Clatsop Community College

2005 - 2006 Catalog

Statement of Mission and Objectives

The mission of Clatsop Community College is to provide high quality learning opportunities for individuals in Clatsop County and beyond, and to lead in meeting the changing needs of our community.

In order to fulfill this mission, the Board and College staff are committed to the following objectives:

Students: To provide a student-centered learning environment with faculty and staff who are accessible and supportive. To help students develop a sense of responsibility to self and society by providing guidance, counseling, and career planning that inspires student success and a commitment to lifelong learning. To maintain our open admission policy with equal educational access and opportunity.

Educational Offerings: To provide lower division transfer courses that will enable students to transfer to Oregon University System institutions. To provide a variety of professional technical courses and programs that prepare individuals for entry level employment or occupational advancement, and meet the needs of business and industry. To provide developmental and remedial assistance for those who need to develop competencies in basic skills or who are pursuing a GED. To provide an extended learning program that responds to the cultural, social, recreational, and general self-improvement needs of our patrons.

Staff: To attract and retain the best qualified faculty and staff who are dedicated to our mission and objectives. To provide a congenial, cooperative atmosphere, and a variety of employee development and wellness programs which promote employee job satisfaction, performance, and advancement. To maintain a firm commitment to affirmative action and equal opportunity.

The Community: To foster positive and productive relationships with community residents, local businesses, and public agencies in order to develop and improve College programs. To participate in the activities of community-based organizations. To encourage public input through advisory committees, follow-up studies, community surveys, and other appropriate means. To promote and maintain a commitment to the concept of the College as both cultural and educational center for the community.

Planning: To continuously review the educational and facilities needs of the College district and beyond through ongoing strategic planning. To continue student recruitment and long range planning processes that will enable us to achieve our objectives and improve our services. To ensure the public's trust by effectively managing the human, financial, and physical resources of the College. To adapt our programs to educational and technological advancements.

To receive information about the College's degree or certificate programs, write or call:

Clatsop Community College
Admissions Office
1653 Jerome, Astoria, OR 97103
(503) 338-2411 or Toll Free 1-866-CLATSOP
FAX (503) 325-5738
admissions@clatsopcc.edu

For general information, call (503) 325-0910 or access our website at:
www.clatsopcc.edu
Specific inquiries about the Affirmative Action Policy should be directed to the:
Affirmative Action Officer/Human Resources Director

It is the policy of Clatsop Community College that there will be no discrimination or harassment on the grounds of race, color, sex, marital status, religion, national origin, age, sexual orientation, or disability in any educational programs, activities, or employment. Questions or complaints should be directed to the Affirmative Action/Gender Equity Officer in Patriot Hall 225 (503 338-2450; TDD 503 325-2468). The Section 504 Coordinator is located in P330 (503 338-2474).

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"Welcome to the 2005-2006 academic year at Clatsop Community College!"

As Clatsop Community College's president, I am excited to be a part of a dynamic teaching and learning community; one that keeps students at the center of all that we do. I can assure you that, as a student here at Clatsop Community College, your educational needs will be our focus.

I believe in community college education. My own experience as a college student began at a community college back in Minnesota, and I am grateful for the positive preparation I got there; preparation that formed the foundation for my Bachelors, Masters, and PhD degrees, and for my 25 years of work in higher education. I want you to know that I am committed to providing you with that same positive start!

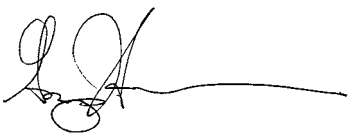
Clatsop Community College is a uniquely student and learner centered place, dedicated to providing you with high-quality education with a personal touch. Excellent faculty and small classes combine to give you access to instructors who are experts in the subjects and skills you want. And at Clatsop Community College, you have access to tutoring, counseling, academic advising, and other support services that will assist you in getting all you can from your classes.

Clatsop Community College is fully accredited, so you can be assured that the education and credits you receive from us will be recognized by businesses and other colleges throughout the country.

Clatsop Community College is YOUR college. We have a well-earned reputation for service to Clatsop County and surrounding areas, providing a variety of educational and cultural opportunities that are responsive to the needs and interests of the community and its citizens - that's you!

I am so very proud to be a part of Clatsop Community College, and I encourage you to be a part of this college and feel this same pride for yourself.

Welcome!



Dr. Gregory Hamann
President

Clatsop Community College

Clatsop Community College is a public, two-year coeducational institution serving northwest Oregon and southwest Washington since 1958. It has grown to an enrollment of over 7,000 students. Instruction and training in liberal arts and sciences, professional technical fields, continuing education, developmental education, and general education are offered.

Located at the mouth of the Columbia River in historic Astoria, the College enjoys the mild, if wet, climate that has helped make the Oregon coast famous for its lush, green beauty and rugged, undeveloped shoreline. Its high-quality, low-cost education serves a district that covers all of Clatsop County and part of Columbia County in Oregon, and Pacific and Wahkiakum Counties in Washington.

At Clatsop you may:

- Earn a two-year degree.
- Take up to two full academic years of lower division instruction which can be transferred to a four-year college or university.
- Take courses that lead to occupational, social, and personal competence.
- Enroll in classes, workshops, and seminars which offer avocational as well as occupational benefits.

Accreditation

Clatsop Community College is accredited by the Northwest Commission on Colleges & Universities. This accreditation assures Clatsop Community College students that their work will receive appropriate recognition from prospective employers and other colleges and institutions. You may receive information regarding accreditation by contacting the Office of the President.

Convenient For Students

The Astoria campus is convenient. It is an easy walk to most classes. The student center, library, classrooms and laboratories, and administrative offices are nestled comfortably together on the city's northern hillside just below the historic Astoria Column. From this vantage point at the edge of Oregon's coastal mountain range there is a bird's eye view of the beautiful Columbia River estuary.

In addition to the main campus facilities, the College has a performing arts center and waterfront Marine and Integrated Manufacturing Technology training facilities. The South County Center in Seaside serves south Clatsop County including the cities of Seaside, Gearhart, and Cannon Beach. Other communities which the College serves include Warrenton, Knappa, Clatskanie, Rainier, and Westport, as well as Long Beach, Ilwaco, Seaview, and Naselle in Washington.

The Area

The College district covers all of Clatsop County which records a population of about 35,000. Astoria, the county seat of government with a population of 10,000, boasts industries in forestry and fishing with a growing tourism trade and maritime shipping rounding out the local economy. Steeped in Northwest history, Astoria is said to be the oldest American settlement west of the Rocky Mountains. Its beautiful, Victorian-era homes and commercial buildings, many constructed before the turn of the century, speak to the craftsmanship of a bygone age. Many of these have been placed on our nation's official register of historic places. They attest to the importance of this area to Oregon and Northwest history.

Northwest Oregon claims over a century and a half of colorful history in which explorers, fur traders, fishermen, and lumbermen played active roles. Seagoing traders visited the Columbia River soon after the United States became a nation. The city of Astoria sprang from John Jacob Astor's fur trading post in 1811, five years after Lewis and Clark explored the area. Coastal streams, lakes, and waterfalls bear the names of early explorers. Within the district are numerous Oregon state parks. Nearby, across the renowned Astoria-Megler bridge, can be found some of Washington's parks, as well as the beautiful Long Beach Peninsula with its miles of continuous, sandy beach. The area offers many clear streams and lakes teeming with trout and steelhead, and of course the mighty Columbia River with its important commercial and sports fisheries.

ADMISSION DEGREE OR CERTIFICATE PROGRAM

If you are planning to earn a Clatsop degree or certificate you must apply and be admitted to Clatsop as a certificate or degree seeking student. In addition, many of the special program funding sources such as financial assistance, veterans benefits, and some scholarships require your admission before any funds can be released.

Admission Criteria: Clatsop is an open-door, equal-access institution. To qualify for admission, you must be 18 years of age or older, or possess a high school diploma or GED. To be admitted you must complete an admissions application and the ASSET placement evaluation. The College reserves the right to deny admission to applicants whose admission is judged to be potentially detrimental to the institution.

Application Dates: As a prospective student, you are encouraged to apply early to be eligible for early registration dates. The first day of class of any given term is the last day to begin the admissions process. You may visit, call, or write the Admissions Office, located in Room 200 of Towler Hall, for specific application dates and for assistance beginning the admissions process.

You may call (503) 338-2411 or 1-866-CLATSOP (toll free), write to Office of Admissions, Clatsop Community College, 1653 Jerome, Astoria, OR, 97103, or reach us by e-mail at admissions@clatsopcc.edu. The following steps have been established to ensure that you begin your experience at Clatsop with ease and confidence.

Step 1: Complete Application for Admission The first step in the admissions process is to complete an Application for Admission. We will mail you an application, or you may fill one out at the Admissions Office in Towler Hall, Room 200, or you can download the application at www.clatsopcc.edu/admissions and click on the application link. Complete the application, print it, sign it, and bring it to the admissions office or mail it to: Clatsop Community College, Admissions Office, 1653 Jerome Ave., Astoria, OR 97103. A $15.00 application fee must be paid before your application can be processed.

If you are not transferring from another institution and have been out of high school or have obtained your GED within the last five years, you should request that your high school transcripts be mailed to the CCC Admissions Office. You may request your GED transcripts from the Department of Education in the state where you took your GED test. You may request an application and transcript request forms from the Admissions Office. The application should be returned to the Admissions Office as soon as possible. You must then contact the Admissions Office to schedule an appointment for the next step, the ASSET assessment.

Step 2: ASSET Assessment A placement evaluation called ASSET helps identify your readiness levels in writing, reading, and math. This is required for admitted students. If you have been successful in previous college classes, you may ask about an exemption from the ASSET. The data from ASSET will not be used to deny admission to Clatsop.

The assessment consists of three basic areas:

1. **Writing Skills** measures your skills in punctuation, grammar, sentence structure strategy, organization, and style.
2. **Reading Skills** measures your ability to read and understand factual material.
3. **Numerical Skills** measures your ability to understand and work with whole numbers, decimals, fractions and basic word problems involving arithmetic. If you have additional mathematics experience, an algebra assessment may also be recommended to determine your appropriate class placement.

Step 3: New Student Orientation All new students should attend New Student Orientation. At the orientation, you will receive information about the results of your ASSET assessment, degree requirements, the role of academic advisors, registration, college resources, and be assigned an academic advisor.

After attending the orientation, you will meet with your academic advisor. Your advisor will provide you with assistance in selecting your courses, interpreting degree requirements, understanding institutional policies and procedures, and monitoring your progress through the use of the degree checklist.

Transfer Admission: If you are transferring from another institution, you should follow the steps listed above. Your official transcript will be submitted for evaluation to the Registrar's Office after you schedule a New Student Orientation session. Both lower and upper division credits in which you earned a "C" or better will be considered for evaluation.

Upper division credits may be transferred to Clatsop to meet group and elective requirements when it is determined that the upper division course content is essentially equivalent to Clatsop course content. Transfer credit for work done in non-accredited collegiate institutions will not be granted.

Readmission: If you have been admitted and attended Clatsop before, but have been absent for one year or more, contact the Registrar's Office to update your status as an admitted student.

NURSING PROGRAM

Nurses at all levels need to be caring and relate well to people of different backgrounds and cultures. As a nurse, you need to be able to adapt to change, think critically, and respond during crises. Personal integrity and ethical behavior are essential for nurses. The nursing program is academically and physically rigorous. As a nursing student, you need to be able to grasp scientific concepts, set up and answer basic math and algebra problems, and communicate well verbally and in writing. Physically, you need to be able to remain on your feet for extended periods, lift up to 40 pounds, hear heart and breath sounds and use a telephone, read fine print, and identify skin tones such as pale, ashen, grey, or bluish. If you have a history of substance abuse or mental health problems or a criminal record, you may wish to speak with a nursing advisor prior to pursuing nursing as a career.

Enrollment in the nursing program is limited. Acceptance into the program is determined by a weighted point system from a pool of qualified applicants. After evaluation and determination of total points, the top ranking individuals will be offered admission to the program. Remaining qualified candidates are placed on a ranked alternate list which expires after fall term commences. Fall term admission applications must be submitted the preceding Spring term. If you are interested in applying for the nursing program, you should read about the program requirements listed in the Applied Science section of this catalog. Contact the Admissions Office at (503) 338-2411 or stop by Towler Hall, Room 200 for an application, program information packet, and specific application dates.

For complete information on nursing program admission requirements, refer to page 62.

Re-Entry and Advanced Placement

Re-Entry: If you were previously enrolled in the CCC Nursing program and have signed and met the terms of your Re-Entry Agreement, you may have one opportunity to reenter the Nursing program within one year after the term you withdrew (or within 2 years after the term you withdrew if you were enrolled in the Tillamook cohort), provided space is available in the program. If you are interested in applying for Re-Entry, contact the Admissions Office for a "Re-Entry & Advanced Placement Application Packet."

Advanced Placement: If you are a licensed practical or vocational nurse (LPN/LVN) or have been previously enrolled in a nursing program at Clatsop or another college, you may be considered for Advanced Placement, provided space is available in the program. If you have been withdrawn from the CCC nursing program for more than a year or if you failed or withdrew from the program more than one time, you may also apply for Advanced Placement, provided space is available in the program. If you are interested in applying for Advanced Placement, contact the Admissions Office for a "Re-Entry & Advanced Placement Application Packet."

INTERNATIONAL STUDENTS

To be admitted, you must meet the following requirements:

1. A paper-based score of 520 or above or a computer-based score of 190 or above on the International Test of English Language (TOEFL), or successful completion of and recommendation from an English Language Institute in the United States, or 30 quarter hours or 20 semester hours of transferable credits with a 2.5 grade point average or better from American colleges or universities.
2. The equivalent of a U.S. high school diploma.
3. A financial statement verifying that you have the financial resources to pay the normal expenses for one year's enrollment. You will be required to submit one year's tuition before final papers for immigration and college admission are issued. See the tuition and fee information on page 7.

Applicants are accepted to begin in the fall, winter, or spring terms. The application process must be completed two months prior to the term you plan to attend. If you are interested in applying for admission, you should request an "International Student Packet" from the Admissions Office. The packet outlines the application procedures and application deadlines. A $150.00 non-refundable international student application fee must be submitted with your application.

