Co-op Ed: Internship Seminar	2
HIM 280	Co-op Ed: Health Information Management	3

Electives

Students may need to take additional 100-level or higher electives to reach the 90-credit minimum.

Footnotes

1 – WR 115W (p. 177) or higher writing is also accepted

2 – Any math (MTH/STAT) above MTH 060 (p. 153) is also accepted (MTH 098 (p. 154) is recommended)

3 – Students will not be able to complete the following HIM courses until officially accepted into the program: HIM 210 (p. 149); HIM 222 (p. 149); HIM 230 (p. 149); HIM 241 (p. 149); HIM 242 (p. 149); HIM 260 (p. 149); HIM 270 (p. 149); HIM 271 (p. 149); HIM 273 (p. 149). Please contact the Program Coordinator or an Academic Advisor for help with the program application.

4 – HIM 120 (p. 149) meets the Human Relations requirement and cannot be substituted

5 – Completion of BI 231 (p. 124), BI 232 (p. 124), and BI 233 (p. 124) with a letter grade of C or better is an acceptable equivalent for HP 150 (p. 150) and HP 152 (p. 150)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for Health Information Management: Medical Coding, 1-yr Certificate (p. 84).
- HIM AAS: All courses must be completed within five years of the start of the academic year a student begins the AAS program.
- Medical Coding 1-Year Certificate: All courses must be completed within three years of the start of the academic year a student begins the certificate program.

Accreditation

The Health Information Management Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

Health Information Management: Medical Coding, 1-yr Certificate

The purpose of this program 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.

54 credits (prerequisites: 12-13 credits)

Program Contacts

- Program Coordinator: Rick Riordan, riordanrf@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost for Program: $ 13,419

- Resident Tuition: $ 8,410
- Technology Fees: $ 812
- General Student Fees: $ 0
- Online Course Fee: $ 580
- Books / Course Materials: $ 3460 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 157 Application fee, background check, drug/alcohol screening, background check, drug/alcohol screening, COMPLIO account)

Estimated Cost for Prerequisites: $ 2,178

- Resident Tuition: $ 1,740
- Technology Fees: $ 168
- General Student Fees: $ 150
- Online Course Fee: $ 120

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 - Abstract health records and assign standardized codes to diagnoses and procedures to accurately meet reporting needs and processing claims for insurance reimbursement
PLO 3 - Organize, analyze, and evaluate health record content for completeness and accuracy

Admission Information

Students are admitted once per year in the Fall Term. Admission is restricted and is based on a program application. Please see the HIM admissions and application information.

Program Requirements

All courses must be completed with a letter grade of C or better. P/NP is not accepted.

Prerequisites Prior to Applying

Must be completed with a grade of C or better. P/NP is not accepted.

WR 115	Introduction to College Composition	4
MTH 060	Beginning Algebra	4
	Or	
MTH 098	Math Literacy	5
CIS 101	Computer Fundamentals	4
	Or	
CS 120	Concepts of Computing: Information Processing	4

WR: See Footnote 1.

MTH: See Footnote 2.

Program Core Courses

Must be completed with a grade of C or better. P/NP is not accepted.

Students will not be able to complete all HIM courses* until officially accepted into the program; please contact the Program Coordinator or Academic Advisor for help with the program application.

HP 100	Medical Terminology 1	3
HP 150	Human Body Systems 1	3
HP 152	Human Body Systems 2	3
HIM 107	Integrated Electronic Health Records	4
HIM 120	Introduction to Health Information Management	4
HIM 154	Introduction to Disease Processes	4
HIM 160	Healthcare Insurance and Billing	4
HIM 222	Reimbursement Methodologies	5
HIM 225	Legal & Ethical Aspects of Health Information Management	4
HIM 270	ICD-10 Coding	5
HIM 271	ICD-10-PCS Coding	5
HIM 273	CPT and HCPCS Coding	5

HIM 120: see Footnote 3.

HP 150 / HP 152: See Footnote 4.

*HIM courses not available until admitted to the program: HIM 222; HIM 270; HIM 271; HIM 273

Cooperative Education

Must be completed with a grade of C or better. P/NP not accepted.

COOP 206	Co-op Ed: Internship Seminar	2
HIM 280	Co-op Ed: Health Information Management	3

COOP 206: complete 2 credits

HIM 280: complete 3 credits

Footnotes

1 – WR 115W (p. 177) or higher writing is also accepted

2 – Any math (MTH/STAT) above MTH 060 (p. 153) is also accepted (MTH 098 (p. 154) is recommended)

3 – HIM 120 (p. 149) meets the Human Relations requirement and cannot be substituted

4 – Completion of BI 231 (p. 124), BI 232 (p. 124), and BI 233 (p. 124) with a letter grade of C or better is an acceptable equivalent for HP 150 (p. 150) and HP 152 (p. 150)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Health Information Management (online), AAS (p. 83)
- HIM AAS: All courses must be completed **within five years** of the start of the academic year a student begins the AAS program.
- Medical Coding 1-Year Certificate: All courses must be completed **within three years** of the start of the academic year a student begins the certificate program.

Medical Assistant, 1-yr Certificate

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.

48 credits (prerequisites: 17-19 credits)

Program Contacts

- Program Coordinator: Gloria Northup, AA, CMA (AAMA); northupg@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost for Program: $ 12,755

- Resident Tuition: $ 6,960
- Technology Fees: $ 675
- General Student Fees: $ 450
- Online Course Fee: $ 0
- Books / Course Materials: $ 2,250 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Costs: $ 1,374 (certifications/licensure/exams, health Insurance, immunizations, application fee, background check, drug/alcohol screening and ADB-Camplio tracking account)
- Differential Fees: $ 599

Estimated Cost for Prerequisites: $ 3,321

- Resident Tuition: $ 2,755
- Technology Fees: $ 266
- General Student Fees: $ 300
- Online Course Fee:$ 0

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

The application and information on the point allocation system and transferring students is available in the Advising Department and on the Medical Assistant website. The program may run a second, spring cohort.

Program Requirements

All courses must be completed with a letter grade of C or better. P/NP is not accepted.

Program Prerequisites

Must be completed with a grade of C or better. P/NP not accepted. Prerequisites are required for program admission.

WR 115	Introduction to College Composition	4
MTH 052	Math for Health and Physical Sciences	4

HP 100	Medical Terminology 1	3
	Complete ONE psychology (PSY) course	4
HP 150	Human Body Systems 1	3
	Or	
BI 231	Human Anatomy and Physiology 1	4

WR: See Footnote 1.

MTH: See Footnote 2.

Prereq Note: See Footnote 3.

Program Core Courses

Must be completed with a grade of C or better. P/NP not accepted. BT 165 may be completed with a C- or Pass.

BT 165	Introduction to the Accounting Cycle	4
HP 110	Health Office Procedures	3
HP 153	Introduction to Pharmacology	3
HP 220	Legal and Ethical Aspects of Healthcare	3
HP 152	Human Body Systems 2	3
	Or	
BI 232	Human Anatomy and Physiology 2	4
MA 112	Medical Insurance Procedures	3
MA 119	Introduction to Medical Coding and Scribing	3
MA 150	Laboratory Orientation	3
MA 110	Clinical Assistant 1	3
MA 120	Clinical Assistant 2	3
MA 130	Clinical Assistant 3	3
MA 206	Co-op Ed: Medical Assistant Seminar	2
MA 280	Co-op Ed: Medical Assistant	5-12
HP 105	EHR for the Provider Office	3
	Or	
HIM 107	Integrated Electronic Health Records	4

Complete one of the following:

Must be completed with a letter grade of C or better. P/NP is not accepted.

BT 120	MS WORD for Business	4
CIS 101	Computer Fundamentals	4
CS 120	Concepts of Computing: Information Processing	4

MA 280: complete a minimum of 5 credits

HP 110: See Footnote 4.

MA 112/119: See Footnote 5.

HP 150/BI 232: See Footnote 6.

Footnotes

1 – WR 115W (p. 177) or higher writing is also accepted

2 – MTH 095 (p. 154)or higher math (MTH/STAT) is an accepted substitute for MTH 052 (p. 153)

3 – To meet minimum application requirements (points included), additional coursework may be needed. See Academic Advisors and application packet for information.

4 – HP 110 (p. 150) satisfies the Human Relations requirement and cannot be substituted

5 – MA 112 (p. 152), MA 119 (p. 152), and courses with the prefixes BT, CIS, CS, HIM, and HP may be taken prior to program acceptance

6 – Must either complete HP 150 (p. 150) & HP 152 (p. 150) or BI 231 (p. 124) & BI 232 (p. 124). Mixing sequences is not allowed.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- The following requirements must meet universal standards order for internships: Proof of required immunizations; tuberculosis (TB) screen; 10-panel drug and alcohol screen; and criminal background check.
- 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.

Licensing and Certification

Certified Medical Assistant: CMA (AAMA). This is a National Certification.

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; https://caahep.org/; 727-210-2350

Medical Assistant: Basic Health Care, CPC

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 designed for positions in health care such as patient transport, medical receptionist, environmental support, food services, and physical therapy aide.

24 credits

- Program Coordinator: Gloria Northup, AA, CMA (AAMA); northupg@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost for Program: $ 5097

- Resident Tuition: $3,480
- Technology Fees: $336
- General Student Fees: $300
- Online Course Fee: $240
- Books / Course Materials: $741 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses must be completed with a letter grade of C or better. P/NP is not accepted.

Program Core Courses

Must be completed with a letter grade of C or better. P/NP is not accepted.

WR 115	Introduction to College Composition	4
MTH 052	Math for Health and Physical Sciences	4
CIS 101	Computer Fundamentals	4
	Or	
CS 120	Concepts of Computing: Information Processing	4
HP 100	Medical Terminology 1	3
HP 110	Health Office Procedures	3
HP 150	Human Body Systems 1	3
HP 152	Human Body Systems 2	3

WR: See Footnote 1.

MTH: See Footnote 2.

HP 150 / HP 152 (p. 150): See Footnote 3.

Footnote

1 – WR 115W (p. 177) or higher writing is also accepted

2 – Any math above MTH 052 (p. 153) is also accepted

3 – Completion of BI 231 (p. 124), BI 232 (p. 124), and BI 233 (p. 124) with a letter grade of C or better is an acceptable equivalent for HP 150 (p. 150) and HP 152 (p. 150)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Medical Assistant, 1-yr Certificate (p. 85).

Nursing, AAS

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.

90 credits for AAS degree (prerequisites for Nursing: 34 minimum credits)

Program Contacts

- Director of Nursing: Jennifer Tavernier, tavernierj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost for Program: $ 39,168

- Resident Tuition: $13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 930
- Online Course Fee: $ 20
- Books / Course Materials: $ 1,520 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 4,011 (certifications-licensure-exams, health insurance, application fee, background check, drug/alcohol screening, CPR, Kaplan/DocuCare/ELNEC learning modules, and American Data Bank account)
- Other Cost / Expenses: $ 2,140 (nursing kit, uniforms/stethoscope/shoes, uniform laundry, ID badge, computer)
- Differential Fees: $ 16,237

Estimated Cost for Prerequisites: $5,856

- Resident Tuition: $ 4,930
- Technology Fees: $ 476
- General Student Fees: $ 450
- Online Course Fee: $ 0

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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.

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 Nursing program website
- RN application
- LPN to RN Bridge information

Drug testing, criminal background check, and immunizations are required.

Program Requirements

Prerequisites Prior to Applying

Must be completed with a grade of C or better. P/NP is not accepted.

WR 121Z	Composition 1	4
WR 122Z	Composition 2	4
MTH 095	Intermediate Algebra Or any math (MTH/STAT) higher than MTH 095	5
BI 231	Human Anatomy and Physiology 1	4
BI 232	Human Anatomy and Physiology 2	4
BI 233	Human Anatomy and Physiology 3	4
BI 234	Introductory Microbiology	4
FN 225	Nutrition	4
PSY 215	Lifespan Developmental Psychology	4
	Electives to reach 37 credits - choose from Approved Electives List below	

Note: Completion of all prerequisites with a continuing GPA of 3.00 or higher by the end of Summer in the year of acceptance is required for Fall entry.

WR: See Footnote 1.

BI 112: this course is the required prerequisite for BI 231 (p. 124). Students who transfer in the equivalent of BI 231 (p. 124) do not need to take BI 112 (p. 123).

Recommended Prerequisites

Students are encouraged to take additional approved electives to enhance their application and prepare to pursue a BSN. Courses can be taken from Arts and Letters (p. 17), Social Science (p. 20) and Science/Math/Computer Science (p. 19). Work with your Academic Advisor to determine courses to take.

Program Core Courses

Must be completed with a grade of C or better. P/NP is not accepted. (Clinical Labs are only offered P/NP but coursework must be at a level of C or better).

Complete all of the following:

NRS 110A	Foundations of Health Assessment and Health Promotion	4
NRS 110B	Foundations of Health Assessment and Health Promotion - Clinical Lab	5
NRS 111A	Foundations of Nursing in Chronic Illness 1	2
NRS 111B	Foundations of Nursing in Chronic Illness 1 - Clinical Lab	4
NRS 112A	Foundations of Nursing in Acute Care I	2
NRS 112B	Foundations of Nursing in Acute Care I - Clinical Lab	4
NRS 221A	Nursing in Chronic Illness 2 and End-of-Life Care	4
NRS 221B	Nursing in Chronic Illness 2 and End-of-Life Care - Clinical Lab	5
NRS 222A	Nursing in Acute Care II and End-of-Life	4
NRS 222B	Nursing in Acute Care II and End-of-Life - Clinical Lab	5
NRS 224A	Integrative Practicum	2
NRS 224B	Integrative Practicum	7
NRS 234	Pathophysiological Processes for Nursing 1	2
NRS 235	Pathophysiological Processes for Nursing 2	2
NRS 236	Pathophysiological Processes for Nursing 3	2
NRS 237	Clinical Pharmacology for Nursing 1	2
NRS 238	Clinical Pharmacology for Nursing 2	2
NRS 239	Clinical Pharmacology For Nursing 3	2

NRS 110A: See Footnote 2.

Electives

Must be completed with a grade of C- or better. P/NP is not accepted.

Take electives as needed to complete 90 credits for the degree

- 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 and 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, Theatre Arts (non-performance), Writing (WR 123 or higher)
- **Social Sciences** - Anthropology, BA 101Z, CJA 200, Economics, Ethnic Studies, Geography, History, Philosophy, Human Development (not HDFS), Political Science, Psychology, Sociology, Women's Studies
- **Science, Math, Computer Science** - Astronomy, Biology, Botany, Chemistry, Computer Science (CS prefix, not CIS), CJA 214, Engineering, General Science, Geology, Mathematics 100+ level (STAT 243Z for extra points on the application), Physical Science, Physics, Zoology

Elective 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 100 and Health courses are not accepted as Approved Electives. However, HP 100 is worth extra points on the application
- Graduate (500- and 600-level) courses are not accepted as Approved Electives

Footnotes

1 - If students have previously taken WR 121 &/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 121Z (p. 177), WR 122Z (p. 177), and WR 123 (p. 177) or WR 227Z (p. 177) (Honors "H" or CCN "Z" versions are acceptable).

2 – NRS 110A (p. 162) meets the Human Relations requirement and cannot be substituted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- Writing and Math courses may necessitate placement testing. Learn more about placement testing at Lane.
- BI 233 (p. 124) and BI 234 (p. 124) 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.
- Nursing students can apply to graduate in Practical Nursing program (p. 88) after completing the first year of the AAS.

Licensing and Certification

Nursing Approval: Oregon State Board of Nursing (OSBN) 27938 SW Upper Boones Ferry Rd, Portland, OR, 971-673-0685, https://www.oregon.gov/OSBN/Pages/index.aspx.

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.

Accreditation

Effective July 3rd, 2023, the Practical Nursing and Registered Nursing program at Lane Community College in Eugene Oregon is a candidate for initial accreditation by the Accreditation Commission for Education in Nursing. This candidacy status expires on July 3, 2025.

Accreditation Commission for Education in Nursing (ACEN) 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326 (404) 975-5000

View the public information disclosed by the ACEN regarding this candidate program.

*Type of program: practical, diploma, associate, baccalaureate, master's, master's/post-master's certificate, post-master's certificate, clinical doctorate, clinical doctorate/DNP clinical doctorate specialist certificate, or DNP clinical doctorate specialist certificate.

Note: Upon granting initial accreditation by the ACEN Board of Commissioners, the effective date of initial accreditation is the date on which the nursing program was approved by the ACEN as a candidate program that concluded in the ACEN Board of Commissioners granting initial accreditation.

Practical Nursing, 1-yr Certificate

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).

45 credits for 1-year certificate (prerequisites for LPN: 28 minimum credits)

Program Contacts

- Director of Nursing: Jennifer Tavernier, tavernierj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost for Program: $ 16,305

- Resident Tuition: $ 6,525
- Technology Fees: $ 630
- General Student Fees: $ 480
- Online Course Fee: $ 0
- Books / Course Materials: $ 745 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 2,980 (certifications-licensure-exams, health insurance, application fee, background check, drug/alcohol screening, CPR, Kaplan/DocuCare/ELNEC learning modules, and American Data Bank account)
- Other Cost / Expenses: $ 476 (nursing kit, uniforms/stethoscope/shoes, uniform laundry, and ID badge)
- Differential Fees: $ 4,469

Estimated Cost of Prerequisites: $ 4,902

- Resident Tuition: $ 4,060
- Technology Fees: $ 392
- General Student Fees: $ 450
- Online Course Fee: $ 0

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Client-centered Care: deliver client centered nursing care to diverse populations in a variety of settings
PLO 2 - Quality and Safety: deliver quality nursing care that minimizes risk to clients, self, and others
PLO 3 - Clinical Decision-Making: execute the nursing process in the provision of nursing care in a variety of settings
PLO 4 - Professionalism: execute nursing care that reflects integrity, accountability, legal and ethical principles and complies with the standards of the Nurse Practice Act
PLO 5 - Informatics and Technology: utilize the appropriate technology and informatics relative to client care
PLO 6 - Teamwork and Collaboration: effectively apply collaborative communication skills in a self-directed manner with clients, families, and members of the healthcare team

Admission Information

Go to the program website for information about this program and the application packet. Drug testing, criminal background check, and immunizations are required.

Program Requirements

Prerequisites Prior to Applying

Must be completed with a grade of C or better. P/NP is not accepted.

BI 231	Human Anatomy and Physiology 1	4
	Choose ONE of the following courses:	
MTH 052	Math for Health and Physical Sciences	4
MTH 065	Elementary Algebra	4
MTH 095	Intermediate Algebra	5

MTH: See Footnote 1.

BI 231 (p. 124) has a prereq of BI 112. Students who transfer in the equivalent of (p. 124)BI 231 (p. 124) do not need to take BI 112 (p. 123).

Note: In order to be competitive in the selection process, you may need additional courses. Work with your academic advisor.

Prerequisites Prior to Admissions

Must be completed with a grade of C or better. P/NP is not accepted.

WR 121Z	Composition 1	4
HP 100	Medical Terminology 1	3
PSY 215	Lifespan Developmental Psychology	4
BI 232	Human Anatomy and Physiology 2	4
BI 233	Human Anatomy and Physiology 3	4

WR 121Z: see Footnote 2.

Program Core Courses

Must be completed with a grade of C or better. P/NP is not accepted (except for PN 101B, PN 102B, & PN 103B).

WR 122Z	Composition 2	4
PN 101A	Practical Nursing 1	7
PN 101B	Practical Nursing 1 Lab	5
PN 102A	Practical Nursing 2	7
PN 102B	Practical Nursing 2 Lab	5
PN 103A	Practical Nursing 3	7
PN 103B	Practical Nursing 3 Practicum	6

WR 122Z (p. 177): See Footnote 2.

PN 101A: See Footnote 3.

Footnotes

1 – Accepted alternative: any math (MTH/STAT) course above MTH 095 (p. 154) (MTH 095 (p. 154) or higher is required for RN program)

2 – WR 121Z is required to be completed prior to Fall Term of program entry. It is recommended that students also complete WR 122Z by Fall Term of program entry. If students have previously taken WR 121 and or WR 122 equivalents 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 121Z (p. 177), WR 122Z (p. 177), and WR 123 (p. 177) or WR 227Z (p. 177) (Honors "H" or CCN "Z" versions are acceptable)

3 – PN 101A (p. 168) meets the Human Relations requirement and cannot be substituted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- Writing and Math courses may necessitate placement testing. Learn more about placement testing at Lane.
- The most recent BI 233 (p. 124) course must have been completed within 7 years prior to starting the PN Program. (p. 87)
- AAS: Nursing (p. 87) students can apply to graduate in this program after completing the first year of the AAS.

Licensing and Certification

Nursing Approval: Oregon State Board of Nursing (OSBN) 27938 SW Upper Boones Ferry Rd, Portland, OR, 971-673-0685

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).

Accreditation

Effective July 3rd, 2023, the Practical Nursing and Registered Nursing program at Lane Community College in Eugene Oregon is a candidate for initial accreditation by the Accreditation Commission for Education in Nursing. This candidacy status expires on July 3, 2025.

Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326
(404) 975-5000

View the public information disclosed by the ACEN regarding this candidate program.

*Type of program: practical, diploma, associate, baccalaureate, master's, master's/post-master's certificate, post-master's certificate, clinical doctorate, clinical doctorate/DNP clinical doctorate specialist certificate, or DNP clinical doctorate specialist certificate.

Note: Upon granting initial accreditation by the ACEN Board of Commissioners, the effective date of initial accreditation is the date on which the nursing program was approved by the ACEN as a candidate program that concluded in the ACEN Board of Commissioners granting initial accreditation.

Paramedicine, AAS

The purpose of this program is to prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels. 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.

100 credits

Program Contacts

- Program Coordinator: Kris Siewert, siewertk@lanecc.edu, 541-463-5183
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 27,200

- Resident Tuition: $ 14,500
- Technology Fees: $ 1,400
- General Student Fees: $ 1,050
- One Time Student Fee: $ 30
- Online Course Fee: $ 660
- Books / Course Materials: $ 1,050 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 5,853 (lab/program application fees, EMT & Paramedic licensure/exams, background check/fingerprinting, medical requirements, American DataBank)
- Other Cost / Expenses: $ 300 (instrument/tools, uniform/boots)
- Differential Fees: $ 2,357

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 (HPAdvising@lanecc.edu) before applying for admission. Learn more about the program application and information about the point allocation system.

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 052	Math for Health and Physical Sciences	4
	Or	
MTH 098	Math Literacy	5

WR: See Footnote 1.

MTH: See Footnote 2.

Program Core Courses

Must be completed with a grade of C- or better. P/NP not accepted.

HP 100	Medical Terminology 1	3
BI 231	Human Anatomy and Physiology 1	4
BI 232	Human Anatomy and Physiology 2	4
BI 233	Human Anatomy and Physiology 3	4
EMS 101	Introduction to Emergency Services	4
EMS 102	Crisis Intervention	3
EMS 103	Emergency Services Rescue	4
EMS 111	Emergency Medical Technician	8
EMS 112	Emergency Medical Technician Lab	3
EMS 113	Emergency Medical Technician Clinical	1
EMS 201	Pathophysiology	3

EMS 211	Pharmacology 1	2
EMS 212	Pharmacology 2	2
EMS 221	Trauma Emergencies 1	3
EMS 222	Trauma Emergencies 2	3
EMS 231	Medical Emergencies 1	3
EMS 232	Medical Emergencies 2	3
EMS 233	Medical Emergencies 3	2
EMS 241	Electrocardiography 1	3
EMS 242	Electrocardiography 2	3
EMS 251	Paramedic Lab 1	3
EMS 252	Paramedic Lab 2	3
EMS 253	Paramedic Lab 3	3
EMS 261	Paramedic Clinical 1	1
EMS 262	Paramedic Clinical 2	3
EMS 263	Paramedic Clinical 3	4
EMS 280P1	Co-op Ed: Paramedic Internship P1	3-12
EMS 280P2	Co-op Ed: Paramedic Internship P2	5-12

EMS 280P1: complete a minimum of 3 credits.

EMS 280P2: complete a minimum of 7 credits.

EMS 102: See Footnote 3.

BI 231: See Footnote 4.

Current EMS Licenses: See Footnote 5.

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

2 – Any math (MTH/STAT) above MTH 052 (p. 153) is also accepted. Students pursuing a bachelor's degree will need to complete a college level course (MTH 105 or higher)

3 – EMS 102 (p. 141) satisfies the Human Relations requirement

4 – BI 231 (p. 124) has a prerequisite of BI 112 (p. 123) at LCC. Transfer students should contact an academic advising for more information

5 – 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 (p. 141), EMS 112 (p. 141), & EMS 113 (p. 141)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for Paramedicine: Emergency Medical Technician, CPC (p. 90).

Accreditation

- The Paramedic Program is nationally accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).
- Accreditation of Allied Health Education Programs (CAAHEP); it carries out its accrediting activities with EMS programs in cooperation with the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Licensing and Certification

- National Certification: National Registry of Emergency Medical Technicians - Emergency Medical Technician (NREMT)
- State licensure: Oregon Health Authority, EMS & Trauma- Emergency Medical Technicians (EMT)

Paramedicine: Emergency Medical Technician, CPC

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.

12 credits

Program Contacts

- Program Coordinator: Kris Siewert, siewertk@lanecc.edu, 541-463-5183
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 5,044

- Resident Tuition: $ 1,740
- Technology Fees: $ 168
- General Student Fees: $ 150
- One Time Student Fee: $ 30
- Online Course Fee: $ 80
- Books / Course Materials: $ 200 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 2,162 (lab/program application fees, EMT & Paramedic licensure/exams, background check/fingerprinting, medical requirements, American DataBank)
- Other Cost / Expenses: $ 245 (instrument/tools, uniform/boots)
- Differential Fees: $ 289

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 (HPAdvising@lanecc.edu) before applying for admission. Learn more about the program application and information about the point allocation system.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

EMS 111	Emergency Medical Technician	8
EMS 112	Emergency Medical Technician Lab	3
EMS 113	Emergency Medical Technician Clinical	1

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Paramedicine, AAS degree (p. 89).

Accreditation

- The Emergency Medical Technician Program is nationally accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).
- Accreditation of Allied Health Education Programs (CAAHEP); it carries out its accrediting activities with EMS programs in cooperation with the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Licensing and Certification

- National Certification: National Registry of Emergency Medical Technicians - Emergency Medical Technician (NREMT)
- State licensure: Oregon Health Authority, EMS & Trauma - Emergency Medical Technicians (EMT)

Physical Therapist Assistant, AAS

The purpose of this program is to prepare the graduate to practice as an entry-level, licensed physical therapist assistant (PTA).

94 credits (prerequisites: 11-16 credits)

Program Contacts

- Program Coordinator: Christina Howard, PT, MPT, Ed.D., howardc@lanecc.edu, 541-463-5764
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Eugene Campus - Estimated Cost for Program: $ 22,324

- Resident Tuition: $ 13,630
- Technology Fees: $ 1,316
- General Student Fees: $ 5

- One Time Student Fee: $ 30
- Online Course Fee: $ 720
- Books / Course Materials: $ 1,100 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 2,104 (certifications-licensure-exams, application fee ($50.00), Health Insurance, background check, drug/alcohol screening, industry student membership)
- Other Cost / Expenses: $ 938 (instruments/tools, uniforms/shoes, etc.)
- Travel: $ 500
- Differential Fees: $ 2121

Estimated Cost for Prerequisites: $ 2,694

- Resident Tuition: $ 2,320
- Technology Fees: $ 224
- General Student Fees: $ 150
- Online Course Fee: $ 0

Rogue Community College Campus - Estimated Cost for Program: $ 27,198

- Resident Tuition: $ 13,630
- Technology Fees: $ 1,316
- General Student Fees: $ 30
- One Time Student Fee: $ 30
- Online Course Fee: $ 580
- Books / Course Materials: $ 1,100 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 2,104 (certifications-licensure-exams, application fee ($50.00), Health Insurance, background check, drug/alcohol screening, industry student membership)
- Other Cost / Expenses: $ 1,148 (instruments/tools, uniforms/shoes, etc.)
- Travel: $ 500
- Distance Campus Fee: $ 5,000
- Differential Fees: $ 2121

Estimated Cost for Prerequisites: $ 2,544

- Resident Tuition: $ 2,320
- Technology Fees: $ 224
- General Student Fees: $ 0
- Online Course Fee: $ 0

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 - Support the supervising physical therapist in providing high-quality patient/client-centered physical therapist services

PLO 2 - Effectively communicate (face-to-face, written, or digital), actively listen, collaborate, and respond to all stakeholders with cultural humility

PLO 3 - Use theory, evidence, contextual factors, and clinical judgment to make safe and effective clinical decisions when implementing the supervising physical therapist's plan of care

PLO 4 - Value personal and professional accountability with actions that build a therapeutic alliance and the profession's collective effort to improve the health of society

PLO 5 - Perform selected physical therapy interventions and data collection skills with competence to carry out the physical therapy plan of care

Admission Information

Students are admitted once a year. Admission is restricted and is based on a program application. Please consult the PTA Application Information website.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

Prerequisites for Applying

All prerequisites must be completed prior to applying for the program.

WR 121Z	Composition 1	4
HP 100	Medical Terminology 1	3
PH 101	Fundamentals of Physics	4
	Or	
PH 102	Fundamentals of Physics	4
	Human Biology - choose ONE of the following:	
BI 102	Organismal Systems	4
BI 231	Human Anatomy and Physiology 1	4
HP 150	Human Body Systems 1	3

Human Biology Note - students who complete BI 102 (p. 123) as a prerequisite will not need to take another human biology course. If HP 150 (p. 150) or BI 231 (p. 124) is completed instead, students will need to finish the series complete by to the end of Fall Term of Year 1 in the program (see more info in General Education).

BI 102 - *only the Human Biology section will count as meeting this requirement.*

Writing options: See Footnote 1.

Physics options: See Footnote 2.

General Education

MTH 065	Elementary Algebra	4
COMM 115	Introduction to Intercultural Communication	4
	Or	
COMM 218Z	Interpersonal Communication	4
	Human Biology - see options	

Human Biology - *Students who complete HP 150 or BI 231 as a prerequisite, need to finish the series. See Options 1 and 2. Students who completed BI 102 (human biology section) 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 Body Systems (3 credits)** - complete the following:
  HP 152 - Human Body Systems 2 (p. 150)
- **Option 2: Anatomy & Physiology (8 credits)** - complete the following:
  BI 232 - Human Anatomy and Physiology 2 (p. 124)
  BI 233 - Human Anatomy and Physiology 3 (p. 124)

MTH: See Footnote 3.

Complete one of the following:

PSY 201Z	Introduction to Psychology I	4
PSY 202Z	Introduction to Psychology II	4
PSY 215	Lifespan Developmental Psychology	4

Program Core Courses

Must be completed for a grade of C or better. P/NP not accepted. HP 153 may be completed with a grade of C- or better, or Pass.

HP 153	Introduction to Pharmacology	3
PTA 100	Introduction to Physical Therapy	3
PTA 101	Introduction to Clinical Practice 1	5
PTA 101L	Introduction to Clinical Practice 1 Lab	2
PTA 103	Introduction to Clinical Practice 2	5
PTA 103L	Introduction to Clinical Practice 2 Lab	2
PTA 104	PT Interventions - Musculoskeletal Conditions	5
PTA 104L	PT Interventions - Musculoskeletal Conditions Lab	2
PTA 132	Applied Kinesiology 1	3
PTA 132L	Applied Kinesiology 1 Lab	2
PTA 133	Applied Kinesiology 2	3
PTA 133L	Applied Kinesiology 2 Lab	2
PTA 200	Professionalism, Ethics, and Exam Preparation	4
PTA 201	Physical Therapy and the Older Adult	2
PTA 203	Contemporary Topics in Physical Therapy	2
PTA 204	PT Interventions - Neuromuscular Conditions	5
PTA 204L	PT Interventions - Neuromuscular Conditions Lab	2
PTA 205	PT Interventions - Complex Health Conditions	4
PTA 205L	PT Interventions - Complex Health Conditions Lab	2
PTA 206	Physical Therapist Assistant Seminar	2
PTA 280A	Co-op Ed: Physical Therapist Assistant - First Clinical Experience	4-8
PTA 280B	Co-op Ed: Physical Therapist Assistant -	4-8

	Second Clinical Experience	
PTA 280C	Co-op Ed: Physical Therapist Assistant - Third Clinical Experience	4-8

HP 153: See Footnote 4.

PTA 200: See Footnote 5.

PTA 280A-B-C: complete 6 credits of each.

Footnotes

1 – WR 122Z (p. 177), WR 123 (p. 177), or WR 227Z (p. 177) are also accepted (including Honors "H" or prior versions of these courses). Prior bachelor's degree, verified by a transcript from US accredited institution or higher, may be used to meet the Writing requirement

2 – PH 201 (p. 168) or GS 104 - Physical Science (no longer offered at LCC) will also be accepted to meet this requirement

3 – Any math (MTH/STAT) above MTH 065 (p. 153) is also accepted

4 – It is not recommended to complete HP 153 (p. 150) in the first term of the program; students should complete no later than fall term of second year

5 – PTA 200 (p. 171) meets the Human Relations requirement and cannot be substituted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- 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.

Licensing and Certification

- Graduates meet education eligibility for the National Physical Therapy 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: 3030 Potomac Ave., Suite 100, Alexandria, Virginia 22305-3085

Phone: 703-706-3245

Email: accreditation@apta.org

Website: CAPTE

If needing to contact the program/institution directly, please call 541-463-5617 or email healthprofessionsoffice@lanecc.edu

Media Arts

Associate of Applied Science degrees (AAS)

- Graphic Design, AAS (p. 92)
- Multimedia Design, AAS (p. 93)
- Multimedia Design and Production: Animation Option, AAS (p. 94)

1-year Certificates

- Multimedia Design, 1-yr Certificate (p. 94)
- Web Design, 1-yr Certificate (p. 95)

Graphic Design, AAS

The purpose of this program is to prepare graduates for entry-level positions in the fields of graphic and digital design.

90 credits

Program Contacts

- Program Coordinator: Hannah Hamalian, hamalianh@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 18,295

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 190
- Books / Course Materials: $ 1,200 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 1,140 (Course Fees)
- Other Cost / Expenses: $ 555(External hard drive, adobe software)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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, view the admissions procedures on our website.

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

General Education

WR 121Z	Composition 1	4
	Human Relations - choose one course from list	3-4
MTH 098	Math Literacy	5
	Or	
MTH 105Z	Math in Society	4

List of accepted Human Relations Courses (p. 11)

MTH: See Footnote 1.

Program Core Courses

ART 115	Core Studio: 2D Design	4
ART 116	Core Studio: Color Theory	4
ART 119	Typography 1	3
ART 131	Core Studio: Drawing 1	4
ART 216	Digital Design Tools	3
ART 225	Digital Illustration	3
ART 289	Web Production	3
ART 290	Design Concepts for the Web	3
MUL 105	Digital Photography	4
MUL 205	Design Studio	3
MUL 212	Digital Imaging	4
MUL 220	Intermediate Typography	3
MUL 227	Graphic Design Literacy	3

Drawing

Complete one of the following:

ART 231	Drawing 2: Composition and Thematic Development	4
ART 234	Drawing 2: Life Drawing	4
ART 237	Illustration 1	4
ART 240	Natural Science Drawing	4
ART 245	Drawing for Media	4

Graphic Design & Production

Complete all of the following:

MUL 228	Graphic Design 1	3
MUL 229	Graphic Design 2	3
MUL 230	Graphic Design 3	3
MUL 231	Graphic Design Production 1	3

MUL 232	Graphic Design Production 2	3
MUL 233	Graphic Design Production 3	3

Cooperative Education

Complete 6 credits of:

MUL 280GD	Co-op Ed: Graphic Design	3-12

Electives

Complete 7 credits from any of the following courses and subjects:

MUL 110 - Introduction to Graphic Design (1cr)

CIS 195 - Web Authoring 1 (4cr)

CS 133JS - Beginning Programming: JavaScript (4cr)

ARH - Art History

ART - Art

CINE - Cinema Studies

FA - Film Arts

J - Journalism

MUL - Multimedia

Note: Students using lower-credit courses to meet General Education requirements may need to take additional credits to meet the 90-credit minimum.

Footnotes

1 – MTH 060 (p. 153) or higher math (MTH/STAT) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.

Multimedia Design, AAS

The purpose of this program is to prepare graduates for entry-level positions in media arts industries and careers in multimedia design and production.

90 credits

Program Contacts

- Program Coordinator: Hannah Hamalian, hamalianh@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 18,170

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 240
- Books / Course Materials: $ 1,200 (Some courses use Open Educational Resources (OER), which are free or use low-cost materials)
- Program Specific Fees: $ 965 (Course Fees)
- Other Cost / Expenses: $ 555 (Computer/Internet, Adobe Software)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 - 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 3 - Ethically and responsibly create media, with attention to professional standards for copyright, fair use, and documentation

PLO 4 - Research, evaluate, and use evolving media tools and technologies and sustain on-going technical and conceptual learning

PLO 5 - Demonstrate innovative use of concepts, techniques and tools in one or more media disciplines

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

WR 121Z	Composition 1	4
	Human Relations - choose one course from list	3-4
MTH 098	Math Literacy	5
	Or	
MTH 105Z	Math in Society	4

MTH: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

ART 115	Core Studio: 2D Design	4
ART 216	Digital Design Tools	3
ART 245	Drawing for Media	4
ART 288	Introduction to Web Design and Social Media	3
FA 250	Concepts of Visual Literacy	3
FA 261	Writing and Interactive Design	3
MUL 101	Introduction to Media Arts	3
MUL 103	Time-Based Tools	4
MUL 105	Digital Photography	4
MUL 107	Computer Animation 1	4
MUL 120	Audio Production	4
MUL 151	Video Production 1: Camera	3
MUL 210	Multimedia Design	3
MUL 212	Digital Imaging	4
MUL 218	Business Practices for Media Arts	3
MUL 246	Multimedia Design Production 1	3
MUL 247	Multimedia Design Production 2	3
MUL 280M	Co-op Ed: Multimedia	3-12

MUL 280M: must complete a minimum of 3 credits

Focus areas

Choose one focus area and complete 6 credits.

Audio/Video Focus

MUL 254	Fundamentals of Lighting	3
MUL 251	Video Production 2: Editing	3

Photography Focus

MUL 256	Lighting for Photography	3
MUL 215	Digital Photography 2	3

Electives

Complete 12 credits from the following:

CIS 125G	Software Tools 1: Game Development	4
CIS 195	Web Authoring 1	4
CS 120	Concepts of Computing: Information Processing	4
CS 133JS	Beg. Programming: JavaScript	4
CS 161C/CS 133C	Computer Science 1	4
CS 161N/CS 133N	Computer Science 1	4
CS 161P/CS 133P	Computer Science 1	4
CS 162C/CS 233C	Computer Science 2	4
CS 162N/CS 233N	Computer Science 2	4
CS 162P/CS 233P	Computer Science 2	4
CS 295N	Web Development 1: ASP.NET	4
	Any courses from the subjects listed below	

ARH - Art History (p. 118)
ART - Art (p. 118)
CINE - Cinema Studies (p. 127)
FA - Film Arts (p. 145)
J - Journalism (p. 152)
MUL - Multimedia (p. 155)

Note: Students using lower-credit courses to meet General Education requirements may need to take additional credits to meet the 90-credit requirement for the degree.

CS 161/162: see Footnote 2.

Footnotes

1 – MTH 060 (p. 153) or higher math (MTH/STAT) is also accepted

2 – Students who complete more than one CS 161 or CS 162 programming language course should be aware that transfer institutions may count multiple 161 or 162 courses as repeats, and may not accept them in transfer. Students wishing to complete multiple programming courses should first take a CS 161/162 series and then enroll in CS 133/233 course series for any subsequent programming languages. Cannot mix programming sequences (i.e. CS 133C and 233P)

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for Multimedia Design, 1-yr Certificate (p. 94) and Multimedia Design and Production: Animation Option, AAS (p. 94).

Multimedia Design, 1-yr Certificate

The purpose of this program is to prepare students for entry-level positions in the media industry and careers in multimedia design and production.

47 credits

Program Contacts

- Program Coordinator: Hannah Hamalian, hamalianh@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 9,158

- Resident Tuition: $ 6,815
- Technology Fees: $ 658
- General Student Fees: $ 450
- Online Course Fee: $ 150 (if applicable)
- Books / Course Materials: $ 300 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 470 (Course Fees)
- Other Cost / Expenses: $1,740 (External hard drive, Adobe Software)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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 - 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 3 - Ethically and responsibly create media, with attention to professional standards for copyright, fair use, and documentation

PLO 4 - Ethically and responsibly create media, with attention to professional standards for copyright, fair use, and documentation

PLO 5 - Demonstrate innovative use of concepts, techniques and tools in one or more media disciplines

PLO 6 - Produce, organize, and present creative content to demonstrate the requisite knowledge, skills, and abilities for professional and/or educational advancement

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

General Education

WR 121Z	Composition 1	4
	Human Relations - choose one course from list	3-4
MTH 098	Math Literacy	5
	Or	
MTH 105Z	Math in Society	4

MTH: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

ART 115	Core Studio: 2D Design	4
ART 216	Digital Design Tools	3
ART 245	Drawing for Media	4
FA 250	Concepts of Visual Literacy	3
MUL 101	Introduction to Media Arts	3
MUL 103	Time-Based Tools	4
MUL 105	Digital Photography	4
MUL 107	Computer Animation 1	4
MUL 120	Audio Production	4
MUL 151	Video Production 1: Camera	3

Footnotes

1 – MTH 060 (p. 153) or higher math (MTH/STAT) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Multimedia Design, AAS degree (p. 93).

Multimedia Design and Production: Animation Option, AAS

The purpose of this program is to prepare graduates for entry-level positions in media arts industries and careers in multimedia design and animation.