This school is authorized under Federal law to enroll non-immigrant students.

MONEY MATTERS RESIDENCY - PAYMENT - REFUNDS

Payment Obligations

By registering for a class(es) at the College, you have incurred a legal obligation to pay all tuition, fees, and any other charges relating to your enrollment, even if your charges are being paid by another party. Unless you officially withdraw from your courses, you are obligated to make payment by the due date published in the relevant class schedule.

If you do not make payment, make arrangements for deferred payment, provide proof of payment in full by another party, or withdraw from your courses by the required date, you will also be responsible for payment of additional late charges and any collection costs and attorney fees.

You are responsible for keeping the College informed of any changes in your mailing address or name.

If you are under 18 years of age, you will be held liable for all charges incurred under Oregon Revised Statute 348.105.

Payment Options

Payments may be made by any of the following methods:

Cash: US funds only.

Checks:Local personal checks, non-local personal checks (with check guarantee card), travelers checks, cashiers checks and money orders are accepted. Make payable to Clatsop Community College.

A $25 charge and all collection costs, including court costs, will be charged on returned checks. After the college has received two returned checks from you, all future payments must be made by cash, credit card, or cashiers check; personal checks will not be accepted. Returned checks of any nature, including NSF and stop payment, do not cancel your financial obligation for payment.

Credit Cards: VISA and Mastercard are accepted.

Financial Assistance/Scholarship: A signed Clatsop Community College financial assistance attendance form must be presented to the Business Office at the time you pickup your funding.

Alternate Funding Source: It is your responsibility to ensure that official payment authorization is received by the Business Office by the payment due date or late charges will be assessed and/or the account will be sent to collections.

Installment Payment Plan: Any student may participate in the Deferred Payment Plan, except those noted below. If you qualify, the following conditions apply:

- you must register using your social security number.
- a $20 processing fee will be charged.
- a downpayment must be made equal to the application fee and one-third (1/3) of the outstanding balance — after applying all financial assistance, scholarships, and alternate funding source payments.
- the remaining balance, after downpayment, will be divided into two equal installments. A late payment charge of 10% or $20, whichever is less, will be added to the outstanding balance for each installment that is not made by the due date.
- any balance remaining at the last day of the term may immediately be referred to a collection agency, the Oregon Department of Revenue, or an attorney for collection. Collection and/or attorney fees will be added to the outstanding balance.
- any balance due may be deducted from all financial assistance or scholarships awarded to you.
- you will not be allowed to register for subsequent terms until your account is paid in full.

NOTE: The college's Installment Payment Plan is not available to:

1) students receiving full funding from financial assistance, scholarships, or alternate source.
2) students owing less than $100.
3) international students.

Refunds

Before dropping or withdrawing from a class, it is a good idea to see an advisor or student services representative to discuss support services that may make it possible for you to remain in classes.

General: Refunds are calculated from the date and time the Student Records and Registration Office receives a completed schedule change or withdrawal form. Refunds will be processed by the Business Office, as soon as possible, beginning the third week of each term.

Regular Courses: Students withdrawing from a course more than two days in length, and who comply with regulations concerning withdrawals, may receive a refund of tuition and fees. Withdrawals made within the first 10% of instruction time will qualify for a full refund. Withdrawals made within the second 10% of instruction time will qualify for a 90% refund. Withdrawals made after the second week of class do not qualify for a refund.

Short Courses: If you withdraw from classes two days or less in length, you will receive a full refund if the action is initiated prior to a special preregistration deadline or if no such deadline, prior to the beginning of the class. No refunds will be issued after those times.

Course Cancellations: If a class is canceled by the College, there will be a 100% refund of the tuition and fees.

Special Provisions: Refunds of financial assistance will be pro-rated in accordance with federal regulations and are returned to the financial assistance programs, not to the student. Details are available at the Financial Assistance Office. If you withdraw due to circumstances beyond your control such as job relocation or a medical emergency, you may file a petition for additional refund. The date of receipt of the petition, length of class attendance, and cost of course materials and services may be considered in denying or reducing the amount requested.

Gold Card

Clatsop Community College students 62 or older may hold a Clatsop Community College Gold Card. Card holders are entitled to a 25% tuition discount and instructional fee discount. Other fees, including technology and materials fees, are the responsibility of the bearer. Applicants must present proof of age.

The college reserves the right to exempt courses from the Gold Card discount.

Tuition & Fees

2004-2005: Subject to change for 2005-2006
Per Credit Hour

Residency	Tuition		Technology Fee*		Per Credit
In-state**	$54.00	+	$6.00	=	$60.00
Out-of-State	$108.00	+	$6.00	=	$114.00
International	$189.00	+	$6.00	=	$195.00

Tuition and fees are subject to change without notice. Current tuition and fee information is published in the quarterly class schedule, available at CCC or on-line. All monies owed to the college for previous terms must be paid before you can register for the current term.

* **Technology Fee:** in order to provide the most up-to-date computer hardware and software for students to utilize in the labs and instructional classrooms, it is necessary to periodically replace both the hardware and software. The Technology fee paid by the students helps the College with a portion of these costs. The fee also helps pay for the cost of operating the instructional labs each term. This includes helping pay for lab monitors, internet access, paper, print cartridges, and other current operating expenses. The fee is pro-rated for non-credit classes.

****Residency:** Residents of Oregon, Washington, Nevada, California or Idaho will be charged the in-state tuition rate. If you wish/need to retain residency in a state other than those listed above, you will be charged the out-of-state tuition rate. Declaration of intent must be made at the time of registration. Per Oregon Revised Statute, the following are considered residents:

- military personnel on active duty and their dependents.
- veterans enrolling within one year of separation from services.
- dependents of parent or guardian who qualifies as Oregon resident.

International students will be charged the international tuition rate.

Other Fees

Late Registration Fee: A late registration fee of $25 will be charged to you if you enroll after the first week of the term for regular term-length credit classes.

Refundable Fees (in addition to or in lieu of tuition): Some classes such as art, integrated manufacturing technology, computer science and physical activity have additional fees. You should check the current class schedule to determine which classes have fees and the amounts. Depending upon circumstances, these fees may be refundable.

Non-refundable Fees: The following fees are non-refundable:

	2005-2006
Admissions application	$15
Official transcripts	$5 each
Faxed transcripts	$6 each
Late registration fee	$25
Late fee for not making payment arrangements by end of the first week of classes	$50, plus $15.00 per month
GED program participation fee	$25
GED testing fee	$90
GED retake fee	$13 per test
ASSET testing fee (per battery)	$10
(per individual test)	$5
Installment Payment Plan processing fee	$20
Returned check fee	$25
International student application fee	$150
Graduation petition fee	$15
Graduation cap & gown fee	$25

FINANCIAL ASSISTANCE

Clatsop Community College has a comprehensive financial assistance program that includes grants, loans, and part-time employment for students who qualify. The primary purpose is to provide financial assistance to students who would be unable to attend Clatsop Community College without such help. Financial assistance is available to help bridge the gap between the annual educational expenses and the student's ability to meet them. Each student and his or her parents (if applicable) bear the primary responsibility for meeting educational costs.

Eligibility: To be eligible to receive financial assistance, a student must be a U.S. citizen or permanent resident, have a United States high school diploma or GED, or pass an "Ability to Benefit" test, and be admitted to and enrolled in a program leading to a degree or certificate. Students applying for financial assistance must also submit official copies of all previous post-secondary grade transcripts to the Admissions Office for evaluation. Financial assistance (with the exception of some scholarships) is determined by careful analysis of financial resources from information furnished on the "Free Application for Federal Student Aid" (FAFSA). A federal formula calculates a student's financial need. Every effort is made to ensure fair distribution of the resources available to the college. At Clatsop, campus-based funding is distributed first based on need and then on a first-come, first-served basis.

A student who is in default on any federal student loan is not eligible to receive additional financial assistance until the default has been cleared (See the Financial Assistance Office if you need help in clearing up a defaulted loan). A student who owes a repayment of Title IV Financial Aid funds is not eligible to receive additional financial assistance until full repayment (or satisfactory arrangements for repayment) have been made.

A student may have no federal or state drug convictions as an adult for possession or sale of illegal drugs. Students who have been convicted for the first time of possession (within the last year), for the second time of possession (within the last two years), or for the first time for sale (within the last two years) of an illegal drug may establish eligibility by completing a qualified drug rehabilitation program. Students convicted more than once for sale or more than twice for possession of illegal drugs are ineligible for federal funding.

Applying for Financial Assistance: Financial assistance forms are available in January for the following academic year (fall through summer terms). Students should begin the application process as soon as possible after January 1 regardless of the term they plan to attend. It is important to file early as the awarding process can take two months or more and some funding sources will run out of available funds early in the year. Forms are available through high schools and colleges.

Renewal Application: If you were in college last year and meet certain conditions, you will receive a Renewal Application in the mail in early January. The Renewal application will allow you to update the information you submitted last year.

Internet filing: If you have Internet access, you can file a FAFSA (or a Renewal Application, if you are eligible and have a PIN number) at http://www.fafsa.ed.gov

A student who is in default on a student loan that was taken out while attending Clatsop Community College will not be able to register for any classes at Clatsop until proof of full repayment or documentation indicating that the loan has been rehabilitated and is in good standing is presented to the Financial Assistance Office. Either of these situations requires a letter from the Department of Education. See the Financial Assistance Office for further details.

Financial Need is the difference between the cost of education and the amount the student and his/her family are expected to contribute, known as the Expected Family Contribution (EFC).

Cost of education
-Expected Family Contribution
=Financial need

The EFC is determined by the federal processor using the information on your financial assistance application. The cost of education at Clatsop is a standard budget that includes regular tuition, fees, books and supplies, housing, transportation and personal expenses. Budgets may be adjusted annually to reflect increased costs and are pro-rated for number of terms you are attending and the number of credits enrolled for each term.

The amount of financial assistance offered depends on the student's financial need and the availability of funds. Supplemental Educational Opportunity Grant (SEOG) and Federal Work Study are limited and awarded first based on need and then on a first-come, first-served basis. Oregon Opportunity Grants are offered as long as state funds are available. Federal Pell Grants, Federal Direct Stafford Student Loans, and Parent Loans for Undergraduate Students (PLUS) are available to eligible students/parents all year.

The amount of funding varies with the number of credits a student takes. Students may enroll full-time (12+ credits), three-quarter time (9-11 credits), half-time (6-8 credits) or less than half-time (1-5 credits).

Financial Assistance Refunds and Returns

For any students receiving federal student financial aid, refunds for tuition and fees (excluding non-refundable fees) are returned to the financial assistance programs and not to the student. A return of federal student financial aid funds that were received by the student for other costs of education, such as living expenses, may be required if a student completely withdraws from all classes before completing at least 60% of the term or receives zero credits. Any refunds for tuition and fees and any financial assistance funds returned by the student will be applied

in the following order:

1. Unsubsidized Direct Stafford loans.
2. Subsidized Direct Stafford loans
3. Direct PLUS loans
4. Federal Pell Grants
5. Federal Supplemental Educational Opportunity Grants
6. Other SFA Programs
7. Other federal, state, private, or institutional sources
8. The student

Students are required to notify the College of their withdrawal from all classes by completing a *Schedule Change Form* and submitting it to the Registrar's Office for any term in which they receive financial assistance funding. For any student who completely withdraws before more than 60% of the term has been completed, the amount of any refund for tuition and fees, and the amount of federal student financial assistance funds that must be returned by the student are calculated based on the student's withdrawal date. A student's withdrawal date is the last date of attendance as indicated on the *Schedule Change Form*. For students who fail to complete a *Schedule Change Form* and submit it to the Registrar's Office, or in cases where no last date of attendance is indicated on the *Schedule Change Form*, the exact withdrawal date will be determined by the Financial Assistance Office. (Contact the Financial Assistance Office for further details on withdrawal date determination.)

Financial Assistance Programs*

Program	Brief Description	Award Amounts
Federal Pell Grant	A federal grant program for undergraduate Students who demonstrate need.	$400 to $4,050 Enrolled in 1-12 credits
Federal Supplemental Educational Opportunity Grant	A Federal grant program for undergraduate students who demonstrate need.	$100 to $1,500. Limited funding — apply early. Must be enrolled in at least 6 credits.
Oregon Opportunity Grant	A state grant program for undergraduate students who demonstrate need.	$1,257. Limited funding — apply early. Must be enrolled in at least 12 credits. Must be an Oregon State Resident.
Federal Workstudy	A federal and college funded program that provides employment opportunities for students who demonstrate need. Jobs may be on or off campus.	Up to $4,692 per year. Wage rate $7.00 - $8.02 per hour. Limited funding — apply early. Must be enrolled in at least 6 credits.
William D. Ford Federal Direct Subsidized Loan	A federal loan program with interest and repayment deferred until student leaves school. Interest is variable, currently capped at 8.25%. Student must demonstrate need.	Up to $2,625 for freshman and $3,500 for sophomores. Must be enrolled in at least 6 credits.
William D. Ford Federal Direct Unsubsidized Loan	A non-need based federal loan program with principle repayment deferred until student leaves school. Interest is variable, currently capped at 8.25%, and must be paid while student is attending school, or added into loan amount.	Up to $4,000, depending on cost of education. Must be enrolled in at least 6 credits.
William D. Ford Federal Direct PLUS Loan	A non-need based federal loan program for parents of undergraduate dependent students. Repayment begins within 60 days of receipt of funds. Interest is variable, currently capped at 9.00%. Parent must pass a credit check.	Up to the cost of education minus any other funding. Student must be enrolled in at least 6 credits, not including classes for which no tuition is charged.

** The above award amounts are for the 2005-2006 academic year and are subject to change for 2006 - 2007. Please check with the Financial Assistance Office for information on the 2006-2007 award amounts.*

If a financial assistance student completely withdraws from all classes before more than 60% of the term has been completed, the College will determine the refund amounts and the amount of financial assistance funds, if any, that must be returned by the student (or parent, if a PLUS loan). The College must calculate these amounts, refund any tuition and fees, and notify the student of any amount due within 30 days of the withdrawal date or the date the College determines the student withdrew, whichever is later. The College calculates the refund amounts and the amount of funds that must be returned by the student based on the percentage of the term completed. For more information and examples of how the College calculates these amounts, contact the Financial Assistance Office.

A student/parent must return the entire amount due by the end of the term in which he/she withdraws in order to continue assistance eligibility for the next term. A student/parent who cannot immediately return the full amount due may make other arrangements by contacting the College Business Office within 45 days of the date the College notifies the student of the amount due. If satisfactory arrangements are made with the College Business Office, the student will continue to be eligible for assistance.

Student-Owed Repayments

Students receiving cash payments from the financial assistance programs (funds disbursed to the student after payment of tuition and fees, not including the Federal Work Study) who completely withdraw from all classes or receive zero credits may be required to repay a portion of the cash payment according to the percentage of term completed.

No repayment of financial assistance is required for students who complete more than 60% of the term. Students must submit written notification of complete withdrawal from classes by submitting a *Schedule Change Form* to the Records & Registration office. No additional financial assistance will be paid to a student who owes a repayment for early withdrawal until full repayment or arrangements for repayment are made.

***The last date of attendance is the date used to determine the tuition refund to the Financial Assistance program and the amount of repayment a student owes. If a student fails to withdraw, the last date of attendance is the mid-point of the term or as determined by information available to the Financial Assistance office.*

Satisfactory Progress Guidelines

Clatsop is required by federal and state regulations to define and enforce standards of satisfactory academic progress (SAP) which students must maintain to continue receiving financial assistance. SAP is determined each term based on your cumulative GPA and the total credits you have earned at Clatsop. Refer to the following chart:

Credit Hours Funded	*Cumulative GPA*	*Percent of Credits*
1-44	1.80	Complete 75% of your attempted credits each term
45 or more credits	2.00	Complete 75% of your attempted credits each term

Students who do not meet the minimum cumulative GPA and/or complete the required number of credits listed above will be disqualified from financial assistance. Other guidelines also apply. See the *Financial Assistance Handbook* for further details.

Maximum Credit Limit: Federal regulations require that a school define a maximum number of credits within which a student must complete his/her program. At Clatsop a student is expected to complete a one year certificate within 70 credits (Maritime Science certificate is 77 credits) or a two year degree within 135 credits. All credits attempted at Clatsop and any credits a student attempted at other institutions will be used in the calculation.

Appeals: If you are disqualified for the following: not maintaining the appropriate cumulative GPA and/or not completing the required number of credits by the end of a term; completing zero credits any term; not completing your program within the maximum credits allowed, and you believe you have extenuating circumstances that caused you to be disqualified, you may petition the Student Issues Committee for a review of your situation. Petitions are available at the Financial Assistance office, and must be submitted by Wednesday, 5:00 PM, the first week of classes. No petitions are accepted for Summer Term.

Scholarships and Institutional Funding

The application period for scholarships that are offered through Clatsop will open in Spring term (April) for funding for the following academic year beginning in September. See the CCC web site at www.clatsopcc.edu/scholarships for details on scholarships being offered and application deadlines, or call the Financial Assistance Office at (503) 338-2322. The list of scholarships being offered is updated annually in March. To qualify for Clatsop scholarships, print out the CCC Scholarship application from the CCC web site, complete and submit it to the Financial Assistance Office by the deadline indicated.

Beginning in 2005-06, Clatsop is offering the CCC Success Grant to all CCC students enrolled for the first time in a certificate or degree program fall term, full-time (12 credits or more). The CCC Success Grant is for $200 and is renewable at $200 a term for five consecutive terms, provided students attend full-time and achieve a 2.75 or better cumulative grade point average.

In addition, Clatsop will be offering CCC Opportunity Grants in the amount of $1,257 to those full-time students most in need who do not receive an Oregon Opportunity Grant (income guidelines apply). For those students who receive either an Oregon or a CCC Opportunity Grant, Clatsop will fully fund the cost of education at CCC with grants and student employment (no loans).

To qualify for the CCC Success Grant or the Oregon or CCC Opportunity Grant, complete the Free Application for Federal Student Aid on the web at www.fafsa.ed.gov, or call the Financial Assistance Office at (503) 338-2322.

REGISTRATION

Registration Information

The calendar on the inside back cover of this catalog and in term class schedules contains registration dates. These dates are subject to change if necessary.

The college publishes a schedule of classes prior to the beginning of each term. The schedule contains current course offerings, location of classes, and fees charged for each class. Classes and workshops of less than one term in length may be advertised in the schedule of classes or individually as they occur. To register, you need to complete the registration form and pay for tuition and fees.

Degree Seeking Students

If you plan to earn a Clatsop certificate or degree and/or are receiving financial assistance, you must complete the admissions process. Admitted students are provided information about college degrees and services, are evaluated for correct placement in courses, and are assigned to an academic advisor. Your advisor will assist you in making informed decisions concerning career planning, in selecting appropriate courses, and in referrals for help with financial or personal issues. See the admissions section of this catalog for more information about becoming an admitted student.

A full-time certificate-/degree-seeking student will usually have to complete 15 credits each term in order to complete certificate/degree requirements within three or six terms. If you need college preparatory work, plan to spend an additional term or terms to ensure that you are prepared to meet degree requirements. New degree-seeking students will be assisted with registration during their first scheduled advising session. Returning students are encouraged to register during the announced early registration periods.

Non-Degree Seeking Students

If you do not intend to complete a degree or certificate, you are still encouraged to register prior to the beginning of the term. No approval is required except for those courses which require instructor permission for registration; however, you should follow course prerequisites as noted in the college catalog and term schedule. If you are unsure of whether you have the academic skills to be successful in a college course, you may arrange for a reading, writing, or math placement assessment. Contact the Admissions Office at (503) 338-2411 for more information or to schedule an assessment session.

Your registration is complete when you have paid tuition and fees or when other funding arrangements have been completed.

Students Under the Age of 18

The College is part of an array of educational services offered throughout Clatsop County. The College does not usually serve students under the age of 18 unless they are high school graduates. However, provisions have been made, in exceptional circumstances, to allow the enrollment of younger students.

Examples of these unique circumstances include:

1. By special contract with a local school district.
2. Through pre-approval of specific classes which are open to younger students.
3. Simultaneous enrollment.
4. By special petition.
5. For GED preparation.

Specific policies and procedures are available from the Registrar's Office. Parents or Guardians of dependent students are responsible for payment of tuition and fees.

Late Registration

If you wish to register for regular term length courses during the second week of the term, you must obtain instructor approval and pay a late registration fee. You may not register for regular term length classes after the second week of the term.

Changes After Registration

You may make course changes at the Registrar's Office. If you are a degree-seeking student you should consult your academic advisor before making any changes in your schedule. If you are adding a course the second week of the term, you must also obtain the approval of the instructor. *Schedule Change Forms* are available from the Registrar's Office. These forms must be used to add, drop, or change from audit to credit. (You are no longer allowed to change from credit to audit. Please see "audit" located in the Academic Information section of this catalog). If you are receiving financial assistance, you should check with the Financial Assistance Office prior to dropping a class to avoid losing funding. Funding from scholarships or outside agency sources may also be adversely affected by dropping a course.

For information regarding timelines for dropping courses in order to avoid a notation of "W" on your academic transcript, please refer to the following paragraph in this section, titled "Withdrawal."

Withdrawal

You have the responsibility to formally withdraw from courses for which you have registered, but do not intend to complete. Otherwise, you risk receiving an "F" for the course. Instructors do not withdraw students from courses. Withdrawal from one or more courses or a complete withdrawal from all courses will affect your financial assistance eligibility. It may also affect funding for students receiving scholarship funds or funds from outside agencies. Contact the Financial Assistance Office for more information.

You are expected to withdraw from classes in person at the Registrar's Office, using a *Schedule Change Form*. Under exceptional circumstances, you may withdraw by writing a letter of explanation to the College's Registrar.

REGISTRATION

No record of the course will appear on your transcript if the withdrawal is done before the fourth week. A notation of "W" will appear on your transcript for the course if the withdrawal is submitted from the fourth through seventh week.

The end of the seventh week of the term is the deadline for withdrawing from an individual course, as well as changing from "audit" to "credit" status. You are not allowed to change from credit to audit.

When circumstances are beyond your control, you may completely withdraw from the term, that is: drop all courses for that term. Withdrawal must be completed by the last Friday of classes prior to final exam week. Contact the Registrar's Office for more information.

Audit

You may register to "audit" a class if you do not wish to receive credit for a course. Credit seeking students have priority, however, so students wishing to audit a course must wait until Monday of the first week of the academic term to register. Auditing students pay the same tuition and fees as credit students.

You also need to obtain instructor permission to audit a class. Instructors accepting auditors may expect those students to meet many or all of the same course requirements as credit seeking students. These requirements will be made clear on course handouts. Auditors not meeting these requirements may be administratively withdrawn from the course at any time during the academic quarter.

To register to audit a class, simply circle the CRN number on your registration form, put a check mark in the AUDIT column, and tell the person at the registration desk you'd like to audit a class. To change from audit to credit you must complete *a Schedule Change Form*. On the "add" section, list the course again, but circle the course number. Changing from audit to credit must be completed by Friday of the 7th week of the term. You are not allowed to change from credit to audit.

Note: Audited courses do not meet requirements for enrollment status required for Veterans, Social Security benefits, or Financial Assistance. For example, if you need twelve credits to be a full-time financial assistance student, none of the twelve credits can have an "audit" status. An audit also does not satisfy requirements for entry into courses where prerequisites are specific.

Student Records

You have access to your records defined by the College as educational records. Examples of some student records are your admission application, transcript, and financial assistance data. For more information regarding access to your student records and other data the College is required to provide to you, see the "Student Consumer Information" section on page 20 of this catalog.

Grades may be picked up at the Registrar's office at the end of the term (or will be mailed to you if you are a degree-seeking student). For a copy of your transcript, complete a request form and drop it off, or mail it to the Registrar's Office with a check for $5 for an official copy, or we will fax it to an Oregon college for $6. There is no charge for unofficial transcripts.

Directory Information

Clatsop Community College has designated the following student data as "directory" information and it may be released without prior written authorization from the student: name, address, major field of study, terms of attendance, degrees and awards received. In addition, The Solomon Amendment requires by law that the College release a student's name, address, telephone number, date of birth, education level, major, and degrees received, upon request from recruiters of the branches of the United States military.

If you don't want information released, you must indicate so in writing by completing a *Request for Non-Disclosure of Student Information Form*. These forms are available at the Registrar's Office.

Transcripts

Your student transcript lists courses in which you are enrolled each term. This is your permanent, cumulative record of enrollment and grades. Courses dropped prior to the fourth week are not recorded. Honor Roll, Dean's List, and Phi Theta Kappa are also noted on your transcript.

You may obtain a transcript by submitting a written request to the Registrar's office. There is a $5.00 fee for official transcripts. There is no charge for unofficial transcripts. Transcripts may be faxed to other Oregon Colleges for a $6 fee. Your transcript will not be issued if you have defaulted on a student loan or have financial obligations to the College including college owned equipment, supplies or library books or materials.

If you retake a course for which you have already received a grade, the later grade will be transcripted and used in computing your grade point average (GPA). The earlier grade is removed from computation of the earlier term GPA and the cumulative GPA. You will be allowed two retakes to improve your grade. Subsequent retakes will be transcripted, but may not be used to meet degree requirements.

To ensure that your GPA is recalculated, you should inform the Registrar's Office of the retake and request that the GPA be recomputed. Notations of P, I, NC, W, and audit are not used in computation of the grade point average. Retakes of courses for which you previously received non-passing grades, or grades lower than required by your program, can be funded by financial assistance; however, retakes of courses for which you previously received a passing or required grade cannot be funded.

Academic Information

Degrees

The College offers four degrees. Specific information may be found on the following pages: Associate of Arts, Oregon Transfer (AA/OT), page 26; Associate of Science, Oregon Transfer Degree in Business (AS/OT-Bus), page 30; Associate of Applied Science (AAS), page 36; and the Associate of General Studies (AGS), page 34. You may earn more than one degree at Clatsop Community College. To be awarded an additional degree or degrees, however, you must complete at least 24 credits of coursework different from each of the previous degree(s). In addition, you must fulfill all the specified requirements for each new degree. Degrees will be awarded once you have completed the graduation petition process and have participated in graduation ceremonies, unless excused.

Warranty

Clatsop Community College warrants the competencies you develop while obtaining an Associate of Applied Science (AAS) degree. If, during the two years immediately following completion of the AAS degree requirements, you need to upgrade skills or acquire additional training in your professional/technical specialty, certain eligible courses may be attended tuition free on a space-available basis. All fees remain your responsibility.

Eligible courses include any which meet major requirements in the degree program under which you graduated and occupational supplementary courses determined to be in the applicable occupational specialty. The Vice-President of Instruction may approve appropriate Professional-Technical supplementary courses on an individual basis.

One-Year Certificates

The College also offers structured one-year certificates in particular Applied Science fields. Specific requirements are listed in the program descriptions in this catalog. A certificate may not be awarded concurrently with or subsequent to a degree in the same applied science program.

Recognizing that the established degree and certificate programs cannot meet every individual's educational needs, the College will develop short-term certificates in specific areas of concentration. You must arrange through the Vice-President of Instruction and be pre-approved by the Instructional Council for these individualized certificates which are usually completed in less than two years.

All certificate programs require a minimum of 45 credits. At least 12 of these credits must be earned at Clatsop. Additionally, there are mathematics, writing, and human relations requirements for all certificate programs. See your advisor and the Vice-President of Instruction for details.

Credit

Your credits are earned on the basis of your successful completion of course requirements. The number of credits assigned to each course is usually related to the number of hours you spend in class. One credit is earned for each hour of lecture/discussion class attended per week. Laboratory and studio experience usually require two or three hours of attendance for each credit earned. Most courses have been assigned a definite number of credits per term, but some have been given variable credits. In some variable credit courses, the number of credits will be determined by your progress during the term.