91 credits

Program Contacts

- Program Coordinator: Hannah Hamalian, hamalianh@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 18,374

- Resident Tuition: $ 13,195
- Technology Fees: $ 1,274
- General Student Fees: $ 900
- Online Course Fee: $ 210
- Books / Course Materials: $ 1,200 (Some courses use Open Educational Resources (OER), which are free or use low-cost materials)
- Program Specific Fees: $ 1,040
- Other Cost / Expenses: $ 555 (External hard drive Adobe Software)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

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 - Ethically and responsibly create media, with attention to professional standards for copyright, fair use, and documentation

PLO 4 - Use appropriate resources to research animation tools and technologies, media and design innovations, and support lifelong technical and conceptual learning

PLO 5 - Draw using traditional methods and digital technology and software

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

General Education

WR 121Z	Composition 1	4
	Human Relations - choose one course from list	3-4
MTH 098	Math Literacy	5
	Or	
MTH 105Z	Math in Society	4

MTH: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

ART 115	Core Studio: 2D Design	4
ART 131	Core Studio: Drawing 1	4
ART 216	Digital Design Tools	3
ART 234	Drawing 2: Life Drawing	4
	Or	
ART 286	Sculpting for Animators	3
ART 245	Drawing for Media	4
FA 250	Concepts of Visual Literacy	3
FA 261	Writing and Interactive Design	3
MUL 101	Introduction to Media Arts	3
MUL 103	Time-Based Tools	4
MUL 107	Computer Animation 1	4
MUL 119	Introduction to Animation	3
MUL 207	Computer Animation 2	4
MUL 208	Motion Capture for Animation	4
MUL 210	Multimedia Design	3
MUL 212	Digital Imaging	4
MUL 218	Business Practices for Media Arts	3
MUL 223	Digital Sculpting and Texture	3
MUL 224	Digital Painting	3
MUL 246	Multimedia Design Production 1	3
MUL 247	Multimedia Design Production 2	3
MUL 280M	Co-op Ed: Multimedia	3-12

MUL 280M: complete a minimum of 3 credits

Electives

Complete 9 credits from the following:

CIS 125G	Software Tools 1: Game Development	4
	Any courses from the subjects listed below	

ARH - Art History (p. 118)
ART - Art (p. 118)
CINE - Cinema Studies (p. 127)
FA - Film Arts (p. 145)
J - Journalism (p. 152)
MUL - Multimedia (p. 155)

Footnotes

1 – MTH 060 (p. 153) or higher math (MTH/STAT) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This degree is 70% contained in the Multimedia Design, AAS (p. 93).
- 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.

Web Design, 1-yr Certificate

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.

46 credits

Program Contacts

- Program Coordinator: Hannah Hamalian, hamalianh@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 8,936

- Resident Tuition: $ 6,670
- Technology Fees: $ 644
- General Student Fees: $ 450
- Online Course Fee: $ 180
- Books / Course Materials: $ 300 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 277 (Course Fees)
- Other Cost / Expenses: $ 315 (External hard drive, Adobe Software)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

General Education

WR 121Z	Composition 1	4
	Human Relations - choose one course from list	3-4
MTH 098	Math Literacy	5
	Or	
MTH 105Z	Math in Society	4

MTH: See Footnote 1.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

ART 115	Core Studio: 2D Design	4
ART 216	Digital Design Tools	3
ART 245	Drawing for Media	4
ART 289	Web Production	3
ART 290	Design Concepts for the Web	3
CIS 195	Web Authoring 1	4
CS 133JS	Beg. Programming: JavaScript	4
MUL 212	Digital Imaging	4
MUL 218	Business Practices for Media Arts	3
MUL 280	Co-op Ed: Web Design	3-12

MUL 280: must complete a minimum of 3 credits

Note: Students using lower-credit courses to meet General Education requirements may need to take additional credits to meet the 45-credit minimum.

Footnotes

1 – MTH 060 (p. 153) or higher math (MTH/STAT) is also accepted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.

Office Support and Occupational Skills

Certificates of Completion

- Front Office Support Specialist, Certificate of Completion (p. 95)
- Occupational Skills Training, Certificate of Completion (p. 96)

Front Office Support Specialist, Certificate of Completion

The purpose of this program is to provide students with short-term training in front end office, basic customer service, reception, or customer intake type positions. This is an opportunity for those who are finding barriers to accessing employment in an office environment, or as a stepping stone for those who are seeking more advanced career options.

22-24 credits

Program Contacts

- Program Coordinator: Rosa Lopez; lopezr@lanecc.edu; 541-463-4726
- Academic Advising: careerpathways@lanecc.edu
- Cooperative Education Coordinator: Shamra Clark; clarks@lanecc.edu; 541-463-5008

Cost

Estimated Cost: $ 5,256

- Resident Tuition: $ 3,480
- Technology Fees: $ 336
- General Student Fees: $ 450
- On Line Course Fee: $ 240
- Books / Course Materials: $ 750 (Some courses use Open Educational Resources (OER), which are free or low-cost materials)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Apply basic and transferable computer skills in common software tools such as Microsoft Word and Excel

PLO 2 - Engage in culturally appropriate communication and interpersonal skills needed to work in an office or customer facing environment

PLO 3 - Demonstrate basic awareness of the specific office climate, culture, and vocabulary relevant to unique career area choice

Program Requirements

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

Computer Skills

Complete two courses from the following:

BT 120	MS WORD for Business	4
BT 123	MS EXCEL for Business	4
CIS 101	Computer Fundamentals	4
	Or	
CS 120	Concepts of Computing: Information Processing	4

Communication and Human Relations

Complete two courses from the following:

BA 278	Leadership and Team Dynamics	4
CG 100	College Success	1-3
CG 203	Human Relations at Work	1-3
COMM 105	Listening and Critical Thinking	4
COMM 130	Business and Professional Communication	4
COMM 218Z	Interpersonal Communication	4
COMM 219	Small Group Communication	4
COMM 260	Introduction to Conflict Management	4
COMM 296	Communication in Healthcare Settings	4
ES 101	Historical Racial and Ethnic Issues	4
ES 102	Contemporary Racial and Ethnic Issues	4
ES 224	Black Male Studies: Lies, Literature, and Legacy	4
ES 244	Native American Leadership 1: Building Leadership Through Indigenous Oratory	4
ES 251	Introduction to African-American Studies	4
ES 254	Introduction to Chicanx/Latinx Studies	4
ES 256	Introduction to Native American Studies	4
SLD 101	Native Circles: It's Your Life	3
SLD 103	Post-Racial America: Challenges & Opportunities	4
SLD 108	Puertas Abiertas Éxito	2
SLD 111	Chicano/Latino Leadership 1: Quien Soy? Quienes	4
SLD 112	Chicano/Latino Leadership 2: Cultural Heroes	4
SLD 113	Chicano/Latino Leadership 3: Affirmative & Resistance	4
SLD 121	African American Leadership: History, Philosophy, & Practice	4

Office Environments

Complete two courses from the following:

BA 101Z	Introduction to Business	4
BT 120	MS WORD for Business	4
BT 123	MS EXCEL for Business	4
BT 181	Customer Service	4
COMM 130	Business and Professional Communication	4
ED 258	Multicultural Education	3
HP 100	Medical Terminology 1	3
HP 110	Health Office Procedures	3
HS 201	Introduction to Human Services	3

Work with an advisor/coach for assistance in choosing courses relevant to your desired work environment.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- Co-op is highly recommended. Substitutions allowed with faculty permission only.

Occupational Skills Training, Certificate of Completion

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.

36 credits

Program Contacts

- Program Coordinator: Rosa Lopez; lopezr@lanecc.edu; 541-463-4726
- Academic Advising: careerpathways@lanecc.edu
- Cooperative Education Coordinator: Shamra Clark; clarks@lanecc.edu; 541-463-5008

Cost

Estimated Cost: $ 6,924

- Resident Tuition: $ 5,220
- Technology Fees: $ 504
- General Student Fees: $
- Books / Course Materials: $ 750 (Some courses use Open Educational Resources (OER), which are free or low-cost materials)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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, visit the Career Pathways Department.

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

Program Core Courses

Must be completed with a grade of C- or better. P/NP not accepted.

--20 credits of co-op coursework from the following:
- OST 280 (p. 32)
- GWE 180 (p. 148) (up to 12 credits)
- Any Co-op Seminar from the following: BT 206, COOP 206 (p. 130), CS 206 (p. 132), DA 206 (p. 135), MA 206 (p. 152), PTA 206 (p. 171), HS 150 (p. 150)

--16 credits of any course approved by the Career Pathways office as meeting the needs of the student

Notes

- Ongoing career coaching is required as part of this program.
- Most training goals can be met, provided they meet the following criteria: 1) There is a current labor market need for the job being sought, and 2) there is an appropriate training site available in the community. The program is open-entry/open-exit (Students can start at any time in the term) to maximize educational opportunities.
- OST 280's requirement of 20 credits are an exception to the 18-credit cooperative education limit in other Lane programs, per state requirement.

Performing Arts

Transfer Degrees

- Music, AS (p. 97)

Associate of Applied Science degrees (AAS)

- Music Technology and Sound Engineering, AAS (p. 98)

Career Pathway Certificates (CPC)

- Music Technology and Sound Engineering: MIDI and Audio Production, CPC (p. 99)
- Music Technology and Sound Engineering: MIDI Production, CPC (p. 100)

Music, AS

This Associate of Science degree is intended to support transfer to the University of Oregon, though may also aid in transfer to other universities or colleges. While students who complete this degree may have met lower-division general education requirements and pre-major or major requirements at the receiving institution, completion of an AS degree does not guarantee junior standing in a major. University of Oregon School of Music and Dance may require an audition for admission into certain degree programs. Consult with the UO undergraduate admissions office for current information regarding admission requirements.

90 credits

Program Contacts

- Program Coordinators: Doug Doerfert (Music, doerfertd@lanecc.edu, 541-463-5045) and Seth Mulvihill (Music Tech, mulvihills@lanecc.edu, 541-463-5184)
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Note - Students are strongly encouraged to work with an academic advisor and a program coordinator to select courses and map a plan that matches career and transfer major goals

Guidelines

- Complete a total of 90 credits of college-level coursework (24 credits must be completed at LCC).
- General Education courses must be a minimum of 3 credits. Elective courses may be any number of credits.
- Music Major requirements must be completed with a grade of C- or better. P/NP is not accepted. All other courses may 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 degree is awarded.

Cost

Estimated Cost: $19,650

- Resident Tuition: $13,050
- Technology Fees: $1,260
- General Student Fees: $900
- Online Course Fee: $ 0
- Books / Materials: $1,200 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $3,240 (Music course fees and individual music lessons fees)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Think critically about the essential elements of music through listening, analyzing, evaluating, and interpreting musical information

PLO 2 - Engage cooperatively with others as performers, composers, and collaborators in music communities through reading and performing music

PLO 3 - Create, interpret, and analyze musical ideas with an understanding of aesthetics, style, and performance practice

PLO 4 - Communicate effectively by adjusting musical expression according to audience, purpose, style, idiom, culture, and context, while practicing authenticity and respect for others

PLO 5 - Apply knowledge and skills to solve problems and support musical decisions, often by taking risks in new contexts

Admissions

Students must pass the Music Theory Placement exam prior to enrolling in first year Music Core Classes (Music Theory, Sight-Reading Ear Training and Keyboard Skills). Learn more about the placement process. Email arts@lanecc.edu for information.

Connect with the Performing Arts Department for more information.

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

Core Transfer Map Requirements

Writing - WR 121Z (p. 177)

Math - MTH 105Z (p. 154) or higher math (MTH/STAT)

Arts & Letters - Fulfilled by MUS 111 (p. 160) and MUS 112 (p. 159) (found in Major Requirements)

Social Science - Choose two courses from the Social Science List (p. 20)

Natural Sciences - Choose two lab courses from the Science/Math/Computer Science List (p. 19)

Cultural Literacy - Select one course from Arts & Letters (p. 17) or Social Science (p. 20) that is also designated as meeting the statewide criteria for Cultural Literacy

Core Transfer Map: See Footnote 1.

Arts & Letters: See Footnote 2.

Major Requirements

Must be completed with a letter grade of C- or better. Pass not accepted. To count toward equivalency at the UO School of Music and Dance, a course grade of B or higher in LCC music core courses must be earned.

First-Year Courses (24 credits)

MUS 111	Music Theory 1 (First Term)	4
MUS 112	Music Theory 1 (Second Term)	4
MUS 113	Music Theory 1 (Third Term)	4
MUS 114	Sight-reading and Ear Training (First Term)	2
MUS 115	Sight-reading and Ear Training (Second Term)	2
MUS 116	Sight-reading and Ear Training (Third Term)	2
MUS 127	Keyboard Skills 1 (First Term)	2
MUS 128	Keyboard Skills 1 (Second Term)	2
MUS 129	Keyboard Skills 1 (Third Term)	2

MUS 111/112: see Footnote 3.

Second-Year Courses (21 credits)

MUS 211	Music Theory 2: (First Term)	3
MUS 212	Music Theory 2 (Second Term)	3
MUS 213	Music Theory 2 (Third Term)	3
MUS 214	Keyboard Skills 2 (First Term)	2
MUS 215	Keyboard Skills 2 (Second Term)	2
MUS 216	Keyboard Skills 2 (Third Term)	2
MUS 224	Sight-reading and Ear Training (First Term)	2
MUS 225	Sight-reading and Ear Training (Second Term)	2
MUS 226	Sight-reading and Ear Training (Third Term)	2

Additional Requirements (12 credits)

- MUS Ensemble - take 12 credits (6 terms)
- MUP (Individual Lessons) - take 6 credits (6 terms)

Electives

Any college-level courses that bring total credits to 90 credits, with the following limitations:

- Up to 12 credits of Career Technical Education. See the list of Course Types by Prefix (p. 108). 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.
- 12 credits of Physical Education or Dance activity (PE, PEAT, PEO, D). Excludes D 160 (p. 135), D 251 (p. 136), D 256 (p. 136), and D 260 (p. 136).

Footnotes

1 – To earn the CTM notation on a transcript, students must meet all the CTM requirements with a minimum of 30 credits. Students must email degreeevaluators@lanecc.edu once the Core Transfer Map requirements have been completed so that it is notated on the transcript. This is crucial for transferring credits from LCC to UO

2 – MUS 111 (p. 159) & MUS 112 (p. 159) fulfill both Arts and Letters & Major Requirement but the credits are not double counted

3 – Students must take a Music Theory Placement Test prior to enrollment in the Music Core (MUS 111 (p. 159), MUS 114 (p. 159), MUS 127 (p. 159) - fall start only), which is offered by the Performing Arts Department

Notes

To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.

- **Time Limitation for UO Equivalency** - To qualify, applicable coursework at Lane Community College must have been taken no more than four terms (not including summers) previous to the student's first term of enrollment at the University of Oregon School of Music and Dance. As an example, for a student transferring into the UO SOMD fall 2017 term, LCC coursework taken spring 2016 term is eligible for equivalency under the terms outlined in this agreement. However, coursework completed during winter 2016 term would not qualify as it exceeds this four-term time limitation.
- Students are responsible for notifying the UO Music Undergraduate Office when operating under this articulation agreement to ensure their credits transfer as outlined herein.
- **Application of Music Core Equivalencies** - Because credits earned in LCC music core classes are transferred to the UO as generic lower-division music credit, credits may be applied to UO music major requirements in one of two ways:

1) For students pursuing a traditional music major (BM, BMME, BA in Music: Music Theory concentration and History-Literature concentration, BS in Music: Music Technology), which requires full or partial completion of two years of Theory, Aural Skills and Keyboard Skills, equivalencies for UO courses will be applied directly to the Music Core Requirements, thereby allowing students to enroll in classes for which those courses serve as prerequisites.

2) For students pursuing a non-traditional music major (BA/BS in Music: General Music concentration and Popular Music concentration), no more than 16 UO equivalent credits may be applied toward the total credit requirement of the major. Thus, students pursuing the General Music concentration — a major which has a minimum total credit requirement of 60 credits — will be required to earn at least 44 music credits at the UO. Likewise, students pursuing the Popular Music Studies concentration - a major which has a minimum total requirement of 66 credits, will be required to earn at least 50 credits toward music major requirements at the UO. However, this 16-credit limitation does not restrict the number of credits applied toward coursework categories (i.e., Musicianship, History and Culture) for these majors.

Music Technology and Sound Engineering, AAS

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.

90 credits

Program Contacts

- Program Coordinator: Seth Mulvihill, mulvihills@lanecc.edu, 541-463-5184
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 19,175

- Resident Tuition: $ 13, 50
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fee: $ 30
- Books / Materials: $1,200 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $2,735 (Music, Music Tech and Individual Music Lessons Fees)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

Admissions

A Music Theory Placement Assessment is required prior to enrolling in Program Core Courses. Learn more about the placement process. Email arts@lanecc.edu for information.

Connect with the Performing Arts Department for more information.

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 115	Introduction to College Composition	4
MTH 098	Math Literacy	5
	Or	
MTH 105Z	Math in Society	4
	Human Relations - choose one course from list	3-4

WR: See Footnote 1.

MTH: See Footnote 2.

List of accepted Human Relations Courses (p. 11)

Program Core Courses

Must be completed with a grade of C- or better. P/NP not accepted.

MUS 101	Music Fundamentals	3
MUS 107	Audio Engineering 1	3
MUS 109	Audio Engineering 2	3
MUS 110	Audio Engineering 3	3
MUS 111	Music Theory 1 (First Term)	4
MUS 112	Music Theory 1 (Second Term)	4
MUS 113	Music Theory 1 (Third Term)	4
MUS 114	Sight-reading and Ear Training (First Term)	2
MUS 115	Sight-reading and Ear Training (Second Term)	2
MUS 116	Sight-reading and Ear Training (Third Term)	2
MUS 118	Music Technology MIDI/Audio 1	3
MUS 119	Music Technology MIDI/Audio 2	3
MUS 127	Keyboard Skills 1 (First Term)	2

MUS 128	Keyboard Skills 1 (Second Term)	2
MUS 129	Keyboard Skills 1 (Third Term)	2
MUS 131	Group Piano	2

MUS 101 / MUS 131 (p. 160): See Footnote 3.

Complete 12 credits from the following:

May be completed with a grade of C- or better, or Pass.

Note: each course is repeatable up to 12 credits. Complete any combination.

MUS 291	Chamber Choir	2
MUS 293	Jazz Combos	2
MUS 294	Jazz Ensemble	2
MUS 295	Symphonic Band	2
MUS 297	Concert Choir	2

Music Lessons

Must be completed with a grade of C- or better. P/NP not accepted.
(Group Lessons allows a Pass.)

Individual Lessons -
Complete 3 credits over 3 terms from the following:
- any 100 level courses (MUP)
- any 200 level courses (MUP) (

Group Lessons/Individual Lessons -
Complete 3-4 credits from the following:

MUS 134	Group Voice	2
MUS 137	Group Guitar	2
MUS 138	Group Guitar 2	2

- any 100 level courses (MUP)
- any 200 level courses (MUP)

MUP: see Footnote 4.

MUS 134/MUS 137 (p. 160)/MUS 138 (p. 160): see Footnote 5.

Electives

Program Electives

Complete 13 credits from the following list:

BA 101Z	Introduction to Business	4
BA 281	Personal Finance	4
BT 165	Introduction to the Accounting Cycle	4
MUL 120	Audio Production	4
MUS 103	Songwriting Techniques and Analysis 1	3
MUS 134	Group Voice	2
MUS 137	Group Guitar	2
MUS 138	Group Guitar 2	2
MUS 161	Jazz Improvisation: Instrumental	2
MUS 201	Exploring Music: Introduction to Music History	3
MUS 202	Exploring Music: Introduction to Music History	3
MUS 203	Exploring Music: Introduction to Music History	3
MUS 205	Introduction to Jazz History	3
MUS 211	Music Theory 2: (First Term)	3
MUS 212	Music Theory 2 (Second Term)	3
MUS 213	Music Theory 2 (Third Term)	3
MUS 214	Keyboard Skills 2 (First Term)	2
MUS 215	Keyboard Skills 2 (Second Term)	2
MUS 216	Keyboard Skills 2 (Third Term)	2
MUS 224	Sight-reading and Ear Training (First Term)	2
MUS 225	Sight-reading and Ear Training (Second Term)	2
MUS 226	Sight-reading and Ear Training (Third Term)	2
MUS 260	History of Hip-Hop and Rap Music	3
MUS 264	Roots of Rock (Roots-1963)	4
MUS 265	Golden Age of Rock & Roll (1964-1974)	4
MUS 266	Rockin' the New Millennium (1974-2006)	4
MUS 268	History of Electronic Music	3

Recommended: MUL 120 (p. 155), BA 101Z (p. 122), BA 281 (p. 123), BT 165 (p. 124).

Electives: See Footnote 5.

Open Electives

*Complete any course(s) (about **4 credits**) 100-level or higher to reach the required 90 total credits required for the program.*

Footnotes

1 – Any writing above WR 115 (p. 177) is also accepted

2 – MTH 060 (p. 153) or higher math (MTH/STAT) is also accepted

3 – Depending on music theory placement, some students may skip MUS 101 (p. 159) and MUS 131 (p. 160) and replace with 5 credits of Electives from list

4 – MUP courses (100- and 200-level): limited to 6 credits applied towards the degree

5 – MUS 134 (p. 160), MUS 137 (p. 160), and MUS 138 (p. 160): limited to 6 credits each applied towards the degree. There's a 12-credit (in any combination of the three) limitation overall

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for the Music Technology and Sound Engineering: MIDI and Audio Production, CPC (p. 99) and Music Technology and Sound Engineering: MIDI Production, CPC (p. 100).

Music Technology and Sound Engineering: MIDI and Audio Production, CPC

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.

35 credits

Program Contacts

- Program Coordinator: Seth Mulvihill, mulvihills@lanecc.edu, 541-463-5184
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 7,720

- Resident Tuition: $ 5,075
- Technology Fees: $ 490
- General Student Fees: $ 750
- Online Course Fees: $ 30
- Books / Materials: $ 300 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 1,075 (Music, Music Tech and Individual Music Lessons Fees)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

Admissions

A Music Theory Placement Assessment is required to get into MUS 111 (p. 159). Learn more about the placement process. Email arts@lanecc.edu for information.

Program Requirements

Program Core Courses

Must be completed with a letter grade of C- or better. P not accepted.

MUL 120	Audio Production	4
MUP 100	Individual Lessons	1
MUS 101	Music Fundamentals	3
MUS 107	Audio Engineering 1	3

MUS 109	Audio Engineering 2	3
MUS 110	Audio Engineering 3	3
MUS 111	Music Theory 1 (First Term)	4
MUS 114	Sight-reading and Ear Training (First Term)	2
MUS 118	Music Technology MIDI/Audio 1	3
MUS 119	Music Technology MIDI/Audio 2	3
MUS 127	Keyboard Skills 1 (First Term)	2
MUS 131	Group Piano	2

MUP 100: complete any MUP 100 course for 1 credit

Ensemble

Ensemble may be completed with a grade of C- or better, or Pass.

Complete one of the following:

MUS 291	Chamber Choir	2
MUS 293	Jazz Combos	2
MUS 294	Jazz Ensemble	2
MUS 295	Symphonic Band	2
MUS 297	Concert Choir	2

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Music Technology and Sound Engineering, AAS degree (p. 98).

Music Technology and Sound Engineering: MIDI Production, CPC

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.

18 credits

Program Contacts

- Program Coordinator: Seth Mulvihill, mulvihills@lanecc.edu, 541-463-5184
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 4,272

- Resident Tuition: 2,610
- Technology Fees: $ 252
- General Student Fees: $ 300
- Online Course Fees: $ 30
- Books / Materials: $ 300 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 780 (Music, Music Tech and Individual Music Lessons Fees)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

Must be completed with a grade of C- or better. P/NP not accepted.

MUL 120	Audio Production	4
MUP 100	Individual Lessons	1
MUS 101	Music Fundamentals	3
MUS 118	Music Technology MIDI/Audio 1	3
MUS 119	Music Technology MIDI/Audio 2	3
MUS 131	Group Piano	2

MUP 100: complete any MUP 100 course for 1 credit

Ensemble

Ensemble may be completed with a grade of C- or better, or Pass.

Complete one of the following:

MUS 291	Chamber Choir	2
MUS 293	Jazz Combos	2
MUS 294	Jazz Ensemble	2
MUS 295	Symphonic Band	2
MUS 297	Concert Choir	2

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Music Technology and Sound Engineering, AAS degree (p. 98).

Science

Transfer Degrees

- Biology, AST (p. 100)

Certificate of Completion

- Wildland Fire Management, Certificate of Completion (p. 102)

Biology, AST

This degree is dependent on students selecting and working with their transfer institution early in the program. Contact an academic advisor for help determining a degree plan.

This program outlines specific course requirements for students who plan to transfer to a four-year public university in Oregon and earn a Bachelor of Science in Biology. Students should work with an academic advisor to ensure they fulfill the requirements for this program and for their intended transfer institution. Students seeking alternative accepted pathways should consult with an academic advisor.

90 credits

Program Contacts

- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Note: students are strongly encouraged to work with an academic advisor to select courses and map a plan that matches career and transfer major goals

Guidelines

- Complete a total of 90 credits of college-level coursework (24 credits must be completed at LCC).
- General Education courses must be a minimum of 3 credits. Elective courses may be any number of credits.
- Biology major requirements must be completed with a grade of C- or better. P/NP is not accepted. All other courses may be completed with a grade of C- or better, or Pass.

Note - grade requirements may differ by transfer institution.

- 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 degree is awarded.

Cost

Estimated Cost: $ 16,710

- Resident Tuition: $ 13,050
- Technology Fees: $ 1,260
- General Student Fees: $ 900
- Online Course Fees: $ 0
- Books / Course Materials: $ 1,500

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Lane degrees and certificates are aligned with Lane's Institutional Learning Outcomes (p. 5) and Oregon learning outcomes. View our State General Education Learning Outcomes (p. 5).

Program Requirements

Core Transfer Map Requirements

Writing - WR 121Z (p. 177) (4 credits)

Math - Fulfilled by MTH 251 (p. 155) (found under Major Requirements) (5 credits)

Arts & Letters - Choose two (2) courses from Arts and Letters list (p. 17) (6-8 credits)

Social Science - Choose two (2) courses from Social Science list (p. 20) (6-8 credits)

Natural Sciences - Fulfilled by BI 221 (p. 123) and BI 222 (p. 123) (found under Major Requirements) (8 credits)

Cultural Literacy - One (1) course from the courses above must also be an approved Cultural Literacy course (see specific lists for those designated as meeting CL)

Core Transfer Map: See Footnote 1.

MTH and BI: See Footnote 2.

Additional General Education

Choose one from the following:

WR 122Z	Composition 2	4
WR 227Z	Technical Writing	4

Major Requirements

Must be completed with a letter grade of C- or better. Pass not accepted.

Calculus

Note: 5 of the 10 credits will be applied to Core Transfer Map

MTH 251	Differential Calculus	5
MTH 252	Integral Calculus	5

Biology

Note: 8 of the 12 credits will be applied to Core Transfer Map

BI 221	Principles of Biology	4
BI 222	Principles of Biology	4

Complete one of the following:

BI 223A	Principles of Zoology	4
BI 223B	Principles of Botany	4

Biology: See Footnote 3.

Chemistry

Note: Laboratory required

CH 221	General Chemistry 1	4
CH 222	General Chemistry 2	4
CH 223	General Chemistry 3	4
CH 227	General Chemistry Laboratory 1	2
CH 228	General Chemistry Laboratory 2	2
CH 229	General Chemistry Laboratory 3	2

Pick ONE sequence from the following:

Organic Chemistry (labs required)

CH 241	Organic Chemistry	4
CH 242	Organic Chemistry	4
CH 243	Organic Chemistry	4
CH 247	Organic Chemistry Laboratory 1	2
CH 248	Organic Chemistry Laboratory 2	2
CH 249	Organic Chemistry Laboratory 3	2

General Physics

PH 201	General Physics	5
PH 202	General Physics	5
PH 203	General Physics	5

Physics with Calculus

PH 211	General Physics with Calculus	5
PH 212	General Physics with Calculus	5
PH 213	General Physics with Calculus	5

Electives

Any college-level courses that bring total credits to 90 credits, with the following limitations:

- Up to 12 credits of Career Technical Education. See the list of Course Types by Prefix (p. 108). Policies on accepting career-technical credits vary at four-year institutions in Oregon. Consult an academic advisor about taking these courses as electives.
- 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).
- Maximum 12 credits of activity courses (PE, PEAT, PEO, D) may be included within the entire degree, with the exception of D 160 (p. 135), D 251 (p. 136), D 256 (p. 136), and D 260 (p. 136).
- Transfer institution requirements. Consult Lane's Academic Advising department for a list of recommended coursework. Transfer institution requirements may change without notice.

Recommended Electives by Institution

Oregon State University

- COMM 111Z
- HE 275
- Pick a 2nd sequence from Chemistry, or Physics. [Note - students must have organic chemistry completed prior to junior year at OSU]
- Additional General Education as needed by OSU. See list of LCC courses that transfer - General Education Course Equivalencies to OSU (p. 25). Connect with OSU to determine what to take.

University of Oregon

- Pick a 2nd sequence from Chemistry, or Physics (listed above).
- Additional General Education as needed by UO. See list of LCC courses that transfer - General Education Course Equivalencies to UO (p. 26). Connect with UO to determine what to take.

Portland State University

- Pick a 2nd sequence from Chemistry, or Physics.
- Additional General Education as needed by PSU. Connect with PSU to determine what to take.

For all other Oregon universities, please connect with your desired transfer institution to determine any additional requirements that can be completed at the community college.

Footnotes

1 – To earn the CTM notation on a transcript, students must meet all the CTM requirements with a minimum of 30 credits. This notation is not automatically awarded. 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

2 – MTH 251 (p. 155) / MTH 252 (p. 155) and BI 221 (p. 123) / BI 222 (p. 123) credits are fulfilled in two areas but cannot be double counted

3 – Students must complete full biology series at the same institution

Notes

- This program follows Associate of Arts (AAT)/Associate of Science (AST) Requirements unless otherwise specified.
- Students must complete all required courses to earn this degree. Equivalent courses of 3 credits or higher may be transferred in and used to meet core or major requirements. To earn a Core Transfer Map (CTM) transcript notation, students must complete required courses and have a minimum of 30 CTM credits.
- Students considering pre-medical, pre-dental, and pre-pharmacy programs should consider the Organic Chemistry sequence. Courses in the sequence must be taken at the same institution.
- 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.
- 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 online from Enrollment Services.
- Repeatable courses may be used once to meet a Core Transfer Map requirement. Any additional allowable repeats may be used to meet Elective requirements.
- Some courses are included on more than one Core Transfer Map list. These courses may

be used only once to meet a specific Core Transfer Map requirement. Please contact your academic advisor for details.
- Courses numbered 197, 198, 199, 280, 297, 298, or 299 count as electives and do not meet Core Transfer Map requirements. Courses numbered 199 and 299 are experimental and may later be reviewed and approved to meet Core Transfer Map requirements.

Wildland Fire Management, Certificate of Completion

This program prepares students for fire management positions with the Bureau of Land Management, the U.S. Forest Service, private agencies, non-profit organizations, and local community groups. It emphasizes the use of fire as a management tool for restoration ecology as well as the role of fire in regional ecosystems. It integrates the study of forest ecological principles, fire science, fire policies, public communication, and management issues to prepare students for more advanced positions and further study in wildland fire management.

23 credits

Program Contacts
- Program Coordinator: Richard Glover, gloverr@lanecc.edu, 541-463-5514
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 4,360
- Resident Tuition: $ 3,335
- Technology Fees: $ 322
- General Student Fees: $ 450
- Online Course Fee: $ 10
- Books / Course Materials: $ 75 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 168

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

Students who complete this program will be able to:

PLO 1 - Explain current fire management issues and challenges using terminology and concepts related to wildland fire behavior, fire ecology, fire prevention, fire cessation and suppression, fire use, and fuels management

PLO 2 - Discuss the role of controlled burning/prescribed fire in maintaining and restoring fire-adapted ecosystems and habitats for fire-dependent species

PLO 3 - Participate in hands-on field exercises for planning, preparing, or implementing a prescribed fire

PLO 4 - Measure, inventory, and classify fuels using both quantitative and qualitative tools and methods

PLO 5 - Interpret and communicate spatial data using physical and digital mapping tools

Program Requirements

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

Program Core Requirements

Complete all of the following:

BI 103	Ecosystems	4
FIRE 100	Introduction to Wildland Fire	4
FIRE 200	Wildland Fuels Management and Prescribed Burning	4
GIS 151	Digital Earth	4

BI 103: complete the Forest Ecology section

Complete all of the following:

Must be completed with a grade of Pass.

FIRE 110	Wildland Fire Management Seminar	1
FIRE 111	Wildland Fire Communication	1
FIRE 120	NWCG Basic Firefighter Lecture Series	4
FIRE 130	NWCG Basic Firefighter Field Day	1

FIRE 120 & FIRE 130 (p. 145): See Footnote 1.

Footnotes

1 – If you have an incident qualification card, you may qualify for Credit for Prior Learning (CPL) and will not need to take FIRE 120 (p. 145) and FIRE 130 (p. 145) as part of the Wildland Fire Management Certificate. Contact the Program Coordinator for help with CPL

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- FIRE 120 and FIRE 130 (p. 145) will prepare students to successfully earn their NWCG card to gain the qualifications to work as a wildland firefighter. These exams are self-administered by students as part of their program.

Social Science

Associate of Applied Science degrees (AAS)
- Criminal Justice, AAS (p. 102)
- Human Services, AAS (p. 103)

Career Pathway Certificates (CPC)
- Human Services: Addiction Studies, CPC (p. 105)

Certificate of Completion
- Geographic Information Science, Certificate of Completion (p. 105)

Criminal Justice, AAS

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.

90 credits

Program Contacts
- Program Coordinator: Caoimhin OFearghail, ofearghailc@lanecc.edu, 541-463-5361
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 18,065
- Resident Tuition: $ 13,050
- Technology Fee: $ 1,260
- General Student Fees: $ 900
- Online Course Fees: $ 210
- Books / Course Materials: $ 2,625 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program Specific Fees: $ 20

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 121Z	Composition 1	4
WR 122Z	Composition 2	4

MTH 105Z	Math in Society	4
COMM 218Z	Interpersonal Communication	4

Math: see Footnote 1.

COMM 218Z: see Footnote 2.

Complete one of the following:

COMM 111Z	Public Speaking	4
COMM 112	Persuasive Speech	4

Complete one of the following:

HE 250	Personal Health	3
HE 252	First Aid	3
HE 275	Lifetime Health and Fitness	3

Complete one of the following:

ANTH 103	Cultural Anthropology	4
ES 101	Historical Racial and Ethnic Issues	4
ES 102	Contemporary Racial and Ethnic Issues	4
HST 203	History of the United States	4
SOC 213	Race and Ethnicity	4

Social Science Track

Complete all courses from one of the following Social Science tracks -

a. Political Science:

PS 201	U.S. Government and Politics	4
PS 203	State and Local Government and Politics	3

b. Psychology:

PSY 201Z	Introduction to Psychology I	4
PSY 202Z	Introduction to Psychology II	4

c. Sociology:

SOC 205	Social Stratification and Social Systems	4
SOC 206	Institutions and Social Change	4

d. Open Social Science:

Complete two courses from the Social Science list

Science Track

Complete all courses from one of the following Science tracks -

a. Forensics:

ANTH 101	Physical Anthropology	4
BI 101	Cell Systems *complete "Introduction to Genetics" section of BI 101	4
CH 114	Introduction to Forensic Chemistry	4

b. Geographic Info Science:

GIS 151	Digital Earth	4
GIS 245	GIS 1	4
GIS 246	GIS 2	4

c. Open Science:

Complete 3 courses (two with labs & one with or without lab) selected from this list: Science/Math/Computer Science

Program Core Courses

Must be completed with a grade of C or better. P/NP not accepted

CJA 100	Introduction to Criminal Justice	4
CJA 200	Introduction to Criminology	4
CJA 210	Criminal Investigation 1	3
CJA 212	Criminal Justice Documentation and Reporting	3
CJA 213	Interviewing and Interrogation	3
CJA 214	Introduction to Forensic Science	4
CJA 220	Introduction to Criminal Law	3
CJA 222	Criminal Law: Procedural Issues	3
PHL 201	Ethics	4
PHL 221	Critical Thinking Or	4
COMM 105	Listening and Critical Thinking	4

Program Electives

Must be completed with a grade of C or better. P/NP not accepted.

Complete three of the following:

CJA 201	Juvenile Delinquency	3
CJA 207	Gender, Crime and Justice	4
CJA 280	Co-op Ed: Criminal Justice	3-12
HS 102	Psychopharmacology	4
HS 209	Crisis Intervention and Prevention	3
SOC 211	Social Deviance	3
PSY 239	Introduction to Abnormal Psychology	3

CJA 280: repeatable up to 9 credits

Note: Students using lower-credit courses to meet General Education requirements may need to take additional Electives to meet the 90-credit minimum.

Footnotes

1 – Any math (MTH/STAT) higher than MTH 105Z (p. 154) is also accepted

2 – COMM 218Z (p. 130) satisfies the Human Relations requirement and cannot be substituted

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- Co-op internship placements may require a term or more to coordinate. Students who are interested in enrolling in CJA 280 (p. 128) 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.

Human Services, AAS

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. Within the Associate of Applied Science (AAS) degree, there is a General Human Services Track for students seeking a broad range of experience and a Children/Families track designed for those who would like to focus specifically on working with this population. 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. 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.

92 credits

Program Contacts

- Program Coordinator: Susan Shipp, shipps@lanecc.edu, 541-463-5231
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Co-op Coordinator: Erin McGladrey, mcgladreye@lanecc.edu, 541-463-5813

Cost

Estimated Cost: $ 17,190

- Resident Tuition: $ 13,050
- Technology Fee: $ 1,260
- General Student Fees: $ 900
- Online Course Fees: $ 80
- Books / Course Materials: $ 1,900 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in a program require default grading (completed with a letter grade of C- or better, or Pass) unless specified otherwise below.

General Education

WR 121Z	Composition 1	4
WR 122Z	Composition 2	4
MTH 098	Math Literacy	5
	Complete one Science course - see list	3-4

MTH: See Footnote 1.

List of accepted Science/Math/Computer Science (p. 19) courses

Complete one of the following:

COMM 100Z	Introduction to Communication	4
COMM 111Z	Public Speaking	4
COMM 112	Persuasive Speech	4
COMM 130	Business and Professional Communication	4
COMM 218Z	Interpersonal Communication	4
COMM 219	Small Group Communication	4

COMM 218Z (p. 130): See Footnote 2.

Complete one of the following:

HE 152	Drugs, Society and Behavior	3
HE 209	Human Sexuality	3
HE 240	Holistic Health	3
HE 250	Personal Health	3
HE 252	First Aid	3
HE 255	Global Health and Sustainability	4
HE 275	Lifetime Health and Fitness	3

Social Science & Education Tracks

Complete 9 credits from one of the following tracks:

General Human Services Track

PSY 201Z	Introduction to Psychology I	4
PSY 202Z	Introduction to Psychology II	4
PSY 212	Learning and Memory	3
PSY 215	Lifespan Developmental Psychology	4
PSY 239	Introduction to Abnormal Psychology	3
SOC 204	Introduction to Sociology	4
SOC 205	Social Stratification and Social Systems	4
SOC 206	Institutions and Social Change	4
SOC 210	Marriage, Family, and Intimate Relations	4
SOC 211	Social Deviance	3
SOC 213	Race and Ethnicity	4
SOC 218	Sociology of Gender	4
	Any lower-division PSY or SOC transfer course	3

Children and Families Track

ED 233	Adolescent Learning and Development	3
ED 258	Multicultural Education	3
ED 269	Inclusion and Special Needs	3
HDFS 226	Child Development	3
HDFS 227	Children Under Stress	3

Program Core Courses

HS 102	Psychopharmacology	4
HS 150	Personal Effectiveness for Human Service Workers	3
HS 155	Interviewing Theory and Techniques	3
HS 201	Introduction to Human Services	3
HS 224	Group Counseling Skills	3
HS 226	Ethics and Law	3
HS 231	Advanced Interviewing and Counseling	3
HS 232	Cognitive-Behavioral Strategies	3
HS 265	Casework Interviewing	3
HS 266	Case Management	3
HS 267	Cultural Competence in Human Services	3

HS 150: See Footnote 3.

HS 155: See Footnote 4.

HS 226: See Footnote 5.

Cooperative Education

Complete 18 credits in any combination from the following -

HS 280	Cooperative Education: Human Services	1-12
	Or	
HS 280AS	Cooperative Education: Human Services - Addiction Studies	1-12

HS 280/HS 280AS: See Footnote 6.

Program Electives

Complete 8 credits from one of the following tracks:

General Human Services Track

HS 158	Trauma: Theory to Practice	2
HS 209	Crisis Intervention and Prevention	3
HS 220	Prevention 1: Preventing Substance Abuse and Other Social Problems	3
HS 221	Co-occurring Disorders	3
HS 222	Best Practices in Human Services: Interventions	4
HS 228	HIV/AIDS and other Infectious Diseases: Risk Assessment and Intervention	2
HS 229	Grief and Loss Across Life Span	3
CJA 200	Introduction to Criminology	4
CJA 201	Juvenile Delinquency	3

Children and Families Track

ECE 105	Health and Safety Issues in Early Childhood Education	2
ECE 230	Family, School, Community Relations	3
ECE 253	Diversity Issues in Early Childhood Education	3
ED 230	Language and Literacy	3
HDFS 228	Young Children with Special Needs	3
HS 209	Crisis Intervention and Prevention	3
HS 220	Prevention 1: Preventing Substance Abuse and Other Social Problems	3
HS 221	Co-occurring Disorders	3
HS 229	Grief and Loss Across Life Span	3

Footnotes

1 – MTH 025 (p. 153) or higher math (MTH/STAT) is also accepted

2 – COMM 218Z (p. 130) is recommended if pursuing the Child and Family Track

3 – HS 150 (p. 150) satisfies the Human Relations requirement and cannot be substituted. It also serves as a prerequisite for HS 280 (p. 151)/HS 280AS (p. 151)

4 – HS 155 (p. 150) is a prerequisite for HS 231 (p. 151), HS 232 (p. 151), HS 265 (p. 151), HS 266 (p. 151)

5 – HS 226 (p. 150) is a prerequisite for HS 280 (p. 151)/HS 280AS (p. 151)

6 – A total of 18 credits of Cooperative Education are required to complete this degree. Students may use either of the following toward meeting this requirement: HS 280 (p. 151) or HS 280AS (p. 151). Under certain conditions, Cooperative Education coursework in Psychology, Sociology, and Service Learning may also be used to meet this requirement. Please speak with your Co-op Coordinator prior to enrolling.

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This is the parent program for the Human Services: Addiction Studies, CPC (p. 105).
- Cooperative Education: Students are required to attend a co-op orientation prior to beginning their field placement. Contact the Human Services Cooperative Education Coordinator.

Credit for Prior Learning

Students who hold a current CADC license from the MentalHealth & AddictionCertificationBoar d of Oregon should contactAcademicAdvising about receiving credit for prior learningtowards L ane' HumanServicesdegree and Career Pathway Certificate, Addiction Studies (p. 105). Current CADC 1 or higher certificate holdersmay be eligible to receive up to 15 credits for the following courses: HS 102 (p. 150), HS 150 (p. 150), HS 155 (p. 150), HS 228 (p. 150) and 3 credits HS 280AS (p. 151).