Transfer Credit

Coursework for which you earned a "C" or better grade from an accredited institution may be accepted to meet degree or certificate requirements at Clatsop Community College. Transfer coursework, although it may be used to meet requirements, will not be included in your Clatsop Community College cumulative grade point average.

Continuing Education Units

The college works in conjunction with various professional associations and employers to offer continuing education units (CEUs) as a form of certification for the successful completion of specified occupational instruction. The CEU is a measure of the amount of professional upgrading instruction that you have successfully completed. Contact the Continuing Education office for more information about specific classes.

You may not earn CEUs and academic credit for the same class. Therefore, you may not pay for classes awarding CEUs with financial assistance funds and CEUs do not count toward financial assistance satisfactory progress eligibility or toward degree completion.

Course Numbering/Grading

1. Courses that are fully transferable to Oregon University System universities are listed on pages 37 & 38. Most of these courses are graded on the A - F system. A few courses are graded pass or no credit (P/NC). Information regarding grading is available in the course syllabus which the instructor distributes during the first week of class.
2. Courses that are primarily professional-technical in nature are listed on pages 39 & 40. These courses are designed to prepare you for particular skills and trades. Most of these courses are graded on the A - F system. An exception is the Work Experience classes which are graded pass or no credit (P/NC).
3. Alpha-numeric courses below 100 are not designed for transfer to other colleges or universities within the Oregon University System. Most of these courses are graded P/NC. A few are graded on the A - F system.
4. Alpha-prefixed courses, such as MUS0511, which have a zero (0) in the fourth place, are non-credit general self-improvement or hobby and recreation courses.

Academic Information

Grading Policies

By Friday of the first week of classes each term, you should receive a course syllabus for each credit class in which you are enrolled. The syllabi should provide criteria on how grades are awarded including the approximate percentage of the term grade to be awarded for completed homework, weekly quizzes, term projects, mid-terms, finals, class participation, etc. Grades should reflect how well you meet course objectives. If you understand the objectives and know how well you have done in achieving them, you will generally not be disappointed with your grades.

Graded work at Clatsop Community College is based on the following guidelines (grade point value is also indicated):

A - Excellent (4.0)

1. Scores superior on examinations and/or assignments.
2. Shows independent thinking in terms of the subject matter of the course.
3. Shows a grasp of the relationships among various parts of the subject.
4. Asks questions which are appropriate and which stimulate relevant discussion by the instructor and/or students.
5. Complies with the stated performance regulations of the instructor.

B - Commendable (3.0)

1. Scores above average on examinations and/or assignments
2. Presents sound ideas on subject matter of the course.
3. Shows a grasp of the general organization of the subject matter.
4. Asks appropriate questions which clarify the presentation of the subject.
5. Complies with the stated performance regulations of the instructor.

C - Satisfactory (2.0)

1. Scores average on examinations and does average work on assignments.
2. Presents evidence of a grasp of the subject matter of the course.
3. Asks relevant questions.
4. Complies with the stated performance regulations of the instructor.

D - Minimal (1.0)

1. Scores below average on examinations; completes assignments at below average level, or fails to complete them.
2. May follow the course of discussion by others, but contributes little.
3. Shows some grasp of portions of the subject matter but little grasp of the overall picture.
4. Complies with the stated performance regulations of the instructor.

F - Unacceptable (0.0)

1. Scores unsatisfactory on examinations; completes assignments at an unsatisfactory level or fails to complete them.
2. Shows little or no grasp of the subject matter.
3. Does not comply with the stated performance regulations of the instructor.

I - Incomplete

At your request, an instructor may award an incomplete if you have completed at least 70 percent of the course work and shown an intent to finish the required work. An instructor will provide you with a statement describing the work needed to complete the course, and a copy of such statement will be maintained in the Student Records and Registration Office.

An incomplete does not imply an offer of tuition-free re-enrollment in the class. You will be allowed a maximum of one academic term to correct deficiencies noted on the statement of incomplete status. Incompletes received for spring term may be corrected during fall term of the following academic year. Under extenuating circumstances as approved by the Vice-President of Instruction, you will be allowed an extension beyond the deadlines noted above for finishing an incomplete. Incompletes are temporary notations. If courses are not completed, an instructor-designated grade will be issued.

W - Withdrawal

A student-initiated withdrawal.

P - Pass

You may earn credit for a course which is graded on a pass/no credit basis. The P grade denotes a level of accomplishment of "C" or higher. You may apply a maximum of 24 credits of "pass" grades toward a degree.

NC - No Credit

A designation used when you do not do passing work in a pass/no credit class.

Aud - Audit

You may register for audit if you do not wish to receive credit for a course. You must obtain instructor permission to audit a class. Because credit-seeking students have priority, you may not register for courses you wish to audit until Monday of the first week of the academic quarter. Instructors accepting auditors may expect those students to meet many or all of the same course requirements as credit seeking students. These requirements will be made clear on course handouts. Auditors not meeting these requirements may be administratively withdrawn from the course at any time during the academic quarter. Students cannot change from credit to audit. An audit does not satisfy requirements for entry into courses where prerequisites are specific. For example, audit WR 121 you will not satisfy the prerequisite for WR 122. Audited courses do not meet requirements for enrollment status required for Veterans, Social Security benefits, or Financial Assistance. If you are receiving scholarships of money from outside agency sources, your funding may be adversely affected by enrolling for audit. Registration, tuition and fees are the same as for credit courses. Changing from audit to credit must be completed by Friday of the 7th week of the academic quarter.

Academic Information

Academic Standards

In order to graduate from Clatsop Community College with a degree or certificate you must have a cumulative grade point average of 2.0 for all Clatsop Community College coursework.

If you are receiving funding from an external source such as financial assistance, scholarships or Veterans benefits you will be required to maintain satisfactory academic progress in order to continue to receive benefits. (Review the Financial Assistance, Scholarships, and Veterans sections of this catalog for details on satisfactory progress requirements.)

Credit by Examination

Credit by examination recognizes alternative routes to obtaining college-level knowledge and skills independent of the classroom. The intent of this method for awarding credit is to enable you to proceed through an established program in accordance with your present ability and knowledge. To ensure that you have achieved at the same level as any other student completing the course, the following conditions have been set forth for gaining credit through examination:

1. You must be enrolled in a diploma or degree program before a credit by examination petition (challenge) can be initiated. Exceptions may be granted by the Vice President of Instruction.
2. You must submit a formal application approved by the Administrative Assistant to the Vice President of Instruction, your advisor, and the instructor who will administer the examination.
3. You may elect to challenge a course in which you are currently enrolled, provided the class is formally dropped prior to the beginning of the fourth week of classes. Courses in which you have previously enrolled and received a grade may not be challenged.
4. You may not challenge more than 24 credits. Credits earned through examination cannot be counted for the degree completion requirement of "complete at least 24 credits at Clatsop Community College". A maximum of six credits, taken by examination, may be in cooperative work experience.
5. The faculty of the College offering the instruction in the challenged course will be responsible for the formulation, administration, and compilation of the results of the equivalency test in accordance with other provisions of this policy. The examination may be either oral, written, performance, or a combination of these methods of evaluation. Under no circumstances will the requirement for credit by examination exceed the pre-established criteria for the course.
6. Examination for course credit may be taken only once. If successful, you will receive the grade of pass and the letter "P" will be entered upon your transcript. If unsuccessful, you will receive a "N/C" on your transcript. Credits so earned will not be calculated in your grade point average.
7. Courses involving laboratory or shop experience may be challenged in the same method as any other course; however, you must supply written references from qualified individuals indicating your sufficient background experience to cause a waiver of the laboratory or shop time.
8. Credits earned by examination may not exceed the total credits previously earned at Clatsop Community College in regular course work. Should a challenge be approved during your initial quarter at Clatsop, credit for the challenged courses will not be applied until evidence of your successful completion of regular course work is entered into your transcript.
9. You will be assessed a nonrefundable charge of 50 percent of the tuition for each course challenged. A year-long course series, which must ordinarily be taken in sequence, and which, at the discretion of the instructor, may be evaluated by a single comprehensive examination, may be handled as a single challenge for the standard fee. Upon successful completion of the course challenge examination, you must pay the remaining 50 percent tuition before the course(s) will be entered on your transcript.

All the conditions set forth above are applicable to each student requesting course credit through examination. Any waiver of these conditions must be at the approval of the President of the College and these conditions are subject to change. For information or assistance regarding Credit by Examination, call the office of Vice-President of Instruction at (503) 338-2440.

CLEP

You may also earn credit by successfully completing the College Level Examination Program (CLEP) General Examinations or Subject Examinations. You may take CLEP examinations at any official CLEP testing center. Contact the Registrar's office at (503) 338-2407 for more information.

Independent Study

Clatsop Community College does not promote the use of independent study courses, but will allow, under specific circumstances, your utilization of this mechanism only after all other alternatives have been explored.

It is the prerogative of the instructor to approve these courses. If the instructor genuinely feels that circumstances warrant such an expediency, and after other avenues have been exhausted, the instructor may petition the office of the Vice-President of Instruction on your behalf, detailing the proposed course. Independent Study forms are available in the Instructional Services Office, Towler Hall room 203. Call (503) 338-2440 for additional information.

Academic Information

Work Experience (Cooperative Education)

Work Experience (Cooperative Education) is a nationally recognized program granting academic credit for various supervised Internships. Work Experience staff advise you in the program and assist you with registration.

Work Experience staff work with local employers to find learning and career opportunities for students. In addition, staff meet with you and your supervisor at the job site at least twice during the academic quarter to discuss your progress toward completing the learning objectives. Call (503) 338-2480 or email cwedirector@clatsopcc.edu for more information.

Companion Classes: A work experience seminar course is offered to augment the cooperative education experience. If you are enrolled in a work experience course, you must take the field seminar course concurrently, unless you have completed it in a previous term.

Job Placement: The Career Planning office receives job opportunities from employers and will contact instructors and students directly or through the student newsletter. The Employment Department has placed a touch screen computer with all job listings for local, state, and national employment opportunities in Fertig Hall. Local positions are posted on the Career Planning Job Board on the 2nd floor of Towler Hall.

Credit for Prior Learning

You may earn college credit by documenting learning acquired through job experiences, travel, hobbies and family and civic responsibilities. Enrolling in CPL 120, Credit for Prior Learning, will help you learn how to develop a portfolio of your activities. A maximum of 22 credits earned through development of your portfolio and six credits CPL 120 may be applied to an associate degree.

The CPL course is an on-line course taught by an instructor at another campus. You must have your own computer, modem, internet service provider and web browser software. Call the Learning Resource Center at (503) 338-2341 for information and permission to register. Textbooks are only available through the Chemeketa Community College Bookstore at (503) 399-5131.

Learning Resource Center: Dora Badollet Library

Located in the center of the main campus at 1680 Lexington, the Clatsop Community College Learning Resource Center/Library (LRC) is a gateway to the world of information. Services available at the LRC include access to the collection of books and periodicals, access to on-line databases with journals, magazines and e-books, Internet access, interlibrary loan service, distance education, and media/audiovisual services. Librarians are available to help students with research projects and the use of information technology. There are quiet places to study, and seminar rooms where video and audio equipment are available for viewing or listening to library media materials.

The primary mission of the LRC is to support the curriculum; the collection therefore contains materials on subjects in the liberal arts, sciences, and nursing, as well as technical and vocational fields. The LRC uses a web-based Voyager system. The library webpage also provides a portal to journal indexes and full text articles from a variety of vendors. The library collects materials in a wide range of formats, including: books, magazines, electronic resources, software, microfilm, microfiche, videotapes, audiotapes, compact discs, DVDs, laserdiscs, slides, art, and maps.

The LRC catalog is available on-line via http://library.clatsopcc.edu. Students can search the catalog, and the periodical databases, renew materials, and read e-books on-line. New resources and services are continually being added.

Graduation Requirements

In order to graduate from Clatsop Community College you must file a graduation petition with the Registrar's office. Due dates for petitions are printed in the Student Handbook, which is available in Student Services.

No student shall be issued a degree or certificate who has not earned a cumulative grade point average of 2.0 for all Clatsop College coursework and completed a minimum of ninety pre-approved credits for an Associate Degree or a minimum of forty-five credits for a Certificate. Please check specific degree and certificate requirements. You must be admitted to a degree or certificate program to graduate. (See Admissions Office in Towler Hall, Room 200). You must complete at least 24 credits at Clatsop.

You may graduate under the academic requirements in effect in any year in which you were enrolled in any course which counts toward a Clatsop Community College degree or certificate, but not to exceed five years prior to your graduation date. You may not mix requirements from two or more academic years.

Multiple Degrees: You may earn more than one degree at Clatsop Community College. To be awarded an additional degree or degrees, however, you must complete at least 24 credits of coursework different from each of the previous degree(s). In addition, you must fulfill all the specified requirements for each new degree.

Student Responsibility: It is the responsibility of you, the student, to know and to observe the requirements of your degree or certificate program and the rules governing academic work. Although your advisor will attempt to help you make wise decisions, the final responsibility for meeting the requirements for graduation rests with you.

Graduation Fees: A $15 graduation petition fee is payable to the business office, and payment is required prior to submitting your graduation petition to the Registrar's office. A $25 cap and gown fee must also be paid by all students attending commencement.

Academic Information

Honors and Awards

Clatsop Community College recognizes superior academic achievement and distinctive service by:

Transcripting term honors and recognition:

- Dean's List (12 or more graded credits; 3.75 to 4.00 grade point average {GPA})
- Honor Roll (12 or more graded credits; 3.5 to 3.74 GPA)
- Phi Theta Kappa eligibility (12 or more graded credits and a 3.50 GPA first term; 3.00 GPA thereafter)

Graduation With Honors/High Honors

At commencement, qualifying students are recognized as meeting requirements for graduation with honors or high honors. To qualify for honors, you must have a **cumulative** grade point average of 3.50 to 3.74. To qualify for high honors, you must have a **cumulative** grade point average of 3.75 to 4.00. Transfer work may meet requirements for coursework for which you earned a grade of "C" or better but is not computed in your cumulative grade point average.

Conferring other honors and awards:

- ASBG recognition cords (ASBG Officers at graduation)
- ASBG President's Cup
- Student Body Plaque
- Helen Wheeler Extra Mile Award
- Unsung Student Hero Award
- Instructional Council trophy (highest Clatsop GPA for graduating associate degree recipient)
- Outstanding Club Award
- Certificates of Appreciation
- Department awards
- Commencement Marshals
- Phi Theta Kappa cords at graduation

Summer Term

The College offers a limited selection of course offerings during the summer. Requests for specific classes may be directed to the office of Continuing Education or to the Vice-President of Instruction for academic coursework.

Lower division transfer, professional-technical, self-improvement and basic skill courses are offered.

Summer term schedules are available the first week of June in print or available online at the College's website at http://www.clatsopcc.edu by the third week of May. You may also ask the Registrar's Office to mail you a copy.

An Important Note: The College is closed on Fridays in July and August through Labor Day.

Student Services

Academic Advising

When you are admitted to a certificate or degree program, the college provides you with an academic advisor to assist with your exploration of career and educational goals; development of a plan for completing degree requirements; and selection of courses each term. Advisors can also provide referrals to help you resolve financial or personal issues, and assist you in understanding institutional policies and procedures. You are encouraged to obtain your advisor's signature on your registration form prior to registering; however, it is not required unless you are receiving financial assistance or are enrolling for your first term as a degree or certificate seeking student. Financial assistance students **must** obtain their advisor's signature on their financial assistance attendance form before their financial assistance check will be released to them.

Career Services

Assistance with career planning, choosing a college major, and finding career-related internships is available to all CCC students. Students with clear career goals complete college degrees at much higher rates than "undecided" students..

Available services include: a two-credit course, Career Planning (HD 110); individual career counseling with a qualified Career Counselor; personality and interest assessments; a career library; and assistance using relevant career information websites including CIS (Career Information System).

Call (503)338-2480 to schedule an appointment or request assistance with any aspect of the career planning process. You can also email questions to jweatherly@clatsopcc.edu or stop by the Career Planning Office in Towler Hall, Rm 211.

Counseling

Short term, confidential professional counseling is available to help students deal with personal difficulties that may affect their college work, such as family/relationship dilemmas, decision making or follow-through, or dealing with addiction, abuse, emotional or social problems. This service is provided free of charge. You may also ask about self-help courses, support groups, and community counseling services.

To make an appointment to consult with the college counselor, call (503) 338-2474, stop by the office in Patriot Hall room 330, or email jwhitman@clatsopcc.edu

Plus Program

The Plus Program, a federally funded Student Support Services TRIO project, is designed to help eligible students succeed at Clatsop and, when appropriate, transfer to a four-year college or university. Services include: in-depth academic and career advising; study skills; tutoring; scholarship assistance; four-year college transfer assistance; campus visits; laptop computer loans; workshops; personal counseling; tickets to cultural events. To be eligible, a student must be an admitted, degree-seeking student who has a need for our services and who is one of the following;

1) a first generation college student (neither parent has a four-year college degree),
2) low-income according to federal guidelines, or
3) a student with a documented disability.

Program information and applications are available in the Plus Program office, Towler Hall, Room 212, or by calling (503) 338-2346 or email plusprogram@clatsopcc.edu or visit our website at www.clatsopcc.edu/plus.

Students with Disabilities

The college is committed to providing equal opportunities for students with disabilities throughout the college community. Students with documented disabilities are entitled to reasonable accommodations under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Our philosophy is to maximize your independence and self-reliance, while making available a variety of support options, to assist you in achieving your educational and/or vocational objectives. To receive services you must submit documentation of your disabling condition(s) to the Disabilities Specialist. **To initiate support services, please contact Services for Students with Disabilities in Patriot Hall 330 or call the office at (503) 338-2474.** Official documentation will be reviewed by the Disabilities Specialist prior to receiving accommodations. It is your responsibility to self identify and make the request for services. Services may include:

- Campus orientation
- Registration assistance
- Academic advising and counseling
- Reasonable and appropriate classroom accommodations
- Test taking facilitation
- Learning style assessment
- Tutorial support
- Student advocacy
- Resource and referral services
- Special adaptive equipment

SEA Services Tutoring

Tutoring for enrolled students is provided in SEA (Student Educational Assistance) Services located in Fertig Hall room 24. Individual and group tutoring, study groups, computers for word processing and career counseling are some of the services offered in the SEA. Specialized tutoring in math and writing is offered every day with extended hours during finals week. Tutoring in other subject areas is scheduled throughout the term. A qualified staff works closely with college instructors to support students, providing assistance in a relaxed atmosphere. The SEA offers special services for English Language Learners (ELL) and students with learning disabilities.

Students at all levels of study are welcome at the SEA. Appointments for math tutoring are not necessary and all tutoring is free. For more information, contact the SEA tutor coordinator at (503) 338-2455.

Student Services

Assessment Center

The Assessment Center is located in SEA Services, Fertig Hall room 24. The Assessment Center administers a variety of tests, including the college placement test (ASSET), pre-GED placement (CASAS), and GED tests. Tests for distance education coursework can also be taken in the Assessment Center by making arrangements with both the originating institution and the Assessment Center staff.

Tests are administered by appointment only. For more information call (503) 338-2426.

Volunteer Literacy Tutor Program

The College offers training to students and community members interested in participating in the volunteer literacy tutor program. Trainings are offered throughout the year and focus on both adult literacy and English Language Learners (ELL). Participants in the trainings are qualified to tutor community members through the college program. For more information, call the Director of Adult Education and Family Literacy at (503) 338-2336.

Veterans Services

The Veterans Coordinator is located in the Financial Aid Office and provides assistance to students who are eligible for VA Education Benefits. The VA Coordinator will help veterans and eligible dependents with VA educational paperwork and policies as well as general college information or referrals. The VA Coordinator tracks programs, enrollment, grades and progress on each student to report to the VA. Initiating VA educational benefit checks generally take 6-8 weeks. While an application is being processed, students should be prepared to meet the costs of attendance. A Deferred Payment Plan is offered to all qualified students by the Business Office to assist students in initial tuition costs.

Admissions: Students receiving veterans' educational benefits must be officially admitted toward a certificate or degree program before the term they are requesting benefits. The VA will pay only for classes that advance students toward an approved degree or certificate program.

Transfer of credit: Students who enter as transfer students, or who have completed any college-level course work, are required to have all official transcripts submitted to the Admissions Office for evaluation. Students have until the end of their first term of enrollment to have submitted transcripts. The VA will not pay for the student to repeat any classes they have previously passed successfully.

Satisfactory Progress: A term and cumulative GPA of 2.00 is necessary to maintain benefits. Students will be sent a Probation Letter notifying them of unsatisfactory progress at the end of any term in which they fail to meet minimum standards. A Termination of Benefits Letter is sent to students who fail to bring their GPA above 2.00 for a second consecutive term or withdraw or fail all classes in any one term. In most cases, a student must satisfactorily complete a subsequent term in order to have educational benefits reinstated after termination due to unsatisfactory progress. Students will receive a copy of the complete Satisfactory Progress Policy upon application for benefits.

The Student Center

The cafeteria, bookstore, and Associated Student Body Government (ASBG) are located in the Student Center on the first floor of Patriot Hall. The cafeteria is open until early afternoon when classes are in session and serves meals and snacks. The bookstore provides textbooks and other class materials. ASBG officers hold office hours as their schedules permit.

Student Government Leadership Opportunities

The Associated Student Body Government (ASBG) is a non-profit student organization that coordinates student activities on campus and provides assistance and service to the student population. Student Government consists of a three-member Executive Committee and a three-member Senate.

Student government provides Clatsop Community College students with the opportunity to gain leadership skills and to help other students. Student government officers plan campus activities, develop the yearly budget, purchase equipment, hold elections, and participate in many community service events. They also serve as members of some campus committees, providing advocacy for students in campus decision-making.

For more information on how you can participate in student government, stop by the ASBG Office on the first floor of Patriot Hall next to the cafeteria or call them at (503) 338-2495. You may also contact the ASBG Coordinator at (503) 338-2371.

Organizations and Activities

Out-of-class activities are as important for education as traditional course work. At Clatsop, there are a variety of recreation and social activities and cultural events throughout the year: films, speakers, concerts, plays, barbecues, and more. If you have a special interest, you are invited to form a club and seek ASBG approval as a recognized student organization.

Recreational Opportunities

City league sports are available to students who choose to participate.

The Associated Student Body Government has equipment available for students to borrow free of charge. Contact the ASBG office at (503) 338-2495 for details.

Student Services

Students' Rights, Responsibilities and Conduct

The College has established policies and procedures governing student rights and responsibilities, and outlining the rules for student conduct, procedures for disciplining students, and the process for filing student complaints. These policies and procedures are published in the Student Handbook and on the College's web site at www.clatsopcc.edu/info/consumerinfo/consumer.html Copies of the handbook are available in Student Services, Towler Hall, Room 200, or contact Student Services at (503) 338-2371 to request a copy. Any changes to student policies and procedures made after the handbook has been published are also available in Student Services or on the College website.

Student Consumer Information

Federal regulations (part 668.41 – Student Assistance General Provisions) require that certain information be provided to all enrolled students on an annual basis, and to all prospective students. Following is a list and brief description of the required disclosures and information on where you can obtain a detailed copy of each disclosure.

Institutional Information: The college is required to provide you with general information regarding Clatsop Community College, including: the cost of attendance, academic programs, accrediting agencies, special services for students, appropriate campus contacts for all information, a description of the institution's refund policies, return of funds to Title IV programs (financial assistance), and the institution's procedures for officially withdrawing. The primary sources for this information are the catalog, quarterly class schedule, Student Handbook, and the Clatsop Community College web site at www.clatsopcc.edu

Available Financial Assistance: Information on available federal, state, and institutional financial need-based and non-need based assistance programs can be found by reviewing the Clatsop Community College Financial Assistance Handbook. The Financial Assistance Handbook includes descriptions of student assistance programs, application procedures and eligibility criteria, and the rights and responsibilities of students receiving financial assistance. A Financial Assistance Handbook may be picked up at the Financial Assistance Office in Towler Hall, Room 201, or you may request one by phone at (503) 338-2322 or email at financial_assistance@clatsopcc.edu. Scholarship information and applications may be accessed on-line. Go to Clatsop Community College's web site at www.clatsopcc.edu and click on the "Financial Assistance" button. Several student computers are available in Student Services, Towler Hall, Room 200 for use in accessing this information. You may also pick up scholarship information at the Financial Assistance Office. Information is also provided at scholarship workshops held each term. See "Financial Assistance" section of class schedule for workshop dates.

Graduation Rates: This report provides information on the graduation rates of a cohort of full-time degree or certificate seeking students who graduated within 150% of normal time for graduation. This information is available in the Student Right-to-Know Report which can be picked up at the Registrar's Office in Patriot Hall, Room 229, or you may request a copy by phone at (503) 338-2437 or view it on the college website at: www.clatspcc.edu/info/consumerinfo/graduate.html

Family Education Rights and Privacy Act (FERPA): also known as the Buckley Amendment, gives students the right to:

- Access their educational records
- Consent to release a record to a third party
- Challenge information in their records
- Be notified of their privacy rights.

Information on FERPA is available in the student hand-out entitled "Your Student Records." You may request a copy by phone at (503) 338-2437 or view it on the college website at www.clatsopcc.edu/info/consumerinfo/studentrecords.html

Campus Safety Report: This disclosure provides statistics on campus safety and crime for the three most calendar years, policies and procedures for reporting crimes, information regarding campus security provisions, and crime prevention programs on campus. The annual Campus Safety Report can be picked up at the Registrar's Office in Patriot Hall, Room 229, or you may request one by phone at (503) 338-2437 or email at registrar@clatsopcc.edu or you may review it on the college web site: www.clatsopcc.edu/info/consumerinfo/safety.html

Disclosure Statement

OAR 581-41-460 authorizes 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 will also 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 colleges to support the progress of students and their success in the workplace and other education programs.

OCCURS or 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; The 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; The Oregon Department of Education, to provide reports to local, state and federal governments. The information is used to learn about education, training, and job market trends for planning, research, and program improvement; The Oregon Department of Revenue and collection agencies only for purposes of processing debts and only if credit is extended to you by the college; The American College Testing Service, if you take the Asset Placement test, for educational research purposes.

State and federal law protects the privacy of your records. Your number will be used only for the purposes listed above.

Continuing Education

Lifelong Learning

The College considers education to be a lifelong process; therefore, courses are taught for all ages and interests. Continuing Education is an integral part of the total educational program of the college. A broad variety of courses are offered each term for professional, cultural, and special interest groups, as well as business and industry, and persons seeking an associate degree.

Continuing Education offers simple registration procedures. If you are a part-time student wishing to become a degree candidate, you must complete the normal admission procedures.

Typical continuing education offerings include art, conversational foreign language, home economics, internet, music, photography, personal fitness, health, securities, investments, and other general interest topics. In addition, management, employee, and small business development courses, seminars and workshops are offered.

General interest courses are designed to be flexible. Courses are offered each term in various locations. These classes start at convenient times and are purposely located to be easily accessible to you. Classes can be of any practical length: a full-term or a partial-term course, a weekend workshop, or an evening seminar. The College will offer a course on nearly any topic if a suitable location, a qualified instructor, and a sufficient number of students can be identified.

Any group of ten or more people who have common educational or training interests may request a seminar, a course or course series. The College then may seek an appropriate instructor and set up the course. Tuition and/or fees for such courses are established so that they cover the cost of the instruction, materials, and laboratory expenses.

ENCORE

Clatsop Community College sponsors ENCORE (Exploring New Concepts of Retirement Education), a learning in retirement organization. ENCORE is a member-run organization dedicated to providing quality educational opportunities and adventures for older adults, meeting the intellectual and cultural needs of its members. ENCORE offers a broad spectrum of programs and promotes an environment that fosters personal growth, vitality, and celebrates lifelong learning. ENCORE members pay annual dues to the organization and may attend free any or all of the ENCORE scheduled classes they are interested in (except where special fees may apply).

Call (503) 338-2473 or (503) 338-2408 for additional information.