To earn the Addiction Studies CPC (p. 105), students would need to additionally take HS 224 (p. 150), HS 226 (p. 150), and HS 266 (p. 151).

Human Services: Addiction Studies, CPC

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 (Certified Alcohol Drug Counselor). State certification also requires successfully completing 1000 hours of supervised practice and a written exam. Three credits of Cooperative Education may apply toward the supervised hours requirement.

24 credits

Program Contacts

- Program Coordinator: Susan Shipp, shipps@lanecc.edu, 541-463-5231
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu
- Cooperative Education; 541-463-5203; coop-office@lanecc.edu

Cost

Estimated Cost: $ 4,736

- Resident Tuition: $ 3,480
- Technology Fee: $ 336
- General Student Fees: $ 450
- Online Course Fee: $ 20
- Books / Course Materials: $ 450 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

Program Learning Outcomes

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

All courses in this program require default grading (completed with a letter grade of C- or better, or Pass).

Program Core Courses

HS 102	Psychopharmacology	4
HS 150	Personal Effectiveness for Human Service Workers	3
HS 155	Interviewing Theory and Techniques	3
HS 224	Group Counseling Skills	3
HS 226	Ethics and Law	3
HS 228	HIV/AIDS and other Infectious Diseases: Risk Assessment and Intervention	2
HS 266	Case Management	3
HS 280AS	Cooperative Education: Human Services - Addiction Studies	1-12

HS 280AS (p. 151): complete a minimum of 3 credits

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- This program is fully contained in the Human Services, AAS degree (p. 103).
- Cooperative Education: Students are required to attend a co-op orientation prior to beginning their field placement. Contact the Human Services Cooperative Education Coordinator.

Credit for Prior Learning

Students who hold a current CADC license from the Mental Health & Addiction Certification Board of Oregon should contact Academic Advising about receiving credit for prior learning towards Lane's Human Services degree and Career Pathway Certificate, Addiction Studies. Current CADC 1 or higher certificate holders may be eligible to receive up to 15 transfer credits for the following courses: HS 102 (p. 150), HS 150 (p. 150), HS 155 (p. 150), HS 228 (p. 150), and 3 credits of HS 280AS (p. 151).

Geographic Information Science, Certificate of Completion

The purpose of this program is to provide students with the technical skills and concepts to utilize geographic information systems (GIS) in support of their career and educational goals. Professional fields of application include science, business, resource/land management, surveying, public safety, and urban and regional planning. GIS 151 (p. 147), GIS 245 (p. 147), and GIS 246 (p. 147) transfer to many Oregon four-year colleges and support current graduates and working professionals as they update their technical skills.

12 credits

Program Contacts

- Program Coordinator: Jason Ambacher, ambacherj@lanecc.edu
- Academic Advising; 541-463-3800; academicadvising@lanecc.edu

Cost

Estimated Cost: $ 2,353

- Resident Tuition: $ 1740
- Technology Fee: $ 168
- General Student Fees: $ 314
- Online Course Fee: $ 40
- Books / Course Materials: $ 0 (Some courses use Open Educational Resources (OER), which are free or low-cost materials.)
- Program-Specific Fees: $ 105 (course fee)

Costs provided are estimates only, and may differ depending on course type and/or modality. Learn more and view current tuition and fee information online.

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

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

MTH 060	Beginning Algebra	4
CIS 101	Computer Fundamentals	4

Note - MTH 060 (p. 153) serves as a prerequisite for GIS 151 (p. 147)

Program Core Courses

GIS 151 & GIS 245 must be completed with a C- or better. P/NP not accepted.
GIS 246 must be completed with a B or better. P/NP not accepted.

GIS 151	Digital Earth	4
GIS 245	GIS 1	4
GIS 246	GIS 2	4

Notes

- To view all important info for all programs (grading, total credits, honors, etc.), visit the Programs of Study (p. 7) page.
- 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.

Non-Credit Programs

Non-Credit Programs

English as a Second Language (Community)

The Community English Program (CEP) at Lane Community College offers 6 levels of English as a Second language study that ranges from beginning through high intermediate proficiency level. These classes combine the language skills of reading, writing, listening and speaking. We also offer two levels of literacy classes.

Length of program depends on placement level

Program Contacts

- Program Coordinator: Leilani Perez, 541-463-3403, perezl@lanecc.edu
- Student Services Team: 541-463-5253, eslstudentservices@lanecc.edu
- Academic Advising Team: internationaladvisor@lanecc.edu

Cost

- U.S. - Fees may change during the year. Learn more and view updated information about fees for students who live permanently in the U.S.
- International - Fees may change during the year. Learn more and view updated information about the cost of attendance for international students.

Admission Information

All new students should complete the ESL Intake Form and take a placement test, which is located on our website.

Courses

Course hours listed represent hours per week

Level 0

XESC 05160	ESL Combined Skills Level 0	5 hours

Level 1

XESC 05161	ESL Combined Skills Level 1	5 hours
XESL 05161	ESL Grammar & Literacy Level 1	5 hours

Level 2

XESC 05162	ESL Combined Skills Level 2	5 hours

Level 3

XESC 05163	ESL Combined Skills Level 3	5 hours

Level 4

XESC 05164	ESL Combined Skills Level 4	5 hours

Level 5

XESC 05165	ESL Combined Skills Level 5	5 hours

Level 6

XESC 05166	ESL Combined Skills Level 6	5 hours

English as a Second Language (Intensive)

The Intensive ESL (IESL) Program at Lane Community College offers 6 levels of English as a Second language study that ranges from beginning through college transition.

Length of program depends on placement level

Program Contacts

- Program Coordinator: Leilani Perez, 541-463-3403, perezl@lanecc.edu
- Student Services Team: 541-463-5253, eslstudentservices@lanecc.edu
- Academic Advising Team: internationaladvisor@lanecc.edu

Cost

- U.S. - Fees may change during the year. Learn more and view updated information about fees for students who live permanently in the U.S..
- International - Fees may change during the year. Learn more and view updated information about cost of attendance for international students.

Program Learning Outcomes

The purpose of this program is to assist English language learners, 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

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, see the Daytime Program Intensive ESL website.

ESL to Credit Bridge Program: For students interested in completing ESL coursework simultaneously with credit courses, contact the department or go to the website to learn more about the Bridge Program.

Courses

There are 6 levels in the IESL program (A, B, C, D, E, and F).

Course hours listed represent hours per week

Level A

XESC 0516A	ESL Basic Combined Basic Skills Level A	10 hours
XESR 0516A	ESL Reading and Oral Skills Level A	10 hours

Level B

XESC 0516B	ESL Combined Skills Level B	10 hours
XESR 0516B	ESL Reading and Oral Skills Level B	10 hours
XESW 0516B	ESL Writing and Grammar Level B	10 hours

Level C

XESR 0516C	ESL Reading and Oral Skills Level C	10 hours
XESW 0516C	ESL Writing and Grammar Level C	10 hours

Level D

XESR 0516D	ESL Reading and Oral Skills Level D	10 hours
XESW 0516D	ESL Writing and Grammar Level D	10 hours

Level E

XEBO 0516E	ESL Bridge Oral Skills Level E	5 hours
XEBW 0516E	ESL Bridge Reading and Writing Level E	7 hours
XESR 0516E	ESL Academic Reading Level E	5 hours
XESS 0516E	ESL Academic Listening and Speaking Level E	5 hours
XESW 0516E	ESL Academic Writing and Grammar Level E	10 hours

Level F

XEBO 0516F	ESL Bridge Oral Skills Level F	5 hours
XESS 0516F	ESL College Transition Listening and Speaking Level F	5 hours
XESR 0516F	ESL College Transition Reading Level F	5 hours
XEBW 0516F	ESL Bridge Reading and Writing Level F	7 hours
XESW 0516F	ESL College Transition Writing and Grammar Level F	10 hours

Elective

XESS 05160	English Pronunciation	2.5 hours

Non-Credit Training Certificates

A NCTC is a form of recognition awarded by a community college made up of a single or series of courses that do not offer college credit for completion. These are short-term programs that provide skills training in response to regional occupational needs.

Phlebotomy

The primary responsibility of a phlebotomist is to draw blood specimens from patients for laboratory tests. The job includes establishing a professional relationship with the patient, selecting and preparing the puncture site, collecting specimens, preparing and maintaining equipment, and caring for the patient after specimen collection. Other duties include entering data into a computer and performing clerical duties associated with lab test record keeping.

The training consists of two terms of noncredit lecture/lab courses. Upon successful completion of both terms, the student will have the necessary skills to seek employment. Once employed full-time (35 hours a week) for one year, they will meet the Route 3 eligibility requirements set by the American Society of Clinical Pathology (ASCP) to qualify to take the national Phlebotomy Technician PBT certification exam at additional cost. Certification is not currently required to work as a phlebotomist in Oregon. Students must take both terms for successful completion of the course.

- For more information, see the LCC Phlebotomy website.

Project Management

Lane's Project Management training is designed to be flexible, convenient, and affordable. All our trainings are held virtually, saving you valuable time and money. Even though your classes are all online, they're taught live, so you'll get many opportunities to interact with your instructors. Whether you're interested in just taking one specific class or enrolling in the complete Project Management noncredit Certificate Bundle, our training is flexible enough to fit into your schedule. Trainings begin in spring and fall terms, and the seven course bundle can be completed in about six months.

- For more information, please see the LCC Project Management website.

Supported Employment

This program is being developed in full collaboration with Oregon Department of Human Services (ODHS), Office of Developmental Disabilities Services (ODDS) as part of the ICAP statewide grant. Its purpose is to support and train current and future job coaches and other professionals supporting individuals with Intellectual and Developmental Disabilities.

- For more information, contact the Career Pathways department.

Courses

All course prerequisites require default grading (must be completed with a letter grade of C- or better, or Pass) unless specified otherwise.

1 - Course Type by Prefix

Types of Courses at Lane

- Career Technical Education (CTE) courses
- Lower-Division Collegiate (LDC) courses
- Support Courses
- Previously Used Prefixes (Subject Codes)

Career Technical Education Courses (CTE)

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
AV: Aviation Maintenance
BT: Business Technology
CA: Culinary Arts
CIS: Computer Information Systems
CNC: Computer Numerical Control
CST: Construction
DA: Dental Assisting
DH: Dental Hygiene
DRF: Drafting
DS: Diesel
ECE: Early Childhood Education (was CTE prior to Summer 2021, LDC Summer 2021-Summer 2024, CTE Summer 2024-present)
EMS: Emergency Medical Services
ET: Electronic Technology
FIRE: Wildland Fire Management
FLS: Fitness and Lifestyle Specialist
FT: Flight Technology
GWE: General Work Experience
HDFS: Human Development/Family Studies (was CTE prior to Summer 2021, LDC Summer 2021-Summer 2024, CTE Summer 2024-present)
HIM: Health Information Management
HP: Health Professions
HS: Human/Community Services (was CTE prior to Summer 2021, LDC Summer 2021-Summer 2024, CTE Summer 2024-present)
IDS: Interdisciplinary Studies
MA: Medical Assistant
MUL: Multimedia
NRG: Energy Management
NRS: Nursing
OST: Occupational Skills Training
PN: Practical Nursing
PTA: Physical Therapist Assistant
RTEC: Regional Technology Education Consortium
UAS: Unmanned Aircraft Systems
WLD: Welding

Lower-Division Collegiate Courses (LDC)

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
COOP: Cooperative Education
CRWR: Creative Writing
CS: Computer Science
CW: Chinuk Wawa
D: Dance
ECON: Economics
ED: Education
EL: Effective Learning
ENG: English
ENGR: Engineering
ENSC: Environmental Science
ES: Ethnic Studies
FA: Film Arts (FA 250 (p. 145) was CTE prior to Summer 2024)
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
HON: Honors
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
STAT: Statistics
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 (Subject Codes)

^ indicates CTE

AB: Auto Body^
AIL: American Indian Language (replaced by CW)
ALS: Academic Learning Skills
AT: Advanced Technology^
AUD: Audio Production^
AVN: Avionics^
APPR: Apprenticeship (now APR)^
BOT: Botany (replaced by BI)
BVDP: Broadcast/Video Production^
CAS: Computer Application Software^
CE: Continuing Education^
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)
GD: Graphic Design^
HI: Health Informatics (replaced by HIM)^
HIT: Health/Medical Technology^
HO: Health Occupations (replaced by HP)^
HRTM: Hotel, Restaurant, Tourism Management^
INTL: International^
IT: Industrial Technology^
JPN: Japanese
LA: Legal Office Assistant^
LAT: Landscape/Nursery Technology^
LE: Law Enforcement^
LGL: Legal Office^
MDP: Multimedia Production^
MFG: Manufacturing Technology^
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)
SUST: Sustainability^
TTL: Trans and Trucking Logistics^
VP: Video Production^
WATR: Water Conservation^
WST: Watershed Science Technician^
Z: Zoology (replaced by BI)

2 - Common Course Numbering (CCN)

Through legislation approved in 2021, the state of Oregon established a group called the Transfer Council, which is charged with developing and sustaining a Common Course Numbering system (CCN) to allow seamless transfer of the most-transferred courses among public universities and community colleges.

A designator (Z) at the end of each common course number denotes it is part of the CCN System and therefore transferable across all Oregon public higher education institutions. Previous versions of a course (i.e. COMM 100 or SP 100) are generally still equivalent and will be applied the same in degrees and programs. Contact Academic Advising for questions about course equivalencies or transferability.

CCN Courses at Lane Community College:

- BA 101Z (p. 122) Introduction to Business
- BA 211Z (p. 123) Principles of Financial Accounting
- BA 213Z (p. 123) Principles of Managerial Accounting
- COMM 100Z (p. 129) Introduction to Communication
- COMM 111Z (p. 130) Public Speaking (including the honors: COMM 111HZ (p. 129))
- COMM 218Z (p. 130) Interpersonal Communication
- ENG 104Z (p. 142) Introduction to Fiction (including the honors: ENG 104HZ (p. 142))
- ENG 105Z (p. 142) Introduction to Drama (including the honors: ENG 105HZ (p. 142))
- ENG 106Z (p. 142) Introduction to Poetry (including the honors: ENG 106HZ (p. 142))
- MTH 105Z (p. 154) Math in Society
- MTH 111Z (p. 154) Precalculus 1: Functions
- MTH 112Z (p. 154) Precalculus 2: Trigonometry
- PSY 201Z (p. 170)Introduction to Psychology I (including the honors: PSY 201HZ (p. 170))
- PSY 202Z (p. 170) Introduction to Psychology II (including the honors: PSY 202HZ (p. 170))
- STAT 243Z (p. 173) Elementary Statistics 1 (previously MTH 243)
- WR 121Z (p. 177) Composition 1 (including the honors: WR 121HZ (p. 177))
- WR 122Z (p. 177) Composition 2 (including the honors: WR 122HZ (p. 177))
- WR 227Z (p. 177) Technical Writing (including the honors: WR 227HZ (p. 177))

3 - Course Lists

- Cooperative Education (p. 109)
- Honors (p. 110)
- Independent Study (p. 110)
- Sustainability (p. 110)

Cooperative Education

Cooperative Education (180/280/480 and some 206-numbered courses): these courses integrate on-the-job work experience with academic studies. Students earn credit and a grade while working full-time or part-time in positions related to their career and academic goals.

- AM 280 (p. 111) Co-op Ed: Automotive
- AP 280 (p. 112) Co-op Ed: Pro Pilot
- ART 280A (p. 120) Co-op Ed: Art and Applied Design
- AV 280 (p. 122) Co-op Ed: Aviation Maintenance
- BA 280 (p. 123) Co-op Ed: Business Management
- BA 280AA (p. 123) Co-op Ed: Administrative Professional
- BA 280AC (p. 123) Co-op Ed: Accounting
- BI 280 (p. 124) Co-op Ed: Biology
- BT 206 (p. 124) Co-op Ed: Business Seminar
- CA 280 (p. 125) Co-op Ed: Culinary Arts
- CH 280 (p. 127) Co-op Ed: Physics-Chemistry
- CJA 280 (p. 128) Co-op Ed: Criminal Justice (p. 129)
- CNC 280 (p. 129) Co-op Ed: CNC and Manufacturing
- COOP 206 (p. 130) Co-op Ed: Internship Seminar
- COOP 280 (p. 130) Co-op Ed
- COOP 280H (p. 130) Co-op Ed: Service Learning-Honors
  COOP 280MR (p. 130) Co-op Ed: Medical Receptionist
- COOP 280PB (p. 130) Co-op Ed: Phlebotomy
- COOP 280RX (p. 130) Co-op Ed: Pharmacy Tech
- COOP 280SL (p. 130) Co-op Ed: Service Learning
- CS 206 (p. 132) Co-op Ed: Computer Information Technology Seminar
- CS 280CN (p. 133) Co-op Ed: Computer Network Operations
- CS 280GD (p. 133) Co-op Ed: Computer Simulation & Game Development
- CS 280IS (p. 133) Co-op Ed: Computer Information Systems
- CS 280PR (p. 133) Co-op Ed: Computer Programming
- CST 280 (p. 134) Co-op Ed: Construction
- DA 206 (p. 135) Co-op Ed: Dental Assisting Seminar
- DA 280 (p. 135) Co-op Ed: Dental Assisting
- DH 280 (p. 138) Co-op Ed: Dental Hygiene
- DS 280 (p. 139) Co-op Ed: Diesel
- ECE 280 (p. 139) Co-op Ed: Early Childhood Education
- ED 280 (p. 140) Co-op Ed: Education
- EMS 280P1 (p. 142) Co-op Ed: Paramedic Internship P1
- EMS 280P2 (p. 142) Co-op Ed: Paramedic Internship P2
- ENGR 280 (p. 144) Co-op Ed: Engineering
- DRF 280 (p. 138) Co-op Ed: Drafting
- FL 280IW (p. 145) Co-op Ed: International Work Experience
- FLS 280 (p. 146) Co-op Ed: Fitness
- FLS 280A (p. 146) Co-op Ed: Healthy Aging
- G 280 (p. 147) Co-op Ed: Geology
- G 280ES (p. 147) Co-op Ed: Environmental Science
- GIS 280 (p. 147) Co-op Ed: Geographic Information Science
- GWE 180 (p. 148) Co-op Ed: General Work Experience
- HE 280 (p. 148) Co-op Ed: Health Occupations
- HIM 280 (p. 149) Co-op Ed: Health Information Management
- HS 280 (p. 151) Cooperative Education: Human Services
- HS 280AS (p. 151) Cooperative Education: Human Services-Addiction Studies
- IDS 280S (p. 152) Co-op Ed: Sustainability Coordinator
- J 280 (p. 152) Co-op Ed: Journalism
- MA 206 (p. 152) Co-op Ed: Medical Assistant Seminar
- MA 280 (p. 152) Co-op Ed: Medical Assistant
- MGMT 480 (p. 153) Co-op Ed: Applied Business Management
- MTH 280 (p. 155) Co-op Ed: Mathematics
- MUL 280 (p. 157) Co-op Ed: Web Design
- MUL 280GD (p. 157) Co-op Ed: Graphic Design
- MUL 280M (p. 157) Co-op Ed: Multimedia
- MUS 280 (p. 161) Co-op Ed: Music
- NRG 280 (p. 162) Co-op Ed: Energy Management
- NRS 280 (p. 163) Co-op Ed: Nursing
- OST 280 (p. 163) Co-op Ed: Occupational Skills
- PE 280C (p. 167) Co-op Ed: Coaching
- PS 280 (p. 169) Co-op Ed: Political Science
- PS 280LW (p. 169) Co-op Ed: Pre Law

- PSY 280 (p. 170) Co-op Ed: Psychology
- PTA 206 (p. 171) Physical Therapist Assistant Seminar
- PTA 280A (p. 172) Co-op Ed: Physical Therapist Assistant - First Clinical Experience
- PTA 280B (p. 172) Co-op Ed: Physical Therapist Assistant - Second Clinical Experience
- PTA 280C (p. 172) Co-op Ed: Physical Therapist Assistant - Third Clinical Experience
- SOC 280 (p. 173) Co-op Ed: Sociology
- TA 280 (p. 174) Co-op Ed: Performing Arts
- UAS 280 (p. 175) Co-op Ed: UAS
- WLD 280 (p. 176) Co-op Ed: Welding

Honors

Honors courses (H or _H, previously) delve deeper into course topics and require a high level of student motivation; the pace may be faster than non-Honors courses. Learn more about the Honors Program.

- ARH 209H (p. 118) History of Japanese Art-Honors 3 Credits
- ART 115H (p. 118) Basic Design: Fundamentals-Honors 4 Credits
- COMM 111HZ (p. 129) Fundamentals of Public Speaking-Honors 4 Credits
- CRWR 242H (p. 131) Creative Writing: Poetry-Honors 4 Credits
- ENG 104HZ (p. 142) Introduction to Literature: Fiction-Honors 4 Credits
- ENG 105HZ (p. 142) Introduction to Literature: Drama-Honors 4 Credits
- ENG 106HZ (p. 142) Introduction to Literature: Poetry-Honors 4 Credits
- ENSC 182H (p. 144) Atmospheric Environment and Climate Change-Honors 4 Credits
- ENSC 183H (p. 144) Aquatic Environment-Honors 4 Credits
- HON 280H (p. 149) Co-op Ed: International Work Experience-Honors 1-12 Credits
- PHL 201H (p. 167) Ethics-Honors 4 credits
- PS 203H (p. 169) State and Local Government and Politics 3 credits
- PS 297H (p. 170) Environmental Politics-Honors 4 Credits
- PSY 201HZ (p. 170) General Psychology-Honors 4 Credits
- PSY 202HZ (p. 170) General Psychology-Honors 4 Credits
- SOC 204H (p. 172) Introduction to Sociology-Honors 4 Credits
- TA 272H (p. 174) Introduction to Theatre-Honors 4 Credits
- WR 121HZ (p. 177) Composition 1-Honors 4 Credits
- WR 122HZ (p. 177) Composition 2-Honors 4 Credits
- WR 227HZ (p. 177) Technical Writing-Honors 4 Credits

Note: Students cannot receive credit for both the Honors and non-Honors versions of a course.

Independent Study

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.

Current offerings:

- Art (ART)
- Art History (ARH)
- Biology (BI)
- Business (BA)
- Chemistry (CH)
- Computer Science (CS)
- Construction (CST)
- Dental Hygiene (DH)
- Drafting (DRF)
- Environmental Science (ENSC)
- Film Arts (FA)
- Geographic Information Science (GIS)
- Health Information Management (HIM)
- Honors (HON)
- Medical Assistant (MA)
- Multimedia (MUL)
- Music (MUS)
- Nursing (NRS)
- Paramedicine (EMS)
- Physical Therapist Assistant (PTA)
- Threatre Arts (TA)

Sustainability

For students interested in issues of sustainability (ecological, social, economic), the following courses have been deemed to have sustainability as a central focus. 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 103 (p. 123) Ecosystems (Biodiversity and Sustainability section) 4 Credits
- CH 170 (p. 126) Introduction to Environmental Chemistry 4 Credits
- CST 201 (p. 134) Sustainable Building Practices 3 Credits
- ENG 240 (p. 143) Nature Literature 4 Credits
- ENSC 181 (p. 144) Terrestrial Environment 4 Credits
- ENSC 182 (p. 144) Atmospheric Environment and Climate Change 4 Credits
- ENSC 183 (p. 144) Aquatic Environment 4 Credits
- HE 255 (p. 148) Global Health and Sustainability 4 Credits
- IDS 280S (p. 152) Co-op Ed: Sustainability Coordinator 3-12 Credits
- PS 297 (p. 170) Environmental Politics 4 Credits
- SOIL 205 (p. 173) - Introduction to Soil Science 4 Credits

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.

AM-Automotive

AM 143 - Brakes (1-8)
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.
Corequisite: AM 246.

AM 145 - Engine Repair (1-12)
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)
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.
Corequisite: AM 149.

AM 149 - Manual Drive Trains and Axles (1-6)
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.
Corequisite: AM 147.

AM 242 - Automatic Transmissions/ Transaxles (1-12)
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.
Prerequisite: AM 145 and/or AM 244.

AM 243 - Electrical and Electronic Systems (1-12)
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)
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.
Prerequisite: AM 243.

AM 246 - Heating and Air Conditioning (1-4)
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.
Corequisite: AM 143.

AM 280 - Co-op Ed: Automotive (3-12)
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.

ANTH-Anthropology

ANTH 101 - Physical Anthropology (4)
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.

ANTH 102 - World Archaeology (4)
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.

ANTH 103 - Cultural Anthropology (4)
Cultural Anthropology is the study of living cultures. It provides a comparative cross-cultural explanation of how culture and language shape human behavior. Aspects of culture to be examined include patterns of subsistence, how cultures organize themselves socially, marriage and family practices, political and economic systems, religious beliefs and practices, gender and sexuality, health and healing, and the multitude of worldviews, values, and ways of seeing across cultures.

ANTH 162 - Introduction to Medical Anthropology (4)
This course is an anthropological introduction to the cross-cultural examination of health and illness among humans. The concept of holism is used to examine how various factors, such as culture, biology, linguistic, environmental, political and economic interact to influence wellness, illness and disease. Public health and epidemiologic approaches are considered to illustrate the interdisciplinary nature of the field, and to understand the value of ethnographic data collection on evidence-based evaluations of medical outcomes.

ANTH 235 - Anthropology of Native North America (4)
Introduction to the anthropological study of Native North America. Examines pre-contact, post-contact, and contemporary issues associated with indigenous peoples of the United States and Canada. Main topics include prehistory, language, subsistence, social and political organization, spiritual practices, the diversity of cultural identities, and stereotypes of American Indians past and present.

AP-Aviation Pilot

AP 110A - Flight Lab - Pre-Solo (1)
Part 61 pre-solo flight training for students under 180 pounds in weight and 6'2" in height.
Prerequisite: Admission to the Aviation Pilot program.

AP 110B - Flight Lab - Pre-Solo (1)
Part 61 pre-solo flight training for students at or over 180 pounds in weight and 6'2" in height.
Prerequisite: Admission to the Aviation Pilot program.

AP 112 - Private Pilot Ground School (5)
Part 141 private pilot ground training.
Prerequisite: Admission to the Aviation Pilot program.

AP 113 - Airman Certification Standards and Maneuvers (1)
Breakdown of private pilot flight maneuvers and the Airman Certification Standards of each.
Prerequisite: Admission to the Aviation Pilot program.

AP 115 - Introduction to Aviation and Careers (1)
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.
Prerequisite: Admission to the Aviation Pilot program.

AP 116 - Aviation History (4)
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.
Prerequisite: Admission to the Aviation Pilot program.

AP 120A - Flight Lab - Private Pilot Certificate (1)
Part 61 private pilot flight training for students under 180 pounds in weight and 6'2" in height.
Prerequisite: Admission to the Aviation Pilot program.

AP 120B - Flight Lab - Private Pilot Certificate (1)
Part 61 private pilot flight training for students at or over 180 pounds in weight and 6'2" in height.
Prerequisite: Admission to the Aviation Pilot program.

AP 121 - Simulator Lab - Private (1)
Part 61 private pilot simulator training.
Prerequisite: Admission to the Aviation Pilot program.

AP 125 - Aircraft Systems & Structures 1 (2)
In depth study of small fixed-wing aircraft systems.
Prerequisite: Admission to the Aviation Pilot program.

AP 126 - Aviation Weather Services (2)
In depth study of weather reporting available to pilots on the aviationweather.gov website.
Prerequisite: Admission to the Aviation Pilot program.

AP 127 - Aerodynamics (3)
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.
Prerequisite: Admission to the Aviation Pilot program.

AP 130 - Flight lab - Attitude Control (1)
Part 61 attitude instrument flight training.
Prerequisite: Admission to the Aviation Pilot program.

AP 132 - Instrument Ground School (5)
Part 141 instrument ground training.
Prerequisite: Admission to the Aviation Pilot program.

AP 135 - Advanced Avionics (1)
Hands on advanced GPS lab.
Prerequisite: Admission to the Aviation Pilot program.

AP 140 - Flight Lab - Instrument Rating (1)
Part 61 instrument rating flight training.
Prerequisite: Admission to the Aviation Pilot program.

AP 141 - Simulator Lab - Instrument (1)
Part 61 instrument simulator training.
Prerequisite: Admission to the Aviation Pilot program.

AP 210 - Flight Lab - Cross-Country (1)
Part 61 commercial cross-county flight training.
Prerequisite: Admission to the Aviation Pilot program.

AP 212 - Commercial Pilot Ground School (5)
Part 141 commercial pilot ground training.
Prerequisite: Admission to the Aviation Pilot program.

AP 215 - Aircraft Systems & Structures 2 (2)
In depth study of advanced fixed-wing aircraft systems including hydraulics, fly-by-wire, and turbine-engines.
Prerequisite: Admission to the Aviation Pilot program.

AP 220 - Flight Lab - Maneuvers (1)
Part 61 commercial maneuvers flight training.
Prerequisite: Admission to the Aviation Pilot program.

AP 221 - Simulator Lab - Commercial (1)
Part 61 commercial pilot simulator training.
Prerequisite: Admission to the Aviation Pilot program.

AP 222 - CFI/CFII Ground School (3)
Part 61 CFI/CFII ground training.
Prerequisite: Admission to the Aviation Pilot program.

AP 225 - FOI & Human Factors (3)
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.
Prerequisite: Admission to the Aviation Pilot program.

AP 230 - Flight Lab - Commercial Pilot Certificate (1)
Part 61 commercial pilot flight training.
Prerequisite: Admission to the Aviation Pilot program.

AP 232 - Multi-Engine Ground School (2)
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: Admission to the Aviation Pilot program.

AP 235 - Accident Investigations (3)
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.
Prerequisite: Admission to the Aviation Pilot program.

AP 240 - Flight Lab - Multi-Engine Rating & CFI/CFII Certificate (1)
Part 61 multi-engine, CFI, and CFII flight training.
Prerequisite: Admission to the Aviation Pilot program.

AP 280 - Co-op Ed: Pro Pilot (3-12)
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.
Prerequisite: Instructor consent; Admission to the Aviation Pilot program.

APR-Apprenticeship

APR 101 - Trade Skills Fundamentals (4)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
Designed for Oregon state-recognized apprentices employed in the millwright industry. This course provides an overview of workplace practices and how to succeed on the job. Course content will include: communication and leadership skills; employee attitudes and safety awareness; personal safety procedures; workplace safety; tools for the job; basic rigging practices; and the wellness of the Millwright.

APR 151 - Millwright Machine Theory and Trade Calculations (5)
Designed for Oregon state-recognized apprentices employed in the millwright trade. Students will learn trade calculations as they pertain to the millwright industry. This course will provide students with hands-on experience using Mic's, calipers and various precision measuring equipment. Students will gain knowledge in the use of metal lathes, milling equipment, boring, keyway cutting, and other facets of machine work.

APR 152 - Millwright: Power Transmissions and Boilers-Steam (5)
Designed for Oregon state-recognized apprentices employed in the millwright industry. Course will provide students with an understanding of mechanical power train functions and what makes a mill operational such as: drives, clutches, brakes, and couplers (their functions, applications, and advantages/disadvantages). Students will learn all steam functions and the precautions necessary to be aware of during installations and repairs; the differences in fire tube and water tube systems; and all associated traps, valves, pumps, and reliefs. Discussions will include how they function and what can be serviced by Millwrights and what the requirements are for a steam specialist.

APR 160 - Plumbing Skill Fundamentals (4)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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: College writing placement test or prior college.

APR 186 - Wire Drive Welding 1 (1-4)
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: College writing placement test or prior college.

APR 187 - Fundamentals of Metallurgy (1-3)
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: College writing placement test or prior college.

APR 190 - Electrical Theory (1-4)
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.
Prerequisite: College writing placement test or prior college AND MTH 060 or higher with a letter grade of C- or better. Crosslisted as: ET 129.

APR 192 - Grounding and Bonding (3)
This course provides a comprehensive coverage of the techniques used in the grounding and bonding of systems, buildings, equipment, enclosures and electrical service connections. The principles of ground faults, the grounding of circuits that are over 1000 volts and lightning protection are also covered in this class. A special emphasis is placed on quality workmanship, common practices and the rules, regulations and requirements of proper grounding and bonding techniques as defined by the "National Electric Code". Trade hazards and appropriate safety equipment and techniques are also explored.
Prerequisite: ET 129 OR APR 190.

APR 194 - Industrial Wiring (3)
This course provides coverage of the techniques used in the wiring of industrial facilities. Through the use of classroom and laboratory resources, the student will learn how to evaluate the electrical needs of various sites and perform calculations to properly size the components that will be used to meet those needs. In the study of the course topics, a special emphasis is placed on quality workmanship, common practices and their rules, regulations and requirements that are defined by "National Electric Code".
Prerequisite: ET 129 OR APR 190.

APR 201 - Carpentry Basic Rigging and Practices (3)
Designed for Oregon state-recognized apprentices employed in the carpentry trade. The curriculum is competency-based and modular in format. This course introduces students to the basic equipment and hardware used in rigging. An overview of personnel lifting, lift planning and crane load charts will also be introduced along with handling and placing of concrete and the preparing of the student for working in and around excavations.

APR 202 - Carpentry Concrete Practices (3)
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)
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)
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)
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)
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)
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)
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)
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)
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 systems, 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)
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)
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)
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)
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)
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)
Designed for Oregon state-recognized apprentices employed in a trade or industry-related occupation. Course will include hands-on training to introduce students to concepts of electrical systems troubleshooting. Students will identify faults using digital multi-meters and troubleshooting concepts.

APR 240 - Audio and Intrusion Systems (4)
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)
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)
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)
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)
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)
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)
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)
Designed for Oregon state-recognized apprentices employed in the millwright industry. Course will include a review of orthographic projection, isometric, and schematic drawings used to show piping, hydraulic, and pneumatic systems, industrial automation, and conveyer system. Discussion and lab work will include an overview of several types of prints, their symbols and abbreviations, the components that make up a print and the various lines used within them. Students will practice take-off's and bid proposals by using various sets of industrial prints to provide cost estimations.

APR 251 - Millwright: Pneumatics and Lubrications (5)
Designed for Oregon state-recognized apprentices employed in the millwright industry. This course is a comprehensive view of pneumatics where power is derived from the use of a gas, usually air. Topics will include pneumatic applications that require quick response, low and moderate precision, lower power and light to moderate load capacity requirements and the similarities and differences that pneumatics share with hydraulics. An overview of the special requirements of lubes and lubrication systems will be examined along with the various shapes and construction of bearings; their applications and specifications.

APR 252 - Hydraulics for Millwrights (5)
Designed for Oregon state-recognized apprentices employed in the millwright industry. Students will gain an understanding of the functions of today's hydraulic systems and components, components specification for certain applications, and theory and formulas for verifying these results. Students will perform hands-on review and troubleshooting of components, such as fluids, valves, pumps and motors.

APR 253 - Millwright Piping Systems (5)
Designed for Oregon state-recognized apprentices employed in the millwright industry. This course is an overview of piping systems and various types of pipes that contribute to each type of system. Students will learn construction piping systems along with ancillary components and how they differ. The course will also cover schematics for piping systems and methods of clamping, hanging and supporting them. Tube bending and how to make it fit and look good will also be discussed.

APR 254I - Industrial Instrumentation Technician Grounding Installation and Bending of Conduit (4)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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 (3)
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 (3)
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: APR 285.

APR 287 - Motors 3 (3)
This is the 3rd class in a sequence that provides a comprehensive overview of electrical theory and fundamental motor operating principles as they relate to installation and troubleshooting procedures. It includes the information on motor switching devices, solid state and electromechanical controls, programmable motor drives and the principles of both preventative and predictive maintenance. This class is designed to help the learner understand both fundamental and advanced concepts. Installation, maintenance, and troubleshooting are emphasized along with the application of National Electrical Code® and NFPA 70E®.
Prerequisite: APR 286.

APR 290 - Programmable Controllers 1 (3)
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 (3)
This class provides an introduction to the robot and its capabilities and explores the various tasks that robots are programmed to perform.
Prerequisite: APR 290.

APR 292 - Programmable Controllers 3 (3)
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: APR 291 and second-year standing.

ARH-Art History

ARH 200 - History of Design Arts (3)
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)
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)
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: Recommended: placement into WR 115 or above.

ARH 205 - History of Western Art 2 (3)
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: Recommended: placement into WR 115 or above.

ARH 206 - History of Western Art 3 (3)
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: Recommended: placement into WR 115 or above.

ARH 207 - History of Indian Art (3)
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: Recommended: placement into WR 115 or above.

ARH 208 - History of Chinese Art (3)
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: Recommended: placement into WR 115 or above.

ARH 209 - History of Japanese Art (3)
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: Recommended: placement into WR 115 or above.

ARH 209H - History of Japanese Art-Honors (3)
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 209H.
Prerequisite: Recommended: placement into WR 115 or above.

ARH 211 - Early Modern Art: 1850-1910 (3)
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)
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 217 - History of Middle Eastern and Islamic Art (3)
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: Recommended: placement into WR 115 or above.

ARH 218 - History of Photography:1700-1910 (3)
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 220 - History of Photography: 1950-Present (3)
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.

ARH 221 - Modern and Contemporary Latin American Art (3)
This course surveys the history of art in the Spanish and Portuguese-speaking Americas, from the first attempts to construct a postcolonial identity in the 1800s, to the political complexities that defined the region in the 1900s and the global stage of the 2000s. The class provides an in-depth discussion of pivotal Latin American artists and their contributions in order to establish a wider and more complex vision of modern art.
Prerequisite: Recommended: WR 115 or above.

ART-Art

ART 111 - Introduction to Visual Arts (3)
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 - Core Studio: 2D Design (4)
Emphasis on visual elements and principles in 2D media and processes as related to drawing, painting, photography, graphic design and other 2D media. Students will create and analyze projects that demonstrate critical and creative thinking and knowledge of 2D Design theory and practice. Students will participate in critiques, discussions and presentations of the historical and contemporary context of design.

ART 115H - Core Studio: 2D Design-Honors (4)
Emphasis on visual elements and principles in 2D media and processes as related to drawing, painting, photography, graphic design and other 2D media. Students will create and analyze projects that demonstrate critical and creative thinking and knowledge of 2D Design theory and practice. Students will participate in critiques, discussions and presentations of the historical and

contemporary context of design. 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 and ART 115H.

ART 116 - Core Studio: Color Theory (4)
Emphasis on color theory and design as related to painting, graphic design, sculpture, ceramics, and other 2D, 3D, and digital media. Students create and analyze projects that demonstrate critical and creative thinking, and knowledge of color theory and practice. Students participate in critiques, discussions, and presentations of the historical and contemporary context of color theory and design.

ART 117 - Core Studio: 3D Design (4)
Beginning course focusing on the fundamental principles of 3D design for art and non-art majors. Students will create projects using various 3D processes, and materials to explore design elements that include form, balance, proportion, scale, contrast, tension, pattern, and positive/negative space. Students will participate in critiques, discussions and presentations of projects that demonstrate critical and creative thinking while incorporating art historical and/or contemporary art theory. A foundation course for students interested in Ceramics, Sculpture, Product Design, Architecture, Interior Design, Game Design, Animation, and other 3D design fields.

ART 118 - Artist Books and Pop-up (4)
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)
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)
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 - Core Studio: Drawing 1 (4)
Emphasis on developing skills in observation and the ability to describe three dimensional objects in two dimensional surfaces. Focus will be in perceptual drawing using still-life, figure, perspective or other representational drawing processes. Secondary focus in composition and drawing theory. Students will participate in critiques, discussions and presentations of the historical and contemporary context of drawing. A foundation course for students interested in visual arts, graphic design and multimedia design fields. May be repeated up to 9 total credits.

ART 216 - Digital Design Tools (3)
An introduction to vector and bitmap images, and document-sharing software used in graphic design.

ART 220 - Documentary Photography (3)
Explore the creation and historical impact of documentary photography. Lecture and discussion is based on the impact of images through history and how images of historical, cultural, and social significance are helping to shape our contemporary history and viewpoints. Students will create a still-photo documentary story during the term. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 9 total credits.

ART 225 - Digital Illustration (3)
Students gain experience in using vector software to create technical and creative illustrations.
Prerequisite: ART 216.

ART 231 - Drawing 2: Composition and Thematic Development (4)
Emphasis on composition, aesthetics, style, and thematic development within the drawing medium. Explore expressive visual and conceptual concepts of modern and contemporary drawing theory. Students will participate in critiques, discussions and presentations related to the historical and contemporary context of drawing. May be repeated up to 8 credits.
Prerequisite: ART 131 or instructor permission by portfolio.

ART 234 - Drawing 2: Life Drawing (4)
Fundamental studio course in life drawing. Students will develop skills in visual representation using the human figure, other organic forms, or landscape. Students will create and analyze drawings that demonstrate creative and critical thinking, develop compositional skills and focus on anatomical structures, proportion and depth. Students will examine the portrayal of the figure through art historical theory and context. May be repeated up to 8 credits.
Prerequisite: ART 131.

ART 237 - Illustration 1 (4)
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 Drawing 1. May be repeated up to 8 credits.
Prerequisite: ART 131.

ART 240 - Natural Science Drawing (4)
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 8 credits.

ART 245 - Drawing for Media (4)
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)
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)
A hands-on introductory ceramics course designed for students with no previous ceramic hand-building experience. Emphasis on fundamental ceramic formation processes, techniques, concepts, and theory. Students will develop critical problem-solving skills through the evaluation and interpretation of assignments. Explore cultural, historical, and contemporary themes related to course work. Develop and demonstrate the ability to discuss creative intent and content in personal and peer assignments. Content 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)
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)
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)
A lab-based course that explores the essentials of ceramic chemistry, materials, and kiln firing practices. Emphasis on developing an understanding of the origins of ceramic materials, chemical composition, properties, and the function of clay bodies and glazes. Students will increase their ceramic knowledge and material literacy by experimentation and testing of materials for various surface outcomes, color, textural possibilities, and firing temperatures. The course provides practical information to utilize clay bodies and glazes in ways that will advance and enhance project goals and outcomes in course and studio work.
Prerequisite: ART 250.

ART 261 - Photography 1 (3)
An introductory course focusing on the history and fundamentals of Photography. Various technical and aesthetic considerations of fine art photography are taught with an emphasis on camera handling, manual exposure control, composition, and basic color theory. The course covers digital camera features such as the aperture, shutter, proper exposure, creative control, and composition to improve image quality.