Off Campus Classes

There are many locations within the College district to take classes. The College maintains a full-time office and classroom complex in Seaside to coordinate classes in Cannon Beach, Seaside, and Gearhart. Phone (503) 738-3346 for information about south county classes. Other classes throughout the district are coordinated for residents living near Warrenton, Svensen, Knappa, Clatskanie, Westport, Jewell, and Rainier. Call the Continuing Education office, (503) 338-2408, for specific information about classes in your area.

Distance Education

Clatsop Community College offers distance education classes in a number of delivery methods to serve students unable to enroll in traditional on-campus courses.

Several college courses are available via television utilizing the local cable station. These telecourses allow students to earn credits at home and may lead to an associate degree. Students may be required to attend some class meetings on campus.

Online courses allow students to take classes at their convenience from home or workplace. Students need access to a computer with Internet Browser software and an Internet Service Provider account to access course material, to turn in assignments, and to communicate with the instructor and classmates. Many of these online courses are provided by colleges around the state, and some are developed by instructors here on-campus. Contact the Learning Resource Center (Library) for details, (503) 338-2341.

Registration For Continuing Education

Registration times and locations for Continuing Education courses are provided in the term schedule published prior to each term. Student registrations are processed on a first-come, first-served basis. You may register by mailing in a registration form with a Visa/Mastercard number or personal check, or sign up for classes in person. Phone registration is also available by calling (503) 338-2437 or (503) 738-3346.

Continuing Education

Customized Training and Workforce Development

Clatsop Community College sponsors many management workshops, seminars, and courses specifically designed for business and industry. Events can be geared for an entire industry, or they can be custom designed for single "in-house" organizations. Instructors are selected for their experience and their emphasis is on applying practical knowledge. Contact the Business and Training Center at (503) 738-3346 for further information.

Small Business Development Center (BizCenter)

The Small Business Development Center provides low to no cost services and resources to existing, new, and potential small businesses throughout the College district and is part of a state wide network for service to businesses. The Center is located in the College's Business and Training Center, 1455 N. Roosevelt, Seaside. Services consist of consultation, basic management seminars, and an intensive small business management program. Call (503) 738-3347 or (503) 338-2405 for further information.

Apprenticeship Training

Related classroom training for registered apprentices is also coordinated through the Continuing Education and Development office. It is taught according to Oregon's Law and Plan of Apprenticeship and Training, the U.S. Department of Labor, and the Oregon State Apprenticeship Council. Classes cover technical areas of the trades and are intended to complement skills learned on the job. Apprenticeship related training offered through Clatsop Community College currently includes plumbing, electrician-inside wireman, plant electrician, and bricklayers. This program is for indentured apprentices only. Call (503) 338-2408 for information.

You can obtain information on how to become an apprentice from the Oregon Bureau of Labor and Industry, Apprenticeship Training Division, 800 NE Oregon St. #32, Portland, Oregon 97232; telephone (503) 731-4072 ext. 270; local telephone number, (503) 338-2408 (Continuing Education office).

Services for Business and Industry

All Business and Training opportunities can be accessed with one call: (503) 738-3346

Small Business Management

If you are a business owner/manager, the Small Business Management Program provides you with a variety of skills and tools that can lead you to greater business success. The program includes a practical once-a-month classroom session covering a variety of business topics and providing you an opportunity to exchange ideas with other business owners. The program also includes a monthly visit to businesses by the SBM instructor to assist in applying the materials learned in class. The instructor/student relationship is completely confidential.

The course covers a variety of subjects, including financial control and management, supervision, sales and marketing, inventory control, quality control, accounting, customer relations, and computer applications. You will receive a certificate of completion at the conclusion of the three year program.

Additional information about this program can be obtained by contacting Jim Entler at the Business and Training Center, South County Center, (503) 738-3347 or (503) 338-2405.

Business Capital Resource Center (BCRC)

The Business Capital Resource Center is designed to offer assistance to small businesses by improving access to get the money they need to start or enhance their business. Business owners and entrepreneurs can obtain help in writing a business plan or loan proposal and finding information and referral resources. The BCRC offers a library of business reference material, publications and computer resources with internet access. Call (503) 738-3347 or (503) 338-2405 for information and to make an appointment with a counselor.

Special Programs

Job Opportunities & Basic Skills (JOBS)

If you are receiving cash public assistance or food stamps you may qualify for the Job Opportunities and Basic Skills (JOBS) Program. The JOBS Program serves adult and teenage participants referred by the State of Oregon's Department of Human Services, Self-Sufficiency Program. You may be offered a series of education, training, and employment skills enhancements to prepare to leave welfare. The aim is for you to become self-sufficient and provide for your family without public assistance.

Typical activities are ABE/GED classes, regular credit classes in a skill area, specialized short-term training, life skills/personal management, job search classes, and counseling.

Clatsop Community College works in a partnership arrangement with Department of Human Services, MTC Works, the Employment Department, and Clatsop Behavioral Healthcare to provide services.

Arts & Ideas

In our mission to bring fine cultural programming to the Columbia Pacific Region, the Clatsop Community College Arts & Ideas program presents a wide spectrum of events throughout the year. Working with regional and nationally known artists, professionals and educators, Arts & Ideas provides opportunities for creativity and learning to audiences in a setting of artistry and education. Events presented in the annual series include workshops, dance, music, theater, lectures, and films.

The Arts & Ideas program is funded by Clatsop Community College and through our supporting memberships and sponsors. To find out more about the vibrant Arts & Ideas program visit www.clatsopcc.edu/arts&ideas or call (503) 338-2473.

Lives In Transition

The Lives in Transition (LIT) program is designed to assist individuals gain greater self-sufficiency, explore career/vocational options, and develop personal action plans. To successfully complete the program, students participate in two, three-credit classes: "Life Transitions" and "Coping With Stress And Depression." Classroom activities and discussions include:

- Improving self-esteem
- Promoting assertiveness and boundary-setting techniques
- Understanding the grief process
- Enhancing communication skills
- Learning and practicing stress management skills, and
- Developing educational, career or vocational goals.

A resource room is available to provide on-going support, guidance and camaraderie. The program is located in Towler Hall, Room 209. For more information or to sign up for the mandatory, pre-class orientation, stop by or call (503) 338-2377.

Western Oregon University

Clatsop Community College and Western Oregon University in Monmouth, Oregon work cooperatively to offer upper division and graduate courses for professional development and personal enrichment, and course work that can earn credits towards a bachelor's or master's degree as well as assistance with special programs and information and advising sessions. Availability of programs and/or classes is dependent upon enrollments and resources.

For further information contact (503) 791-3896 or 1-800-451-5767, or email extend@wou.edu.

Special Programs Grant Funded

Secondary Education

In cooperation with the area school districts, Clatsop Community College has competed for and successfully received two federal grants which assist middle school and high school students. The general purposes of the grants are to help participants succeed in school, make plans for the future and enter post-secondary education. These grants, Educational Talent Search (ETS) and Upward Bound (UB), are long term grants which are renewable; the services from these grants should continue for many years. The requirements for eligibility are similar for both grants with an emphasis on students who come from families which qualify based on income and educational levels. If you want more information, you should contact the ETS or UB office at (503) 338-2370.

Trio Grant Programs

Educational Talent Search (ETS)

Upward Bound (UB)

Student Support Services (Plus Program)

Educational Talent Search

Educational Talent Search (ETS) is a 100% federally funded program which serves eligible 6th grade through 12th grade students in the Astoria, Knappa, Seaside and Warrenton school districts. The purposes of ETS are to help participants be successful in school, graduate from high school, and enter an appropriate post-secondary program. ETS provides a wide range of age-appropriate services. These services can include classroom presentations, small group and individual work, group tours and visiting speakers. All ETS services are free; ETS has served the local area for over 13 years. If you are interested in more information, please contact the ETS office at (503) 338-2370.

Upward Bound

Upward Bound is a 100% federally funded program which serves eligible high school students in the 10th through the 12th grades. Upward Bound serves three high schools, Astoria, Seaside and Warrenton. Upward Bound is a small program which provides extensive support and activities. The program has a mandatory six week summer program at Clatsop CC during the summer following the sophomore year. During their junior and senior years Upward Bound participants are actively involved in preparation for college. Participants visit colleges, go to cultural events, and research careers. All Upward Bound services are free; Upward Bound has served students in this area for over 12 years. If you are interested in more information, please contact the Upward bound office at (503)338-2370.

Postsecondary Grant

Student Support Services

The Student Support Services TRIO grant, known at Clatsop Community College as the Plus Program, serves the academic and personal needs of first generation and low income college students and students with disabilities. The Plus Program provides in-depth services to students so that they may succeed in college and graduate and/or transfer to a four-year college or university. For further information, please see the program description on page 18 of this catalog or contact the Plus Program at (503) 338-2311 or email plusprogram@clatsopcc.edu.

Carl D. Perkins Vocational and Technical Education Act of 1998

The Carl D. Perkins Vocational and Technical Education Act of 1998 provides federal funds to develop the academic, vocational, and technical skills of high school and community college students by:

- developing challenging academic standards;
- integrating academic and professional technical instruction, and linking high school and community college education;
- developing, implementing, and improving professional technical education;
- providing professional development to improve professional technical education programs, services and activities.

Specifically, the grant provides for improving the linkage between the area high schools and Clatsop Community College in the following program areas:

Business & Management
Health Occupations
Industrial & Manufacturing Technologies

Funding is available for staff training and curriculum development, including inservice training of both professional technical and academic instructors working with professional technical students for integrating academic and professional technical education.

Special Programs

General Information

The purpose of Adult Education and Family Literacy is to help you improve your basic reading, writing and mathematics skills. Instruction in basic skills enhances your opportunities for success in continued academic learning and in the workplace. Course offerings include basic skills classes, college preparation, GED, and English Language Learners (ELL). Career and workforce skills are integrated into the courses.

SEA (Student Educational Assistance) Services is also a part of the Adult Education Department. The SEA supports students at all levels of study offering tutoring, study groups and career counseling opportunities. SEA Services are free for Clatsop Community College students. See page 18 for a description of SEA Services.

College Preparation Courses for Transfer and Professional/Technical Students

College preparation courses help you strengthen the reading, writing, and mathematics skills needed to prepare for college transfer classes, vocational programs and the workforce. After completing the ASSET placement your assigned advisor will direct you to the appropriate courses.

General Educational Development (GED)

The GED program offers classes for you to prepare for the GED certificate tests. The GED is accepted as a substitute for a high school diploma by most employers, apprenticeship programs and colleges throughout the United States. In Oregon the certificate is awarded by the Oregon Department of Education.

If you are interested in obtaining your GED, contact the Director of Adult Education and Family Literacy at (503) 338-2336. Day and evening classes are offered at various sites.

English Language Learners

English Language Learner (ELL) classes are designed to help non-native speakers gain skills in reading, writing, and speaking. Strengthening English skills will increase opportunities for success in college courses and the workplace. Classes are offered in Astoria and at other community sites. You may register for ELL classes at any time.

Literacy Program

Tutors are available to assist basic skills and ELL students with reading, writing, math, citizenship and workforce skills. Free tutor training is offered throughout the year. If you are interested in volunteering for the Volunteer Literacy Tutor program or want to refer someone for tutoring, contact the Director of Adult Education and Family Literacy at (503) 338-2336.

"As an ELL student, CCC is the best place to start college because it is not big and I can have the teachers attention."
Zulfa Nuvi

Academic Programs
Associate of Arts - Oregon Transfer Degree (AA/OT)

You have the opportunity to broaden your creative and critical knowledge through an Arts and Sciences program. You might enroll in the lower division program to explore several fields of study to clarify your educational and professional goals. Or you might seek a broad general education as a foundation in preparation for specialization during your junior and senior years at a four-year institution.

Many students attend Clatsop Community College for one or more terms and then transfer to a four-year college. The Associate of Arts, Oregon Transfer Degree allows you to complete lower division requirements at Clatsop Community College. If you complete this degree and are accepted at Oregon public universities, you are admitted as having completed all the lower division General Education requirements for a baccalaureate degree; however, some departments within State System institutions may require additional courses for admittance with junior standing.

You should confer with your advisor at Clatsop and with the institution to which you expect to transfer concerning the requirements of their baccalaureate major. Additional classes which are not on following lists may transfer as electives. The receiving school makes the decision concerning which classes it will accept for credit, which apply to its major and degree requi
confer with the school to which you intend to transfer.

General Requirements

Writing — **Nine credits** (three classes) with a "C" or better in each class from the following courses: WR 121 English Composition and WR 122 English Composition and *either* WR 123 English Composition *or* WR 227 Technical Report Writing.

Mathematics — **Four credits** or more with a "C" or better in MTH 105 Introduction to Contemporary Mathematics or a higher numbered math course. This course cannot be used to meet the Math/Science requirement.

Oral Communication — **Three credits** (one class) with a "C" or better from the following courses: SP 111 Fundamentals of Public Speaking, SP 112 Persuasive Speech, or SP 219 Small Group Discussion. This course cannot be used to meet the Arts & Letters requirement.

Distribution Requirements

Arts & Letters
A minimum of 12 credits, chosen from at least two disciplines, with no more than 9 credits from one discipline. (CHOOSE FROM THE FOLLOWING LIST)

ART 115,116,117	Basic Design	3 ea
ART 204,205,206	History of Western Art	3 ea
ART 211,212,213	Survey Visual Art of 20th Century	3 ea
ASL 201	American Sign Language - Conversational Skills	3
ENG 104,105,106	Introduction to Literature	3 ea
ENG 107,108,109	World Literature	3 ea
ENG 110	Introduction to Film Studies	3
ENG 180	Gothic Literature	3
ENG 201,202,203	Shakespeare	3 ea
ENG 204,205,206	Survey of English Literature	3 ea
ENG 220	Non-European Minority Literature	3
ENG 221	Intro to Children's Literature	3
ENG 253,254,255	Survey of American Literature	3 ea
ENG 260	Introduction to Women's Literature	3
FR 201,202,203	Second Year French	4 ea
GER 201,202,203	Second Year German	4 ea
HUM 101,102,103	Introduction to Humanities	3 ea
PHL 101	Philosophical Problems	3
PHL 102	Ethics	3
PHL 103	Critical Reasoning	3
R 201,202,203	Great Religions of the World	3 ea
SP 111	Fundamentals of Public Speaking	3
SP 112	Persuasive Speech	3
SP 115	Intro. to Intercultural Communication	3
SP 130	Business & Professional Speaking	3
SP 219	Small Group Discussion	3
SPAN 201,202,203	Second Year Spanish	4 ea
TA 101	Introduction to Theatre	3
TA 121,122,123	Fundamentals of Acting	3 ea
WR 241,242,243	Creative Writing	3 ea
WR 249	Writing Children's Books	3
WR 270	Literary Publications	3

Social Science

A minimum of 15 credits, chosen from at least two disciplines, with no more than 9 credits from one discipline. (CHOOSE FROM THE FOLLOWING LIST)

ANT 110	General Anthropology: Cultural	3
ANT 150	General Anthropology: Archeological	3
ANT 170	General Anthropology: Physical	3
ANT 232	Native North Americans	3
CJ 100	Survey of Criminal Justice	3
CJ 101	Introduction to Criminology	3
CJ 110	Introduction to Law Enforcement	3
CJ 114	Gender, Race, Class & Crime	3
CJ 120	Introduction to the Judicial Process	3
CJ 130	Introduction to Corrections	3
EC 115	Introduction to Economics	3
EC 201,202	Principles of Economics	4 ea
GEO 100	Introduction to Physical Geography	3
GEO 110	Intro to Cultural & Human Geography	3
GEO 120	World/Regional Geography	3
GEO 130	Economic/Resource Geography	3
HFS 226	Growing Years	3
HS 101	Alcohol Use, Misuse and Addiction	3
HS 102	Drug Use, Misuse and Addiction	3
HS 154	Community Resources	3
HS 201	Family Alcoholism/Addiction	3
HS 205	Youth Addiction	3
HST 101,102,103	History of Western Civilization	3 ea
HST 201,202,203	History of the United States	3 ea
PS 201, 202	American Government	3 ea
PS 203	State and Local Government	3
PS 205	International Politics	3
PSY 101	Psychology of Human Relations	3
PSY 190	Stress Theory & Management	3
PSY 201,202,203	General Psychology	3 ea
PSY 215	Intro. to Developmental Psychology	3
PSY 216	Social Psychology	3
PSY 219	Introduction to Abnormal Psychology	3
PSY 231	Introduction to Human Sexuality	3
SOC 204	General Sociology: Introduction	3
SOC 205	General Sociology: Social Issues	3
SOC 225	General Sociology: Social Problems	3
SOC 210	Marriage, Family & Intimate Relations	3
SOC 213	Minorities: Dealing with Diversity	3
SOC 221	Juvenile Delinquency	3
SOC 223	Sociology of Aging	3

Science/Mathematics

A minimum of 15 credits (including at least 12 credits in biological or physical sciences with laboratories) chosen from at least two disciplines. (CHOOSE FROM THE FOLLOWING LIST)

*BI 101,102,103	General Biology	4 ea
BI 121,122	Basic Human Anat. & Phys. I, II	3 ea
*BI 201,202,203 * 211, 212, 213	General/Principles of Biology	4 ea
BI 222	Human Genetics	3
*BI 231,232,233	Human Anatomy and Physiology	4 ea
*BI 234	Introductory Microbiology	4
*BOT 101	Botany	4
*CH 104,105,106	Introductory Chemistry	4 ea
*CH 221,222,223	General Chemistry	5 ea
CS 160	Intro to Computer Programming	4
CS 161	Computer Science I	4
CS 162	Computer Science II	4
CS 163	Computer Science III	4
CS 171	Principles of Computer Organization	4
CS 260	Data Structures	4
CS 271	Computer Architecture	4
CS 279	Network Management I	3
CS 288	Network Management II	3
CSB 133	Beginning Visual Basic Prog.	3
CSB 233	Advanced Visual Basic Prog.	3
CSB 234	Visual Basic III	4
*ES 160	Techniques in Environmental Information Analysis	4
G 145	Field Geology of Oregon	3
*G 201,202,203	Geology	4 ea
*GS 104,105,106,109	Physical Science	4 ea
GS 161	Field Biology of Oregon	3
MTH 105	Intro. to Contemporary Mathematics	4
MTH 111	College Algebra	4
MTH 112	Elementary Functions (Trigonometry)	4
MTH 211,212,213	Fundamentals of Elementary Mathematics I,II,III	3 ea
MTH 241	Calculus for Management and the Social Sciences	4
MTH 243,244	Intro. to Probability and Statistics	4 ea
MTH 251	Calculus I	5
MTH 252,253	Calculus II,III	4 ea
MTH 254	Vector Calculus I	4
MTH 255	Vector Calculus II	4
MTH 256	Differential Equations	4
*PH 201,202,203	General Physics	5 ea
*PH 211,212,213	General Physics with Calculus	5 ea

*courses which meet the lab science requirements of the AA-OT

Electives

Limitations on electives:

- Electives must be from the approved list - pages 37 & 38 in this catalog.
- Professional/Technical courses - A total of 12 credits of courses numbered 100 or higher from pages 39 & 40 in this catalog.
- Physical Education - A maximum of six hours.
- Individual Music Lessons (MUP) **-** A maximum of 12 credits on a major instrument and six credits on a secondary instrument may be applied to an associate degree.
- Cooperative Work Experience - no more than 18 credits of combined worksite and seminar courses.

Institutional Requirements

- Complete a minimum of 90 credits of approved lower division collegiate courses listed in OUS Transfer lists A & B (pages 37 - 40) in this catalog.
- Earn a grade point average of 2.00 or above for all Clatsop Community College coursework.
- Have earned a "C" grade or better on all coursework transferred from other institutions that is to be included in a Clatsop Community College degree or certificate.
- Complete at least 24 credits at Clatsop Community College.

Foreign Language

Students, who have graduated from high school or completed a high school equivalency program in 1997 or after, must meet one of the following requirements for admission to an Oregon University System institution: *either,*

1) two years of the same high school level language, ***or***
2) two terms of college level language with a grade of "C" or better (may be first year language; ASL [American Sign Language] classes also qualify).

(AA/OT) Associate of Arts - Oregon Transfer Degree Worksheet page 29

The Oregon Transfer Degree allows students to complete lower division (freshman and sophomore) degree requirements at Clatsop. Students who complete this degree and are accepted at Oregon public universities and colleges are admitted as having completed all lower division and General Education requirements for a baccalaureate degree.

General Requirements - Complete all classes with a grade of C or better.

Writing

WR 121 English Composition Credit 3 Term _____

WR 122 English Composition Credit 3 Term _____

_____ Credit 3 Term _____
WR 123 or WR 227

Mathematics

_____ Credit 4 Term _____
MTH 105 or higher number math

Oral Communication

_____ Credit 3 Term _____
SP 111, SP 112 or SP 219 (113)

Distribution Requirements

Arts and Letters - 12 Credits

A minimum of twelve (12) credits, chosen from at least two disciplines, with no more than nine credits from one discipline. (Chosen from the list on the previous pages)

_____ Credit____ Term_____ _____ Credit____ Term_____

_____ Credit____ Term_____ _____Credit____ Term_____

Social Science - 15 Credits

A minimum of fifteen (15) credits, chosen from at least two disciplines, with no more than nine credits from one discipline. (Chosen from the list on the previous pages)

_____ Credit____ Term_____ _____ Credit____ Term_____

_____ Credit____ Term_____ _____Credit____ Term_____

_____ Credit____ Term_____

Science/Mathematics - 15 Credits

A minimum of fifteen (15) credits (including at least twelve credits in biological or physical sciences with laboratories) chosen from at least two disciplines. (Chosen from the list on the previous pages)

_____ Credit____ Term_____ _____ Credit____ Term_____

_____ Credit____ Term_____ _____Credit____ Term_____

_____ Credit____ Term_____

Electives

Complete electives to bring the total credits to 90. All elective credit must be from the approved transfer list, pages 37 & 38 in this catalog. A total of 12 credits of Professional/Technical courses numbered 100 or higher from pages 39 & 40 in this catalog may be applied. Students are limited to a maximum of 6 hours of physical education, no more than 18 credits of combined worksite and seminar Cooperative Work Experience courses, and in individual music lessons (MUP), a maximum of 12 credits on a major instrument and 6 credits on a secondary instrument.

_____ Credit____ Term_____ _____Credit____ Term_____

_____ Credit____ Term_____ _____Credit____ Term_____

_____ Credit____ Term_____ _____Credit____ Term_____

_____ Credit____ Term_____ _____Credit____ Term_____

_____ Credit____ Term_____ _____Credit____ Term_____

_____ Credit____ Term_____ _____Credit____ Term_____

Academic Programs

Associate of Science, Oregon Transfer Degree in Business (AS/OT-Bus)

You have the opportunity to broaden your creative and critical knowledge through an Arts and Sciences program. You might enroll in the lower division program to explore several fields of study to clarify your educational and professional goals. Or you might seek a broad general education as a foundation in preparation for specialization during your junior and senior years at a four-year institution.

Many students attend Clatsop Community College for one or more terms and then transfer to a four-year college. The Associate of Science, Oregon Transfer Degree in Business provides you an opportunity to complete the first two-years of a four-year business degree at Clatsop Community College. This degree allows you to complete all of the lower division general education requirements of Oregon University System institutions. Upon admission to the Oregon University System institution, you will have junior year standing for purposes of registration only. It may be possible that there may be some lower division course requirements that must be satisfied for the business program at the Oregon University System institution.

You should work closely with your academic advisor at Clatsop. It is very important that you attempt to identify the Oregon University System institution to which you plan to transfer for your baccalaureate degree as early as possible. As you will see on the following pages, each university has its unique business program prerequisite requirements, including, in some cases, grade point average. You should also confer with the university to which you intend to transfer to ensure that you are satisfying all of their requirements for admission into their business program.

General Requirements

Writing: **Nine credits** (three classes) with a "C" or better in each class from the following courses: WR 121 English Composition and WR 122 English Composition and WR 227 Technical Report Writing.

Oral Communications/Rhetoric:
Three credits (one class) with a "C" or better in a fundamentals of speech or communication course. This course cannot be used to meet the Arts & Letters requirement.

Mathematics: **Twelve credits** with a "C" or better, MTH 111 College Algebra or a higher numbered math courses, four credits of which must be statistics.

Computer Applications: **Three or four credits** with a "C" or better, showing proficiency in word-processing, spreadsheet, database, and presentation software as demonstrated by successful completion of either MIC 145 Intro to Integrated Software (3) or CS 131 Intro to Computer Information Systems (4).

Distribution Requirements:

Arts & Letters — A minimum of 12 credits, chosen from at least two disciplines._ (CHOOSE FROM THE FOLLOWING LIST)

ART 115,116,117	Basic Design	3 ea
ART 204,205,206	History of Western Art	3 ea
ART 211,212,213	Survey Visual Art of 20th Century	3 ea
ASL 201	American Sign Language - Conversational Skills	3
ENG 104,105,106	Introduction to Literature	3 ea
ENG 107,108,109	World Literature	3 ea
ENG 110	Introduction to Film Studies	3
ENG 180	Gothic Literature	3
ENG 201,202,203	Shakespeare	3 ea
ENG 204,205,206	Survey of English Literature	3 ea
ENG 220	Non-European Minority Literature	3
ENG 221	Intro to Children's Literature	3
ENG 253,254,255	Survey of American Literature	3 ea
ENG 260	Introduction to Women's Literature	3
FR 201,202,203	Second Year French	4 ea
GER 201,202,203	Second Year German	4 ea
HUM 101,102,103	Introduction to Humanities	3 ea
PHL 101	Philosophical Problems	3
PHL 102	Ethics	3
PHL 103	Critical Reasoning	3
R 201,202,203	Great Religions of the World	3 ea
SP 111	Fundamentals of Public Speaking	3
SP 112	Persuasive Speech	3
SP 115	Intro. to Intercultural Communication	3
SP 130	Business & Professional Speaking	3
SP 219	Small Group Discussion	3
SPAN 201,202,203	Second Year Spanish	4 ea
TA 101	Introduction to Theatre	3
TA 121,122,123	Fundamentals of Acting	3 ea
WR 241,242,243	Creative Writing	3 ea
WR 249	Writing Children's Books	3
WR 270	Literary Publications	3

Social Science

A minimum of 12 credits, with a minimum of eight credits of "principles of economics" (to include microeconomics and macroeconomics*) at the 200 level. The courses in economics must be completed with a grade of "C" or better. (CHOOSE FROM THE FOLLOWING LIST)

ANT 110	General Anthropology: Cultural	3
ANT 150	General Anthropology: Archeological	3
ANT 170	General Anthropology: Physical	3
ANT 232	Native North Americans	3
CJ 100	Survey of Criminal Justice	3
CJ 101	Introduction to Criminology	3
CJ 110	Introduction to Law Enforcement	3
CJ 114	Gender, Race, Class & Crime	3
CJ 120	Introduction to the Judicial Process	3
CJ 130	Introduction to Corrections	3
EC 115	Introduction to Economics	3
***EC 201,202**	**Principles of Economics**	**4 ea**
GEO 100	Introduction to Physical Geography	3
GEO 110	Intro to Cultural & Human Geography	3
GEO 120	World/Regional Geography	3
GEO 130	Economic/Resource Geography	3
HFS 226	Growing Years	3
HS 101	Alcohol Use, Misuse and Addiction	3
HS 102	Drug Use, Misuse and Addiction	3
HS 154	Community Resources	3
HS 201	Family Alcoholism/Addiction	3
HS 205	Youth Addiction	3
HST 101,102,103	History of Western Civilization	3 ea
HST 201,202,203	History of the United States	3 ea
PS 201, 202	American Government	3 ea
PS 203	State and Local Government	3
PS 205	International Politics	3
PSY 101	Psychology of Human Relations	3
PSY 190	Stress Theory & Management	3
PSY 201,202,203	General Psychology	3 ea
PSY 215	Intro. to Developmental Psychology	3
PSY 216	Social Psychology	3
PSY 219	Introduction to Abnormal Psychology	3
PSY 231	Introduction to Human Sexuality	3
SOC 204	General Sociology: Introduction	3
SOC 205	General Sociology: Social Issues	3
SOC 225	General Sociology: Social Problems	3
SOC 210	Marriage, Family & Intimate Relations	3
SOC 213	Minorities: Dealing with Diversity	3
SOC 221	Juvenile Delinquency	3
SOC 223	Sociology of Aging	3

Science

A minimum of 12 credits in biological or physical sciences with laboratory courses. (CHOOSE FROM THE FOLLOWING LIST)

BI 101,102,103	General Biology	4 ea
BI 201,202,203 211, 212, 213	General/Principles of Biology	4 ea
BI 231,232,233	Human Anatomy and Physiology	4 ea
BI 234	Introductory Microbiology	4
BOT 101	Botany	4
CH 104,105,106	Introductory Chemistry	4 ea
CH 221,222,223	General Chemistry	5 ea
ES 160	Techniques in Environmental Information Analysis	4
G 201,202,203	Geology	4 ea
GS 104,105,106,109	Physical Science	4 ea
PH 201,202,203	General Physics	5 ea
PH 211,212,213	General Physics with Calculus	5 ea

Business Specific Requirements

Each course in this section must be completed with a grade of "C" or better:

BA 101 Introduction to Business (3)
BA 211, 212, 213 Principles of Accounting (12)
BA 226 Business Law I (4)

Elective and/or University-Specific Prerequisites (8-14 credits)

Depends on choice of transfer institution – see "University-Specific Prerequisites and Recommendations." Please note: This list of prerequisites and recommendations is subject to change without notice. At time of admission, consult university catalog for binding course requirements (also available online at http://www.ous.edu/aca/ASOT-Bus.pdf).