ART 270 - Printmaking: Traditional and Digital Etching (4)
A beginning level course in non-toxic intaglio printmaking involving etching and printing using copper plates as the matrix. Traditional processes such as line etch, aquatint, drypoint, and engraving as well as digital photo etching processes will be explored. Students will design and create original editioned prints and learn perceptual skills, compositional development, and basic thematic awareness. Coursework will demonstrate critical and creative thinking, the knowledge of technical intaglio printmaking and the history and aesthetics of the medium. May be repeated for up to 8 credits.

ART 271 - Printmaking: Woodcut and Linocut (4)
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 8 credits.

ART 272 - Printmaking: Experimental Processes (4)
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 8 credits.

ART 275 - Screen Printing 1 (4)
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 8 credits.

ART 276 - Sculpture: Introduction (3)
A beginning course for students without prior training in sculpture. This course will introduce students to a variety of sculptural processes such as additive, subtractive and constructive techniques. Through working hands-on with various sculptural materials, students will develop an understanding of space and form, while actively exploring concepts of content and meaning in their work. Projects and media explored (i.e.: clay, plaster, wood, metal, stone, mixed media, etc.) vary from term to term. May be repeated up to 9 total credits.

ART 277 - Sculpture: Welding (3)
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)
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.

ART 280A - Co-op Ed: Art and Applied Design (3-12)
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 consent.

ART 281 - Painting 1: Color and Form (4)
Emphasis on basic technical and perceptual aspects of painting employing acrylic media. Explore and develop skills in the use of color, form, composition and a variety of surface applications. Course assignments involve direct observational approaches presented through a variety of traditional painting styles and techniques. Critique, discussions, and presentations will expand the students' perceptions of the artistic process and painting practice. May be repeated up to 8 credits.
Prerequisite: ART 131 or instructor permission by portfolio.

ART 282 - Landscape and Architectural Photography (4)
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 2: Composition and Thematic Development (4)
Emphasis on technical development, aesthetics and composition within painting medium. Explore expressive visual concepts and theory within historical and contemporary painting. Critique, discussion, and presentations will expand the students' perceptions of the artistic process and painting practice. May be repeated up to 8 credits.
Prerequisite: ART 281 or instructor permission by portfolio.

ART 285 - Screen Printing 2 (4)
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 8 credits.
Prerequisite: ART 275. Crosslisted as: ART 275 Screen Printing 1.

ART 286 - Sculpting for Animators (3)
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)
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.
Prerequisite: Recommended: ART 216.

ART 289 - Web Production (3)
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: MUL 212 and instructor consent (may be taken before or as a corequisite).

ART 290 - Design Concepts for the Web (3)
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 289.

ART 291 - Sculpture: Metal Casting (5)
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)
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)
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 1 (4)
Emphasis on the basic technical and aesthetic aspects of painting with watercolor media. Explore and develop skills in the use of color, form, and composition. Lectures, demonstrations, critiques, and discussions expand students' perceptions of the artistic process and watercolor painting practice. May be repeated up to 8 credits.

ART 295 - Watercolor 2 (4)
Emphasis on technical development, aesthetics, and composition within watercolor media. Explore expressive visual concepts and theory within historical and contemporary watercolor painting. Lectures, demonstrations, critiques, and discussions expand students' perceptions of the artistic process and watercolor painting practice. May be repeated up to 8 credits.
Prerequisite: ART 294 or instructor permission by portfolio.

ART 296 - Mural Painting Class (4)
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.

AS-Aerospace Science

AS 111 - Foundations of the Air Force Part I (1)
The introduction to the Air Force mission and organization. Featured topics include Air Force dress and appearance stand standards; military customs and courtesies, Air Force heritage, overview of the Department of the Air Force, and Air Force core values. Basic oral and written communication will be assessed.

AS 112 - Foundations of the Air Force Part II (1)
The second part of the introduction to the Air Force mission and organization. Featured topics include Air Force career opportunities, Air Force benefits, military communication skills, Air Force installations, and look at the basic characteristics of war. Basic oral and written communication will be assessed.

AS 113 - Foundations of the Air Force Part III (1)
The third part of the introduction of what the Air Force is about and what the Air Force has to offer. Featured topics include basic leadership, team building, interpersonal skills, diversity in the Air Force, and the oath of office and commissioning. Basic oral and written communication will be assessed.

AS 120 - Leadership Laboratory (1)
Cadets learn officership, leadership, drill and ceremony, and customs and courtesies. Lab. Only offered to students enrolled in the AFROTC officer commissioning program. Taken concurrently with AS 111, AS 112 and AS 113. Only offered to students enrolled in the AFROTC officer commissioning program.
Corequisite: AS 111, AS 112, and AS 113.

AS 211 - The Evolution of Air and Space Power 1860-1945 (1)
Study of the development of air power, concepts, and doctrine from its beginnings to the end of World War II. Historical examples examined include balloons, dirigibles, Wright Brother's first flight, and the role of airpower in World War I and II. Oral and written communication skills will be assessed. If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.
Corequisite: If enrolled in the AFROTC officer commissioning program, must be taken as a corequisite with AS 220.

AS 212 - The Evolution of Air and Space Power 1945-1990 (1)
Study of the development of air power, concepts, and doctrine during the Cold War. Historical examples examined include the Berlin Airlift, nuclear deterrence, and the role of air power employment in the Korean and Vietnam conflicts. Oral and written communication skills will be assessed. If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.
Corequisite: If enrolled in the AFROTC officer commissioning program, must be taken as a corequisite with AS 220.

AS 213 - The Evolution of Air and Space Power 1991-2025 (1)
Study of the factors contributing to the development of air power, concepts, and doctrine from the Persian Gulf War in 1990 to the present and beyond. Historical examples examined include the air campaigns used in the Gulf War, Kosovo crisis, Operations Enduring Freedom, Iraqi Freedom, and the Global War on Terrorism. Oral and written communication skills will be assessed. If enrolled in the AFROTC officer commissioning program, must be taken concurrently with AS 220.
Corequisite: If enrolled in the AFROTC officer commissioning program, must be taken as a corequisite with AS 220.

AS 220 - Leadership Laboratory (1)
Cadets are placed in element leadership positions in order to know and comprehend the Air Force concepts of command, discipline, tradition, and courtesies. Only offered to students enrolled in the AFROTC officer commissioning program. Only offered to students enrolled in the AFROTC officer commissioning program.
Corequisite: AS 211, AS 212, and AS 213.

ASL-American Sign Language

ASL 101 - 1st Year American Sign Language (4)
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)
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)
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.

ASTR-Astronomy

ASTR 121 - Astronomy of the Solar System (4)
This course 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. 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. ASTR 121, 122, and 123 can be taken in any order.
Prerequisite: MTH 60 or above with grade of C- or better OR equivalent placement via the Math Placement Process. OR corequisite CG 123.

ASTR 122 - Stellar Astronomy (4)
This course provides an in-depth and comprehensive introduction to the science of astronomy. This course is designed to serve non-science majors, but also offer a good introduction for prospective science majors interested in Astrophysics or Space Science. ASTR 122 focuses on the fundamental physics 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. ASTR 121, 122, and 123 can be taken in any order.
Prerequisite: MTH 60 or above with grade of C- or better OR equivalent placement via the Math Placement Process. OR corequisite CG 123.

ASTR 123 - Cosmology and the Large-Scale Structure of the Universe (4)
This course provides an in-depth and comprehensive introduction to the science of astronomy. This course is designed to serve non-science majors, but also offer a good introduction for prospective science majors interested in Astrophysics or Space Science. 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, Cosmology including the Big Bang, the geometry of space-time, the cosmic background radiation, and Dark Matter and Dark Energy. Lab included. ASTR 121, 122, and 123 can be taken in any order.
Prerequisite: MTH 60 or above with grade of C- or better OR equivalent placement via the Math Placement Process. OR corequisite CG 123.

AV-Aviation Maintenance

AV 251 - General 101 (6)
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: Admission to the Aviation Maintenance program.

AV 252 - General 102 (6)
Maintenance publications, maintenance forms and records, mechanic privileges and limitations, airframe and engine inspection, ground operations and aircraft drawings.
Prerequisite: Admission to the Aviation Maintenance program.

AV 253 - General 103 (6)
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: Admission to the Aviation Maintenance program.

AV 254 - General 104 (6)
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: Admission to the Aviation Maintenance program.

AV 255 - General 105 (6)
Aircraft fuel systems, aircraft and engine instrument systems, aircraft and engine fire protection systems, weight and balance.
Prerequisite: Admission to the Aviation Maintenance program.

AV 261 - Airframe 1 (6)
Assembly and rigging, ice and rain control systems, communication and navigation systems, welding.
Prerequisite: Admission to the Aviation Maintenance program.

AV 262 - Airframe 2 (6)
Position and warning systems, aircraft landing gear systems, hydraulic and pneumatic power systems.
Prerequisite: Admission to the Aviation Maintenance program.

AV 263 - Airframe 3 (6)
Inspect and repair sheet metal structures, install conventional rivets, form, layout and bend sheet metal.
Prerequisite: Admission to the Aviation Maintenance program.

AV 264 - Airframe 4 (6)
Wood structures, aircraft covering, non-metallic structures, aircraft finishes, cabin atmosphere and control systems.
Prerequisite: Admission to the Aviation Maintenance program.

AV 271 - Powerplant 1 (6)
Inspect, check, troubleshoot, service, repair and overhaul reciprocating engines, remove and install reciprocating engines, inspect and repair a radial engine.
Prerequisite: Admission to the Aviation Maintenance program.

AV 272 - Powerplant 2 (6)
Inspect, check, troubleshoot, service, repair and overhaul turbine engines and auxiliary power units, remove and install turbine engines.
Prerequisite: Admission to the Aviation Maintenance program.

AV 273 - Powerplant 3 (6)
Induction and engine airflow systems, engine exhaust and reverser systems, ignition and starting systems, engine cooling systems.
Prerequisite: Admission to the Aviation Maintenance program.

AV 274 - Powerplant 4 (6)
Fuel metering, propellers and unducted fans, lubrication systems.
Prerequisite: Admission to the Aviation Maintenance program.

AV 280 - Co-op Ed: Aviation Maintenance (3-12)
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.
Prerequisite: Instructor consent; Admission to the Aviation Maintenance program.

AV 282 - Airframe Return to Service (6)
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: Admission to the Aviation Maintenance program.

AV 283 - Powerplant Return to Service (6)
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: Admission to the Aviation Maintenance program.

BA-Business Administration

BA 101Z - Introduction to Business (4)
Presents an integrated view of both established and entrepreneurial businesses by studying their common characteristics and processes in a global context. Introduces theory and develops basic skills in the areas of accounting, finance, management, and marketing, with an emphasis on social responsibility and ethical practices. Explores how businesses can create value for themselves and society by addressing environmental and social challenges. This course is part of the Oregon Common Course Numbering System.

BA 206 - Management Fundamentals (4)
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 211Z - Principles of Financial Accounting (4)
Imparts an understanding of the purpose of accounting, common financial statement items, and the principles of internal controls. Focuses on recording the impact of economic events on account balances using U.S. Generally Accepted Accounting Principles, and the creation and analysis of financial statements to aid in external decision making. This course is part of the Oregon Common Course Numbering System.
Prerequisite: MTH 095 or higher or test, BA 101Z and WR 121Z or WR 122Z or WR 123.

BA 213Z - Principles of Managerial Accounting (4)
Builds an understanding of the role of managerial accounting in a business, focusing on the development and use of information to evaluate production costs and operational performance in support of short- and long-term organizational decision-making. This course is part of the Oregon Common Course Numbering System.
Prerequisite: BA 211Z.

BA 214 - Business Communications (4)
Introduces workplace and professional communications and provides students with the tools needed to collect, organize, and present information in a business and organizational setting. Students will learn how to use library and internet resources to evaluate sources and collect information. Students will use modern software applications to write and format formal business reports, develop and deliver persuasive presentations, and conduct team based communication, including via e-mail.
Prerequisite: BT 108 and WR 121Z.

BA 223 - Marketing (4)
Marketing is misunderstood, even by business leaders. Most people think that marketing is just sales, but marketing is much more than sales. 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 in this course students will learn and apply the principles of marketing.
Prerequisite: BA 101.

BA 226 - Business Law (4)
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 (4)
A beginning class in the basic techniques of selling. Includes an overview of the sales process, role of sales in the organization, and the relationship between sales and marketing. Covers the application of sales techniques in Business to Consumer, Business to Business, and professional development environments. Emphasis on applied learning and practice of sales techniques.
Prerequisite: BA 101.

BA 254 - General Aviation Management (3)
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 260 - Small Business Management (4)
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 278 - Leadership and Team Dynamics (4)
This course is designed to provide emerging and existing leaders the opportunity to explore, develop and improve their leadership and team skills. The course integrates readings from the humanities, experiential exercises, films, and contemporary readings on leadership. Topics include: Leadership philosophies, ethical issues related to leadership, strategies for identifying and articulating visions, empowering effective teams, goal setting, evaluation, decision-making, and conflict resolution.

BA 280 - Co-op Ed: Business Management (3-12)
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)
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)
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.

BA 281 - Personal Finance (4)
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.

BI-Biology

BI 101 - Cell Systems (4)
BI 101 topics: atoms, molecules, cellular processes, genetics, protein synthesis, photosynthesis, respiration. Only one BI 101 can be used to meet requirements for any Lane degree, regardless of letter option. Sections offered for BI 101 include: Botanical Beginnings, Cell Systems, Introduction to Genetics, Ocean Life Foundations, and Unseen Life. Lab included.

BI 102 - Organismal Systems (4)
BI 102 topics: homeostasis, feedback loops, and body systems. Only one BI 102 can be used to meet requirements for any Lane degree, regardless of letter option. Sections for BI 102 include: Animal Biology, Body Systems, Genetics and Society, Human Biology, Forest Biology, Marine Biology, and Mushrooms. Lab included.

BI 103 - Ecosystems (4)
BI 103 topics: ecology, evolution and the classification and natural history of organisms. Only one BI 103 can be used to meet requirements for any Lane degree, regardless of letter option. Sections for BI 103 include: Bird Ecology, Biodiversity and Sustainability, Ecosystems, Evolution and Diversity, Forest Ecology, Global Ecology, Sea Birds & Mammals, and Wildflowers. Lab included.

BI 112 - Cell Biology for Health Occupations (4)
Introduction to human cell structure, function, respiration and division. Includes human genetic concepts of DNA replication, protein synthesis, genes and inheritance. Laboratory included, skills learned: use of microscopes, identification of cell structures.
Prerequisite: Recommended: CH 112.

BI 221 - Principles of Biology (4)
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 111Z or higher.

BI 222 - Principles of Biology (4)
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 221 with grade of C-/P or better.

BI 223A - Principles of Zoology (4)
Designed for Life Science Majors. Survey of comparative vertebrate anatomy, vertebrate evolution, cladistics, and ecology. Skills: dissection, digital documentation, cladogram construction, and mathematical models in biology.
Prerequisite: BI 222 with a grade of C-/P or better or instructor consent.

BI 223B - Principles of Botany (4)
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: BI 222 with a grade of C-/P or better or instructor consent.

BI 231 - Human Anatomy and Physiology 1 (4)
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. Lab included.
Prerequisite: BI 112 (preferred) or BI 221 with a grade of C- or better. Recommended: CH 112 with a grade of C- or higher.

BI 232 - Human Anatomy and Physiology 2 (4)
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. Lab included.
Prerequisite: BI 231 with a grade of C- or better.

BI 233 - Human Anatomy and Physiology 3 (4)
Topics include respiratory, digestive, endocrine, urinary, fluid and electrolytes, acid-base, and reproductive systems. Also included are concepts of pregnancy, genetics, and disorders. Common clinical applications associated with the topics above are presented. Lab included.
Prerequisite: BI 232 with a grade of C- or better.

BI 234 - Introductory Microbiology (4)
A medically oriented survey of microbiology that includes cell biology and virology, immunity, microbial control, the human microbiota, and the pathogenesis, prevention and treatment of infectious diseases. Labs emphasize aseptic technique and methods of culturing, staining, isolation and identification. Lab included.
Prerequisite: BI 233 with a grade of C- or better or instructor consent.

BI 235 - Genetics for Health Professions (4)
Genetic information will play a greater role in future health care as nearly every disease has a genetic cause or component. Therefore, a sound knowledge of genetics and genomics is essential for health care providers in evaluating needs of patients and delivering care to patients and families. This course will prepare students in health care fields by reinforcing the basic principles of genetics and disease while exploring new advances and discussing how these advances will affect health care.
Prerequisite: BI 221 or BI 231 with a grade of C- or better.

BI 280 - Co-op Ed: Biology (3-12)
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.
Prerequisite: Instructor Consent.

BT-Business Technology

BT 108 - Business Proofreading and Editing (4)
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. Note: *If the course is taken in an online modality, in-person testing is required, see instructor for further guidance.*

BT 120 - MS WORD for Business (4)
Students will use and apply MS WORD to create professional business documents focusing on learning features in Word to create, edit, and format documents. Students will also learn how to use advanced features to enhance efficiency (mail merge, fillable forms, macros, shared documents, etc.) Learning how to integrate Google Docs, One Drive, and Word Desktop will also be explored. Note - computer required (chromebooks/tablets will not suffice)
Prerequisite: Basic Computer Literacy. Recommended: familiarity with Windows operating system and have some past experience using Word.

BT 123 - MS EXCEL for Business (4)
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 may also explore Google Sheets and other software in a business context. Note - computer required (chromebooks/tablets will not suffice)
Prerequisite: BT 120 or any 4+ credit CIS/CS course and MTH 065 or higher or equivalent via the math placement process.

BT 150 - Business Web Pages with WordPress (3)
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 165 - Introduction to the Accounting Cycle (4)
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.
Prerequisite: BA 101Z.

BT 167 - Computerized Accounting and Payroll (4)
Introduces students to the use of computerized accounting software for small business including an introduction to payroll operations. Attention is given to the application of the entire accounting cycle for both service providers and merchandisers with an emphasis on planning and analysis. Introduces federal and state regulations affecting payroll. Provides practice in all payroll operations, including accounting entries and the preparation of payroll tax returns that are required of business.
Prerequisite: BT 123 and BT 165.

BT 181 - Customer Service (4)
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 both as a front line employee, as well as a manager of these employees. You will learn how to develop a customer service culture which is critical to success in all organizations.

BT 206 - Co-op Ed: Business Seminar (2)
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.

BT 221 - Budgeting for Managers (4)
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. Recommended: BT 123.

BT 223 - MS EXCEL for Business-Expert (4)
The course presents advanced features of Excel useful in typical business situations. The focus is on using Excel as a tool to create useful, well-documented business spreadsheets. Student projects deal with intermediate to advanced scheduling, marketing, financing and production problems. This course also introduces strategies for independent learning about Excel.
Prerequisite: BT 123 and MTH 095 or higher, or instructor consent.

BT 230 - Digital Office (4)
This course exposes students to a variety of digital tools (Adobe Acrobat, Teams, Outlook, OneNote, One Drive, Google Drive, among others) that will help them be adept at digital work and production. The course also focuses on digital collaboration. Students will learn how to successfully navigate virtual meetings and teams as well as how to manage digital documents both of their own and those that are shared with others.
Prerequisite: BT 120.

BT 272 - Tax concepts and Preparation (4)
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)
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: BT 123, BT 165, BT 167, and BA 211.

BT 291 - Operations Management (4)
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 or higher.

CA-Culinary Arts

CA 101 - Survey of Professional Cooking (2)
This course is a general survey of the culinary arts: soups, sauces, salads, entrees and more. Students will learn the fundamentals of preparing these items, and gain an understanding of the professional food world. This course is open to all LCC students.

CA 102 - Survey of Professional Baking (2)
This course is a general survey of the bakery arts: cakes, breads, pastries and more. Students will learn the fundamentals of preparing these items, and gain an understanding of the professional food world. This course is open to all LCC students.

CA 121 - Composition of Cake (2)
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: Admissions into the program.

CA 122 - Artisan Breads (2)
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.
Prerequisite: Admissions into the program.

CA 123 - International Baking and Pastry (2)
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: Admissions into the program.

CA 124 - Seasonal Baking and Pastry 1 (2)
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: Admissions into the program.

CA 125 - Seasonal Baking and Pastry 2 (2)
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)
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: Admissions into the program.

CA 162 - Introduction to Cooking Theories 2 (7)
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 163A - Beginning Baking and Pastry (3)
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: Admissions into the program.

CA 163B - Intermediate Baking and Pastry (2)
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)
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 280 - Co-op Ed: Culinary Arts (1-7)
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: Instructor consent.

CA 294 - Advanced Cooking Theories 3 (8)
Contemporary and advanced food preparation. Students practice and serve restaurant-quality dishes to the public in the student-run dining room, rotating through restaurant and kitchen positions; developing, planning and serving a rotating menu.
Prerequisite: CA 162.

CG-Career Development & Human Relations

CG 100 - College Success (1-3)
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.

CG 123 - Amplify My Math Preparation (AMMP) (1)
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).

CG 140 - Career and Life Planning (1-3)
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)
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)
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 220 - Life Transitions (2)
This course is designed to help students enrolled in the Life Transition course navigate their current life transitions and explore positive new life directions. Topics will include: understanding life transitions, relationships, increasing self-compassion, coping with powerful emotions, developing healthy power and assertiveness and learning new strategies to deal with acceptance and change.

CH-Chemistry

CH 104 - Introduction to General Chemistry (5)
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 a C- or better OR equivalent placement via the math placement process.

CH 106 - Introduction to Organic and Biological Chemistry (5)
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: MTH 052 or above with a C- or better OR equivalent placement via the math placement process.

CH 112 - Chemistry for Health Occupations (4)
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 a C- or better OR equivalent placement via the math placement process.

CH 114 - Introduction to Forensic Chemistry (4)
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 a C- or better OR equivalent placement via the math placement process.

CH 150 - Preparatory Chemistry (3)
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 a C- or better OR equivalent placement via the math placement process.

CH 170 - Introduction to Environmental Chemistry (4)
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 above with a C- or better OR equivalent placement via the math placement process.

CH 201 - Chemistry for Engineering Majors I (4)
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 095 or above with a C- or better OR equivalent placement via the math placement process.

CH 202 - Chemistry for Engineering Majors 2 (4)
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.

CH 221 - General Chemistry 1 (4)
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.
Prerequisite: MTH 095 or higher with a C- or better OR placement into MTH 111Z or higher via the math placement process. Corequisite: CH 227.

CH 222 - General Chemistry 2 (4)
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.
Prerequisite: CH 221 with a C- or better. Corequisite: CH 228.

CH 223 - General Chemistry 3 (4)
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.
Prerequisite: CH 222 with a C- or better. Corequisite: CH 229.

CH 227 - General Chemistry Laboratory 1 (2)
First laboratory course of the general chemistry lab sequence. Introduces chemical lab safety, common laboratory techniques, and analytical skills. Lab emphasized green chemistry.
Corequisite: CH 221.

CH 228 - General Chemistry Laboratory 2 (2)
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 221 with a C- or better. Corequisite: CH 222.

CH 229 - General Chemistry Laboratory 3 (2)
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 222 with a C- or better. Corequisite: CH 223.

CH 241 - Organic Chemistry (4)
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.
Prerequisite: CH 222 with a C- or better. Corequisite: CH 247.

CH 242 - Organic Chemistry (4)
Organic chemistry lecture for science and health science majors, with a green chemistry emphasis. Topics include alcohols, ethers, aromatics, conjugated systems, aldehydes, and ketones.
Prerequisite: CH 241 with a C- or better. Corequisite: CH 248.

CH 243 - Organic Chemistry (4)
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.
Prerequisite: CH 242 with a C- or better. Corequisite: CH 249.

CH 247 - Organic Chemistry Laboratory 1 (2)
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.
Corequisite: CH 241.

CH 248 - Organic Chemistry Laboratory 2 (2)
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 241 with a C- or better. Corequisite: CH 242.

CH 249 - Organic Chemistry Laboratory 3 (2)
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 242 with a C- or better. Corequisite: CH 243.

CH 280 - Co-op Ed: Physics-Chemistry (3-12)
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.
Prerequisite: Instructor Consent.

CHN-Chinese

CHN 101 - 1st Year Mandarin Chinese (4)
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)
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)
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.

CINE-Cinema Studies

CINE 265 - Film History 1: The Silent Era to Early Sound (4)
This is the 1st course in a 3-part film history survey (aesthetic, economic, technological, cultural) that explores the evolution of film language, the various cinematic and artistic movements, as well as the economic context that led to the development of the U.S. Studio System and Classical Hollywood Style. 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. Attendance at weekly Thursday screenings 5-6:50 are strongly encouraged.
Prerequisite: Recommended: placement into WR 115 or higher.

CINE 266 - Film History 2: The Sound Era through the 1960s (4)
This is the 2nd course in a 3-part film history survey (aesthetic, economic, technological, cultural) that 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. 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. Attendance at weekly Thursday screenings 5-6:50 are strongly encouraged.
Prerequisite: Recommended: placement into WR 115 or higher.

CINE 267 - Film History 3: 1960s-the present (4)
This is the 3rd course in a 3-part film history survey (aesthetic, economic, technological, and cultural) that 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. 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. Attendance at weekly Thursday screenings 5-6:50 are strongly encouraged.
Prerequisite: Recommended: placement into WR 115 or higher.

CIS-Computer Information Science

CIS 100 - Computing Careers Exploration (1)
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)
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)
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 mobile 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)
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.

CIS 125G - Software Tools 1: Game Development (4)
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 135G - Software Tools 2: Game Development (4)
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 one of CS 162C or CS 233C, or CS 162N or CS 233N or instructor's permission.

CIS 140U - Introduction to Unix/Linux (4)
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)
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: Basic digital literacy.

CIS 195 - Web Authoring 1 (4)
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 275E - Data Exploration and Visualization (4)
Using tools and techniques of beginning data analysis, students will learn how to get raw data from various sources and manipulate it into a format that can be used to answer questions about business problems. From that raw data, students will learn how to visualize the relationships between data elements through charts and graphs, draw conclusions from the charts presented, and communicate their findings in a professional manner.
Prerequisite: CS 275 and MTH 095.

CIS 287 - Microcomputer Hardware (4)
The course introduces students to the fundamentals of computer hardware and software. Topics covered are the fundamentals of mobile devices, Linux, macOS, virtualization, and cloud computing as well as expanded information about Microsoft Windows operating systems, security, networking, troubleshooting, and the responsibilities of an IT professional.

CJA-Criminal Justice

CJA 100 - Introduction to Criminal Justice (4)
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 complementary 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 114 - Introduction to Forensic Chemistry (4)
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 a C- or better OR equivalent placement via the math placement process. Crosslisted as: CH 114 Introduction to Forensic Chemistry.

CJA 200 - Introduction to Criminology (4)
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.
Prerequisite: Recommended: WR 121Z.

CJA 201 - Juvenile Delinquency (3)
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)
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)
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. Fundamentals of criminal investigation, theory, and history; crime scene to courtroom with emphasis on techniques appropriate to specific crimes.

CJA 212 - Criminal Justice Documentation and Reporting (3)
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 121Z or instructor consent.

CJA 213 - Interviewing and Interrogation (3)
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)
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)
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)
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.

CJA 280 - Co-op Ed: Criminal Justice (3-12)
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 or instructor consent.

CNC-Computer Numerical Control

CNC 101 - CNC Concepts (3)
This course is an introduction to computer Numerical Control (CNC) machinery and processes. It teaches basic concepts necessary for further study in CNC manufacturing.

CNC 111 - Introduction to CNC Operator (5)
Students will be introduced to the 2-axis CNC lathe and the 3-axis CNC mill. They will learn how to set up work offsets, tool height offsets, tool holders, and work holding. They will learn to operate the CNC machine and run pre-programmed parts. They will set up and run real-world parts and gain experience as a CNC operator. Lab included.
Corequisite: CNC 112 and CNC 113.

CNC 112 - Introduction to 3D Modeling for Machinists (4)
This course will be an introduction to 2D and 3D CAD programming for the machinist. Students will become familiar with CAD software and create 2D and 3D models based on prints. Using those models they will create parts on machines such as 3D printers, waterjets, lasers, and other CNC machines. Lab included.
Corequisite: CNC 111 and CNC 113.

CNC 113 - Introduction to Production Inspection (4)
This course will be an introduction to the study of metrology. Students will get hands on experience using metrology hand tools such as Calipers, Micrometers, and other basic

metrology tools. Students will learn to read prints and take part measurements based on those prints. Lab included.
Corequisite: CNC 111 and CNC 112.

CNC 121 - Basic CNC Lathe/Mill Operation and production (5)
Students will continue their studies from CNC 111 in CNC 121. Students will learn more advanced machining techniques for 2 axis lathes and 3 axis mills. Students will learn production techniques such as using pallet systems and bar feeders as well as setting up multiple parts in a single machine. By the end of the course students should be comfortable in the set up and operation of these machines. Lab included.
Prerequisite: CNC 111. Corequisite: CNC 122 and CNC 123.

CNC 122 - Introduction to CAM Toolpaths (4)
Students will continue their progress from CNC 112 into CNC 122. Students will learn how to create cutting tool paths for the 3D models they have created in order to create those models on CNC lathes and Mills. They will learn industry best practices on the order of operations and modern feeds and speeds. Students will become comfortable making programs to create real-world machined parts. Lab included.
Prerequisite: CNC 112. Corequisite: CNC 121 and CNC 123.

CNC 123 - Inspection 2 (4)
Students will continue to build their skills from CNC 113 in CNC 123. Students will continue to learn more advanced metrology techniques and tooling. Students will begin to create inspection reports for CNC machined parts and learn skills to be an effective QA tech. Students will also use their skills to learn to reverse engineer simple parts for production. Lab included.
Prerequisite: CNC 113. Corequisite: - CNC 121 and CNC 122.

CNC 131 - Basic CNC lathe/Mill Projects (5)
This course will be a project term to test students' skills that they have developed over the year. Students will be required to machine multiple one off parts for both the CNC lathe and mill. Students will be given strict deadlines for all projects to simulate real world machining schedules. Students will be pushed to create high quality parts to print before deadline. Students will keep all machined parts to create their own portfolio of work. Lab included.
Prerequisite: CNC 121. Corequisite: CNC 132 and CNC 133.

CNC 132 - CAD/CAM CNC Lathe/Mill Projects (4)
This course will be a project term to test student skills that they developed over the year. Students will be required to 3D model and create cutting programs for multiple one off parts for both the CNC lathe and Mill. Students will be given a strict deadline for all projects to simulate real world programming environments. Students will also be required to create two projects on their own before the end of the term. All programs will be machined in CNC131. Lab included.
Prerequisite: CNC 122. Corequisite: CNC 131 and CNC 133.

CNC 133 - Inspection 3 (4)
This course will be a project term to test student skills that they developed over the year. Students will be given multiple parts throughout the term to be reserved engineered using the metrology tools they have been trained on. This reverse engineering will be used to create 3D models in CNC132. Upon successful machining of the parts in CNC131 student will then be required to create inspection reports for every part made under a strict deadline to simulate real world demands. Lab included.
Prerequisite: CNC 123. Corequisite: CNC 131 and CNC 132.

CNC 211 - CNC 3 Axis lathe/4 Axis Mill (5)
This course builds upon the skills learn in the first year. Students will begin learning to use more advanced CNC Lathes and Mills in this course. Students will learn to set up and operate the C axis on the lathe and the A axis on the Mill, allowing students to create much more complicated parts in a single operation. Students will also be introduced to operation and programming of industrial robotic arms to increase productivity in a machine shop. Lab included.
Prerequisite: CNC 131. Corequisite: CNC 212 and CNC 213.

CNC 212 - Toolpaths for 3 Axis lathe/4 Axis Mill (4)
Students will begin learning to make cutting programs for the advanced machines used in CNC211. Students will learn machining strategies to utilize the C axis lathe and A axis mill to create more complex parts. Students will also learn how to use these advanced machines for increased productivity through complex and advanced programming techniques. Lab included.
Prerequisite: CNC 132. Corequisite: CNC 211 and CNC 213.

CNC 213 - Inspection 4 (4)
Students will begin to learn using advanced digital metrology equipment such as a CMM to do high level inspections of complex parts. Students will also learn to create custom fixtures for the CMM to allow production level inspection. Lab included.
Prerequisite: CNC 133. Corequisite: - CNC 211 and CNC 212.

CNC 221 - CNC 4 Axis Lathe/5 Axis Mill (5)
Students will expand even deeper into advanced machining with the introduction of the Y axis Lathe and the 5 axis Mill. Students will learn to set up and operate these advanced machines to create even more complex parts and increase productivity. Students will become comfortable with these advanced machines by the end of the term. Lab included.
Prerequisite: CNC 211. Corequisite: - CNC 222 and CNC 223.

CNC 222 - Toolpaths for CNC 4 Axis Lathe/5 Axis Mill (4)
Students will dive into the world of 4 axis lathe and 5 axis mill programming. Students will learn some of the most advanced programming techniques to create complex parts on complex CNC machines. Lab included.
Prerequisite: CNC 212. Corequisite: CNC 221 and CNC 223.

CNC 223 - Inspection 5 (4)
Students will continue to develop new skills around digital metrology equipment such as the CMM. Students will learn to use a CMM to reverse engineer parts with high accuracy. Students will also learn to connect the CMM to their CAD/CAM programs to generate 3D models from the CMM. Lab included.
Prerequisite: CNC 213. Corequisite: - CNC 221 and CNC 222.

CNC 231 - Advanced CNC lathe/Mill Projects (5)
This course will be a project term to test students' skills that they have developed over the year. Students will be required to machine multiple one off parts for both the CNC 4 axis lathe and CNC 5 axis mill. Students will be given strict deadlines for all projects to simulate real world machining schedules. Students will be pushed to create high quality parts to print before deadline. Students will keep all machined parts to create their own portfolio of work. Lab included.
Prerequisite: CNC 221. Corequisite: CNC 232 and CNC 233.

CNC 232 - CAD/CAM Advanced Lathe/Mill Projects (4)
This course will be a project term to test student skills that they developed over the year. Students will be required to 3D model and create cutting programs for multiple one off parts for both the CNC 4 axis lathe and CNC 5 axis Mill. Students will be given a strict deadline for all projects to simulate real world programming environments. Students will also be required to create two projects on their own before the end of the term. All programs will be machined in CNC 231. Lab included.
Prerequisite: CNC 222. Corequisite: CNC 231 and CNC 233.

CNC 233 - Inspection 6 (4)
This course will be a project term to test student skills that they developed over the year. Students will be given multiple parts throughout the term to be reserved engineered using the advanced metrology tools such as the CMM they have been trained on. This reverse engineering will be used to create 3D models in CNC 232. Upon successful machining of the parts in CNC 231 student will then be required to create inspection reports using the CMM for every part made under a strict deadline to simulate real world demands. Lab included.
Prerequisite: CNC 223. Corequisite: CNC 231 and CNC 232.

CNC 280 - Co-op Ed: CNC and Manufacturing (3-12)
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.

COMM-Communication

COMM 100Z - Introduction to Communication (4)
COMM 100Z is a survey course offering an overview of the communication discipline that emphasizes the development of best communication practices in different contexts. This course is part of the Oregon Common Course Numbering System.

COMM 105 - Listening and Critical Thinking (4)
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 111HZ - Public Speaking-Honors (4)
COMM 111HZ emphasizes developing communication skills by examining and demonstrating

how self-awareness, audience, content, and occasion influence the creation and delivery of speeches and 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 111Z and COMM 111HZ.

COMM 111Z - Public Speaking (4)
COMM 111Z emphasizes developing communication skills by examining and demonstrating how self-awareness, audience, content, and occasion influence the creation and delivery of speeches and presentations. This course is part of the Oregon Common Course Numbering System.

COMM 112 - Persuasive Speech (4)
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)
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)
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 218Z - Interpersonal Communication (4)
COMM 218Z increases the knowledge and use of competent communication skills to better understand oneself, others, and the role of communication in interpersonal relationships. This course is part of the Oregon Common Course Numbering System.

COMM 219 - Small Group Communication (4)
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)
This course is intended for people who are interested in increasing their knowledge and awareness of differences in feminine and masculine communication styles. We will explore how communication, gender, and culture interact to influence perceptions and expectations of gender roles. This course is designed to develop students' ability to think critically and analyze issues of gendered communication.

COMM 260 - Introduction to Conflict Management (4)
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)
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)
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.

COMM 296 - Communication in Healthcare Settings (4)
This course explores the ways communication shapes health and health practices. The course examines interpersonal communication about health within the contexts of clinician-patient, family, and social support. Mass communication and health will also be covered, including health communication campaigns, public relations, and advertising for health organizations and how the media and technology present and affect health information.

COOP-Cooperative Education

COOP 206 - Co-op Ed: Internship Seminar (2)
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 280 - Co-op Ed (1-12)
See department for topics.

COOP 280H - Co-op Ed: Service Learning-Honors
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. 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 www.lanecc.edu/honors for information. Prerequisite: Instructor consent. Recommended: WR 121Z readiness.

COOP 280MR - Co-op Ed: Medical Receptionist (3-12)
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.

COOP 280PB - Co-op Ed: Phlebotomy (3-12)
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.

COOP 280RX - Co-op Ed: Pharmacy Tech (3-12)
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.

COOP 280SL - Co-op Ed: Service Learning (1-3)
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.

CRWR-Creative Writing

CRWR 240 - Creative Writing: Nonfiction (4)
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: WR 121Z with a grade or C- or better OR waiver based on instructor's evaluation of student writing.

CRWR 241 - Creative Writing: Fiction (4)
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: WR 121Z with a grade or C- or better OR waiver based on instructor's evaluation of student writing.

CRWR 242 - Creative Writing: Poetry (4)
This course is a course in writing poetry. The course will help students: 1) learn the elements of poetry; 2) read poems by well-known poets; 3) develop ability in poetic composition; 4) read and write poems effectively; 5) receive constructive criticism of their writing; 6) learn to be balanced and confident in their critical evaluations of their peers; and 7) gain a better understanding of themselves and others as writers.
Prerequisite: WR 121Z with a grade or C- or better OR waiver based on instructor's evaluation of student writing.

CRWR 242H - Creative Writing: Poetry-Honors (4)
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 www.lanecc.edu/honors for information. Students cannot receive credit for both CRWR 242 and CRWR 242H.
Prerequisite: WR 121Z with a grade or C- or better OR waiver based on instructor's evaluation of student writing.

CS-Computer Science

CS 120 - Concepts of Computing: Information Processing (4)
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 123 - Introduction to Artificial Intelligence (4)
This course provides an overview of the field of Artificial Intelligence. Students will learn what AI is and how machine learning works. There will be a focus on generative AI and its practical applications in the workplace such as prompt engineering and creating custom chatbots. The risks and dangers of AI will be explored along with the potential benefits.

CS 133C - Beginning Programming: C++ (4)
This is the first in a sequence of 2 courses that teaches students the Computer Science concepts and skills underlying programming. The course introduces students to fundamental programming concepts as well as the syntax of the C++ programming language and the CLion development environment.
Prerequisite: CS 162N or CS 162P. Crosslisted as: CS 161C.

CS 133JS - Beg. Programming: JavaScript (4)
This course introduces students to the JavaScript programming language and fundamental programming concepts such as variables, operators, functions, control structures, arrays, pre-defined objects, and event handling in JavaScript; as well as how to create interactive web pages using JavaScript.
Prerequisite: MTH 060 or higher and CIS 195 (may be taken as a corequisite) or instructor consent.

CS 133N - Beginning Programming: C# (4)
This is the first in a sequence of 2 courses that teaches students the Computer Science concepts and skills underlying programming. The course introduces students to fundamental programming concepts and programming language C#. Which includes basic syntax, semantics, algorithms, and program design. Further, it is an introduction to Object-oriented programming, software design, development and testing.
Prerequisite: CS 162C or CS 162P. Crosslisted as: CS 161N.

CS 133P - Beginning Programming: Python (4)
This is the first course in a two course sequence which teaches students fundamental programming concepts and skills. Students will learn the syntax of the Python programming language and how to use a professional integrated development environment like PyCharm.
Prerequisite: CS 162C or CS 162N. Crosslisted as: CS 161P.

CS 135M - Beginning Mobile Application Development (4)
This course introduces students to using a framework to apply advanced programming techniques like routing and state management to mobile application development. Cross-platform mobile app development will be explored.
Prerequisite: CS 133JS, CS 161C, 161N, or CS 161P or instructor consent.

CS 160 - Orientation to Computer Science (4)
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, MTH 111Z, MTH 241, or placement into MTH 111Z.

CS 161C - Computer Science 1 (4)
This is the first in a sequence of 2 courses that teaches students the Computer Science concepts and skills underlying programming. The course introduces students to fundamental programming concepts as well as the syntax of the C++ programming language and the CLion development environment.
Prerequisite: Complete one of the following: CIS 125A, CIS 125G, CS 160, MTH 095, MTH 111Z, MTH 211, MTH 231, MTH 241, or MTH 251 (or by placement). Crosslisted as: CS 133C.

CS 161N - Computer Science 1 (4)
This is the first in a sequence of 2 courses that teaches students Computer Science concepts and skills underlying programming. The course introduces students to fundamental programming concepts and programming language C#. Which includes basic syntax, semantics, algorithms, and program design. Further, it is an introduction to Object-oriented programming, software design, development and testing.
Prerequisite: Complete one of the following: CIS 125A, CIS 125G, CS 160, MTH 095, MTH 111Z, MTH 211, MTH 231, MTH 241, MTH 251 (or by placement). Crosslisted as: CS 133N.

CS 161P - Computer Science 1 (4)
This is the first course in a two course sequence which teaches students fundamental programming concepts and skills. Students will learn the syntax of the Python programming language and how to use a professional integrated development environment like PyCharm.
Prerequisite: Complete one of the following: CIS 125A, CIS 125G, CS 160, MTH 095, MTH 098, MTH 111Z, MTH 211, MTH 231, MTH 241, MTH 251 (or by placement). Crosslisted as: CS133P.

CS 162C - Computer Science 2 (4)
This is the second in a sequence of 2 courses that teaches students the Computer Science concepts and skills underlying programming. The course introduces students to object oriented programming concepts as well as the syntax of object oriented programming in the C++ programming language. Recursion and data structures are also introduced.
Prerequisite: CS 161C or instructor consent. Crosslisted as: CS 233C.

CS 162N - Computer Science 2 (4)
This is the second in a sequence of 2 courses that teaches students the Computer Science concepts and skills underlying programming. The course introduces students to object oriented programming concepts as well as the syntax of object oriented programming in the C# programming language. Recursion and data structures are also introduced.
Prerequisite: CS 161N or instructor consent. Crosslisted as: CS 233N.

CS 162P - Computer Science 2 (4)
This is the second course in a two course sequence which teaches students programming concepts and skills. Students will learn object oriented programming (OOP) and the syntax of OOP in the Python programming language. Recursion and data structures also are introduced.
Prerequisite: CS 161P or instructor consent. Crosslisted as: CS 233P.

CS 175 - Introduction to SQL (Structured Query Language) (4)
Students will learn the basics of SQL querying, updating, and creating objects in a database. Topics include basic data retrieval statements, filtering, sorting, and manipulating data, and basic reporting statements for output processing. Labs will be set up for the students to get

hands-on experience in each of the topics presented.

CS 179 - Introduction to Computer Networks (4)
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)
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.
Prerequisite: Basic digital literacy.

CS 189 - Routing and Switching Essentials (4)
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 205 - System Programming and Architecture (4)
Introduces how high-level software runs on a computer system. Covers C programming and the assembly that C code becomes. Presents the fundamentals of computer architecture and how instructions and data are represented at the machine level. Provides experience analyzing compiled code to build necessary skills for future work in cybersecurity, operating systems, compilers, and other CS topics involving low-level computation.
Prerequisite: CS 161C or CS 161N or CS 161P (or CS 133C or CS 133N or CS 133P).

CS 206 - Co-op Ed: Computer Information Technology Seminar (2)
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 233C - Intermediate Programming: C++ (4)
This is the second in a sequence of 2 courses that teaches students the Computer Science concepts and skills underlying programming. The course introduces students to object oriented programming concepts as well as the syntax of object oriented programming in the C++ programming language. Recursion and data structures are also introduced.
Prerequisite: CS 133C or instructor consent. Crosslisted as: CS 162C.

CS 233JS - Intermediate Programming: JavaScript (4)
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: CIS195 and CS 133JS.

CS 233N - Intermediate Programming C# (4)
This is the second in a sequence of 2 courses that teaches students the Computer Science concepts and skills underlying programming. The course introduces students to object oriented programming concepts as well as the syntax of object oriented programming in the C# programming language. Recursion and data structures are also introduced.
Prerequisite: CS 133N or instructor consent. Crosslisted as: CS 162N.

CS 233P - Intermediate Programming: Python (4)
This is the second in a sequence of 2 courses that teaches students the Computer Science concepts and skills underlying programming. The course introduces students to object oriented programming concepts as well as the syntax of object oriented programming in the Python programming language. Recursion and data structures are also introduced.
Prerequisite: CS 133P or instructor consent. Crosslisted as: CS 162P.

CS 233S - Python for Systems Administrators (4)
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.

CS 234N - Advanced Programming: C# (4)
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 235M - Advanced Mobile Application Development (4)
This course builds on material covered in CS 135M and explores more advanced features provided by the framework. Mobile app deployment and data management will be explored.
Prerequisite: CS 135M or instructor consent.

CS 240U - Advanced Unix/Linux: Server Management (4)
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)
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: CS 179 or instructor consent.

CS 246 - System Design (4)
In this course, students will learn to design and plan software. 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 295N and CS296N.

CS 260 - Data Structures 1 (4)
This course is intended primarily for students seriously interested in computer science. Through a variety of programming projects, students will demonstrate the usage of advanced data structures, including linked-lists and tree structures, by using pointers and advanced structure programming methods.
Prerequisite: CS 162C or CS 162P or CS 162N or CS 233C or CS 233N or CS 233P AND (MTH 111Z or MTH 112Z or MTH 231 or MTH 241 or MTH 251) or instructor consent.

CS 273 - Introduction to Virtualization and Cloud Computing (4)
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 179 and CS240W or CS240U.

CS 275 - Introduction to Database Systems and Modeling (4)
This is an introduction to production- scale, relational database environments. Included in the course are discussion and application of database models, entity relationship design, normalization, and an introduction to SQL Query usage and development.
Prerequisite: Placement into MTH 095 or higher.

CS 276 - Database Systems and Modeling (4)
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)
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 280CN - Co-op Ed: Computer Network Operations (3-12)
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)
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 280IS - Co-op Ed: Computer Information Systems (3-12)
This internship course offers a work experience that integrates theory and practice in the field of computer information systems. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 280PR - Co-op Ed: Computer Programming (3-12)
This internship course offers a work experience that integrates theory and practice in the field of computer programming. It provides opportunities to develop skills, explore career options and network with professionals and employers while earning academic credit toward the degree.

CS 284 - Network Security Fundamentals (4)
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)
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)
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 189 or CS 279, and CS 284. Or instructor consent.

CS 288 - Network Monitoring and Management (4)
Covers network monitoring and management for network administrators. Topics: Analyzing and measuring 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 179 or CS 189, and CS 240U.

CS 290 - Ethical Hacking Fundamentals (4)
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 or instructor consent.

CS 295N - Web Development 1: ASP.NET (4)
This is the first in a sequence of 2 courses that teaches student who have a working knowledge of C# and Visual Studio to develop web based applications in the.NET environment. This course introduces students to server side web programming concepts as well as the ASP.NET framework.
Prerequisite: CS 162N or CS 233N, and CS 233JS. Or instructor consent. Corequisite: CS 234N.

CS 295R - Web Development 1: React (4)
This course introduces students to React, a JavaScript library for building single-page web-based applications. It is intended for students with an intermediate level of knowledge of the JavaScript programming language and JavaScript development tools.
Prerequisite: CS 233JS.

CS 296N - Web Development 2: ASP.NET (4)
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 applications using the ASP.NET framework.
Prerequisite: CS 295N or instructor consent.

CS 297 - Programming Capstone (4)
This is the final course for the Software Development degree program. 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 and CS296N or instructor consent.

CST-Construction

CST 110 - Blueprint Reading 1 (3)
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 115R OR prior college OR placement test.

CST 111 - Construction Orientation and Environment (2)
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 115R OR prior college OR placement test.

CST 116 - Construction Estimating (4)
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)
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: College writing placement test or prior college.

CST 118A - Building Construction A (1-5)
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: College writing placement test or prior college.

CST 118B - Building Construction B (1-5)
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: College writing placement test or prior college.

CST 118C - Building Construction C (1-5)
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: College writing placement test or prior college.

CST 119 - Building Construction Surveying (3)
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.

CST 122 - Construction Codes (2)
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)
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)
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.

CST 280 - Co-op Ed: Construction (3-12)
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.

CW-Chinuk Wawa

CW 101 - Chinuk Wawa (4)
Chinuk Wawa is the original universal language of the Pacific Northwest, spoken in intertribal settings and multi-lingual homes from Southeast Alaska to Northern California. In collaboration with the language education program of the Confederated Tribes of Grand Ronde, this course teaches Chinuk Wawa through daily listening, speaking, writing, and reading of Chinuk Wawa, as well as discussion of the cultures of people who spoke and still speak the language. Chinuk Wawa 101 is the first course of a three-term sequence in which students achieve beginning oral, literate, and cultural competency in Chinuk Wawa at the first-year college level.

CW 102 - Chinuk Wawa (4)
Chinuk Wawa is the original universal language of the Pacific Northwest, spoken in intertribal settings and multi-lingual homes from Southeast Alaska to Northern California. In collaboration with the language education program of the Confederated Tribes of Grand Ronde, this course teaches Chinuk Wawa through daily listening, speaking, writing, and reading of Chinuk Wawa, as well as discussion of the cultures of people who spoke and still speak the language. CW 102 is the 2nd course of a 3-term sequence in which students achieve beginning oral, literate, and cultural competency in Chinuk Wawa. Enrollment in CW 102 requires previous completion of CW 101 or comparable language knowledge.
Prerequisite: CW 101 or instructor consent.

CW 103 - Chinuk Wawa (4)
Chinuk Wawa is the original universal language of the Pacific Northwest, spoken in intertribal settings and multi-lingual homes from Southeast Alaska to Northern California. In collaboration with the language education program of the Confederated Tribes of Grand Ronde, this course teaches Chinuk Wawa through daily listening, speaking, writing, and reading of Chinuk Wawa, as well as discussion of the cultures of people who spoke and still speak the language. CW 103 is the 3rd course of a 3-term sequence in which students achieve beginning oral, literate, and cultural competency in Chinuk Wawa. Enrollment in CW 103 requires previous completion of CW102 or comparable language knowledge.
Prerequisite: CW 102 or instructor consent.

CW 201 - Chinuk Wawa (4)
Chinuk Wawa is the original universal language of the Pacific Northwest, spoken in intertribal settings and multi-lingual homes from Southeast Alaska to Northern California. In collaboration with the language education program of the Confederated Tribes of Grand Ronde, this course teaches Chinuk Wawa through daily listening, speaking, writing, and reading of Chinuk Wawa, as well as discussion of the cultures of the people who spoke and still speak the language. Chinuk Wawa 201 is the first course of a three-term sequence in which students achieve intermediate oral, literate, and cultural competency in Chinuk Wawa at the second-year college level. Enrollment in Chinuk Wawa 201 requires previous completion of CW103 or comparable language knowledge.
Prerequisite: CW 103 or instructor consent.

CW 202 - Chinuk Wawa (4)
Chinuk Wawa is the original universal language of the Pacific Northwest, spoken in intertribal settings and multi-lingual homes from Southeast Alaska to Northern California. In collaboration with the language education program of the Confederated Tribes of Grand Ronde, this course teaches Chinuk Wawa through daily listening, speaking, writing, and reading of Chinuk Wawa, as well as discussion of the cultures of the people who spoke and still speak the language. Chinuk Wawa 202 is the second course of a three-term sequence in which students achieve intermediate oral, literate, and cultural competency in Chinuk Wawa at the second-year college level. Enrollment in Chinuk Wawa 202 requires previous completion of 201 or comparable language knowledge.
Prerequisite: CW 201 or instructor consent.

CW 203 - Chinuk Wawa (4)
Chinuk Wawa is the original universal language of the Pacific Northwest, spoken in intertribal settings and multi-lingual homes from Southeast Alaska to Northern California. In collaboration with the language education program of the Confederated Tribes of Grand Ronde, this course teaches Chinuk Wawa through daily listening, speaking, writing, and reading of Chinuk Wawa, as well as discussion of the cultures of the people who spoke and still speak the language. Chinuk Wawa 203 is the third course of a three-term sequence in which students achieve intermediate oral, literate, and cultural competency in Chinuk Wawa at the second-year college level. Enrollment in Chinuk Wawa 203 requires previous completion of CW202 or comparable language knowledge.
Prerequisite: CW 202 or instructor consent.

DA-Dental Assisting

DA 102 - Advanced Clinical Experiences (3)
Knowledge and skills taught throughout the program are utilized as students apply a variety of expanded function chairside assisting and client care skills.
Prerequisite: DA 195 and DA 196 with a grade of C or higher; P/NP not accepted. Admission to the Dental Assisting program.

DA 103 - Dentistry Law and Ethics (2)
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.
Prerequisite: Admission to the Dental Assisting program.

DA 105 - Infection Control (2)
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.
Prerequisite: Admission to the Dental Assisting program.

DA 107 - Dental Health Education 1 (1)
This course covers the basic concepts of preventive dentistry including the study of plaque-related diseases, fluoride therapy, brushing and flossing techniques.
Prerequisite: Admission to the Dental Assisting program.

DA 108 - Dental Health Education 2 (2)
This course reinforces the practical application of preventive dentistry concepts and oral hygiene instruction learned in Dental Health Ed 1. Clinic includes alginate impressions, plaque indexing and OHI, clinical exam charting, coronal polishing, fluoride application, the recognition of normal and abnormal oral conditions, and community project presentations.
Prerequisite: Admission to the Dental Assisting program.

DA 110 - Dental Health Sciences (3)
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.
Prerequisite: Admission to the Dental Assisting program.

DA 115 - Dental Anatomy (3)
This course covers the study of head neck anatomy with emphasis on oral structures, individual teeth and tooth surfaces using the universal numbering system.
Prerequisite: Admission to the Dental Assisting program.

DA 192 - Dental Materials (3)
Course content covers the composition, clinical properties, preparation, use and storage of materials, and study model construction used in dentistry.
Prerequisite: Admission to the Dental Assisting program.

DA 193 - Dental Materials 2 (3)
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.
Prerequisite: Admission to the Dental Assisting program.

DA 194 - Dental Office Procedures (2)
Using Eaglesoft dental software, this course provides hands-on learning for appointment planning/scheduling, patient records, treatment plans and billing. Students learn telephone skills, marketing, and management of supply inventory.
Prerequisite: Admission to the Dental Assisting program.

DA 195 - Chairside Procedures 1 (5)
Course covers chairside assisting procedures, such as preparation of client, oral evacuation techniques, instrument exchange, dental examinations, charting, operative dentistry.
Prerequisite: Admission to the Dental Assisting program.

DA 196 - Chairside Procedures 2 (7)
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.
Prerequisite: Admission to the Dental Assisting program.

DA 206 - Co-op Ed: Dental Assisting Seminar (1)
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.
Prerequisite: Admission to the Dental Assisting program. Corequisite: DA 280.

DA 210 - Dental Radiology 1 (4)
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.
Prerequisite: Admission to the Dental Assisting program.

DA 211 - Dental Radiology 2 (3)
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.
Prerequisite: Admission to the Dental Assisting program.

DA 280 - Co-op Ed: Dental Assisting (1-12)
Course provides dental assisting work experience in community businesses. Includes opportunity to integrate theory and practice. Students can develop skills explore career options.
Prerequisite: Admission to the Dental Assisting program. Corequisite: DA 206.

D-Dance

D 152 - Dance Basics (2)
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)
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)
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 176 - Fluid Yoga (2)
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)
For dancers with little or no previous dance experience, this beginning level class accommodates the pre-major and non-major student. Modern dance technique is introduced with focus on three-dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Given realistic progressive development, students will advance to Modern 2 after one term. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 178 - Contemporary Dance 2 (2)
This intermediate level class accommodates the pre-major and non-major student. Students further develop their awareness of modern dance technique and vocabulary. Training continues with movements that incorporate: three-dimensional use of the spine and torso, joint articulation and mobility, core strength, expressivity and spatial awareness. Given realistic progressive development, students will repeat this level for a full year. Contents and expected learning proficiencies of this course vary from term to term. May be repeated up to 12 total credits.

D 179 - Contemporary Dance 3 (2)
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)
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)
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)
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)
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)
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)
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)
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)
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: D 186 or D 187.

D 251 - Looking at Dance (4)
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: Recommended: WR 121Z.

D 256 - Anatomy of the Moving Body (4)
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)
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)
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)
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.

DH-Dental Hygiene

DH 107 - Dental Infection Control and Safety (1)
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)
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)
Introduction to basic instrumentation, assessment procedures, and clinical protocol for dental hygiene care.
Prerequisite: Admission to the Dental Hygiene program. Corequisite: DH 118B.

DH 118B - Clinical Dental Hygiene 1 Lab (2)
Clinical lab required for DH 118A.
Prerequisite: Admission to the Dental Hygiene program. Corequisite: DH 118A.

DH 119A - Clinical Dental Hygiene 2 (3)
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: DH 119B.

DH 119B - Clinical Dental Hygiene 2 Lab (5)
Clinical lab required for DH 119A.
Prerequisite: Admission to the Dental Hygiene program. Corequisite: DH 119A.

DH 120A - Clinical Dental Hygiene 3 Lecture/seminar (3)
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 the Dental Hygiene program. Corequisite: DH 120B.

DH 120B - Clinical Dental Hygiene 3 Clinic Lab (5)
Clinical lab required for DH 120A.
Prerequisite: Admission to the Dental Hygiene program. Corequisite: DH 120A.

DH 132 - Dental Materials for the Dental Hygienist (2)
Composition, properties and manipulation of dental materials. Laboratory and clinical experience with dental materials.
Prerequisite: Admission to the Dental Hygiene program.

DH 139 - Special Needs Patient and Dental Emergencies (2)
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 the Dental Hygiene program.

DH 220A - Clinical Dental Hygiene 4 Lecture/seminar (2)
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 the Dental Hygiene program. Corequisite: DH 220B.

DH 220B - Clinical Dental Hygiene 4 Lab (6)
Clinical lab required for DH 220A.
Prerequisite: Admission to the Dental Hygiene program. Corequisite: DH 220A.

DH 221A - Clinical Dental Hygiene 5 (2)
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 the Dental Hygiene program. Corequisite: DH 221B.

DH 221B - Clinical Dental Hygiene 5 Lab (6)
Clinical Lab required for DH 221A.
Prerequisite: Admission to the Dental Hygiene program. Corequisite: DH 221A.

DH 222A - Clinical Dental Hygiene 6 (1)
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 the Dental Hygiene program. Corequisite: DH 222B.

DH 222B - Clinical Dental Hygiene 6 Lab (6)
Clinical Lab required for DH222A.
Prerequisite: Admission to the Dental Hygiene program. Corequisite: DH 222A.

DH 228 - Oral Biology 1 (4)
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 the Dental Hygiene program.

DH 229 - General and Oral Pathology (3)
Concepts in general, systemic, and oral pathology. Emphasis on entities frequently encountered, clinical signs and symptoms, and concepts of differential diagnosis.
Prerequisite: Admission to the Dental Hygiene program.

DH 233 - Anesthesia/Analgesia for Dental Hygiene Therapy (3)
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 the Dental Hygiene program.

DH 234 - Trends and Issues in Dental Hygiene (2)
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 the Dental Hygiene program.

DH 237 - Community Dental Health 1 (3)
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 the Dental Hygiene program.

DH 238 - Community Dental Health 2 (1)
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 the Dental Hygiene program.

DH 239 - Expanded Practice Concepts and Roles (3)
An introduction to Expanded Practice Dental Hygiene (EPDH) concepts and roles for the provision of services for underserved community groups and individuals. Emphasis and instruction will be given on the use of knowledge and skills as outlined in the State of Oregon Dental Practice Act for Expanded Practice Dental Hygiene. Field work is expected in public health clinics, community groups and public dental programs. This course will be offered through Distance Learning.
Prerequisite: Admission to the Dental Hygiene program.

DH 243A - Oral Radiology 1 Lecture (2)
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 the Dental Hygiene program. Corequisite: DH 243B.

DH 243B - Oral Radiology 1 Lab (1)
Clinical Lab required for DH 243A.
Prerequisite: Admission to the Dental Hygiene program. Corequisite: DH 243A.

DH 244A - Oral Radiology 2 Lecture (1)
Continuation of Oral Radiology 1. Radiologic interpretive knowledge and skills are introduced as a diagnostic aid to assist with dental hygiene diagnosis. Patient management skills, pedodontics, 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.
Prerequisite: Admission to the Dental Hygiene program. Continuation of DH 243A. Corequisite: DH 244B.

DH 244B - Oral Radiology 2 Lab (1)
Clinical Lab required for DH 244A.
Prerequisite: Admission to the Dental Hygiene program. Corequisite: DH 244A.

DH 254 - Pharmacology (3)
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)
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 (2)
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)
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.

Prerequisite: Admission to Dental Hygiene program.

DH 276 - Restorative Dentistry 2 (3)
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. Onsite lab.
Prerequisite: Admission to Dental Hygiene program. Continuation of DH 275.

DH 277 - Restorative Dentistry 3 (1)
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. Onsite lab.
Prerequisite: Admission to Dental Hygiene program. Continuation of DH 276.

DH 280 - Co-op Ed: Dental Hygiene (3-12)
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.
Prerequisite: Admission to the Dental Hygiene program.

DRF-Drafting

DRF 121 - Mechanical Drafting (4)
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)
Fundamentals of building materials, construction techniques, and drawings used in residential structures.
Prerequisite: DRF 160.

DRF 160 - Computer-Aided Drafting and Design (4)
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)
Drafting techniques required for electrical and electronic fields. Schematics, wiring and routing diagrams, logic and printed circuit layout design and drawings.
Prerequisite: DRF 160.

DRF 205 - Drafting: Structures (4)
Graphical methods to investigate forces applied to rigid bodies at rest, including beams and trusses. The course covers vectors, moment, equilibrium, and the construction of load, shear, and moments 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 060 (or higher algebra or 200-level math course), and MTH 085 (or higher geometry/trigonometry) or instructor consent.

DRF 207 - Drafting: Strength of Materials (4)
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: DRF 205.

DRF 210 - Commercial Buildings (4)
Fundamentals of building materials, construction techniques, construction documents, and processes used in commercial structures.
Prerequisite: DRF 160.

DRF 211 - Sustainable Building Systems (4)
Fundamental principles of mechanical systems used in high-performance or green buildings including energy, water, lighting, heating, ventilation, and air conditioning.
Prerequisite: WR 115 or higher or by placement.

DRF 220 - Building Information Modeling (4)
An introduction to Autodesk Revit that will allow students to gain an understanding of this 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)
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)
A study of components used in machine design including materials, weldments, fasteners, keys, linkages, gears, roller chain, and V-belt drives.
Prerequisite: DRF 121.

DRF 245 - Solid Modeling (4)
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)
This course provides a 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.
Prerequisite: DRF 160.

DRF 280 - Co-op Ed: Drafting (3-12)
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.

DS-Diesel Technology

DS 154 - Heavy Duty Braking Systems (1-12)
Operation, diagnosis, testing, and repair of heavy-duty braking systems. Technical information and shop projects to apply and understand theories and principles include: fundamentals of braking - trucks/tractors; disk/cam brake systems; anti-lock air brake systems; heavy duty wedge brakes; power assist units; truck/tractor air brake system components; diesel engine brakes retarders; and preventive maintenance schedules and procedures in on and off the highway heavy-duty equipment.

DS 155 - Heavy Equipment Hydraulics (1-12)
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principals used in the operation, troubleshooting, failure analysis and repair of mobile and stationary hydraulic systems. This includes the following technical information and shop projects to understand and apply theories and principles: introduction to hydraulics and safety; 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, electronically controlled hydraulic systems, pilot controlled hydraulic systems, manually controlled hydraulic systems as they are used on heavy equipment.

DS 158 - Heavy Equipment Chassis and Power Trains (1-12)
Operation, diagnosing, testing, and repair of heavy equipment chassis and power trains. Technical information and shop projects to apply and understand theories and principles include: frames; suspensions; conventional steering systems; track-type undercarriages; final drives and steering mechanisms; clutches; torque converts; standard transmissions; on and off highway automatic/automated transmissions; powershift transmissions; drive lines; front- and

rear-drive units (carriers); heavy duty tires, wheels, and rims; and wheel hubs, dead and live axles of on and off highway diesel equipment.

DS 256 - Diesel and Auxiliary Fuel Systems (1-12)
Operation, diagnosis, testing, and repair of diesel and auxiliary fuel systems. Technical information and shop projects to apply and understand theories and principles of L.P. gas fuel systems; diesel fuel systems including electronic diesel engine controls; and diesel engine performance analysis of on and off highway current model engines.

DS 257 - Diesel Electrical Systems (1-12)
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, troubleshooting, failure analysis, and repair of diesel electrical systems. This includes the following technical information and shop projects to understand and apply theories and principles: introduction to electrical fundamentals and safety; vehicle system components; batteries and battery banks; alternators and charging systems; starters and starting systems; electrical circuits; switches; relays; solenoids; lighting; electrical accessories; electronic control systems; schematics; wiring harnesses and HVAC systems as they are used on heavy duty trucks and equipment.

DS 259 - Diesel Engines and Engine Overhaul (1-12)
This course covers technical information and shop projects necessary for the practical application and understanding of theories and principles used in the operation, troubleshooting, failure analysis and repair of diesel engines and engine overhaul. This includes the following technical information and shop projects to understand and apply theories and principles: introduction to the diesel engine; diesel engine operating principles; diesel engine components; combustion chamber design; cylinder block; cylinder head and components; crankshaft; main bearings; vibration damper; flywheel; pistons; rings; connecting rod; camshaft; timing gears; lubrication systems; lube oil; cooling systems; coolant; air intake systems; exhaust systems; exhaust emission; control systems; hand tools and service tools as they are used on heavy duty trucks and equipment.

DS 280 - Co-op Ed: Diesel (3-12)
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.

ECE-Early Childhood Education

ECE 105 - Health and Safety Issues in Early Childhood Education (2)
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)
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: Recommended: WR 115 or higher.

ECE 120 - Introduction to Early Childhood (2)
Course is designed to provide 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. Required course for ECE majors.

ECE 130 - Guidance of Young Children (3)
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)
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)
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)
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.

ECE 210 - Applying Early Childhood Curriculum (4)
In this 4-credit, online course, students will study best practices and a play-based, Reggio-inspired approach to Early Childhood Education. There is an emphasis on the design of the environment as the "third teacher," including science, technology, engineering, the arts, math (STEAM), and the outdoor environment.

ECE 230 - Family, School, Community Relations (3)
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)
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. A one hour weekly seminar on Zoom is required in addition to 9 hours a week of student teaching in the LCFC (lab school on campus). Permission to practice off-site for students employed full time in childcare centers in the community is possible with instructor approval. Verification of MMR (Measles, Mumps, Rubella) vaccine documentation is required.
Prerequisite: ECE 130 with a grade of C- or better or instructor consent.

ECE 250 - Infant and Toddler Environments (3)
Course topics include: a) how suitable materials and a carefully planned physical environment can enhance optimum development; b) how to staff a center appropriately; c) brief review of infant-toddler development; d) basic care giving techniques; e) how to plan curriculum; and f) resources and references.

ECE 253 - Diversity Issues in Early Childhood Education (3)
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)
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.

ECE 280 - Co-op Ed: Early Childhood Education (1-7)
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. Verification of MMR (Measles, Mumps, Rubella) vaccine documentation is required.

ECON-Economics

ECON 200 - Introduction to Economics (3)
Economics studies how people in society organize themselves to decide what to produce, how to produce, and for whom to produce. Basic economic concepts and measurements are covered. The course builds a solid foundation of elementary economic knowledge so students can better understand current economic issues. This course is recommended as preparation for ECON 201 and ECON 202.
Prerequisite: Recommended: MTH 111Z.

ECON 201 - Introduction to Microeconomics (4)
Microeconomics studies how individuals and other social entities make decisions, respond to incentives and scarcity, and interact with the operations of markets. Attention is given to analytical details of microeconomic reasoning. The course builds a solid foundation of microeconomic knowledge so that students can better understand the functioning of markets as

well as their strengths and limitations.
Prerequisite: Recommended: MTH 111Z or ECON 200.

ECON 202 - Introduction to Macroeconomics (4)
Macroeconomics studies the economy as a whole, economic aggregates and broad economic issues such as the economic growth, gross domestic product, unemployment, price inflation or deflation, money supply, government surpluses or deficits, and the level of exports and imports. The course builds a solid foundation of macroeconomic knowledge so students can better understand the functioning of national economies as well as the reasons and consequences of government macroeconomic policies.
Prerequisite: Recommended: MTH 111Z or ECON 200.

ECON 204 - Introduction to International Economics (4)
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)
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.

ED-Education

ED 100 - Introduction to Teaching (3)
This course provides an overview of the Education field for those considering a career in teaching. Students will explore the classroom community, human development as a basis for the acquisition of knowledge, culturally responsive teaching practices, and engage in a research project studying a current issue in education. Course also includes an in-class observation.

ED 111 - Mathematics and Literacy in CTE Teaching (3)
This course is designed to support CTE educators who are pursuing CTE licensure in Oregon and/or desiring professional development. Supports those who are either new to the teaching profession or existing teachers adding an endorsement to teach in a career technical education program of study. Students receive practical strategies for integrating mathematics and literacy content into CTE courses.

ED 131 - Instructional Strategies in CTE (3)
This course provides students with instructional strategies that have a positive impact on secondary CTE student achievement. Principles based on instructional research, case studies, and classroom examples are provided to give learners tools to use in the CTE classroom.

ED 216 - Foundations of Education (3)
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 220 - Introduction to CTE (3)
This course is designed to support CTE educators who are pursuing CTE licensure in Oregon and/or desiring professional development. Supports those who are either new to the teaching profession or existing teachers adding an endorsement to teach in a career technical education program of study. Students receive a practical introduction to the professional roles and responsibilities of educators, as well as an overview of the state and federal funding and program characteristics that support CTE in Oregon.

ED 230 - Language and Literacy (3)
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 232 - Classroom Community and Conflict Resolution (3)
Classroom culture education is an evolving area of study that recognizes the importance of creating a holistic and inclusive classroom environment beyond behavior management. Topics include social and emotional learning, trauma-informed and culturally sustaining pedagogy, cognitive psychology and motivation theory, and restorative justice in student-centered classrooms. Students will learn instructional and conflict-resolution techniques to accommodate multiple learning styles, abilities, and needs.

ED 233 - Adolescent Learning and Development (3)
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 234 - Reading Instructional Strategies (3)
Grounded in theoretical frameworks and practical applications, this course supports educators to craft effective and evidence-based reading strategies for students. Upon completion educators will understand how to create inclusive literacy experiences. Topics include the foundations of literacy, historical and contemporary theoretical perspectives of reading acquisition, phonemic awareness and phonics instruction, and equity in instruction and assessment.

ED 258 - Multicultural Education (3)
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)
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.

ED 280 - Co-op Ed: Education (3-12)
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.

EL-Effective Learning

EL 110 - Effective College Reading (1-3)
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)
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)
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 117 - Critical Thinking for Essay Writing (3)
EL117 is a co-requisite for students in WR097. Students will develop and strengthen their critical reading, thinking, and writing skills. Together, EL117 and WR097 integrate these skills to prepare students for college-level writing.
Corequisite: WR 097.

EL 121 - Effective Digital Learning (1-3)
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.

EMS-Emergency Medical Services

EMS 101 - Introduction to Emergency Services (4)
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)
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)
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.

EMS 111 - Emergency Medical Technician (8)
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 the following Major: Paramedicine: Emergency Medical Technician, CPC. Corequisite: EMS 112 and EMS 113.

EMS 112 - Emergency Medical Technician Lab (3)
This course is the Lab component of the Emergency Medical Technician licensing course.
Prerequisite: Must be enrolled in the following Major: Paramedicine: Emergency Medical Technician, CPC. Corequisite: EMS 111 and EMS 113.

EMS 113 - Emergency Medical Technician Clinical (1)

This course is the Clinical Experience component of the Emergency Medical Technician licensing course.
Prerequisite: Must be enrolled in the following Major: Paramedicine: Emergency Medical Technician, CPC. Corequisite: EMS 111 and EMS 112.

EMS 201 - Pathophysiology (3)
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 Oregon/National.
Prerequisite: Must be enrolled in the following Major: Paramedicine.

EMS 211 - Pharmacology 1 (2)
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 the following Major: Paramedicine.

EMS 212 - Pharmacology 2 (2)
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 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 the following Major: Paramedicine.

EMS 221 - Trauma Emergencies 1 (3)
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 the following Major: Paramedicine.

EMS 222 - Trauma Emergencies 2 (3)
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 the following Major: Paramedicine.

EMS 231 - Medical Emergencies 1 (3)
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 the following Major: Paramedicine.

EMS 232 - Medical Emergencies 2 (3)
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 the following Major: Paramedicine.

EMS 233 - Medical Emergencies 3 (2)
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 the following Major: Paramedicine.

EMS 241 - Electrocardiography 1 (3)
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 the following Major: Paramedicine.

EMS 242 - Electrocardiography 2 (3)
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 the following Major: Paramedicine.

EMS 251 - Paramedic Lab 1 (3)
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 (3)
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 the following Major: Paramedicine.

EMS 253 - Paramedic Lab 3 (3)
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 the following Major: Paramedicine.

EMS 261 - Paramedic Clinical 1 (1)
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 the following Major: Paramedicine.

EMS 262 - Paramedic Clinical 2 (3)
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 the following Major: Paramedicine.

EMS 263 - Paramedic Clinical 3 (4)
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 the following Major: Paramedicine.

EMS 280P1 - Co-op Ed: Paramedic Internship P1 (3-12)
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 the following Major: Paramedicine.

EMS 280P2 - Co-op Ed: Paramedic Internship P2 (5-12)
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 the following Major: Paramedicine.

ENG-English

ENG 100 - Children's Literature (4)
Children's Literature is an introductory course that centers critical engagement with a range of contemporary, diverse texts published in the U.S. whose target audience is birth to twelve years of age. The course focuses on the role society, culture, economics, education, and institutions play in shaping our understanding of "the child" and "childhood" and how this understanding, in turn, shapes the creation, analysis, publication, distribution, and use of Children's Literature in the U.S. The course emphasizes the concept of representation in order to understand how power and privilege are at work in U.S. Children's Literature.

ENG 104HZ - Introduction to Fiction-Honors (4)
The study of fiction invites us to enter imaginative narratives and confront the challenges of being human. English 104Z provides opportunities for the appreciation of fiction, including deeper awareness of craft and insight into how reading fiction can lead to self-enrichment. Students read a variety of types of fiction, from diverse perspectives and eras, and develop their skills in discussion, literary analysis, and critical thinking. 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 104Z and ENG 104HZ. This course is part of the Oregon Common Course Numbering System.

ENG 104Z - Introduction to Fiction (4)
The study of fiction invites us to enter imaginative narratives and confront the challenges of being human. English 104Z provides opportunities for the appreciation of fiction, including deeper awareness of craft and insight into how reading fiction can lead to self-enrichment. Students read a variety of types of fiction, from diverse perspectives and eras, and develop their skills in discussion, literary analysis, and critical thinking.

ENG 105HZ - Introduction to Drama-Honors (4)
The study of plays exposes us to texts with the power to shock, inspire, enlighten, and delight; this course in drama can be an empowering and transformative journey toward keener engagement with the world, local community, and your intended path. English 105Z provides opportunities for the appreciation of drama, including deeper awareness of craft and insight into how reading plays can lead to self-enrichment. Students read a variety of types of drama, from diverse perspectives and eras, and develop their skills in discussion, literary analysis, and critical thinking. 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 105Z and ENG 105HZ. This course is part of the Oregon Common Course Numbering System.

ENG 105Z - Introduction to Drama (4)
The study of plays exposes us to texts with the power to shock, inspire, enlighten, and delight; this course in drama can be an empowering and transformative journey toward keener engagement with the world, local community, and your intended path. English 105z provides opportunities for the appreciation of drama, including deeper awareness of craft and insight into how reading plays can lead to self-enrichment. Students read a variety of types of drama, from diverse perspectives and eras, and develop their skills in discussion, literary analysis, and critical thinking.

ENG 106HZ - Introduction to Poetry-Honors (4)
The study of poetry invites us to delve into the biggest questions about life and culture alongside the seemingly smallest issues of words and sounds. English 106Z provides opportunities for the appreciation of poetry, including deeper awareness of craft and insight into how reading poetry can lead to self-enrichment. Students read a variety of types of poetry and poetic forms, from diverse perspectives and eras, and develop their skills in discussion, literary analysis, and critical thinking. 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 106Z and ENG 106HZ. This course is part of the Oregon Common Course Numbering System.

ENG 106Z - Introduction to Poetry (4)
The study of poetry invites us to delve into the biggest questions about life and culture alongside the seemingly smallest issues of words and sounds. English 106Z provides opportunities for the appreciation of poetry, including deeper awareness of craft and insight into how reading poetry can lead to self-enrichment. Students read a variety of types of poetry and poetic forms, from diverse perspectives and eras, and develop their skills in discussion, literary analysis, and critical thinking.

ENG 151 - Black American Literature (4)
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)
"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 203 - Shakespeare (4)
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)
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)
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)
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 222 - Literature and Gender (4)
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)
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)
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 244 - Asian American Literature (4)
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)
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)
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 260 - Introduction to Women Writers (4)
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)
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)
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)
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.

ENGR-Engineering

ENGR 101 - Engineering Orientation (3)
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 introductory activities on measurement methods, data collection, use of electronic spreadsheets and the Internet,

possible group projects and/or oral and written reports.
Prerequisite: MTH 095 or higher, with grade of C- or better OR equivalent placement via the Math Placement Process.

ENGR 102 - Engineering Orientation 2 (4)
This course is an introduction to the use of computing language in engineering. Focuses on problem solving skills, algorithm design, debugging, and writing programs using universal design principles.
Prerequisite: MTH 112Z or higher, with grade of C- or better OR equivalent placement via the Math Placement Process (math may be taken as a corequisite).

ENGR 115 - Engineering Graphics (3)
Introduction to graphical communication theory, including freehand sketching techniques, geometric construction, multi-view, pictorial, sectional and auxiliary view representation and dimensioning techniques. Practical application of theoretical concepts using solid modeling software to capture design intent and generate engineering drawings.
Prerequisite: ENGR 101 and MTH 112Z or higher, with grades of C- or better OR equivalent math placement via the Math Placement Process (math may be taken as a corequisite).

ENGR 211 - Statics (4)
Principles of statics and 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, with a grade of C- or better within the past two years.

ENGR 212 - Dynamics (4)
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 in two- and three-dimensions; Newton's second law of motion; rectilinear and curvilinear motion; linear and angular momentum; principles of work and energy; impulse and momentum.
Prerequisite: ENGR 211 and MTH 254, with grades of C- or better within the past two years.

ENGR 213 - Strength of Materials (4)
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, with grades of C- or better within the past two years.

ENGR 221 - Electrical Fundamentals 1 (4)
Circuits will be analyzed via Kirchoff's Laws with an emphasis on linear, idealized circuit elements including current and voltage sources, resistors, capacitors, inductors and op amps. Circuit techniques and theorems will be applied to circuits containing passive and active sources. Transient responses of passive and active circuits will be addressed. The course emphasizes a combination of conceptual understanding, mathematical analysis, lab experiments and computer simulations.
Prerequisite: MTH 252 with a grade of C- or better within the past two years PH 213 strongly recommended.

ENGR 280 - Co-op Ed: Engineering (3-12)
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.
Prerequisite: Instructor Consent.

ENSC-Environmental Science

ENSC 181 - Terrestrial Environment (4)
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. Lab included. ENSC 181-182-183 can be taken in any order

ENSC 182 - Atmospheric Environment and Climate Change (4)
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. ENSC 181-182-183 can be taken in any order

ENSC 182H - Atmospheric Environment and Climate Change-Honors (4)
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. Students cannot receive credit for both ENSC 182 and ENSC 182H.

ENSC 183 - Aquatic Environment (4)
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. Lab included. ENSC 181-182-183 can be taken in any order

ENSC 183H - Aquatic Environment-Honors (4)
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. Students cannot receive credit for both ENSC 183 and ENSC 183H.

ES-Ethnic Studies

ES 101 - Historical Racial and Ethnic Issues (4)
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 102 - Contemporary Racial and Ethnic Issues (4)
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 224 - Black Male Studies: Lies, Literature, and Legacy (4)
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 244 - Native American Leadership 1: Building Leadership Through Indigenous Oratory (4)
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.

ES 251 - Introduction to African-American Studies (4)
This course introduces students to the theoretical models used in the interdisciplinary study of African-America. Using a thematic approach, students will learn to critically engage the development of and dynamics between race, racism and blackness in the United States. This course, then, highlights the symbiotic relationship between structural domination and cultural resistance. This course pays special attention to the intersections of race, class, gender and sexuality. Topics covered include slavery and the slave trade, colonialism and imperialism, racial

segregation and disfranchisement, migration and urbanization, popular cultural representations, black nationalism and internationalism, civil rights and black power, and black cultural productions.

ES 254 - Introduction to Chicanx/Latinx Studies (4)
This course introduces students to the fields of Chicanx and Latinx Studies. Drawing from historical, social science, ethnographic, and visual texts, it can serve as a foundation for students wanting to pursue more advanced courses in Chicanx, Latinx, Ethnic, Latin American, and Caribbean Studies. Thematically, this course emphasizes the historical foundations and political concerns surrounding contemporary Latinx experiences; colonization, migration, and immigration; questions of nation and citizenship; and histories of resistance.

ES 256 - Introduction to Native American Studies (4)
This class will use interdisciplinary approaches to understand Native American lives, examining Native American identities, practices, histories, cultures, and political statuses in context. 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 among indigenous peoples and other groups here and abroad.

ET-Electronic Technology

ET 129 - Electrical Theory (4)
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: College writing placement or prior college AND MTH 060 or higher with a grade of C- or better, or placement test. Crosslisted as: APR 190.

FA-Film Arts

FA 250 - Concepts of Visual Literacy (3)
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 261 - Writing and Interactive Design (3)
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 121Z and ART 216.

FA 264 - Women Make Movies (4)
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: Recommended: placement into WR 115 or higher.

FA 270C - Film Genres: Comedy (4)
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.
Prerequisite: Recommended: placement into WR 115 or higher.

FA 270N - Film Genres: Noir (4)
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.
Prerequisite: Recommended: placement into WR 115 or higher.

FA 270S - Film Genres: Horror (4)
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.
Prerequisite: Recommended: placement into WR 115 or higher.

FA 276 - Gender, Race, and Class in U.S. Cinema (4)
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: Recommended: placement into WR 115 or higher.

FIRE-Wildland Fire Management

FIRE 100 - Introduction to Wildland Fire (4)
This course will explore the sociocultural, political, economic, and ecological aspects of forest fires. Fire's relationship to the development of human cultures and civilizations will be reviewed as well as the more recent history of fire management policies in the U.S. Basics of fire science, fire ecology, and fire management will be covered particularly as it relates to the impacts of fire suppression on northwest forests. Course concepts will be solutions focused on societal change to mitigate wildfire disasters.

FIRE 110 - Wildland Fire Management Seminar (1)
This seminar course will help students frame the concepts in their classes and bring context within the field of wildland fire management. Weekly meetings will include guest speakers, professional development opportunities, student presentations, and how to apply for various fire related careers in our region.

FIRE 111 - Wildland Fire Communication (1)
This seminar course will help students explore communications used in wildland fire. Weekly meetings will include guest speakers, professional development opportunities, and student presentations. These will revolve around the multiple facets of communication before, during, and after a wildland fire event.

FIRE 120 - NWCG Basic Firefighter Lecture Series (4)
Students enrolled in this course will take part in facilitated National Wildfire Coordinating Group trainings for the following courses: S130, S190, L180, ICS100, IS170.

FIRE 130 - NWCG Basic Firefighter Field Day (1)
The intent of this course is to train new firefighters in basic Firefighting skills. This includes a required field exercise that may be arduous in nature. This firefighter field review course will satisfy requirements for the National Wildfire Coordinating Group course S-130. This will be completed in the context of a two day field activity.

FIRE 200 - Wildland Fuels Management and Prescribed Burning (4)
Students will learn about the use of controlled burning for maintaining and restoring fire-adapted ecosystems. An introduction to the methods for measuring, classifying, and managing wildland fuels.

FL-Foreign Language

FL 280IW - Co-op Ed: International Work Experience (1-12)
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. Instructor approval required.
Prerequisite: Instructor consent.

FLS-Fitness Lifestyle Specialist

FLS 110 - Coaching Healthy Eating (2)
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)
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)
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)
Course introduces 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)
Course introduces students 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)
Course 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)
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)
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)
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, completed with a grade of C- or better. P/NP is not accepted.

FLS 214 - Physical Exercise and Healthy Aging (3)
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.

FLS 280 - Co-op Ed: Fitness (1-12)
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: Instructor consent for site and credit load.

FLS 280A - Co-op Ed: Healthy Aging (1-12)
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: Instructor consent for site and credit load.

FN-Food And Nutrition

FN 110 - Personal Nutrition (3)
This is an introductory class that emphasizes practical application of nutrition knowledge to enhance general health. Students will develop skills for improving dietary habits and evaluating the validity of nutrition information.

FN 130 - Family Food and Nutrition (3)
This course focuses on how to prepare and offer a variety of foods in an environment that helps families develop a positive approach to eating. Nutritional guidelines are discussed for infancy through adolescence.

FN 190 - Sports Nutrition (2)
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)
This course focuses on how nutrients, food, and dietary patterns affect human health. Students will build a working knowledge of food sources, functions, requirements, digestion, absorption, and metabolism of nutrients (carbohydrates, proteins, fats, vitamins, minerals, and water). Students will develop skills for improving dietary habits and evaluating the evidence base and validity of nutrition information.

FR-French

FR 101 - First-Year French (5)
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)
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 grade of C-/P or better.

FR 103 - First-Year French (5)
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 grade of C-/P or better.

FR 201 - Second-Year French (4)
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 grade of C-/P or better.

FR 202 - Second-Year French (4)
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 grade of C-/P or better.

FR 203 - Second-Year French (4)
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 grade of C-/P or better.

GEOG-Geography

GEOG 141 - Natural Environment (4)
This course is designed to introduce geographic concepts and major components of the physical environment including landforms, weather patterns, global climates, and global flora and fauna distribution patterns. Students will apply geographic principles, theories, and methods to understand and identify the processes shaping the Earth's surface, including analysis of extreme weather events, human impacts on environmental change, and natural processes found with American national parks.

GEOG 142 - Introduction to Human Geography (4)
This course is an introduction to the field of human geography. Students will explore the relationships and processes that shape cultures. The course focuses on various sub-themes of human geography such as: demographics, world religions, economics, food, migration, ethnic identity, political systems, and globalization. Students will analyze maps and charts as they pertain to the field of human geography.

GEOG 201 - World Regional Geography (4)
This course is an introduction to major geographic regions of the earth. Students will explore each geographic region, examining the cultural and natural earth processes that make each region distinct. Students will use spatial perspectives to understand how physical and cultural attributes impact our understanding of a globalized world.

G-Geology

G 101 - Earth's Dynamic Interior (4)
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 G 101 and 102 in any order. Lab included.

G 102 - Earth's Dynamic Surface (4)
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 G 101 and 102 in any order. Lab included.

G 103 - Evolving Earth (4)
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. Lab included.
Prerequisite: Recommended: G 101 or G 102.

G 146 - Rocks and Minerals (4)
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)
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. Lab included.
Prerequisite: Recommended: previous geology course.

G 148 - Geologic Hazards (4)
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)
G 201-202-203—for science majors. 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. Take G 201 and 202 in any order. Lab included.

G 202 - Earth's Surface Systems (4)
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 G 201 and 202 in any order. Lab included.

G 203 - Evolution of the Earth (4)
This course explores how plate motions, climate change, and other factors influence the distribution and evolution of continents and organisms through geologic time. Labs examine fossils, age relationship, stratigraphy and analysis of complex regions using geologic maps and cross-sections. Lab included.
Prerequisite: G 101 or G 102 or G 201 or G 202, with a grade of C- or better.

G 280 - Co-op Ed: Geology (3-12)
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.
Prerequisite: Instructor Consent.

G 280ES - Co-op Ed: Environmental Science (3-12)
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-Geographic Information Science

GIS 151 - Digital Earth (4)
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, and GIS software 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.
Prerequisite: MTH 060 or higher.

GIS 245 - GIS 1 (4)
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 151. Students will use ArcGIS software to explore cartographic principles, projections, data capture, data structures, and data analysis. Access to a computer outside of class (running Windows 8.1 or later) is strongly recommended. Students who do not have access to a computer are strongly encouraged to attend GIS open lab hours. 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)
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 (running Windows 8.1 or later) is strongly recommended. Students who do not have access to a computer are strongly encouraged to attend the GIS open lab hours. 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.

GIS 280 - Co-op Ed: Geographic Information Science (3-12)
Cooperative Education is a work experience opportunity for students that have completed two GIS classes and have instructor's approval.

GS-General Science

GS 101 - General Science (Nature of the Northwest) (4)
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)
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.

GS 108 - Oceanography (4)
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)
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)
Introduces geology and integrates topics of Earth's history, plate tectonics, minerals, rocks, volcanism, earthquake activity, weathering, rivers, groundwater, glaciers, and coasts. Lab included.

GS 201 - Scientific Skepticism - Someone is Wrong on the Internet (4)
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.

GWE-General Work Experience

GWE 180 - Co-op Ed: General Work Experience (1-12)
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. Instructor consent required.
Prerequisite: Instructor consent.

HDFS-Human Development & Family Services

HDFS 226 - Child Development (3)
Study of the physical, social-emotional, and intellectual development of the child from birth through adolescence. Some emphasis on prenatal influences. A survey of various child-study approaches. Instruction and experience in observing and recording the behavior of young children. Study of adult-child differences, value of play, and discipline. Required for ECE majors.

HDFS 227 - Children Under Stress (3)
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)
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.

HE-Health

HE 152 - Drugs, Society and Behavior (3)
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)
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)
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)
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)
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)
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)
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)
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)
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 the planet.

HE 275 - Lifetime Health and Fitness (3)
Explore current evidence-based fitness research and its relationship to achieving positive health outcomes. Develop an understanding of how optimal fitness, including: cardiorespiratory, strength training, weight management and healthy diet contributes to the prevention of stress and chronic disease.

HE 280 - Co-op Ed: Health Occupations (3-12)
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-Health Information Management

HIM 107 - Integrated Electronic Health Records (4)
Students will learn to work with Electronic Health Record (EHR) systems with simulated data. Students will apply practice management systems (PMS) used in a medical office and work with protected health information (PHI). Students will learn the functionality of health care software:

threats to security, the need for standards, high levels of usability, sources of errors and compliance with regulatory standards.

HIM 120 - Introduction to Health Information Management (4)
This class introduces the student to the historical development of health information management and different health information roles. Course outcomes focus on the work and responsibilities of health information professionals and their relationships. Interpersonal communication with other health care providers, content and structure of patient records; quantitative and qualitative analyses of the documentation of patient care; use of storage methods; and retrieving patient data elements will all be explored.

HIM 125 - Healthcare Data Analytics (4)
This course will introduce Health Information Management students to fundamental relational database concepts and how relational database concepts are used in Health Information Management to gather data and perform healthcare data analytics.

HIM 154 - Introduction to Disease Processes (4)
This course provides students with a basic understanding of various diseases of the human body. The introduction to signs and symptoms of diseases and how they develop and may be treated by clinical professionals will be explored.
Prerequisite: HP 100.

HIM 160 - Healthcare Insurance and Billing (4)
This course will introduce the student to health insurance and reimbursement. Topics include plan options, abstracting medical records, federal regulations, and the importance of accurate, compliant coding of diagnoses and procedures.

HIM 183 - Introduction to Health Information Systems (4)
This course introduces health information technology systems (clinical and administrative) and their applications in health care entities. Students will identify fundamentals of support to HIM professionals.

HIM 200 - Healthcare Statistics (4)
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. Students will learn analysis through pivot tables and data presentation.
Prerequisite: MTH 098 or MTH 060 or higher.

HIM 210 - Leadership for Health Information Management (4)
This course provides 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 electronic health record (EHR) 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: HIM 120 and HIM 125.

HIM 222 - Reimbursement Methodologies (5)
This course will introduce the student to different reimbursement methodologies in medical office, hospital, long term, and other settings. The course will analyze different reimbursement methodologies including fee-for- service, MCO's, managed care, MS- DRG's, and HCC's.
Prerequisite: HIM 120 and HIM 160.

HIM 225 - Legal & Ethical Aspects of Health Information Management (4)
This course introduces legislation affecting healthcare, along with a review of issues such as professional liability, informed consent, privacy and security laws, electronic health records, release of protected health information, patients' rights and workplace legalities. Additionally, the cost of health care, who pays for it, and types of health insurance are discussed. A variety of ethical issues in health care are explored in health information management.

HIM 230 - Quality Improvement in Healthcare (4)
This course investigates the components of quality and performance improvement in health care. Students explore the functions of risk management, utilization review in case studies. Quality performance improvement and regulatory requirements will be investigated. Students will learn skills in data analysis, performance improvement tools, and data presentation.
Prerequisite: HIM 120 and HIM 125.

HIM 241 - Health Information Management Applications 1 (4)
This course is designed to introduce the HIM student to the history and use of clinical terminologies, classifications and code systems; reimbursement methodologies; principles and supervisory management including resource management responsibilities, performance/practice standards, and policies and procedures; health laws; data security, privacy and management.
Prerequisite: HIM 120 and HIM 125.

HIM 242 - Health Information Management Applications 2 (4)
This course is a continuation of HIM 241 exploring the history and use of clinical vocabularies, reimbursement methodologies, principles and supervisory management, resources management responsibilities, job descriptions, performance/practice standards, and policies and procedures of regulatory bodies.
Prerequisite: HIM 241.

HIM 260 - Medical Record Auditing (4)
This course focuses on the principles and practices of auditing medical records. The course covers topics such as applying CPT and ICD 10 CM /PCS coding guidelines in audits, compliant coding, preparing an audit plan, and post-audit follow-up and communication.
Prerequisite: HIM 160, HIM 222, and HIM 273.

HIM 270 - ICD-10 Coding (5)
ICD 10 CM Coding is an introductory course that provides students with a solid foundation in the principles and practices of coding using the International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM). The course covers topics such as coding guidelines, conventions, and principles, as well as the structure and organization of the ICD-10-CM coding system.
Prerequisite: HP 100 and HIM 154 (may be taken as a corequisite).

HIM 271 - ICD-10-PCS Coding (5)
ICD 10 PCS Coding is a specialized course that focuses on the principles and practices of coding using the International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-PCS) for hospital-based procedures.
Prerequisite: HP 100 and HIM 154.

HIM 273 - CPT and HCPCS Coding (5)
CPT Coding is a course that focuses on the principles and practices of medical office coding using the Current Procedural Terminology (CPT) coding system. The course covers topics such as coding guidelines, conventions, and principles, as well as the structure and organization of the CPT coding system.
Prerequisite: HP 100 and HIM 154.

HIM 280 - Co-op Ed: Health Information Management (3)
This course offers a work experience that integrates theory and practice in the field of Health Information Management. This experience will provide: opportunities to develop skills, explore career options and network with professionals and employers as a student completes their AAS HIM degree or Medical Coding certificate.
Prerequisite: COOP 206 with a grade of C or better.

HON-Honors

HON 280H - Co-op Ed: International Work Experience-Honors (1-12)
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 consent. Recommended: WR 121Z readiness.

HORT-Horticulture

HORT 120 - Gardening and Sustainable Food Systems (4)
This class will focus on experiential learning in the garden on how to grow plants from seed to harvest (or to seed again) particularly those plant varietals that are regionally appropriate. We will develop an understanding of sustainable food systems, including growing edible plants at a variety of scales, methods of sustainable agriculture, and methods to improve regional food security. We will also explore the impacts of industrial agriculture on ecosystems, human rights, and health. Lab included.

HP-Health Professions

HP 100 - Medical Terminology 1 (3)
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)
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)
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)
This course introduces the fundamental concepts of the anatomy and physiology, beginning with the structural organization of the body, followed by the structures and functions of the integumentary, skeletal, muscular, cardiovascular, and the nervous system. Part 1 of a 2 part series.

HP 152 - Human Body Systems 2 (3)
As a continuation of HP 150, this course introduces the fundamental structures and functions of the lymphatic, endocrine, respiratory, urinary, digestive, and reproductive systems, and the general and special senses. A basic introduction to microbes and immunology is also included. Part 2 of a 2 part series.
Prerequisite: HP 150.

HP 153 - Introduction to Pharmacology (3)
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)
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.

HS-Human Services

HS 102 - Psychopharmacology (4)
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 150 - Personal Effectiveness for Human Service Workers (3)
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 155 - Interviewing Theory and Techniques (3)
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)
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)
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)
This course will introduce human service 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)
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)
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)
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)
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.
Prerequisite: HS 155.

HS 226 - Ethics and Law (3)
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 & other Infectious Diseases: Risk Assessment and Intervention (2)
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)
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)
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)
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)
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)
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.
Prerequisite: HS 155.

HS 267 - Cultural Competence in Human Services (3)
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.

HS 280 - Cooperative Education: Human Services (1-12)
Pre-req: HS150. 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 AND HS 226 (may be taken before or as a corequisite).

HS 280AS - Cooperative Education: Human Services - Addiction Studies (1-12)
In this internship course students will gain human services-related work experience in addiction focused community organizations. Students will integrate theory and practice, develop skills, explore career options, and network with professionals while earning college credit. Please contact the Human Services cooperative education coordinator before attempting to register.
Prerequisite: HS 150 AND HS 226 (may be taken before or as a corequisite).

HST-History

HST 101 - Western Civilization: Ancient Mediterranean (4)
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.

HST 102 - Western Civilization: Making of Modern Europe (4)
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.

HST 103 - Western Civilization: Europe and the World (4)
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.

HST 104 - World History (4)
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.

HST 105 - World History (4)
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.

HST 106 - World History (4)
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".

HST 201 - History of the United States (4)
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.

HST 202 - History of the United States (4)
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)
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.

HST 266 - US Women's History (4)
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.

HUM-Humanities

HUM 100 - Humanities Through the Arts (4)
The Humanities through the Arts offers an exploratory approach to the humanities, focusing on

the special role of the arts. Examining the relation of the humanities to values, objects and events important to people, is central to this course. A major goal of the course is to provide a means of studying values as revealed in the arts, all the while keeping in mind the important question "What Is Art?". This course is intended to provide the necessary tools for students to think critically when exploring the arts and the other humanities. Online mediums are used to enrich and enhance the topics covered.

IDS-Interdisciplinary Studies

IDS 280S - Co-op Ed: Sustainability Coordinator (3-12)
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-Journalism

J 216 - Newswriting 1 (3)
The study and practice of newsgathering and writing objective news stories. Discussions center on concept of news and news values, ethics, interviewing and traditional journalism methods, and standards as practiced by established American newspapers.

J 280 - Co-op Ed: Journalism (3-12)
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.

LIB-Library

LIB 127 - Research Skills and Information Literacy (1)
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.

MA-Medical Office Assistant

MA 110 - Clinical Assistant 1 (3)
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)
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.
Prerequisite: Admission to the Medical Assistant program.

MA 119 - Introduction to Medical Coding and Scribing (3)
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: HP 152 or BI 233, with a grade of C or better (both may be taken as corequisites).

MA 120 - Clinical Assistant 2 (3)
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)
Continuation of Clinical Assistant 2 MA 120. This course includes ordering and scheduling diagnostic testing per doctor's instructions, instructing patients with special needs, and dealing with office emergencies.
Prerequisite: Admission to the Medical Assistant program.

MA 150 - Laboratory Orientation (3)
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.

MA 206 - Co-op Ed: Medical Assistant Seminar (2)
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)
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.

MFG-Manufacturing Technology

MFG 101 - Safety and Basic Shop Practice (3)
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.

MGMT-Management

MGMT 311 - Human Resource Management (4)
This course is an introduction to Human Resource Management. The course is designed to explore the functions, roles, and value of Human Resources. Topics include aspects of workforce planning, DEI (Diversity, Equity & Inclusion), talent acquisition, compensation and benefits, training and engagement, employment laws, company culture, employee and labor relations, strategy and people analytics, and risk management.

MGMT 321 - Accounting Concepts-Managers (4)
This course attempts to bridge the communication gap between the accounting professionals who prepare financial statements for reporting and the business managers who must use financial statements for operational decision making. In this course, you will learn how to read, interpret, and apply the accrual accounting information used in financial statements to common financial, managerial and operational decisions. You will also explore how accounting and budgeting support the manager in promoting organizational goals.
Prerequisite: BT 165 or BA 211Z and MTH 105Z or higher.

MGMT 330 - Digital Marketing (4)
This course will examine major digital channels and platforms for digital marketing, theories and techniques of digital marketing, implementation considerations, and associated risks and limitations. The course will focus on the application of technology and data in the marketing mix and the behavior of consumers in the online environment. 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. Topics include customer relationship management, effects of the internet on product, pricing, distribution, and promotion, as well as ethical, security, and privacy concerns.

MGMT 347 - International Business (4)
Integrated view of international business including current patterns of international business, socioeconomic and geopolitical systems within countries as they affect the conduct of business, major theories explaining international business transactions, financial forms and institutions that facilitate international transactions, and the interface between nation states and the firms conducting foreign business activities.

MGMT 360 - Financial Management (4)
This course concerns how companies make financial investment 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. Small businesses must also understand how financial decisions affect their continuing operations. 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 and how to value projects with differing cash flows and timelines of completion. 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 and understand the three main sources of financing for businesses.

MGMT 388 - Project Management 1 (4)
This course is the first in a two course sequence. This course is an introduction to project management and the role of the project manager. The course introduces the phases of the project life cycle and focuses on project planning, project teams, and project leadership. Working in teams, students will identify and plan a project. Emphasis will be on project planning documentation. This course will also cover working in project teams and agile project management.

MGMT 400 - Operations Management (4)
An examination of the use of information systems to support the management activities of an organization.

MGMT 405 - Management Communications (4)
An examination of the roles of communication strategies for managerial responsibilities. Emphasis on the practice of communication skills including managing primary operations, change, organizational conflict, and corporate culture.

MGMT 407 - Business Analytics (4)
Students will develop a comprehensive understanding of how organizations collect and analyze data from internal and external sources to understand market and operational trends, forecast future outcomes, and capitalize on emerging technologies to achieve and maintain competitive advantage. Students will learn the background and purpose of business analytics and complete applied data analysis, visualization, and presentation projects using common business intelligence software tools.
Prerequisite: BT 223.

MGMT 411 - Marketing Management (4)
This course explores the management of marketing within an organization. Management of marketing requires an umbrella view of the organization's customers, direct and indirect competitors, direct and expanded marketplace, and global factors. Students will understand how to work with other departments in the organization to create a seamless product, sales, marketing, and analytics collaboration. Students will learn through real-life business cases from brands they know. They will learn tactical applicable skills for successfully managing marketing in any organization.

MGMT 432 - Social Enterprise (4)
This course provides students with an introduction to social innovators and entrepreneurs (creators of ventures to address societal needs), the ventures they create, and how these entities create social value. Students will address various components of this emerging field: problem identification, environment scanning, solution identification, concept development, venture creation, value assessment, and communication strategies. Students will explore examples of current social enterprises, leading thinkers in the field of social entrepreneurship, and core entrepreneurial theory focused on social enterprises.

MGMT 446 - Cross-Cultural Management (4)
This course aims to provide a comprehensive understanding of cross-cultural management issues and related best practices. Students will expand their own leadership style understanding explored in BA 278, to include their own cultural norms, how this affects their communication, and how to ensure that their communication is cross-culturally effective. Students will learn the theoretical foundations of cultural differences in the workforce and explore how this knowledge should inform management in organizations. Ultimately it aims to better prepare students to become successful cross-cultural leaders.

MGMT 453 - Strategic Management (4)
Capstone course focusing on strategy formulation and decisional processes. Presents processes required to analyze, plan, and implement business strategy in a competitive market system. Emphasizes the development of skills for integrating complex data into a plan of action used to direct a firm. Applies concepts learned in previous management, marketing, project management, communications, finance, accounting, and economics courses.

MGMT 480 - Co-op Ed: Applied Business Management (3-12)
In this internship course, students will gain work experience in area businesses related to management. The purpose of the course is to give students enrolled in the BAS in Business Management degree program a structure to reflect on their internship experience and apply their learning in a real-world environment. Students will integrate theory and practice, develop skills, and expand career knowledge while earning credit toward the BAS in Business Management degree. Instructor consent required; meet with the Business Dept. Co-op Coordinator before registering.

MGMT 488 - Project Management 2 (4)
This course is the second in the Project Management sequence, and is designed to provide an opportunity for students to apply the foundational knowledge and skills from Project Management 1. Working in teams, students will execute, monitor, and close a project. Emphasis will be on successful project execution and project evaluation. This course will also cover use of project management software and working in virtual teams.
Prerequisite: MGMT 388.

MTH-Mathematics

MTH 010 - Whole Numbers, Fractions, Decimals (3)
Students will review whole number skills and learn to compute with fractions and decimals. Concepts, problem solving, and applications will be integrated into the curriculum to increase students' abilities and to extend their understanding of basic math principles in preparation for higher level math courses. Effective math study strategies and math anxiety issues will be discussed to increase students' confidence in their abilities to succeed in math classes and to use math in daily life. MTH010 is intended for students who need to strengthen their basic math skills before moving on to MTH020.

MTH 020 - Math Renewal (4)
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 with a C- or better within the past two years OR equivalent placement via the math placement process.

MTH 025 - Basic Mathematics Applications (3)
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.

MTH 052 - Math for Health and Physical Sciences (4)
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.

MTH 060 - Beginning Algebra (4)
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 (p. 153). MTH 060 (p. 153) and MTH 065 (p. 153) provide a two-term sequence preparatory to Intermediate Algebra (MTH 095 (p. 154)).
Prerequisite: MTH 020 with a C- or better within the past two years OR equivalent placement via the math placement process.

MTH 065 - Elementary Algebra (4)
This is the second term of a two-term sequence in introductory algebra. Students having successfully completed MTH 060 (p. 153) should continue with this course in preparation for taking Intermediate Algebra (MTH 095 (p. 154)). Topics include systems of linear equations, exponents, polynomials, factoring, quadratic equations, introduction to functions, and rational expressions.
Prerequisite: MTH 060 with a C- or better within the past two years OR equivalent placement via the math placement process.

MTH 070 - Introductory Algebra (5)
This course is a fast-paced review of algebra for students with recent algebra experience. For students without recent algebra experience, MTH 060 (p. 153) and MTH 065 (p.

153) provide a more relaxed and thorough introduction to the subject. (Qualified students who are unsure whether to take MTH 070 (p. 153) or MTH 060 (p. 153) should seek the advice of an academic advisor.) MTH 070 (p. 153) prepares students for Intermediate Algebra (MTH 095 (p. 154)). 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 into by the college's Math Placement Process within the past two years.

MTH 075 - Applied Algebra for Technicians (4)
MTH 075 Applied Algebra is a first course in algebra skills needed for technical mathematics, which includes the following: signed numbers, positive and negative exponents, scientific notation, forming expressions and equations from real situations, ratio and proportion, the Cartesian coordinate systems, rates of change, slope, linear equations, linear systems, quadratic equations, graphs, tables, charts, data analysis and problem solving. The course will emphasize clear communication of mathematical results. Application problems are realistic with some data to be collected, analyzed and discussed in group setting with results submitted in written form.

MTH 085 - Applied Geometry for Technicians (4)
MTH 085 Applied Geometry includes the following: linear, square, and cubic units, dimensional analysis in metric and U.S. 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 (p. 154) 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.

MTH 095 - Intermediate Algebra (5)
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 (p. 154), MTH 105Z (p. 154)-MTH 107 (p. 154), MTH 111Z (p. 154), or MTH 211 (p. 154) or MTH 213 (p. 154).
Prerequisite: MTH 065 or MTH 070 with a C- or better within the past two years OR equivalent placement via the math placement process.

MTH 097 - Geometry (4)
A course in informal geometry covering the study of lines, planes, polygons, circles, solids, area, perimeter, volume, surface area, Pythagorean Theorem, congruence, and similar figures. Applications and exploration of geometry topics rather than proofs will be stressed. This course is strongly recommended for MTH 111Z (p. 154) and MTH 112Z (p. 154).
Prerequisite: MTH 095 or MTH 111Z with a C- or better within the past two years OR equivalent placement via the math placement process.

MTH 098 - Math Literacy (5)
In this course students communicate quantitatively using large numbers, percentages, and rates of change. Students perform calculations using formulas and dimensional analysis, and read and create graphs to present real-world data.

MTH 105A - Support for Math In Society (1)
This support course focuses on the foundational skills and concepts needed to be persistent and successful in MTH 105Z (Math in Society). Students will receive appropriate support as needed in arithmetic, algebra, problem-solving, technology, and study skills in an interactive setting. This course is intended to be taken concurrently with MTH 105Z.
Corequisite: MTH 105Z.

MTH 105Z - Math in Society (4)
An exploration of present-day applications of mathematics focused on developing numeracy. Major topics include quantitative reasoning and problem-solving strategies, probability and statistics, and financial mathematics; these topics are to be weighted approximately equally. This course emphasizes mathematical literacy and communication, relevant everyday applications, and the appropriate use of current technology. This course is part of the Oregon Common Course Numbering System.
Prerequisite: Recommended: MTH 098 for students whose high-school GPA is less than 2.6 or who have not taken a math course for more than two years.

MTH 106 - Math in Society 2 (4)
An exploration of present-day applications of mathematics focused on developing numeracy. Major topics include linear and exponential modeling, scheduling, history and uses of geometry. MTH 105Z, 106, and 107 may be taken in any order.
Prerequisite: Recommended: MTH 098 for students whose high-school GPA is less than 2.6 or who have not taken a math course for more than two years.

MTH 107 - Math in Society 3 (4)
An exploration of present-day applications of mathematics focused on developing numeracy. Major topics include at least three of the following: voting systems, methods of fair division, apportionment, networks, graph theory. MTH 105Z, 106, 107 may be taken in any order.
Prerequisite: Recommended: MTH 098 for students whose high-school GPA is less than 2.6 or who have not taken a math course for more than two years.

MTH 111Z - Precalculus I: Functions (4)
A course primarily designed for students preparing for trigonometry or calculus. This course focuses on functions and their properties, including polynomial, rational, exponential, logarithmic, piecewise-defined, and inverse functions. These topics will be explored symbolically, numerically, and graphically in real life applications and interpreted in context. This course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology. This course is part of the Oregon Common Course Numbering System.
Prerequisite: MTH 095 with a C- or better within the past two years OR equivalent placement via the math placement process.

MTH 112Z - Precalculus II: Trigonometry (4)
A course primarily designed for students preparing for calculus and related disciplines. This course explores trigonometric functions and their applications as well as the language and measurement of angles, triangles, circles, and vectors. These topics will be explored symbolically, numerically, and graphically in real-life applications and interpreted in context. This course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology. This course is part of the Oregon Common Course Numbering System.
Prerequisite: MTH 111Z with a C- or better within the past two years OR equivalent placement via the math placement process.

MTH 211 - Fundamentals of Elementary Mathematics 1 (4)
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 with a C- or better within the past two years OR equivalent placement via the math placement process.

MTH 212 - Fundamentals of Elementary Mathematics 2 (4)
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 with a C- or better within the past two years.

MTH 213 - Fundamentals of Elementary Mathematics 3 (4)
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 with a C- or better within the past two years.

MTH 231 - Discrete Mathematics 1 (4)
This course covers formal logic, methods of proof, sequences, recursion, and mathematical induction. Also included are combinatorics, set and graph theory, and trees.
Prerequisite: MTH 112Z with a C- or better within the past two years or equivalent placement via the math placement process.

MTH 232 - Discrete Mathematics 2 (4)
This course covers functions, relations, Pigeonhole principle, isomorphisms, Boolean algebras, and recursion.
Prerequisite: MTH 231 with a C- or better within the past two years.

MTH 241 - Elementary Calculus 1 (4)
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 111Z with a C- or better within the past two years OR equivalent placement via the math placement process.

MTH 242 - Elementary Calculus 2 (4)
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 C- or better within the past two years.

MTH 251 - Differential Calculus (5)
This course explores limits, continuity, derivatives, and their applications for real-valued functions of a single variable. These topics will be explored graphically, numerically, and symbolically in real-life applications. This course emphasizes abstraction, problem-solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of technology.
Prerequisite: MTH 112Z with a C- or better within the past five years OR equivalent placement via the math placement process.

MTH 252 - Integral Calculus (5)
This course explores Riemann sums, definite integrals, and indefinite integrals for real-valued functions of a single variable. These topics will be explored graphically, numerically, and symbolically in real-life applications. This course emphasizes abstraction, problem-solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of technology.
Prerequisite: MTH 251 or equivalent course with a C- or better within the past five years.

MTH 253 - Calculus: Sequences and Series (4)
This course explores real-valued sequences and series, including power and Taylor series. Topics include convergence and divergence tests and applications. These topics will be explored graphically, numerically, and symbolically. This course emphasizes abstraction, problem-solving, reasoning, communication, connections with other disciplines, and the appropriate use of technology.
Prerequisite: MTH 252 with a C- or better within the past five years.

MTH 254 - Vector Calculus 1 (Introduction to Vectors and Multidimensions) (4)
This course provides a major emphasis on three-dimensional vectors and differential calculus of several variables.
Prerequisite: MTH 252 with a C- or better within the past five years.

MTH 255 - Vector Calculus 2 (Introduction to Vector Analysis) (4)
This course provides a major emphasis on multiple integration, vector fields, and applications.
Prerequisite: MTH 254 with a C- or better within the past five years.

MTH 256 - Applied Differential Equations (4)
An introductory course in differential equations and their applications. The course covers methods of solving ordinary differential equations including first order linear and nonlinear equations, second order linear equations, and higher order equations. Students are also introduced to the method of Laplace transforms. Applications to science and engineering are emphasized.
Prerequisite: MTH 254 with a C- or better within the past five years.

MTH 261 - Introduction to Linear Algebra (2)
The course covers systems of linear equations, vectors, matrices, determinants, linear transformations, dot product and cross product, and eigenvalues and eigenvectors.
Prerequisite: MTH 252 with a C- or better within the past five years.

MTH 280 - Co-op Ed: Mathematics (3-12)
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.
Prerequisite: Instructor Consent.

MUL-Multimedia

MUL 101 - Introduction to Media Arts (3)
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)
An 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)
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 107 - Computer Animation 1 (4)
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.

MUL 110 - Introduction to Graphic Design (1)
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.

MUL 119 - Introduction to Animation (3)
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 120 - Audio Production (4)
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.

MUL 151 - Video Production 1: Camera (3)
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, MUL 105, MUL 120, FA 250.

MUL 205 - Design Studio (3)
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: MUL 229, MUL 232 and ART 289.

MUL 207 - Computer Animation 2 (4)
A comprehensive exploration of 3D computer animation arts: Three-dimensional space and form, model creation, texturing, lighting, scene composition, animation and rendering

strategies.
Prerequisite: FA 221.

MUL 208 - Motion Capture for Animation (4)
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)
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)
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)
An advanced photography class that builds upon the skills learned in MUL105. Students will refine their use of digital single lens reflex (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. 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)
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)
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)
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)
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)
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.

MUL 228 - Graphic Design 1 (3)
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 and acceptance into the second year of the graphic design program.

MUL 229 - Graphic Design 2 (3)
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: MUL 228.

MUL 230 - Graphic Design 3 (3)
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: MUL 229.

MUL 231 - Graphic Design Production 1 (3)
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.

MUL 232 - Graphic Design Production 2 (3)
An intermediate course in digital production with emphasis on professional standards of production.
Prerequisite: MUL 231.

MUL 233 - Graphic Design Production 3 (3)
An advanced course in digital production with emphasis on professional standards of production.
Prerequisite: MUL 232.

MUL 246 - Multimedia Design Production 1 (3)
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, MUL 210, and MUL 151. (MUL 151 may be waived with instructor consent for students in the Animation Option AAS).

MUL 247 - Multimedia Design Production 2 (3)
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: MUL 246, FA 261, and MUL 212.

MUL 251 - Video Production 2: Editing (3)
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: MUL 151.

MUL 254 - Fundamentals of Lighting (3)
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.

MUL 256 - Lighting for Photography (3)
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, digital output, and editing.
Prerequisite: MUL 105 or instructor consent.

MUL 280 - Co-op Ed: Web Design (3-12)
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 consent.

MUL 280GD - Co-op Ed: Graphic Design (3-12)
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 consent.

MUL 280M - Co-op Ed: Multimedia (3-12)
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.

MUP-Music Performance

MUP 100 - Individual Lessons (1)
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 consent or have taken the course within the past year.

MUP 171 - Individual Lessons: Piano (First-year level) (1)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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.

MUS-Music

MUS 101 - Music Fundamentals (3)
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.
Corequisite: Recommended: MUS 131 or MUS 137.

MUS 103 - Songwriting Techniques and Analysis 1 (3)
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.
Prerequisite: MUS 101 or MUS 111.

MUS 107 - Audio Engineering 1 (3)
This is a hands-on course that provides students with tools and techniques to work as recording engineers in a recording environment. The instructor will work with students in a recording studio, using recording equipment. Topics 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 (3)
This is a hands-on course that provides students with tools and techniques to work as recording engineers in a recording environment, such as in a recording studio or at a live concert. The instructor will work with students in a recording studio, using recording equipment. Topics include: operation of outboard mic preamps and signal processors, signal flow and signal path set-up within the control room, microphone placement, basic multitrack recording of instruments, using the mixing console, and tracking to different mediums, etc.
Prerequisite: MUS 107.

MUS 110 - Audio Engineering 3 (3)
This is a hands-on course that provides students with tools and techniques to work as recording engineers in a recording environment. The instructor will work with students in a recording studio, using recording equipment. For this course, students will work on a large-scale recording project demonstrating the skills learned. 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)
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)
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)
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)
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)
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)
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 (3)
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 (3)
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)
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)
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)
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)
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)
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)
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)
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)
Students will study elements of jazz harmony, jazz standards and classic recordings of jazz artists to build background and a platform for development of skills in jazz improvisation. Students should have considerable skill on their instrument and knowledge of major key signatures and major scales. MUS 101 - Music Fundamentals or instructor approval required. May be repeated up to 12 total credits.

MUS 201 - Exploring Music: Introduction to Music History (3)
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)
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)
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)
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)
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)
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)
Emphasis is on musical language of the 20th century, including modes, atonality, serialism, set theory, new forms and new organizations of rhythm and meter. Designed to be taken with MUS 216 and MUS 226 concurrently.
Prerequisite: MUS 212. Corequisite: MUS 216 and MUS 226.

MUS 214 - Keyboard Skills 2 (First Term) (2)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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 280 - Co-op Ed: Music (3-12)
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 consent.

MUS 291 - Chamber Choir (2)
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)
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: Ability to read music or recommended concurrent enrollment in MUS 101.

MUS 294 - Jazz Ensemble (2)
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)
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: Recommended: audition and prior ensemble experience.

MUS 297 - Concert Choir (2)
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.

NRG-Energy Management

NRG 101 - Introduction to Energy Management (3)
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 105 - Green Careers Exploration (3)
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)
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)
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)
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 higher OR MTH 111Z or higher math placement via the math placement process OR department approval.

NRG 121 - Air Conditioning System Analysis (3)
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)
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)
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)
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 department approval.

NRG 131 - Lighting Fundamentals (3)
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)
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 181 - Direct Digital Controls 1 (4)
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)
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)
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)
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)
Students will gain functional knowledge of a variety of commercial building lighting control systems ranging from simple manual on/off switching to complex automatically-controlled systems to newer digitally controlled systems. Students will identify and describe lighting systems/types/technology, including control systems with emphasis on comparing the benefits of one system versus another. Students will modify control system parameters based on original design or new control sequences.

NRG 280 - Co-op Ed: Energy Management (3-12)
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-Nursing

NRS 110A - Foundations of Health Assessment and Health Promotion (4)
This course introduces the learner 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, BI 234, FN 225, PSY 215, WR 121Z, WR 122Z AND MTH 095 or higher, all C or better, and admission into the Nursing Program. Corequisite: NRS 110B.

NRS 110B - Foundations of Health Assessment and Health Promotion - Clinical Lab (5)
Clinical Lab required for NRS110A.
Prerequisite: Admission into the Nursing Program. Corequisite: NRS 110A.

NRS 111A - Foundations of Nursing in Chronic Illness 1 (2)
This course introduces assessment and common interventions (including technical procedures) for clients with chronic illnesses common across the life span in major ethnic groups. 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 C or better and admission into the Nursing Program. Corequisite: NRS 111B.

NRS 111B - Foundations of Nursing in Chronic Illness 1 - Clinical Lab (4)
Clinical Lab required for NRS111A.
Prerequisite: NRS 110A and NRS 110B with a C or better and admission into the Nursing Program. Corequisite: NRS 111A.

NRS 112A - Foundations of Nursing in Acute Care I (2)
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 and NRS 111B, and one of the following: BI 101 (Cell Systems or Intro to Genetics), BI 102 (Genetics and Society), BI 112, or BI 221, all with a C or better and admission into the Nursing Program. Corequisite: NRS 112B.

NRS 112B - Foundations of Nursing in Acute Care I - Clinical Lab (4)
Clinical Lab required for NRS112A.
Prerequisite: Admission into the Nursing Program. Corequisite: NRS 112A.

NRS 221A - Nursing in Chronic Illness 2 and End-of-Life Care (4)
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 clients 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 clients with chronic mental illness as well as other chronic conditions and disabilities affecting functional status and family relationships.
Prerequisite: NRS 112A, NRS 112B, NRS 234, NRS 235, NRS 237, NRS 238, NRS 239. One of the following: BI 101 (Cell Systems or Intro to Genetics), BI 102 (Genetics and Society), BI 112, or BI 221. All with a C or better and admission into the Nursing Program.

Corequisite: NRS 221B.

NRS 221B - Nursing in Chronic Illness 2 and End-of-Life Care - Clinical Lab (5)
Clinical Lab required for NRS221A.
Prerequisite: Admission into the Nursing Program. Corequisite: NRS 221A.

NRS 222A - Nursing in Acute Care II and End-of-Life (4)
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 and admission into the Nursing Program.
Corequisite: NRS 222B.

NRS 222B - Nursing in Acute Care II and End-of-Life - Clinical Lab (5)
Clinical Lab required for NRS222A.
Prerequisite: Admission into the Nursing Program. Corequisite: NRS 222A.

NRS 224A - Integrative Practicum (2)
This course is designed to formalize the clinical judgments, knowledge and skills necessary in safe, registered nurse practice. The preceptor model provides a context that allows the student to experience the nursing work world in a selected setting, balancing the demands of job and life long learner. Faculty/preceptor/student analysis and reflection throughout the experience provide the student with evaluative criteria against which they can judge their own performance and develop a practice framework. Required for AAS and eligibility for RN licensure.
Prerequisite: NRS 222A and NRS 222B and admission into the Nursing Program.
Corequisite: NRS 224B.

NRS 224B - Integrative Practicum (7)
Practicum required for NRS 224A.
Prerequisite: Admission into the Nursing Program. Corequisite: NRS 224A.

NRS 234 - Pathophysiological Processes for Nursing 1 (2)
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 & BI 233) OR (BI 112 & BI 102 - Genetics & Society section) OR (BI 101 - Cell Systems section & BI 233) OR (BI 221 & BI 233) OR (BI 101 - Intro to Genetics section & BI 233) OR (BI 101 - Intro to Genetics section & BI 102 - Genetics and Society section); AND BI 234 AND admission into the Nursing Program.

NRS 235 - Pathophysiological Processes for Nursing 2 (2)
This sequel to Pathophysiological Processes for Nursing 1 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 for Nursing 1.
Prerequisite: NRS 234 and admission into the Nursing Program.

NRS 236 - Pathophysiological Processes for Nursing 3 (2)
This sequel to Pathophysiological Processes for Nursing 2 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 for Nursing 2.
Prerequisite: NRS 235.

NRS 237 - Clinical Pharmacology for Nursing 1 (2)
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.
Prerequisite: BI 233, BI 234 (can be taken as a corequisite), both with C grades or higher; Admission into the Nursing Program.

NRS 238 - Clinical Pharmacology for Nursing 2 (2)
This sequel to Clinical Pharmacology for Nursing 1 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 for Nursing 1.
Prerequisite: NRS 237 and admission into the Nursing Program.

NRS 239 - Clinical Pharmacology For Nursing 3 (2)
This sequel to Clinical Pharmacology for Nursing 2 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 for Nursing 2.

NRS 280 - Co-op Ed: Nursing (2-12)
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: BI 233 and BI 234 (BI 234 may be taken before or as a corequisite).

OST-Occupational Skills Training

OST 280 - Co-op Ed: Occupational Skills (1-12)
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.

PEAT-Physical Education Athletics

PEAT 100 - Cross Country - Women's Conditioning 1 (1)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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. Repeatable up to 12 credits.

PEAT 125 - Basketball – Men's Conditioning 1 (1)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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 experience.

PEAT 205 - Cross Country - Men's Conditioning 2 (1)
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 or similar experience.

PEAT 206 - Cross Country - Men's Skills 2 (1)
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 or similar experience.

PEAT 210 - Volleyball - Women's Conditioning 2 (1)
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 or similar experience.

PEAT 211 - Volleyball - Women's Skills 2 (1)
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 or similar experience.

PEAT 215 - Soccer - Women's Conditioning 2 (1)
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)
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)
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 or similar experience.

PEAT 221 - Soccer - Men's Skills 2 (1)
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 or similar experience.

PEAT 225 - Basketball - Men's Conditioning 2 (1)
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)
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)
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)
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)
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)
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)
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 140 or similar experience.

PEAT 241 - Track and Field - Men's Skills 2 (1)
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 or similar experience.

PEAT 245 - Baseball - Men's Conditioning 2 (1)
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)
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.

PEO-Physical Ed Outdoor Ed

PEO 101 - Downhill Skiing/Snowboarding Beg.-Int.-Adv (1)
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.

PE-Physical Education

PE 101 - Cardio Core Conditioning (1)
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. Repeatable up to 12 credits.

PE 102 - Combination Aerobics (1)
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)
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)
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)
Step and 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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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 124 - Bowling (1)
Instruction and practice in the fundamentals skills and techniques used for both straight and hook deliveries will be covered. Rules, scoring and etiquette will be addressed. This course is designed for beginning bowlers and is held off campus. Repeatable up to 12 credits.

PE 125 - Fencing Beginning (1)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
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 consent.

PE 234 - Tai Chi Chuan Intermediate (1)
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 consent.

PE 237 - Yoga Intermediate (1)
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)
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)
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.

PE 280C - Co-op Ed: Coaching (3-12)
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 consent for site and credit load.

PHL-Philosophy

PHL 201 - Ethics (4)
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 201H - Ethics-Honors (4)
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. 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 PHL 201 and PHL 201H.

PHL 202 - Theories of Knowledge (4)
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)
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)
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.

PH-Physics

PH 101 - Fundamentals of Physics (4)
This 'Fundamentals of Physics' course provide an introduction to a broad range of fundamental physics concepts. PH 101 is recommended for anyone seeking a good basic level of physics literacy. The sequence is designed for non-science majors, but also serves prospective science majors who want to gain a better conceptual grounding before taking General Physics. Emphasis is on everyday phenomena and conceptual understanding. 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. PH 101, 102, and 103 can be taken in any order.
Prerequisite: MTH 060 or above with C- or better OR equivalent placement via the math placement process. OR corequisite CG 123.

PH 102 - Fundamentals of Physics (4)
This 'Fundamentals of Physics' courses provide an introduction to a broad range of fundamental physics concepts. PH 102 is recommended for anyone seeking a good basic level of physics literacy. The sequence is designed for non-science majors, but also serves prospective science majors who want to gain a better conceptual grounding before taking General Physics. Emphasis is on everyday phenomena and conceptual understanding PH 102 focuses on the science of heat and thermodynamics, waves and sound, and electricity and magnetism. The class includes labs, demonstrations, discussion, and individual and group activities. PH 101, 102, and 103 can be taken in any order.
Prerequisite: MTH 060 or above with C- or better OR equivalent placement via the math placement process. OR corequisite CG 123.

PH 103 - Fundamentals of Physics (4)
This 'Fundamentals of Physics' courses provide an introduction to a broad range of fundamental physics concepts. PH 103 is recommended for anyone seeking a good basic level of physics literacy. The sequence is designed for non-science majors, but also serves prospective science majors who want to gain a better conceptual grounding before taking General Physics. Emphasis is on everyday phenomena and conceptual understanding. 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. The class includes labs, demonstrations, discussion, and individual and group activities. PH 101, 102, and 103 can be taken in any order.
Prerequisite: MTH 060 or above with C- or better OR equivalent placement via the math placement process. OR corequisite CG 123.

PH 201 - General Physics (5)
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 112Z with a C- or better. OR placement into MTH 251 via the math placement process.

PH 202 - General Physics (5)
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 a C- or better.

PH 203 - General Physics (5)
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 a C- or better.

PH 211 - General Physics with Calculus (5)
PH 211 is the first term of the calculus-based General Physics sequence, PH 211, 212, 213. The sequence provides an introduction to fundamental physics concepts, analysis, exploration, calculation, and problem-solving that is required for engineering and physics majors, and also meets any existing General Physics requirements for students majoring in mathematics, computer science, health, and other science majors. PH 211 focuses on translational motion, particularly through conceptual understanding, visual and mathematical representation, calculation, and problem-solving. PH 211 introduces the nature of science, Classical Newtonian Mechanics, Work-Energy Principle, Conservation of Energy, Impulse-Momentum Principle, and Conservation of Momentum. The class includes labs, demonstrations, discussions, and individual and group activities.
Prerequisite: MTH 251 with a C- or better (or may be taken as a corequisite). Corequisite: Math 251 (or the equivalent calculus course) must be taken concurrently or it must have been successfully completed previously.

PH 212 - General Physics with Calculus (5)
PH 212 is the second term of the calculus-based General Physics sequence, PH 211, 212, 213. The sequence provides an introduction to fundamental, concepts, analysis, exploration, representations, calculation, and problem-solving that is required for engineering and physics majors, and also meets any existing General Physics requirements for students majoring in mathematics, computer science, health, and other science majors. PH 212 focuses on motion and phenomena in Rotation, Fluids, Special Relativity, Oscillations, Waves, Sound, Light, and Optics. The focus is on identifying conceptual frameworks and applying them through creating visual and mathematical representation, calculation, and problem-solving. The class includes labs, demonstrations, discussion, and individual and group activities.
Prerequisite: PH 211 with a C- or better and MTH 252 (or math may be taken as a corequisite). Corequisite: Math 252 (or equivalent) must be taken concurrently or successfully completed previously.

PH 213 - General Physics with Calculus (5)
PH 213 is the third term of the calculus-based General Physics sequence, PH 211-212-213. The sequence provides an introduction to methods, concepts, representations, problem-solving and problem-posing of physics that is required for engineering and physics majors, and also meets any existing General Physics requirements for students majoring in mathematics, computer science, health, and other science majors. This course focuses on Classical Electricity & Magnetism in terms of conceptual understanding, calculation, problem solving, and use of visual and mathematical representation involving differential and integral calculus. The class includes labs, demonstrations, discussion, and individual and group activities.
Prerequisite: PH 212 with a C- or better.

PN-Practical Nursing

PN 101A - Practical Nursing 1 (7)
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 121Z, HP 100, BI 233, PSY 215 and (MTH 052 or MTH 065 or MTH 095 or higher or placement test), all with a grade of C or better and admission into the Practical Nursing Program. Corequisite: PN 101B.

PN 101B - Practical Nursing 1 Lab (5)
Clinical lab required for PN101A.
Prerequisite: Admission into the Practical Nursing Program. Corequisite: PN 101A.

PN 102A - Practical Nursing 2 (7)
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 and admission into the Practical Nursing Program. Corequisite: PN 102B.

PN 102B - Practical Nursing 2 Lab (5)
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.
Prerequisite: Admission into the Practical Nursing Program. Corequisite: PN 102A.

PN 103A - Practical Nursing 3 (7)
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 and admission into the Practical Nursing Program. Corequisite: PN 103B.

PN 103B - Practical Nursing 3 Practicum (6)
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.
Prerequisite: Admission into the Practical Nursing Program. Corequisite: PN 103A.

PS-Political Science

PS 101 - Modern World Governments (4)
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 102 - Thinking Like a Social Scientist (4)
Illustrates how the ways social scientists think — using quantitative, qualitative, and interpretive methods — help to sharpen thinking for many contexts and careers.

PS 201 - U.S. Government and Politics (4)
Theoretical introduction to and description and analysis of U.S. politics and government, including the Constitution, federalism, U.S. institutions of government, civil liberties and civil rights, political participation, interest groups, parties, elections, public opinion, & the media.

PS 203 - State and Local Government and Politics (3)
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 203H - State and Local Government and Politics-Honors (3)
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. 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 203 and PS 203H.

PS 205 - Introduction to International Relations (4)
Introduction to the theoretical and methodological tools for the analysis of world politics and an analysis of the international system and factors affecting world politics.

PS 206 - Introduction to Political Thought (4)
Introduction to political philosophy. Major ideas and issues of selected political thinkers.

PS 225 - Political Ideology (4)
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)
This course introduces students to basic concepts of the legal system by focusing on the civil rights and liberties of American citizens. Among the legal principles covered are how the court system is organized, the differences between civil and criminal law, and how court cases are appealed. Fundamental civil rights and liberties covered include the issues of free speech, unreasonable search and seizure, the right to counsel, the impact of the Patriot Act on these rights, the right to privacy including a woman's right to control her own body, freedom of religion, the separation of church and state, and the equal protection of the laws dealing with discrimination in America.

PS 280 - Co-op Ed: Political Science (2-12)
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)
This internship is for students anticipating a legal career. Learn and work with lawyers, legal assistants and other legal professionals in areas of legal administration, research, working with clients and the courts. A one term commitment is required, but course can be repeated.

PS 297 - Environmental Politics (4)
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.

PS 297H - Environmental Politics-Honors (4)
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 297H.

PSY-Psychology

PSY 201HZ - Introduction to Psychology I-Honors (4)
Introduction to the science and application of psychology. Emphasis will be placed on psychological concepts, theories, and principles related to: Research Methods, Behavioral Neuroscience, Consciousness, Sensation/Perception, Learning, Memory, Thinking and Intelligence, and related topics. 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 201Z and PSY 201HZ.

PSY 201Z - Introduction to Psychology I (4)
Introduction to the science and application of psychology. Emphasis will be placed on psychological concepts, theories, and principles related to: Research Methods, Behavioral Neuroscience, Consciousness, Sensation/Perception, Learning, Memory, Thinking and Intelligence, and related topics. This course is part of the Oregon Common Course Numbering System.

PSY 202HZ - Introduction to Psychology II-Honors (4)
Introduction to the science and application of psychology. Emphasis will be placed on psychological concepts, theories, and principles related to: Personality, Social Psychology, Health and Well-Being, Motivation and Emotion, Disorders, Therapies, Lifespan Development, and related topics. See www.lanecc.edu/honors for information. Students cannot receive credit for both PSY 202Z and PSY 202HZ.

PSY 202Z - Introduction to Psychology II (4)
Introduction to the science and application of psychology. Emphasis will be placed on psychological concepts, theories, and principles related to: Personality, Social Psychology, Health and Well-Being, Motivation and Emotion, Disorders, Therapies, Lifespan Development, and related topics.

PSY 212 - Learning and Memory (3)
Recommend at least one introductory psychology course before taking this course. Lectures, demonstrations, and review of experimental research in the areas of animal and human learning. Variables that influence learning will also be considered including stimulus-response connections, discrimination, chaining, verbal association, concept formation, and problem solving. Memory, transfer of learning, forgetting, insight and observational learning will also be covered.
Prerequisite: Recommended: one introductory psychology course before taking this course.

PSY 215 - Lifespan Developmental Psychology (4)
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 239 - Introduction to Abnormal Psychology (3)
Recommend at least one introductory psychology course before taking this course. Introduction to Abnormal Psychology bridges the gap between mental health-related concepts touched upon in the General Psychology course and the more in-depth analysis of issues relating to emotional disturbance covered in the typical upper division class in Abnormal Psychology. Major topics to be covered will include the historical and current status of behavior disorders, introductory statistics regarding the incidence and classification of persons who are emotionally disturbed and a framework for understanding such phenomena.
Prerequisite: Recommended: one introductory psychology course before taking this course.

PSY 280 - Co-op Ed: Psychology (3-12)
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-Physical Therapist Assistant

PTA 100 - Introduction to Physical Therapy (3)
This course introduces the roles and responsibilities of physical therapy providers. Topics include history, practice patterns, laws, professionalism, communication, and information literacy.
Prerequisite: PTA 101L or PTA 101LR with a C or higher (may be taken as a corequisite) and admission into the PTA Program. Corequisite: PTA 101.

PTA 101 - Introduction to Clinical Practice 1 (5)
Admission into the PTA program required. 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: PTA 101L or PTA 101LR with a C or better (may be taken as a corequisite).
Corequisite: PTA 100.

PTA 101L - Introduction to Clinical Practice 1 Lab (2)
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 PTA program. Corequisite: PTA 101.

PTA 101LR - Introduction to Clinical Practice 1 Lab-Rogue (2)
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 the PTA Program. Corequisite: PTA 101.

PTA 103 - Introduction to Clinical Practice 2 (5)
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 choice of: Bl 102 (Human Body section), Bl 233 or HP 152. All with a C-/P and admission into the PTA Program. Corequisite: PTA 103L or PTA 103LR.

PTA 103L - Introduction to Clinical Practice 2 Lab (2)
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: PTA 101 and PTA 101L with a C or better (both may be taken as a corequisite) and admission into the PTA Program. Corequisite: PTA 103.

PTA 103LR - Introduction to Clinical Practice 2 Lab-Rogue (2)
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. Course taught at Rogue Community College.
Prerequisite: PTA 101 and PTA 101LR with a C or better (both may be taken as a

corequisite). Corequisite: PTA 103.

PTA 104 - PT Interventions - Musculoskeletal Conditions (5)
This course is designed to assist students in gaining a greater understanding of musculoskeletal health conditions, and their effects across the lifespan. Anatomy, physiology, etiology, and theory are integrated with clinical considerations for effective physical therapy treatment.
Prerequisite: PTA 103 and PTA 132 with a C or better (both also may be taken as a corequisite) and admission into the PTA Program. Corequisite: PTA 104L or PTA 104LR.

PTA 104L - PT Interventions - Musculoskeletal Conditions Lab (2)
This co-requisite lab for PTA 104 allows for practical application of physical therapy interventions related to musculoskeletal conditions. Orthotics/prosthetics, traction, balance, therapeutic exercise, body mechanics, patient safety education/home management, and gait training are also covered.
Prerequisite: PTA 132 and (PTA 132L or PTA 132LR) with a C or better (both also may be taken as a corequisite) and admission into the PTA Program. Corequisite: PTA 104.

PTA 104LR - PT Interventions - Musculoskeletal Conditions Lab-Rogue (2)
This co-requisite lab for PTA 104 allows for practical application of physical therapy interventions related to musculoskeletal conditions. Orthotics/prosthetics, traction, balance, therapeutic exercise, body mechanics, patient safety education/home management, and gait training are also covered.
Prerequisite: PTA 132 and (PTA 132L or PTA 132LR) with a C or better (both also may also be taken as a corequisite). Corequisite: PTA 104.

PTA 132 - Applied Kinesiology 1 (3)
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: PTA 101 and (PTA 101L or PTA 101LR) with a C or better (both also may be taken as a corequisite) and admission into the PTA Program. Corequisite: PTA 132L or PTA 132LR.

PTA 132L - Applied Kinesiology 1 Lab (2)
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: PTA 101 and PTA 101L with a C or better (both also may be taken as a corequisite) and admission into the PTA Program. Corequisite: PTA 132.

PTA 132LR - Applied Kinesiology 1 Lab (2)
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 with a C or better (both also may be taken as a corequisite). Corequisite: PTA 132.

PTA 133 - Applied Kinesiology 2 (3)
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: PTA 132 and (PTA 132L or PTA 132LR) with a C or better (both also may be taken as a corequisite). Corequisite: PTA 133L or PTA 133LR.

PTA 133L - Applied Kinesiology 2 Lab (2)
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 C or better. Corequisite: PTA 133.

PTA 133LR - Applied Kinesiology 2 Lab (2)
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: PTA 132 AND PTA 132LR with a C or better (both also may be taken as a corequisite). Corequisite: PTA 133.

PTA 200 - Professionalism, Ethics, and Exam Preparation (4)
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 required. Corequisite: PTA 203.

PTA 201 - Physical Therapy and the Older Adult (2)
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 the PTA Program; second-year student required.

PTA 203 - Contemporary Topics in Physical Therapy (2)
This course explores contemporary issues affecting clinical and professional physical therapy practice and impacts on the PTA. Course culminates with a public service learning project presentation to the College and clinical community.
Prerequisite: Admission into the PTA Program; second-year student required. Corequisite: PTA 200.

PTA 204 - PT Interventions - Neuromuscular Conditions (5)
This course is designed to assist PTA students in gaining a greater understanding of the various neuromuscular conditions and mental health conditions encountered in physical therapy; clinical problem-solving and communication are highly emphasized.
Prerequisite: PTA 104 and (PTA 104L or PTA 104LR) OR PTA 133 and (PTA 133L or PTA 133LR), all with a C or better (all may be taken as corequisites) and admission into the PTA Program. Corequisite: PTA 204L.

PTA 204L - PT Interventions - Neuromuscular Conditions Lab (2)
This co-requisite lab for PTA 204 allows students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with neuromuscular conditions.
Prerequisite: PTA 104, PTA 104L, PTA 133, and PTA 133L, all with a C or better and admission into the PTA Program. Corequisite: PTA 204.

PTA 204LR - PT Interventions - Neuromuscular Conditions Lab-Rogue (2)
This co-requisite lab for PTA 204 allows students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with neuromuscular conditions.
Prerequisite: PTA 104, PTA 104LR, PTA 133, and PTA 133LR, all with a C or better.
Corequisite: PTA 204.

PTA 205 - PT Interventions - Complex Health Conditions (4)
This course investigates physiological anomalies, clinical presentation and physical therapy treatment approaches for patients with complex health conditions. Students advance clinical decision-making using case studies, treatment models, and evidence-based literature.
Prerequisite: PTA 104 and (PTA 104L or PTA 104LR) and PTA 133 and (PTA 133L or PTA 133LR), all with a grade of C or better (all may be taken as corequisites) and admission into the PTA Program. Corequisite: PTA 205L or PTA 205LR.

PTA 205L - PT Interventions - Complex Health Conditions Lab (2)
This co-requisite lab for PTA 205 allows students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with complex health and integument health conditions.
Prerequisite: PTA 104, PTA 104L, PTA 133, and PTA 133L, all with a C or better.

PTA 205LR - PT Interventions - Complex Health Conditions Lab-Rogue (2)
This co-requisite lab for PTA 205 allows students to practice clinical skills, tests, and measures for improving outcomes in patients/clients with complex health and integument health conditions.
Prerequisite: PTA 104, PTA 104LR, PTA 133, and PTA 133LR, all with a C or better.
Corequisite: PTA 205.

PTA 206 - Physical Therapist Assistant Seminar (2)
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.
Prerequisite: PTA 103 and PTA 132, with a C or better and admission into the PTA Program.

PTA 280A - Co-op Ed: Physical Therapist Assistant - First Clinical Experience (4-8)
Second year PTA students apply PT interventions under PT/PTA supervision at a contracted clinical site. Students progress toward advanced beginner PTA practice by demonstrating communication and critical thinking for the workplace. This is the first of three off-campus clinical learning experiences.
Prerequisite: PTA 104 and (PTA 104L or PTA 104LR), PTA 133 and (PTA 133L or PTA 133LR), all with a C or better (all may be taken as corequisites).

PTA 280B - Co-op Ed: Physical Therapist Assistant - Second Clinical Experience (4-8)
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)
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.

RTEC-Regional Technical & Early College

RTEC 101 - Gateway to College and Careers (1)
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 these programs. RTEC 101 is recommended for high school seniors planning to enroll at Lane.

SLD-Student Leadership Development

SLD 101 - Native Circles: It's Your Life (3)
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)
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, Latino/Latinas, Native Americans and other underrepresented minority populations.

SLD 108 - Puertas Abiertas Éxito (2)
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)
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)
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)
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)
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.

SOC-Sociology

SOC 204 - Introduction to Sociology (4)
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 204H - Introduction to Sociology-Honors (4)
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 (p. 172) and SOC 204H (p. 172).

SOC 205 - Social Stratification and Social Systems (4)
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)
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 207 - Women and Work (3)
Women perform nearly two-thirds of the world's work, receive one-tenth of the world's income, and own less than one-hundredth of the world's property. This class is an introduction to and analysis of the issues necessary to understand women's work experience and economic position, past and present. Focus areas will include the multicultural economic and labor history of women in the US, the family and women's work, welfare/workfare issues, and women's position in the global economy.

SOC 208 - Sport and Society (4)
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)
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)
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.

SOC 213 - Race and Ethnicity (4)
This course explores a comparative history of racial dynamics with particular emphases on the way in which race, ethnicity, and class, inform these histories. A comparative sociological approach will be used in order to explore the process of racial information. Throughout the course we will recuperate the histories of racialized groups and expose sites of oppression, struggle, and resistance.

SOC 218 - Sociology of Gender (4)
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 280 - Co-op Ed: Sociology (3-12)
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.

SOIL-Soil Science

SOIL 205 - Introduction to Soil Science (4)
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.

SPAN-Spanish

SPAN 101 - Spanish, First-Year (5)
This 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)
This 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 grade of C-/P or better or placement by instructor.

SPAN 103 - Spanish, First-Year (5)
This 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 grade of C-/P or better or placement by instructor.

SPAN 201 - Spanish, Second-Year (4)
This is the first course of a three-term sequence (SPAN 201-SPAN 202-SPAN 203) designed to provide one full year of college level transfer courses at the intermediate (second year) level. 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, with a grade of C-/P or better or placement by testing.

SPAN 202 - Spanish, Second-Year (4)
This is the second course of a three-term sequence (SPAN 201-202-SPAN 203) designed to provide one full year of college level transfer courses at the intermediate (second year) level. 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, with a grade of C-/P or better or placement by testing.

SPAN 203 - Spanish, Second-Year (4)
This is the third course of a three-term sequence (SPAN 201-SPAN 202-203) designed to provide one full year of college level transfer courses at the intermediate (second year) level. 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, with a grade of C-/P or better or placement by testing.

SPAN 218 - Spanish for Spanish-Speakers (4)
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)
Serving students whose experience with the Spanish language ranges from beginner to advanced, this course is geared toward 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, or placement into SPAN 103.

STAT-Statistics

STAT 243Z - Elementary Statistics 1 (4)
A first course in statistics focusing on the interpretation and communication of statistical concepts. Introduces exploratory data analysis, descriptive statistics, sampling methods and distributions, point and interval estimates, hypothesis tests for means and proportions, and elements of probability and correlation. Technology will be used when appropriate. This course is part of the Oregon Common Course Numbering System
Prerequisite: MTH 105Z or MTH 111Z, or equivalent course completed with a grade of C- or better within the past two years or equivalent placement via the Math Placement Process.

STAT 265 - Statistics for Scientists and Engineers (4)
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 with a C- or better within the past five years. May be taken concurrently.

TA-Theatre Arts

TA 140 - Acting Shakespeare (4)
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: Recommended: TA 141 or equivalent and placement into WR 115.

TA 141 - Acting 1 (4)
Introduction to the fundamentals of acting and the use of acting skills for performance and personal and professional growth. Topics include use of body and 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.
Prerequisite: Recommended: Placement into WR 115.

TA 142 - Acting 2 (4)
Students are introduced to in-depth character analysis and more advanced scene work. Students learn to believably and compellingly act in dramatic and comedic monologues and ten-minute plays or scenes from full-length plays from dramatic literature written after 1900. Other topics include development of the actor's voice, release of tension, script analysis, and analysis of the work of other actors.
Prerequisite: TA 141.

TA 143 - Acting 3 (4)
Continuation of in-depth character analysis and scene work. Students learn to believably and compellingly act in scenes and monologues from 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)
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)
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
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 212 - Introduction to Costuming and Makeup (4)
Introduction to the skills of visually expressing a character through makeup and costuming. Course content includes: examination of the difference between fashion and costuming; introduction of the materials, machinery, tools and techniques of the fashion and costuming industry; application of acquired skills to the construction of a garment and costume elements; introduction and application of visual aesthetics of makeup for performance; fundamentals of makeup; character, age, corrective, beards and mustaches, and three-dimensional makeup design and application techniques.

TA 241 - Acting for Musical Theatre (4)
This course augments previous training by focusing on characterization using dramatic literature with heightened language from the musical theatre for the singer and non-singer. Other topics include development of the actor's voice, release of tension, script analysis, and analysis of the work of other actors.
Prerequisite: TA 143.

TA 242 - Acting in Non-Realism (4)
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)
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
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)
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.

TA 272H - Introduction to Theatre-Honors (4)
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 272H.

TA 280 - Co-op Ed: Performing Arts (3-12)
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 consent.

UAS-Unmanned Aircraft Systems

UAS 101 - Introduction to UAS and Careers (1)
Introduction to the field of UAS operations, industries that utilize them, and how to become a UAS Professional.
Prerequisite: Admission to the UAS program.

UAS 121 - Multirotor Systems (3)
3D design, analysis, modeling, and 3D printing and prototyping of a student-designed multirotor UAV, including subsystems, camera, electrical wiring, autopilot integration, and autopilot tuning. This is the first year intro into UAV maintenance and design, and serves as an autopilot awareness and training class which is built upon in later classes.
Prerequisite: Admission to the UAS program.

UAS 122 - Ground Control Radio Systems (2)
Students will receive an Amateur Radio Technician License from the FCC upon completion of this class, or an equivalent exam. This class serves to train basic electronics, radio systems, communication protocols, antenna theory, and practical applications of radio

systems to UAV operations.
Prerequisite: Admission to the UAS program.

UAS 123 - UAS Part 107 License Lab (1)
Prepares AUAS Program students to take the Part 107 Commercial Unmanned Operator License from the FAA. Covers all aspects of operations, weather, airspace, regulations, and operating limitations required for the 107 license.
Prerequisite: Admission to the UAS program.

UAS 124A - Intro Flight Lab (1)
An introduction to Unmanned Aviation, flying procedures, checklists, airspace and regulations awareness, LAANC and aviation weather, and intro to basic maneuvers; field lab in person.
Prerequisite: Must be enrolled in UAS Program.

UAS 124B - Advanced Operations Flight Lab (1)
Advanced multirotor operations, flight maneuvers, precision control, regulations, and flying practice for video/photo, SAR, and inspections; field lab in person.
Prerequisite: Admission to the UAS program.

UAS 124C - Fixed Wing Lab (1)
This class trains assembly, simulator flight training, and field training of fixed wing flight with a kit training aircraft provided to the students to keep. This is a stand-alone class, and does not have any entrance requirements.
Prerequisite: Admission to the UAS program.

UAS 124D - UAS Field Operations (1)
Field Operations Lab, where each class is a field trip to different industry partners across Lane County for real-world flight operations in actual conditions. Examples of locations include lumber mills, agricultural farms, parks, fire damage areas, fire/SAR training, houses for sale, UAS Test Range, etc. Serves to provide essential field training for students.
Prerequisite: Admission to the UAS program.

UAS 124E - Advanced Sensor Lab (1)
Advanced sensor lab, where students can gain hands-on training with sensors, cameras, electronic assemblies, and fly them to obtain advanced sensor data.
Prerequisite: Admission to the UAS program.

UAS 124F - Professional Development (2)
Professional Development Lab, where students are given mentoring on how to develop a strong LinkedIn profile, generate a logo, provide accurate job bids, and prepare for work in the industry with a strong resumé.
Prerequisite: Admission to the UAS program.

UAS 201 - UAS Ground School (5)
Pilot UAS training on operations, CRM, SCM, ORM, ADM, airspace, weather, maps, forecasts, aeronautical knowledge, training requirements, regulations, industry qualifications, and standardized FAA training material for UAS pilots.
Prerequisite: Must be enrolled in UAS Program.

UAS 210 - UAS Airframe Testing and Manufacture (5)
Aviation-grade airframe maintenance, manufacture, and Finite Element Analysis and stress testing and simulation of airframes and components.
Prerequisite: Admission to the UAS program.

UAS 211 - UAS Autopilot Ardupilot and Piccolo (3)
Autopilot training and simulation, integration, software training, and basic tuning for several industry-standard autopilot systems.
Prerequisite: Admission to the UAS program.

UAS 212 - UAS Power Systems (5)
Power, engine/motor installation, testing, and maintenance, battery, propulsion, SWaP (size, weight, and power) optimization, and integration to aircraft standards.
Prerequisite: Admission to the UAS program.

UAS 213 - UAS Standards and Documentation (2)
Aviation standards, ISO9001:2015, AS9100, FAA maintenance and manufacture standards, inspection standards, and documentation training.
Prerequisite: Admission to the UAS program.

UAS 214 - UAS Avionics and Electrical Systems (4)
Avionics, wiring, harness development and maintenance, system math, aviation standards for avionics, autopilot and subsystems integration and maintenance.
Prerequisite: Admission to the UAS program.

UAS 215 - UAS Computer Aided Design/ Computer Aided Manufacture, Solidworks (4)
Solidworks training on FEA, Computational Fluid Dynamics, and simulations, as well as solid modeling for aerospace.
Prerequisite: Admission to the UAS program.

UAS 230 - UAS Data Acquisition and Analysis (3)
This course provides training in Pix4D or Agisoft, and QGIS, industry-standard GIS rendering and processing programs which allow for orthomosaic and 3D modeling/multispectral outputs from UAV images. This class is project-based, and serves to train students with these software systems.
Prerequisite: Admission to the UAS program.

UAS 231 - Advanced Sensor (3)
This class covers light and wave theory, plant health analysis from multispectral reflectivity, Remote Sensing, Advanced Multispectral, LiDAR, RADAR, and optics theory for awareness and training on UAV equipment designed to image outside of visible spectra. Advanced material; this class serves as the sister to UAS230.
Prerequisite: Admission to the UAS program.

UAS 235 - Capstone Project (5)
This is the Capstone Project; is has been expanded to include physical projects as well, either in UAV design, software-generated projects as before, or even manufacturing or product invention/design. Instructor mentoring and guidance is offered, and project completion is required.
Prerequisite: Admission to the UAS program.

UAS 280 - Co-op Ed: Unmanned Aerial Systems (3-12)
This course provides UAS-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.
Prerequisite: Instructor consent; Admission to the UAS program.

WLD-Welding

WLD 111 - Blueprint Reading for Welders (3)
This course provides instruction necessary to interpret blueprints that are typically used by metal fabrication shops. Emphasis is placed on understanding types of lines, dimensioning, views, notations, abbreviations, welding symbols and steel nomenclature.

WLD 112 - Fabrication/Welding 1 (12)
Comprehensive skills necessary for the fabrication of metal products. This course introduces basic blueprint reading and shop fabrication techniques, shielded metal arc, GMAW, and gas tungsten arc welding processes. These skills are learned in the context of assigned and graded practice projects and written tests.

WLD 113 - Fabrication/Welding 2 (12)
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)
Comprehensive skills necessary for the fabrication of metal products. This course builds and advances skills previously learned. Instruction and practice is given in calculating material costs, shop fabrication techniques, FCAW-S, gas tungsten arc welding, and SMAW. Safe overhead crane operation is also provided in this course.
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 (stick welding) (4)
Skill development in SMAW, oxy-acetylene cutting, understanding and practicing safe work methods in the welding shop and welding in all positions (flat, horizontal, overhead, and vertical), using the shielded metal arc process.

WLD 122 - Shielded Metal Arc Welding 2 (stick welding) (4)
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)
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 College writing placement test or prior college.

WLD 140 - Welder Qualification (Cert): Wire Drive Processes (3)
This course studies the purpose and standards of the American Welding Society and American Society of Mechanical Engineers procedure and 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.
Prerequisite: WLD 143 and WLD 154 OR WLD 112 and WLD 113 or Instructor consent.

WLD 141 - Welder Qualification (Cert): SMAW (3)
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)
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 113 or WLD 122.

WLD 143 - Wire Drive Welding 1 (4)
Skills development in gas metal arc welding (GMAW) of carbon steel. Students will be instructed in proper care, set-up and use of GMAW equipment. Preparing weld test specimens and performing weld tests is included in this course.

WLD 151 - Fundamentals of Metallurgy (1-3)
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: College writing placement test or prior college.

WLD 154 - Wire Drive Welding 2 (4)
Technology and application of wire drive process using gas shielded cored wire is taught.
Prerequisite: WLD 143 or instructor consent.

WLD 159 - Wire Drive Welding 3 (4)
Wire Drive Welding 3 provides training in the technology and application of wire drive processes using carbon steel solid wires in GMAW-S, GMAW-P, and SAW formats. Instruction is also given in the use of GMAW short circuiting and spray transfer of stainless steel and spray transfer of aluminum and silicon bronze wires.
Prerequisite: WLD 154.

WLD 160 - Wire Drive Welding 4 (4)
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 159.

WLD 215 - Fabrication/Welding 4 (12)
Understanding of materials used in, and skills necessary for, the fabrication of metal products. Instruction and practice in fabrication techniques, GTAW, SMAW, and wire drive processes. Concepts in material science that pertain to fabrication and welding will be presented and tested in a laboratory environment. These skills and concepts may be learned producing actual metal products, some of which may be marketed. This course develops skills taught in Fabrication/Welding 1, 2 and 3. Under certain circumstances, the class may be taken as an introductory course.
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)
Understanding materials used in, and skills necessary for, the fabrication of metal products. Instruction and practice in fabrication techniques and the programming of shape cutting and press break, including concepts in the material science and the gas tungsten arc welding of stainless steels and aluminum alloys. Metallurgical considerations in the welding of carbon and HSLA steels is also studied. This course develops those skills taught in Fabrication/Welding 1, 2, 3, and 4. Under certain circumstances, the class may be taken as an introductory course.
Prerequisite: WLD 215. Second year standing or instructor consent or performance test and written examination.

WLD 217 - Fabrication/Welding 6 (12)
Instruction in the business practices associated with, and fabrication of, metal products. SMAW, FCAW, GTAW welding processes are practiced on standard and more advanced applications. In addition, analysis of wear environments and the selection and application of special wear or corrosion resisting surface treatments are studied and practiced.
Prerequisite: WLD 216. Second year standing or instructor consent or performance test and written examination.

WLD 242 - Gas Tungsten Arc Welding 1 (3)
This course teaches the technology of, and provides practice in, gas tungsten arc welding (GTAW) of carbon and stainless-steel sheet material. Students will be instructed in proper care, set-up and use of GTAW equipment. Testing of weld samples is included in this course.

WLD 256 - Gas Tungsten Arc Welding 2 (3)
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: WLD 242.

WLD 257 - Gas Tungsten Arc Welding 3 (3)
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.

WLD 280 - Co-op Ed: Welding (3-12)
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.

WR-Writing

WR 093 - College Writing for ELL Students (3)
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)
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)
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)
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 better 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)
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 better in WR 093 or WR 097 or successful completion of ABSE Reading and Writing for College Success AND Bridge to College.

WR 121HZ - Composition 1-Honors (4)
WR 121HZ engages students in the study and practice of critical thinking, reading, and writing. The course focuses on analyzing and composing across varied rhetorical situations and in multiple genres. Students will apply key rhetorical concepts flexibly and collaboratively throughout their writing and inquiry processes. This course will prepare students to engage in adaptable inquiry-based research processes that meet the needs of various rhetorical contexts. Students can expect to compose multiple revised texts, for a total of at least 10 double-spaced pages, throughout the term. 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 121Z and WR 121HZ. This course is part of the Oregon Common Course Numbering System.
Prerequisite: WR 115 or placement.

WR 121Z - Composition 1 (4)
WR 121Z engages students in the study and practice of critical thinking, reading, and writing. The course focuses on analyzing and composing across varied rhetorical situations and in multiple genres. Students will apply key rhetorical concepts flexibly and collaboratively throughout their writing and inquiry processes. This course will prepare students to engage in adaptable inquiry-based research processes that meet the needs of various rhetorical contexts. Students can expect to compose multiple revised texts, for a total of at least 10 double-spaced pages, throughout the term. This course is part of the Oregon Common Course Numbering System.
Prerequisite: WR 115 or WR 115W or placement.

WR 122HZ - Composition 2-Honors (4)
WR 122HZ builds on concepts and processes emphasized in WR 121Z, engaging with inquiry, research, and argumentation in support of students' development as writers. The course focuses on composing and revising in research-based genres through the intentional use of rhetorical strategies. Students will find, evaluate, and interpret complex material, including lived experience; use this to frame and pursue their own research questions; and integrate material purposefully into their own compositions. Students will compose multiple revised texts that strategically negotiate among modes of communication and rhetorical situations. 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 122Z and WR 122HZ. This course is part of the Oregon Common Course Numbering System.
Prerequisite: WR 121Z.

WR 122Z - Composition 2 (4)
WR 122Z builds on concepts and processes emphasized in WR 121Z, engaging with inquiry, research, and argumentation in support of students' development as writers. The course focuses on composing and revising in research-based genres through the intentional use of rhetorical strategies. Students will find, evaluate, and interpret complex material, including lived experience; use this to frame and pursue their own research questions; and integrate material purposefully into their own compositions. Students will compose multiple revised texts that strategically negotiate among modes of communication and rhetorical situations. This course is part of the Oregon Common Course Numbering System.
Prerequisite: WR 121Z.

WR 123 - Composition: Research Writing (4)
While continuing the goals of WR 122Z, 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 122Z.

WR 227HZ - Technical Writing-Honors (4)
WR 227HZ introduces students to producing instructive, informative, and persuasive technical/professional documents aimed at well-defined and achievable outcomes. The course focuses on presenting information using rhetorically appropriate style, design, vocabulary, structure, and visuals. Students can expect to gather, read, and analyze information and to learn a variety of strategies for producing accessible, usable, reader-centered deliverable documents that are clear, concise, and ethical. Students will learn to communicate field expertise to non-experts in an appropriate, effective, and graceful fashion. 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 227Z and WR 227HZ. This course is part of the Oregon Common Course Numbering System.
Prerequisite: WR 121Z.

WR 227Z - Technical Writing (4)
WR 227Z introduces students to producing instructive, informative, and persuasive technical/professional documents aimed at well-defined and achievable outcomes. The course focuses on presenting information using rhetorically appropriate style, design, vocabulary, structure, and visuals. Students can expect to gather, read, and analyze information and to learn a variety of strategies for producing accessible, usable, reader-centered deliverable documents that are clear, concise, and ethical. Students will learn to communicate field expertise to non-experts in an appropriate, effective, and graceful fashion. This course is part of the Oregon Common Course Numbering System.
Prerequisite: WR 121Z.

WS-Women's Studies

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

XEBO-Esl Oral Skills Ext Lrng

XEBO 0516E - ESL Bridge Oral Skills Level E (5 hours)
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.

XEBO 0516F - ESL Bridge Oral Skills Level F (5 hours)
This college transition English as a Second Language course supports academic success in Writing 121. 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.

XEBW-Esl Writing Skills Ext Lrng

XEBW 0516E - ESL Bridge Reading and Writing Level E (7 hours)
This Academic English as a Second Language course supports academic success in Communication 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.

XEBW 0516F - ESL Bridge Reading and Writing Level F (7 hours)
This college transition English as a Second Language course supports academic success in Writing 121. 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.

XESC-Esl Combined Ext Lrng

XESC 0516A - ESL Basic Combined Basic Skills Level A (10 hours)
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.

XESC 0516B - ESL Combined Skills Level B (10 hours)
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.

XESC 05160 - ESL Combined Skills Level 0 (5 hours)
This course focuses on developing 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 and support, read very simple and familiar words on familiar subjects and write common words.

XESC 05161 - ESL Combined Skills Level 1 (5 hours)
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.

XESC 05162 - ESL Combined Skills Level 2 (5 hours)
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.

XESC 05163 - ESL Combined Skills Level 3 (5 hours)
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.

XESC 05164 - ESL Combined Skills Level 4 (5 hours)
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.

XESC 05165 - ESL Combined Skills Level 5 (5 hours)
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.

XESC 05166 - ESL Combined Skills Level 6 (5 hours)
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.

XESL-Esl Literacy Ext Lrng

XESL 05161 - ESL Grammar & Literacy Level 1 (5 hours)
The course is designed to develop skills and strategies in literacy and study skills, with a focus on writing more fluently and with more confidence, improved spelling, grammar usage and structure, and vocabulary development.

XESR-Esl Reading Ext Lrng

XESR 0516A - ESL Reading and Oral Skills Level A (10 hours)
Beginning-High-Beginning. This course focuses on reading, writing, and vocabulary development. Vocabulary development is practiced and reinforced in reading and writing.

XESR 0516B - ESL Reading and Oral Skills Level B (10 hours)
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.

XESR 0516C - ESL Reading and Oral Skills Level C (10 hours)
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.

XESR 0516D - ESL Reading and Oral Skills Level D (10 hours)
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.

XESR 0516E - ESL Academic Reading Level E (5 hours)
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.

XESR 0516F - ESL College Transition Reading Level F (5 hours)
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.

XESS-Esl LSpeak Ext Lrng

XESS 0516E - ESL Academic Listening and Speaking Level E (5 hours)
High-Intermediate to Low-Advanced. This course is designed to prepare students for listening and speaking in academic and formal settings.

XESS 0516F - ESL College Transition Listening and Speaking Level F (5 hours)
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.

XESS 05160 - English Pronunciation (2.5 hours)
This noncredit course is designed to help English language learners of all levels to improve their pronunciation skills in English. The class will raise awareness of the features of standard American English Pronunciation including consonant and vowel sounds, stress, rhythm, intonation, and connected speech. Through a variety of listening and speaking activities, students will practice adding these linguistic patterns to their speech and learn how to monitor their speech in order to communicate effectively.

XESW-Esl Writing Ext Lrng

XESW 0516B - ESL Writing and Grammar Level B (10 hours)
Low Intermediate. This course focuses on sentence-level accuracy in written English in informative genres and simple directions.

XESW 0516C - ESL Writing and Grammar Level C (10 hours)
Low intermediate-intermediate. This course focuses on grammar development and extended paragraph writing in narrative and informative genres.

XESW 0516D - ESL Writing and Grammar Level D (10 hours)
Intermediate-High Intermediate. This course focuses on grammar development and basic essay writing in a variety of community and academic contexts.

XESW 0516E - ESL Academic Writing and Grammar Level E (10 hours)
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.

XESW 0516F - ESL College Transition Writing and Grammar Level F (10 hours)
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.

Graduation Requirements

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

Minimum Requirements

- **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.

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. 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 a 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 ceremony may pick up a binder at the Student Life and Leadership office any time after the ceremony.

Cost of Attendance

Affordable cost is one of the many advantages you will have as a student attending a community college. Learn more about additional information about tuition, fees, and expenses.

Tuition and Fees

Credit Tuition

- **Oregon residents -** $144.50 per credit hour
- **Non-residents of Oregon -** $335.50 per credit hour
- Non-resident online tuition - $144.50 per credit hour
- **International students** (summer, fall, winter, spring)
  - 1-5 credits: $330 per credit hour
  - 6-8 credits: $2,150 per term
  - 9-11 credits: $3,150 per term
  - 12-18 credits: $3,750 per term
  - per credit for each credit above 18 credits per term $330.00
- **Non-credit students -** $5 per contact hour

Credit Student Fees

(fees are subject to annual increase)

- **Class fees -** listed next to each class in the class schedule
- **Technology fee -** $14 per credit
- **Online and hybrid course fee -** $10 per credit (max = $50 per course)
- Student Health Clinic fee - $60 per term
- Transportation fee
  - Classes on main campus - $27 per term
  - Classes not held on main campus - $5 per term
- International student fee - $125 per term
- One-time credit enrollment fee - $31
- **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. View the OER website for more information on classes using free or low-cost materials.

Other Credit Student Fees

ASLCC Student Activity Fee - $63.07 (A mandatory student activity fee is required of all students taking credit classes on Lane's main campus)

Breakdown of ASLCC Student Activity Fee:

- Asian and Pacific Islander Student Union (APISU) $1.25
- ASLCC Legal Services $2.70
- Athletics and Recreational/Club Sports Programs $11.50
- Black Student Union (BSU) $1.25
- Child Development Center Subsidy and Co-op $8.62
- Council of Clubs $2.00
- Gender and Sexuality Alliance (GSA) $1.25
- Gender Equity Center (GEC) Women's Program $1.90
- International Programs $1.95
- Lane Student Government Association (Lane SGA) $9.00
- Learning Garden $4.00
- Longhouse Building $3.00
- Maxwell Student Veteran Center (MSVC) $2.50
- Movimiento Estudiantil Chicano de Aztlán (MEChA) $1.25
- Native American Student Association (NASA) $1.30
- Oregon Student Association (OSA) $3.50
- Student Production Association (SPA) $2.40
- The Torch $2.70
- Neurodivergent Student Union (NDSU) $1.00

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.

Non-Credit Course Costs

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 will be assessed the transportation fee every term.

Billing and Payment

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.

Students will be able to make payments on outstanding balances using ExpressLane. 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 in ExpressLane to arrange to have a paper bill mailed. Non-credit students will be mailed paper statements unless they opt not to receive them.

The system 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 to allow you to assign access to a third party to make payments on your account. All transactions are handled through a secure payment system.

For more information, and to set up your account, see Tuition, Fees, and Payments.

Term Bills

A bill is generated when a student registers for classes. Payments are due by midnight on the 15th of each month. After this date, if a charge remains, there will be a 2% late fee on the unpaid balance added to your account the next business day. It is a student's responsibility to check back and review their bill from time to time to ensure that all charges are paid in full as required.

To view payment due dates, see Payment Due Date Information.

How to Pay

Pay Online

Payments can be made online by check or savings account, VISA or MasterCard. Access your account by logging into ExpressLane and click on the "myFinances" tab, then click on "Make a 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.

For more information, see Sponsored Accounts.

Email: *SponsoredAccounts@lanecc.edu*

Payment Plans and Deferred Billing

College Account 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. For more information, see College Account Payment Plans.

Deferring Billing 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. Furthermore, by registering for any class at Lane, students are agreeing to retrieve their 1098T form by accessing the electronic version in their accounts. The college does not mail 1098T forms. For more information, see Accounts Receivable Billing.

Late Payment

To find out how much you owe, access Current Students at and click on the ExpressLane button.

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 two percent (2%) on your unpaid balance from a prior billing period.
- A billing period is the time between statements.

Notify the college if your address changes by using ExpressLane. It is your responsibility to maintain a current address, phone number, and email 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 a 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 that 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 on file in your account 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 and must contact the collection agency listed with the hold message 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.

Refunds

When you register for a class, you agree to pay for it. If **you officially drop** the class by the refund deadline, the college will refund your tuition. If the **college cancels a class,** we will refund your tuition in full. **It is your responsibility to drop any class that you do not plan to attend. Students must use** ExpressLane **to officially drop a class.** Refer to the class schedule (p. 196) 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 Monday week 2 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 and classes of 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 date, you may request an exception to the refund policy. You must complete the Refund Request online form. 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.

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

For more information regarding refund petitions for credit courses, contact:

- Student Accounts, 541-463-3011, 4000 E. 30th Avenue, Eugene OR 97405

For more information regarding refund petitions for noncredit courses, contact:

- Continuing Education, 541-463-6100
- 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

Deadline

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 ExpressLane to drop classes by the refund deadline. Even if your petition is approved, you may still owe fees and finance charges.

For info about exceptions to the refund policy, call Student Accounts at 541-463-3011.

Financial Aid

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.

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 www.fafsa.gov. The financial aid process takes approximately 6-8 weeks. Students should apply as early as possible after October 1, for the next academic year.

For more information, visit: www.lanecc.edu/costs-admission/paying-college/financial-aid

Policies

Student Affairs

This section contains definitions, policies and procedures related to the academic affairs of the College that are not addressed elsewhere. For the convenience of the reader, topics are listed in alphabetical order. For more information on any topic, refer to the LCC website or call the appropriate contact person.

Academic Progress Standards

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 Satisfactory Academic Progress. These standards follow the Financial Aid Satisfactory Academic Progress Standards 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.

At the end of every term, the College will review each student's progress.

Good Standing: 2.0 or higher cumulative GPA and 67% term rate of progress.

Academic Warning: Students who complete less than 2.0 cumulative GPA and/or less than 67% rate of progress for the first time.

Academic Suspension: Failure to meet Good Standing for a student can result in a student being unable to use regulated funding sources. Academically suspended students are disallowed from using regulated funding sources such as federal financial aid, or other applicable aid, or veterans benefits until academic progress can be achieved.

Academic Probation: Student is on academic warning and has a future term of less than 2.0 GPA and/or 67% rate of progress. When using Federal Financial Aid an approved appeal will allow them to continue receiving aid while regaining eligibility. A student may not meet the terms of SAP if they do not meet the requirements at the end of the following term or, in a future term. Students are notified if they have not met the SAP requirements via email to their student email account, and on their financial aid portal.

Satisfactory Academic Progress is reviewed at the end of each term.

Once a student has not met the terms of academic progress for three consecutive or non-consecutive terms, their funding source will be suspended until academic progress can be achieved. Students may choose to continue using private pay funds in order to return to a good standing status, or in general if no federal funding source has been established.

Regaining Eligibility:

1. Federal Financial Aid: Students can submit an appeal to the financial aid office. Students who receive an approved appeal are placed on probation status, until they regain eligibility. Eligibility is defined as achieving 67% rate of progress and cumulative 2.0 GPA. Students who are denied are suspended from financial aid.
2. Students using VA educational benefits will be required to follow all Lane's GPA requirements in accordance with the Academic Standards outlined in the catalog. Each student applying for VA educational benefits will receive a copy of the Standards of Academic Progress for Using VA Benefits at the time of initial certification. These standards apply to all eligible persons using educational benefits administered by the VA.
3. Students who are privately funded can continue and are recommended to meet with Early Outreach in support of future academic success.

All students, regardless of funding source will receive early outreach interventions as identified by Lane's Early Outreach efforts.

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.

Grades and GPA

At the end of each term, grades are recorded and made available to students using ExpressLane. Unofficial transcripts may be printed from ExpressLane.

Grading and Course Grade Options

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- through 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.

Course Grading Options

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 the registration system 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 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.

Request to Absolve Repeated Courses - See Repeated Courses (p. 184) to learn more.

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 the class schedule (p. 196) for more information. If the student owes money to Lane, the added grade will not be processed until the balance is paid in full.

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.

- Term GPAs - calculated using grade points earned only during that term
- Cumulative GPA - calculated using all grade points from all terms

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	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

Note - Points are not included in calculation, because of P grade. Total credits earned in this example are nine.

Adding and Dropping Courses

Students may add and drop full-term classes through Monday of the second week of the term. Schedule changes could result in additional tuition & fees.

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

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

View the current class schedule.

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

Drop/Withdrawal from a Course

It is students' responsibility to drop/withdraw from any class(es) they do not plan to attend.

Deadlines for changes and withdrawing vary based on the length of the class. 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. Please view Schedule Changes and Grading Important

Dates calendar to view deadlines for other lengths of classes.

Drop for 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. An email should be sent to your Lane email.

Drop for No Show

An instructor will drop a student for non-attendance. If a student does not attend at least one class session during the first week of the term that the class meets, the instructor will direct the department to "No Show Drop" the student. This period coincides with the refund period.

Students must physically attend at least one class session during the first week of the term for that class. If it is an online class, students must participate in one online class activity to avoid being "No Show Dropped".

It is the student's responsibility to monitor their account and to verify that the class has been dropped for non-attendance. If you notice that your course has not been dropped and you did not attend, you may request that the course be removed from your class schedule and the tuition and fees deducted from your balance by filling out and submitting the No-Show/Drop Request Form. You may make this request for up to one year past the end of the term in question.

For more information, and to fill out the form, see No Show Drop information.

Student Deadline to Drop a Class with a Refund

- Students may drop a class for a full refund after their original registration by using ExpressLane. Tuition is not prorated.
- For full-term classes, the last day to drop a class **with a refund** is 11:59 pm on Monday of the second week of the term.

Student Deadline to Drop a Class without a Refund (Withdrawal)

- Students may drop a class without a refund (withdrawal) after their original registration by using ExpressLane. Tuition is not prorated. Students will have a withdrawal notation (W) recorded for the class that may impact LCC and Financial Aid progress standards.
- For full-term classes, the last day to drop a class **without a refund** is 11:59 pm on Friday of the eighth week of the term.

Variable-Credit Course Drop Deadlines

Students registered in variable-credit courses may add or drop credits through midnight Friday of the last week of classes before finals week begins.

For more information, see Refund Information When Dropping a Class.

Grade Changes

Students may change their schedule after their original registration by using ExpressLane. For full-term classes, the last day to request a Pass/No Pass grade option or audit a class, is midnight on Friday of the eighth week of the term.

Visit the Schedule Changes and Grading Important Dates Calendar.

Online and Distance Learning

Main Campus, Center Building, Room 352, 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. A $10 per credit fee is assessed on online, online w/in-person testing, hybrid/in-person, hybrid/zoom, hyflex and live-streaming courses with a maximum of $50 per course. The fee covers course development, instructor training and support, direct student support, equipment and online tools.

The Associate of Arts Oregon Transfer and Associate of General Studies 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 on the website by going to "What courses are available online" and clicking the desired term.

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 - 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 - 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 - 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 - 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 - 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 - 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).

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 ExpressLane under the myEnrollment tab and When Can I Register link.

For more information, see Registration, Schedules, and Academic Calendar. For questions, email *AskLane@lanecc.edu*

Repeated Courses

A student can have the grade points removed from the cumulative grade point average if the first grade was B, B-, C+, C, C-, D+, D, D- or F and the class has been repeated at Lane. A course can be retaken only once for this purpose. If a course is retaken more than once, only the oldest course credits will be removed from the grade point average under this policy. The repeated course credits must all be taken in one term at Lane, be taken for a letter grade, and must be equal to or greater than the number of credits completed in the original course.

Upon completion of a course, a student can exercise this option by filling out a **Request to Absolve Repeated Courses from the Cumulative Grade Point Average form.** The form is available in Enrollment Services. 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.

Residency

Student residency for credit courses is determined from information provided by each applicant to the college based on length of permanent residence. Non-credit Continuing Education classes do not have a residency requirement.

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 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.

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 permanent resident). 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 dependent who are entitled to in-district tuition in accordance with the Basic Choice Act (see Veterans Benefits and Certification (p. 185))
- 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

Changing Residency Status

Residency does not change without some kind of student interaction. 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. 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.

Note: 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. Also, 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.

Social Security Number

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 ExpressLane. This number begins with an uppercase L followed by eight computer generated numbers. A student's "L" number with a PIN (personal ID number) will be used for ExpressLane 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 ExpressLane, 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 prior.

Student Records

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 ExpressLane 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.

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 ExpressLane. 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 ExpressLane 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 that 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.

Veterans Benefits and Certification

Veterans Education, Building 1, Room 201, 541-463-5663 or email VAEdBenefits@lanecc.edu

Programs at Lane Community College are approved by the Oregon Department of Veterans Affairs as a qualified training institution for students eligible for VA education benefits. Applications for VA educational benefits and enrollment certifications are processed through the VA Regional Office in Muskogee, OK; 1-888-442-4551 or VA Education and Training.

Eligibility rules - VA education benefits are complex and students may have choices to make to determine which benefit chapter they wish to utilize. Those who qualify for benefits need to submit an application to the VA to obtain their certificate of eligibility. Students may qualify for more than one VA benefit chapter but can only be certified for one at a time. For more information, contact the LCC veterans' office 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 education benefits must be enrolled in an approved degree or certificate program and only courses applicable towards the program can be certified to the VA.

Academic Progress Standards - Academic Progress Standards are listed in this catalog and are provided to new students upon the initial establishment of their VA file at LCC. Students are required to demonstrate satisfactory academic progress each term they use VA benefits at LCC. Federal law requires benefits to be suspended if a student does not demonstrate satisfactory progress. If a student does not meet academic standards in any term, they will be placed on VA academic probation. If a student does not meet minimum academic standards in more than 2 terms and their LCC cumulative GPA is below 2.0 or their LCC pass rate is below 67%, the VA will be notified of unsatisfactory progress and their ability to use benefits at LCC will be suspended per federal law. A student will need to utilize alternative funding sources while they work to improve their GPA and pass rate to minimum academic standards. After a student improves their GPA and pass rate to minimum standards, they can communicate with the VA School Certifying Official to discuss the conditions for the student's continued certification to VA. These conditions will prescribe the minimum performance standards to be achieved by the student during the next enrollment/evaluation period.

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 LCC 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 to the VA. If a student takes a course that does not fulfill a program requirement, it cannot be certified to the VA. Excessive electives, for example, that are not needed to fulfill a student's program requirements, cannot be certified. Courses that do not satisfy a LCC program requirement or meet VA rules are the student's responsibility. In order for prerequisite remedial courses to be certified to the VA for program requirements in math, English, and writing, testing results from the LCC Testing Office must indicate they are necessary. Students needing remedial courses (below 100 level) must enroll in the on-campus 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 and do not satisfy a program graduation requirement. However, if a student fails a class or if a program requires a higher grade than the one achieved, that course may be repeated.

Program changes - Students utilizing VA benefits must keep their program of pursuit current on their LCC account. The program a student declares is reported to the VA every term they use benefits.

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 will result in a benefit adjustment by the VA. Completed classes receiving a grade of P (Pass) must satisfy a program completion requirement. If the P grade does not fulfill a program graduation requirement, the VA will be notified and their benefits will be adjusted. Students are encouraged to complete all classes with a A-F grade to avoid possible VA debts.

Program planners - All students wanting to use VA education benefits at LCC must submit a completed term planner to the Veterans Benefits Office each term. To ensure course applicability and compliance with VA regulations, each term before classes are certified, the student's term planner will be compared to the requirements of the program they have declared. 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 submitted as soon as possible after registration to ensure timely processing and avoid delayed receipt of VA benefits. Registration changes after a planner is submitted will require the student to submit a new planner.

Certification - New VA students are required to complete intake forms with the LCC Veterans Benefits Office to establish their file at the college. These forms must be completed before an enrollment certification is processed to the VA. This initial establishment of your file includes the student providing official transcripts from all prior schools where college credit has been earned and submitting a VA certificate of eligibility.

Students should receive email and/or standard mail communication from the VA after they their enrollment has been reported to the VA. Students should review the certification communication and notify the LCC Veterans Benefits Office if a discrepancy is identified. Initially, only credits are reported to the VA when a VA term planner is processed. Tuition and fees are reported to the VA after the term's drop with refund period. Students using CH 33 benefits should see the VA funds credited to their LCC account before the end of week 7 of the term. Contact the veterans if any discrepancies are identified.

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 processing timelines. VA payments to individual students, when funds are applied to a school account, and when financial aid refunds are dispersed can change from month to month due to a variety of factors. Students receiving financial aid in conjunction with VA benefits will not receive financial aid refunds until their LCC account is paid in full. Unforeseen circumstances may occur which could delay when the VA payment is received. Students are encouraged to monitor their VA account to see when payments are scheduled for deposit to their personal bank account.

Prior credits (transcripts) - Students using VA benefits at LCC who have received college credits at other schools, using VA benefits or not, must provide official transcripts from those schools before their first certification is processed to the VA. Joint Services Transcripts will be requested by LCC personnel. Air Force veterans will need to request their military transcript from the Community College of the Air Force. These transcripts ensure prior awarded credit can be reviewed and applied towards their LCC program to shorten program completion time and avoid taking unnecessary classes.

Lane email - Communication with VA students by email is done through the student's school email account. Students should periodically view their school email to ensure they do not miss important communication related to their VA benefits.

Admissions

Lane offers many different educational opportunities. As the third largest community college in Oregon with campus locations in Eugene, Cottage Grove and Florence, we're known for our innovative programs, high quality instruction and commitment to sustainability. As a student at Lane, you can enroll full-time, part-time, or take noncredit courses for a variety of interests. Lane also offers a variety of courses and programs that can be taken entirely online.

General Admissions

Anyone who is at least 18 years of age may enroll in Lane credit classes. A high school diploma is not required. Admissions are rolling throughout the year, but students can apply until Wednesday of the first week of each term. 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 at How to Apply and Enroll.

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, contact Financial Aid at 541-463-3400.

Lane Community College Supports All Students Regardless of Immigration Status

We respect the contributions undocumented immigrant students make to our community and are committed to education equity for all. If you are undocumented or have Deferred Action for Childhood Arrivals (DACA) or a Temporary Protected Status (TPS), you do not qualify for federal financial aid. However, the resources and from Lane and the State of Oregon to help you meet your education goals and expenses are listed at Resources for Undocumented and DACA Students.

Steps to Enroll

Steps to Enroll for First Time in College Students

Steps to Enroll for Students with Prior College Experience

Programs with Special Admission Procedures

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 programs provide more details.

Health Professions Programs

Many Health Professions degrees and certificates have special admission requirements. Students must be officially admitted to these programs. For more information, email: *hpapplicationcenter@lanecc.edu*

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.

Credit for Prior Learning Options

Lane Community College recognizes the value of granting credit for prior learning (CPL) and non-traditional credit awards, provided 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

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.

Full and Part Time Students

- Full-time student is 12-15 credits per quarter
- 3/4-time students take 9-11 credits per quarter
- Part-time students take 6-8 credits per quarter
- Less than Part-time students take 5 or less credits per quarter

Note: To earn a 90-credit degree in 6 terms (2 years), students would need to take 15 credits of college-level coursework (100- and 200- level) each term.

Immunization

For more information, see Student Immunizations

International Students

International Programs, Building 1, Room 116, 541-463-3434

Lane welcomes students who want to come to the USA to study on student visas in both the International English Program (ESL) & 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 the 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 the 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, see English as a Second Language.

Readmission

After four (4) terms of inactivity, a student's LCC account is inactivated. To reactivate, returning students will need to reapply.

For students who have only taken LCC courses through CollegeNow and/or Continuing Education, proceed with either the First Time in College or the Students with Prior College Experience Steps to Enroll.

For students who have previously been a credit student, and are now looking to just take Continuing Education classes, there's no need to reapply.

For more information, see Readmission.

Students under Age 18

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

- Students who have not graduated and who are not enrolled in high school must have a GED certificate to enroll in credit classes at Lane, 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 information, see Early College Expanded Options.

Transferring into Lane

Accepted Accreditation

Lane uses coursework 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
- 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 (sealed) to Lane from post-secondary institutions previously attended. Only official transcripts from regionally accredited U.S. institutions and international institutions with an evaluation agency will be considered. 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). 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.

Courses may transfer even if Lane does not offer an identical course. Not all transfer coursework 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.

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.

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 are 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.
- 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.

For more information, see Transferring Prior College Credit to Lane.

Transferring Out of Lane

Official LCC transcripts may be ordered through the National Student Clearinghouse.

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 the 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.

Withholding a Transcript

The college reserves the right to withhold official transcripts. Holds that prevent a transcript from being issued include:

- **Accounts Receivable and Collections holds -** If you owe a past due account balance, your transcript cannot be released until paid in full.
- **Exit Counseling hold -** If you have dropped below half-time enrollment, and have had student loans through Financial Aid, you are required to complete "Exit Counseling" on the Federal Student Aid website. Once completed, Lane will receive confirmation within a few business days and your hold will be removed.

For more information, see Ordering Transcripts.

Student Policies and Procedures

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

Student Rights and Conduct

This procedure identifies the Student Rights and Responsibilities statement, and the Student Code of Conduct, as the documents to which students should refer for questions about their rights and responsibilities within the College community.

Student Rights and Responsibilities

Lane maintains a written statement of Student Rights and Responsibilities. This document outlines the essential provisions for academic freedom and guides students in becoming responsible participants in the college community. This document is updated by Student Life and Leadership Development and is approved by the Vice President, Academic and Student Affairs.

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 that 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 December 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 operations. 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 to the college in a timely manner. The college's policies regarding the 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 Grades: Academic and Degree Appeals.
- **Protection Against Improper Disclosure -** Information that staff acquires 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 the 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.

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.

1. 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.
2. 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.
3. Non-discrimination policies - Student organizations must abide by existing college and ASLCC policies and may not restrict membership or participation in events.
4. A recognized club or organization may lose its official recognition and be suspended if actions of its officers or members, or activities of the organization as a whole, violate college policies & 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 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.

Media Commission Guidelines 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; Grades: Academic and Degree Appeals; Discrimination and Harassment Complaint Procedure; Disabilities: Americans With Disabilities Act Complaint Procedures and Affirmative Action Guidelines and Complaint Procedures.

Discipline

Student Code of Conduct 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 of 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 of 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 Lane Community College 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.

Student Code of Conduct

Lane maintains a written Student Code of Conduct. This document describes conduct interfering with the responsibilities and obligations of the college. It also outlines the penalties imposed for prohibited conduct and explains the procedural due process for alleged student violations and the protection of student rights. The Student Code of Conduct is updated by Student Life and Leadership Development and is approved by the Vice President, Academic and Student Affairs.

Academic Accommodations for Students with Disabilities

The college has an obligation to provide academic accommodations and auxiliary aids and services for students under Title II of the Americans With Disabilities Act and Section 504 of the Rehabilitation Act. For more information, see Disabilities: Academic Accommodations and Auxiliary Aids and Services for Students.

Board Policies

To view all active Lane Community College Board of Education policies, go to the Board of Education's online portal.

BP 720 Student Services—Global Directions

Student success is at the heart of Lane's mission, and the foundation upon which faculty and staff shall organize and plan their work to achieve Lane's vision of transforming lives through learning.

Lane Community College supports student success by providing opportunity and access to student services for all eligible students.

The president shall assure that:

1. There is student equity in all educational programs and college services.
2. The college environment is welcoming and accepting to all students.
3. There is adequate provision for the safety and security of learners.
4. The institution represents itself accurately and consistently to prospective students through its catalogs, publications, and official statements.
5. The college avoids collecting unnecessary information from students.
6. Methods of collecting, reviewing, transmitting, or storing student information will be protected against improper access in compliance with federal and state regulations.
7. Student Services facilities are structured to provide a reasonable level of privacy for both sight and sound.
8. Students will be informed of what may be expected from services offered.
9. Students are informed of their rights and responsibilities and are provided a process to address complaints.

BP 725 Tuition Policy

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 tuition 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.

BP 3430 Prohibition of Harassment

All forms of harassment are contrary to basic standards of conduct between individuals. State and federal law, and this policy prohibit harassment and Lane Community College will not tolerate harassment. This policy applies to all members of Lane Community College community including Board of Education members, employees, students, volunteers and interns.

Lane Community College is committed to providing an academic and work environment that respects the dignity of individuals and groups. Lane Community College shall be free of all forms of unlawful harassment. Harassment is unlawful if it is based on any of the following statuses: race, color, religion, sex (including pregnancy), sexual orientation, national origin, marital status, age, disability, familial status or genetic information. For Lane Community College's policy regarding sexual harassment under Title IX, see BP 3433 Prohibition of Sexual Harassment under Title IX and accompanying procedures.

Lane Community College seeks to foster an environment in which employees, students, and other members of the campus community feel free to report incidents of harassment without fear of retaliation or reprisal. Therefore, Lane Community College also strictly prohibits retaliation against any individual for filing a complaint of harassment or for participating in a harassment investigation. Such conduct is illegal and constitutes a violation of this policy. Lane Community College will investigate all allegations of retaliation swiftly and thoroughly. If Lane Community College determines that someone has retaliated, it will take all reasonable steps within its power to stop such conduct. Individuals who engage in retaliatory conduct are subject to disciplinary action, up to and including termination or expulsion.

Any student, employee, or other member of the campus community who believes that he/she/they has been harassed or retaliated against in violation of this policy should immediately report such incidents by following college procedures set forth in college procedures. Lane Community College requires supervisors to report all incidents of harassment and retaliation that come to their attention.

This policy applies to all aspects of the academic environment, including but not limited to classroom conditions, grades, academic standing, employment opportunities, scholarships, recommendations, disciplinary actions, and participation in any community college activity. In addition, this policy applies to all terms and conditions of employment, including but not limited to hiring, placement, promotion, evaluation, disciplinary action, layoff, recall, transfer, leave of absence, training opportunities and compensation.

To this end, the President shall ensure that the institution undertakes education and training activities to counter harassment and to prevent, minimize, or eliminate any hostile environment that impairs access to equal education opportunity or impacts the terms and conditions of employment.

The President shall establish procedures that define harassment on campus. The President shall further establish procedures for employees and students, and other members of the campus community that provide for the investigation and resolution of complaints regarding harassment and discrimination, and procedures for students to resolve complaints of harassment and discrimination. State and federal law and this policy prohibit retaliatory acts by Lane Community College, its employees, students, and agents.

Lane Community College will publish and publicize this policy and related written procedures (including the procedure for making complaints) to students and employees, particularly when they are new to the institution. Lane Community College will make this policy and related written procedures (including the procedure for making complaints) available in all administrative offices and will post them on Lane Community College's website.

Employees who violate the policy and procedures may be subject to disciplinary action up to and including termination. Students who violate this policy and related procedures may be subject to disciplinary measures up to and including expulsion.

BP 3433 Sexual Harassment Policies / BP 3540 Sexual and Other Assault on Campus

All forms of sexual harassment are contrary to basic standards of conduct between individuals. State and federal law and this policy prohibit sexual harassment and Lane Community College will not tolerate sexual harassment. Lane Community College is

committed to providing an academic and work environment that respects the dignity of individuals and groups. Lane Community College shall be free of sexual harassment and all forms of sexual intimidation and exploitation including acts of sexual violence.

Lane Community College seeks to foster an environment in which all employees, students, applicants for employment, and applicants for admission feel free to report incidents of sexual harassment in violation of this policy and Title IX, without fear of retaliation or reprisal. Therefore, Lane Community College also strictly prohibits retaliation against any individual for filing a complaint of sexual harassment in violation of this policy and Title IX or for participating, or refusing to participate, in a sexual harassment investigation. Lane Community College will investigate all allegations of Title IX retaliation swiftly and thoroughly. If Lane Community College determines that someone has retaliated, it will take all reasonable steps within its power to stop such conduct. Individuals who engage in Title IX retaliatory conduct are subject to disciplinary action, up to and including termination or expulsion.

Any employee, student, applicant for employment, or applicant for admission who believes that he/she/they has been harassed or retaliated against in violation of this policy should immediately report such incidents by following college procedures. Lane Community College requires supervisors to report all incidents of harassment and retaliation that come to their attention.

This policy applies to all aspects of the academic environment, including but not limited to classroom conditions, grades, academic standing, employment opportunities, scholarships, recommendations, disciplinary actions, and participation in any community college activity. In addition, this policy applies to all terms and conditions of employment, including but not limited to hiring, placement, promotion, disciplinary action, layoff, recall, transfer, leave of absence, training opportunities, and compensation.

To this end the President shall ensure that the institution undertakes education and training activities to counter sexual harassment and to prevent, minimize, or eliminate any hostile environment that impairs access to equal education opportunity or impacts the terms and conditions of employment. The President shall establish procedures that define sexual harassment on campus.

The President shall further establish procedures for employees, students, and other members of the campus community that provide for the investigation and resolution of complaints regarding sexual harassment in violation of this policy, and procedures to resolve complaints of sexual harassment in violation of this policy. State and federal law and this policy prohibit retaliatory acts against all participants by Lane Community College, its employees, students, and agents.

Lane Community College will publish and publicize this policy and related written procedures (including the procedure for making complaints) to administrators, faculty, staff, students, applicants for employment, and applicants for admission, particularly when they are new to the institution. Lane Community College will make this policy and related written procedures (including the procedures for making complaints) available in all administrative offices and will post them on Lane Community College's website.

Employees who violate the policy and procedures may be subject to disciplinary action up to and including termination. Students who violate this policy and related procedures may be subject to disciplinary measures up to and including expulsion. Volunteers or unpaid interns who violate this policy and related procedures may be subject to disciplinary measure up to and including termination from the volunteer assignment, internship, or other unpaid work experience program.

BP 3540 Sexual and Other Assault on Campus

Any sexual assault, physical abuse, or stalking of any kind, including, but not limited to rape as defined by State law, whether committed by an employee, student, or member of the public, that occurs on Lane Community College property, is a violation of Lane Community College policies and procedures, and is subject to all applicable punishment, including criminal procedures, and employee or student discipline procedures consistent with State and federal law. Students, employees, and campus visitors who may be victims of sexual and other assaults shall be treated with dignity and provided comprehensive assistance.

The President shall establish administrative procedures that ensure that students, employees, and campus visitors who are victims of sexual and other assaults receive appropriate information and treatment. Lane Community College will make educational information about preventing sexual violence is widely available on campus.

The procedures shall meet the criteria contained in 34 Code of Federal Regulations Part 668.46 and ORS 350.255.

BP 3530 Possession of Firearms, Weapons, and Other Destructive Devices

Lane Community College is committed to preventing workplace violence and to maintaining a safe work and learning environment. Lane Community College (College) strictly prohibits any person, including students, employees, visitors, contractors and vendors, from being in possession of, or giving the appearance of being in possession of, any firearm, dangerous or deadly weapon, or destructive device while on College business, or at any other time while in or on College owned or controlled buildings, offices, premises, sites or vehicles, or at activities under the jurisdiction or sponsorship of the College. College property also includes that portion of any other building occupied by the College on a permanent or temporary basis. This policy applies to all firearms and does not include an affirmative defense described in ORS 166.370 (3)(g), concerning persons licensed to carry a concealed handgun under ORS 166.291 and ORS 166.292.

On-duty law enforcement officers licensed with the Oregon Department of Public Safety Standards and Training (DPSST) or equivalent state or federal authority authorized to license the possession of firearms by law enforcement officers may possess firearms while on college property and acting within the scope of their employment. The President is authorized to make exceptions on the showing of good cause or necessity with immediate notification to the board.

Any individual found in violation of this policy is subject to removal and exclusion from campus, college disciplinary action (if an employee or student), and/or arrest in accordance with state and federal laws.

Definitions:

"**Firearm**" means a weapon, by whatever name known, which is designed to expel a projectile by the action of powder.

"**Dangerous or deadly weapon**" means any weapon, device, instrument, material or substance which under the circumstances in which it is used, intended or attempted to be used or threatened to be used, is readily capable of causing death or serious physical injury or specifically designed for and presently capable of causing death or serious physical injury.

"**Destructive device**" means any projectile containing an explosive or incendiary material or any other chemical substance, a bomb, grenade, missile, mine, or similar device, or any combination of parts either designed or intended for use in converting any device into any destructive device or from which a destructive device may be readily assembled.

BP 3550 Drug Free Environment and Drug Prevention Program

Lane Community College shall be free from all drugs. Students and employees may not possess, use, or distribute illicit drugs and alcohol.

The unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in all facilities under the control and use of Lane Community College.

Any student or employee who violates this policy will be subject to disciplinary action (consistent with local, state, or federal law), which may include referral to an appropriate rehabilitation program, suspension, demotion, expulsion, or dismissal.

The President shall assure that Lane Community College distributes annually to each student and employee the information required by the Drug-Free Schools and Communities Act Amendments of 1989 and complies with other requirements of the Act.

BP 3560: Alcoholic Beverages

The President is authorized to enact procedures as appropriate and permitted by law regarding serving alcoholic beverages on campus or at fund-raising events held to benefit non-profit corporations. Alcoholic beverages shall not be served on campus except in accordance with these procedures.

BP 3570: Smoking and Other Tobacco Use and Possession on Campus

To enforce smoking and tobacco control regulations and procedures, the President is authorized to:

- Set enforcement standards for all Lane Community College sites and campuses;
- Direct that Lane Community College post signs stating its tobacco use policy on campus, as follows:

--the locations at which smoking or tobacco use is prohibited on campus;

--the locations at which smoking or tobacco use is permitted on campus;

- Inform students, employees, and visitors of the tobacco use policy and enforcement measures.

Possession of tobacco products and inhalant delivery systems by persons under the age of 21 is prohibited on all Lane Community College grounds and property. This includes, but is not limited to: in facility buildings, at facility-sponsored activities, in vehicles on facility grounds on all campuses, including satellite properties.

This policy applies to all Lane Community College employees, volunteers, clients, students, visitors, vendors and contractors.

Exceptions to this policy are made for a person for whom a tobacco or nicotine product or a substance to be used with an inhalant delivery system has been lawfully prescribed.

This does not include FDA approved nicotine replacement therapy products for the purpose of cessation.

Limited exemptions to this policy may be allowed when tobacco has a ceremonial use.

BP 5010 Admissions and Concurrent Enrollment

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, religion, sex, pregnancy, sexual orientation, gender identity, gender stereotypes, parental status, national origin, perceived shared ancestry or ethnic characteristics, age, limited English proficiency or English learner status, physical or mental disability, record of or regarded as having a disability, genetic information, family relationship, marital status, expunged juvenile record, veteran status or political affiliation or association with any member of these protected groups.

Lane Community College shall in its discretion, or as otherwise federally mandated, evaluate the validity of a student's high school completion. The President shall establish procedures for evaluating the validity of a student's high school completion.

BP 5052 Open Enrollment

All courses, course sections, and classes of Lane Community College shall be open for enrollment to any person who has been admitted to Lane Community College. Enrollment may be subject to any priority system that has been established. Enrollment may also be limited to students meeting properly validated program requirements, prerequisites and corequisites or due to other practical considerations such as exemptions set out in statute or regulation.

The President shall assure that this policy is published in the catalog(s) and schedule(s) of classes.

BP 5055 Enrollment Priorities

All courses of Lane Community College shall be open to enrollment, subject to a priority system that may be established. Enrollment also may be limited to students meeting properly validated program requirements, prerequisites and corequisites or due to other, practical considerations.

The President shall establish procedures defining enrollment priorities, limitations, and processes for student challenge of these priorities.

Veterans Priority Enrollment

The President shall establish procedures to give priority enrollment to certain qualified students who are active members of the Armed Forces, and for a member of the Armed Forces who was honorably discharged, or a dependent who is receiving veterans' educational benefits. The college must offer course registration to the students outlined above before offering registration for courses to other students.

BP 5200 Student Health Services

Lane Community College will provide student health services in order to contribute to the education aims of students by promoting physical and emotional well-being through health oriented programs and services.

BP 5400 Associated Students Organization

The students of Lane Community College are authorized to organize a student body association. The Board of Education hereby recognizes that the association as the Associated Students of Lane Community College.

The Associated Students activities shall not conflict with the authority or responsibility of the Board of Education or its officers or employees.

The Associated Students shall conduct itself in accordance with state laws and regulations and administrative procedures established by the President.

The Associated Students shall be granted the use of Lane Community College's premises subject to such administrative procedures as may be established by the President. Such use shall not be construed as transferring ownership or control of the premises.

BP 5410 Associated Students Elections

The Associated Students shall conduct annual elections to elect officers. The elections shall be conducted in accordance with procedures established by the constitution and bylaws of the Associated Students and within parameters as determined by the President.

Any student elected as an officer in the Associated Students shall meet the requirements as determined by Lane Community College and the Associated Students. The President will establish procedures to ensure the requirements are advertised such that they can be easily accessed by students interested in elections.

BP 5420 Associated Students Finance

Associated Student funds shall be deposited with and disbursed by the President.

The funds shall be deposited, loaned, or invested as authorized by law.

All funds shall be expended according to procedures established by the constitution and bylaws of the Associated Students of Lane Community College which shall be in accordance with Lane Community College policies and procedures.

Security and Safety

Public Safety Services

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 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 Titan Court. 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 6 days a week. 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 and other investigative systems.

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, the Counseling Center, and the Mental Health & Wellness 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, personal safety instruction, and safety planning.

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.

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.

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.

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 website.

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. All emergency phones are checked quarterly to ensure that they function.
- **Blue Telephones -** There are a small number of "blue" emergency phones located in outside areas of the campus. They connect directly to Public Safety Emergency (5555). All emergency phones are checked quarterly 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.

Student Complaint Procedure

Purpose - The formal Student 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.

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.

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.

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).

Step 3: 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.

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.

COPPS procedure: Sexual Respect-Sexual Misconduct

Title IX and Sexual Harassment Guide

For more information, see Sexual Respect at Lane or email *titleix@lanecc.edu* or call 541-463-5920

Transportation and Parking

LTD Bus Passes

Lane Community College students taking a credit class and ESL, ABSE, or GED students at the 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 bus routes and other information, go to the LTD website or call LTD Customer Services at 541-687-5555 or 711 (TTY—Oregon Relay).

For information on how to obtain a bus pass and sticker, see Transportation and Getting Around.

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.

For more information, see Bike Lane Bicycle Program.

Main Campus Parking

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.

For more information, see Vehicle Regulations or call 541-463-5558

Downtown Campus Parking

The closest parking option is The Broadway South Place garage, (900-946 Chamelton 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.

Resources and Support

Campus and community resources designed to help you as you move closer to your educational and career goals.

Other Learning Opportunities

Academic Learning Skills

Main Campus, Building 11, Room 245, 541-463-5439

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.

Credit courses: Academic Learning Skills offers courses for college credit in in-person, hybrid, and online formats. For more information about courses, see the Writing (p. 176), Mathematics (p. 153), and Effective Learning (p. 140) headings in the course description section of this catalog.

Developmental credit: Most of the courses in Academic Learning Skills are considered developmental courses. Students may be eligible to receive financial aid to complete developmental courses. Please discuss the impacts of developmental coursework with financial aid and an academic advisor.

Adult Basic and Secondary Education/GED

Adult Basic and Secondary Education (ABSE) Department, Main Campus, Building 11, Room 201, 541-463-5214; Downtown Campus, Room 404, 541-463-6180

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, and 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.

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.

Continuing Education

Continuing Education, 541-463-6100 or email ceinfo@lanecc.edu

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.

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

Cooperative Education

Cooperative Education, Main Campus, Building 19, Room 231, 541-463-5203

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:

1. 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.
2. Work with your coordinator to set up a Co-op internship
3. 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.

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 English language learners 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.

High School Connections

Main Campus, Building 19, Room 231, 541-463-5521

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. Students must register for the College Now courses in order to receive Lane credit. View College Now course offerings by 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

Contact 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.

Library

Lane Community College is a comprehensive community college whose mission is to provide accessible, high quality, and affordable lifelong education. Within this context, the primary goal of the Library is to provide library services that support the curriculum and fulfill the information needs of students, faculty, staff, administration, and community through the building and maintaining of a vital collection of library materials and resources. Whenever possible, these will be extended to the community.

Phi Theta Kappa Honor Society

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 that 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 that are payable in several options.

Small Business Development Center

Downtown Center, 101 W. 10th Ave., Ste. 133, 541.463.6200

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:

- Free and Confidential business advising in English & Spanish
- Small business fundamentals, courses and workshops – Bilingual
- Small business management programs
- Certification and licensing programs
- SHRM – Society for Human Resources Management
- CCB – Construction Contractors Board
- Real Estate Broker Pre-Licensure
- Property Management
- Network Specialized Services
- Capital Access Advising
- Market Research
- Global Trade Support

Additional Lane Resources

Lane offers many other opportunities to aid in academic success and reaching educational goals. Connect with the individual department to learn more. Support for Academics, Career, Wellness, and more. Get Involved and learn more about what Lane offers beyond classes. Find resources for the community.

Counseling Center

Counselors provide support that leads to student success by fostering a meaningful commitment to care, building a sense of community, and connection to campus. The Counseling Center is proactive in contributing to clearer academic and career direction, as well as increased confidence, self-advocacy, and motivation.

Academic Counseling: We provide counseling and resource referrals for students with academic difficulties or challenges impacting their ability to reach short and long-term Academic or Career Goals

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

Foundation

The LCC Foundation is a 501(c)(3) nonprofit organization that supports the College's mission by raising private funds from individuals, corporations and foundations in support of the College's capital projects, programs, and student scholarships. Student scholarship applications are generally accepted between January and early March each year - please visit the website for exact dates and more information on the application process. Through the generous support of donors, countless students have been able to achieve their educational and career goals.

LCC Alumni-Network

The LCC Alumni Network celebrates the diverse individuals who have been part of Lane Community College. If you've taken a credit or non-credit class, completed a certificate program, or earned a degree, you're an integral part of our alumni community. As a part of the Alumni Network, you'll connect with fellow alumni, strengthen your professional network, share your experiences and insights with current students, connect with employers who hire LCC Alumni, take advantage of the many resources available at the college, and more. Employers interested in hiring alumni should also connect directly with our Alumni Network. To learn more, visit our website or e-mail with questions.

Specialized Support Services

Specialized Support Services (S3) provides job training and education to adults with developmental and intellectual disabilities. We've trained students since 1973 and help prepare them for meaningful employment in the community.

Substance Abuse and Addictions 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.

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

Lane 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.

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 transfer or general degrees
- waiver of requirements for career technical degrees and certificates

Petitions to be reviewed by ARRC.

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 online before registration begins. Registration usually begins the fourth week of the preceding term except fall term, which occurs the preceding spring 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 level definitions - Lane has defined course-level expectations for below-100-, 100-, 200-, 300-, and 400-level courses.

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. CRWR 242H (p. 131). 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.
- **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 the 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 for more information.
- **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." 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.

ExpressLane - Lane Community College students use web registration on ExpressLane. Using the web, students register for classes from any computer connected to the internet.

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 - Student's access term grades through ExpressLane. 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 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.

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 definitions of the various learning modalities on the LCC website.

"L" Number (User ID) - Lane provides all students with a computer-generated user ID for ExpressLane. This number begins with an uppercase "L" followed by eight digits. The "L" number used with a PIN number will give students access to their student information in ExpressLane, 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 ExpressLane under the myGradPlan tab.

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 11-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 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.

Disclosures and Statements

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 that 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, www.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
- **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) & Oregon Trucking Association (OTA)
- **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 the 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) 17938 SW Upper Boones Ferry Rd, Portland, OR, 971-673-0685
- **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, 971-673-0685

General Disclosures

Annual Security Report Information

Annual Clery Safety Report

Campus Crime Disclosures

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Audited Financial Statement

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Credit Student Outcomes

From a cohort of full-time, first-time-in-college, degree-seeking students who enrolled at Lane fall term of AY2021: by July 2023, 24% had completed a degree and 26% transferred to another higher education institution. (Source: Lane IR & IPEDS)

Nondiscrimination Statement

The College's nondiscrimination statement provides notice to all members of the College community about the College's commitment to providing a working and learning environment that is free from discrimination, harassment and retaliation.

Lane Community College, and each individual who represents Lane Community College, shall provide access to its services, classes, and programs without regard to the individual's legally protected status. Legally protected status is defined as: race, color, religion, sex, pregnancy, sexual orientation, gender identity, gender stereotypes, parental status, national origin, perceived shared ancestry or ethnic characteristics, age, limited English proficiency or English learner status, physical or mental disability, record of or regarded as having a disability, genetic information, family relationship, marital status, expunged juvenile record, veteran status or political affiliation or association with any member of these protected groups. Inquiries may be directed to Shane Turner, Associate Vice President, Human Resources & Labor Relations 541-463-5115, or ADA/504 Compliance Officer Dr. Colman Joyce 541-463-5096.

Related Policies, Procedures, and References

- Disabilities: Discrimination and Retaliation against Students with Disabilities is Prohibited
- Affirmative Action Guidelines and Complaint Procedure
- Disabilities: Accommodating Employees
- Disabilities: Americans With Disabilities Act Complaint Procedure
- Harassment and Discrimination Complaint Process
- Harassment Based on Race or Ethnicity or National Origin: General
- Harassment based on Sexual Orientation, Gender Identity, Gender Expression, Religion, or Disability
- Nondiscrimination on the Basis of Gender Identity
- Student Gender-Based Sexual Misconduct
- Title IX Coordinator and Section 504 Officer

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