Limitations on electives:

- Electives must be from the approved list - pages 37 & 38 in this catalog.
- Professional/Technical courses - A total of 12 credits of courses numbered 100 or higher from pages 39 & 40 in this catalog.
- Courses that are developmental in nature, designed to prepare students for college transfer courses, are not applicable to this degree.
- Physical Education - A maximum of six hours.
- Individual Music Lessons (MUP) **-** A maximum of 12 credits on a major instrument and six credits on a secondary instrument may be applied to an associate degree.
- Cooperative Work Experience - no more than 18 credits of combined worksite and seminar courses.

Institutional Requirements

- Complete a minimum of 90 credits of approved lower division collegiate courses listed on pages 37-40 in this catalog.
- Earn a grade point average of 2.00 or above for all Clatsop Community College coursework.
- Have earned a "C" grade or better on all coursework transferred from other institutions that is to be included in a Clatsop Community College degree or certificate.
- Complete at least 24 credits at Clatsop Community College.

Foreign Language

Students, who have graduated from high school or completed a high school equivalency program in 1997 or after, must meet one of the following requirements for admission to an Oregon University System institution: *either,*

1) two years of the same high school level language, *or*
2) two terms of college level language with a grade of "C" or better (may be first year language; ASL [American Sign Language] classes also qualify).

University-Specific Prerequisites* and Recommendations

Institution	Prerequisites	Recommendations
Eastern Oregon University	WR 227 Technical Report Writing. The Business Law course for the AS/OT-Bus is required.	
Oregon Institute of Technology	The Business Law course for the AS/OT-Bus is required.	PSY 201 (General Psychology). BA 206 (Management Fundamentals, equivalent to BUS 215 at OIT). WR 227 (Technical Writing).
Oregon State University	BA 271 Information Technology in Business. BA 275 Business Quantitative Methods MTH 241 Calculus for Biological/Management/Social Sciences MTH 245 Math for Biological/Management/Social Sciences. The Business Law course for the AS/OT-Bus is required.	
Portland State University	CS 106 Computing Fundamentals II. BA 205 Business Communications Using Technology. STAT 244 Introduction to Probability and Statistics II. GPA: 2.75 overall and 2.75 in pre-business core.	
Southern Oregon University	BA 271 or BA 282 Applied Business Statistics. GPA: 2.0 overall and 2.5 in all business courses. Students must apply for admission to the Business School/Program.	
University of Oregon	DCS 199 Special Studies: Business Applications Software. MTH 241, MTH 242 Calculus for Business and Social Science I, II. Multicultural requirement. GPA: 2.75 overall and 2.75 in pre-business core. Students must apply for admission to the Business School/Program	
Western Oregon University	The Business Law course for the AS/OT is required.	

**Subject to change without notice. At time of admission, consult university catalog for binding course requirements (also available online at http://www.ous.edu/aca/ASOT-Bus.pdf).*

Academic Programs
Associate of General Studies (AGS)

The General Studies degree provides students with the opportunity to design a program in broad interdisciplinary areas. Students may select one of two options. One option provides an emphasis in an Applied Science program. The second option is to create a liberal arts cluster which may facilitate transfer to a baccalaureate degree program at a four-year institution. The general studies degree normally requires two years of study.

Option A General Studies with an emphasis in an Applied Science program.
Complete two-thirds or 67 percent of the technical course credits in a specific Applied Science program to include the required core courses (page 35) for all areas of emphasis. Technical option credits may be applied to the 67 percent minimum, but they cannot exceed the number specified in the program.

Complete the General Education Requirements as specified in the Applied Science program.

Writing	**Six credits** (two classes) with a C or better in each class from the following: a. Either WR 40 English Fundamentals or WR 121 English Composition **and** b. Either WR 121, 122, 123 English Composition ; WR 227 Technical Report Writing; BA 214 Business Communications; or a course designated by the specific Applied Science program.
Mathematics	**Four credits,** with a C or better, in MTH 65 Mathematics for the Applied Sciences or MTH 95 Intermediate Algebra or a higher numbered math course.
Humanities and/ or Social Sciences	**Six credits** of Humanities and/or Social Science courses from the Arts and Letters and Social Science lists on pages 37 & 38.
Computer	**One credit** or more of computer-related courses as designated in the specific Applied Science program.
Human Relations	As designated by the specific Applied Science program.

Option B General Studies with an area of concentration.
Complete 36 credits or more from a cluster of related courses the student and his/her adviser identify. They should identify the cluster courses as soon as possible after enrollment, but no later than the term prior to the term in which he/she plans to graduate.

Complete the following General Education Requirements:

Writing	**Six credits** (two classes) with a C or better in each class from the following: a. Either WR 40 English Fundamentals or WR 121 English Composition **and** b. Three credits from the following: WR 121, 122, 123 English Composition ; WR 227 Technical Report Writing; BA 214 Business Communications.
Mathematics	**Four credits,** with a C or better, in MTH 65 Mathematics for the Applied Sciences or MTH 95 Intermediate Algebra or a higher numbered math course.
Humanities and/ or Social Sciences	**Six credits** of Humanities and/or Social Science courses from the Arts and Letters and Social Science lists on pages 37 & 38.

Institutional Requirements

- Complete a minimum of 90 credits of approved coursework which includes alpha-numeric courses and non-transfer courses numbered 9.000-9.999.
- Have earned a "C" grade or better on all coursework transferred from other accredited colleges and universities that is to be included in a Clatsop Community College degree or certificate.
- Earn a grade point average of 2.00 or above for all Clatsop Community College coursework.
- Apply no more than a maximum of 24 credits of pass grades toward and Associate Degree.
- Complete at least 24 credits at Clatsop Community College.

Core Requirements for AGS Option A

Emphasis in Accounting:
BA 131, 132, 133 - General Accounting I, II, III
BA 228 - Computer Accounting Applications
BA 177 - Payroll
BA 256 - Income Tax

Emphasis in Business Management:
BA 101 - Introduction to Business
BA 223 - Principles of Marketing
BA 131 - Accounting Procedures I ***or***
BA 211 - Principles of Accounting
BA 250 - Small Business Management

Criminal Justice
CJ 120 - Introduction to the Judicial Process
CJ 130 - Introduction to Corrections
CJ 219 - Introduction to Community Policing
And 20 credits from other CJ courses

E*mphasis in Fire Science*
FRP 157 - Firefighter Safety
FRP 158 - Pump Construction and Hydraulics
FRP 164 - Hazardous Materials
FRP 166 - Building Construction
FRP 169 - Fire Department Leadership
FRP 170 - Firefighting Strategy and Tactics
FRP 172 - Fire Codes and Ordinances

Emphasis in Microcomputer Business Applications:
CSL 107 - Spreadsheets
CSD 122 - Beginning Database
OA 201 - Word Processing I
OA 202 - Word Processing II

Emphasis in Office Systems - Legal Word Processing:
OA 116 - Office Procedures
OA 201 - Word Processing I
OA 139 - Legal Transcription
OA 240 - Filing and Records Management

Emphasis in Office Systems - Medical Word Processing:
OA 116 - Office Procedures
OA 201 - Word Processing I
OA 142 - Medical Transcription
OA 240 - Filing and Records Management

Emphasis in Office Systems - Office Management:
OA 116 - Office Procedures
OA 201 - Word Processing I
OA 240 - Filing and Records Management
BA 250 - Small Business Management

Emphasis in Vessel Operations:
MAS 150 - Marine Safety ***or***
MAS 135 - STCW Basic Safety
MAS 155 - Introduction to Watchkeeping
MAS 164 - Introduction to Navigation
MAS 165 - Practical Navigation
MAS 168 - Charts and Aids to Navigation
MAS 175 - Rules of the Road
MAS 181 - Seamanship I
MAS 182 - Seamanship II
MAS 183 - Seamanship III

Applied Science Programs
Associate of Applied Science (AAS)

Applied Science programs provide the skills and work experience you'll need to qualify for employment. With the help of a local industry advisory committee, each program is carefully planned to meet the needs of the current job market. Instruction is provided by trained, experienced professionals, and classes are conducted in an industry-like work setting. The Cooperative Work Experience program offers credit for on-the-job experience with local employers in the field of your choice.

Applied Science programs include general education courses to assure that you have a basic understanding of writing, mathematics, human relations, and social sciences and/or humanities. While courses are not specifically intended for transfer to a four-year college or university, certain courses are currently accepted for transfer credit at specific institutions. In most cases, Professional/Technical courses can be transferred to other community colleges which offer similar programs. If you are planning to transfer, consult with appropriate representatives of the school you are planning to attend and with your Clatsop Community college advisor.

We offer one-year, two-year, or specialized training programs depending on the type and amount of preparation required for entry-level employment or professional renewal. Several options are available in many programs. Individuals holding state certifications in programs such as Fire Science and Emergency Medical Technician may be able to get credit based on their previous training. See a counselor or your advisor as you begin planning a specific program. Specific degree and certification requirements are listed below. **See page 41 for specific Applied Science programs and requirements.**

General Requirements

Writing	**Six credits** (two classes) with a C or better in each class from the following: a. Either WR 40 English Fundamentals or WR 121 English Composition **and** b. Either WR 121, 122, 123 English Composition ; WR 227 Technical Report Writing; BA 214 Business Communications; or a course specified by the specific Applied Science program.
Mathematics	**Four credits,** with a C or better, in MTH 65 Mathematics for the Applied Sciences or MTH 95 Intermediate Algebra or a higher numbered math course.
Humanities and/ or Social Sciences	**Six credits** of Humanities and/or Social Science courses from the Arts and Letters and Social Science lists on pages 37 & 38.
Computer	**One credit** or more of computer-related courses as specified in the specific Applied Science program.
Human Relations	As specified by the specific Applied Science program.

Program Courses

Required Courses	As prescribed in the specific Applied Science program.
Technical electives	Technical electives provide student choice within an approved program. The number of technical option credits available is specified by the individual Applied Science programs.
Electives	The number of elective credits is specified by the specific Applied Science program. Students have the opportunity to choose these courses from the list of approved courses.

Institutional Requirements

- Complete a minimum of 90 credits of approved coursework which includes alpha-numeric courses and non-transfer courses numbered 9.000-9.999.
- Have earned a "C" grade or better on all coursework transferred from other accredited colleges and universities that is to be included in a Clatsop Community College degree or certificate.
- Earn a grade point average of 2.00 or above for all Clatsop Community College coursework.
- Apply no more than a maximum of 24 credits of pass grades toward and Associate Degree.
- Complete at least 24 credits at Clatsop Community College.

OUS Transfer List - A

The following courses are on the Oregon State Lower Division Collegiate Course List and are eligible to transfer to Oregon University System (OUS) institutions. They are applicable to AA, AS, AGS, and AAS degrees. For courses which fulfill the distribution requirements of the AA and AS degree, see the Distribution Requirements list on pages 27 -32. **Consult an advisor at Clatsop and the four-year school regarding the transferability of specific programs and/or courses.**

Arts and Letters

ART 115,116,117 ..... Basic Design
ART 118 ..... Introduction to Calligraphy
ART 131,132,133 ..... Introduction to Drawing
ART 161,162,163 ..... Introduction to Photography
ART 194, 195, 196 ..... Introduction to Watercolor
ART 204,205,206 ..... History of Western Art
ART 211,212,213 ..... Survey Visual Arts of the 20th Century
ART 218,219,220 ..... Calligraphy - Intermediate
ART 225 ..... Computer Graphics I
ART 226 ..... Computer Graphics II
ART 231,232.233 ..... Drawing - Intermediate
ART 250,251,252 ..... Introduction to Ceramics
ART 253,254,255 ..... Ceramics - Intermediate
ART 253A ..... Atmospheric Firing (Ceramics)
ART 270, 271,272 ..... Introduction to Printmaking
ART 273,274,275 ..... Printmaking - Intermediate
ART 276,277,278 ..... Introduction to Sculpture
ART 279 ..... Intro Mixed Media-Hybrid Forms: Multidisciplinary
ART 281,282,283 ..... Introduction to Painting
ART 284,285,286 ..... Painting - Intermediate
ART 294,295,296 ..... Watercolor - Intermediate
ASL 101,102,103 ..... American Sign Language
ASL 201 ..... American Sign Language - Conversational Skills
ENG 104,105,106 ..... Introduction to Literature
ENG 107,108,109 ..... World Literature
ENG 110 ..... Introduction to Film Studies
ENG 180 ..... Gothic Literature
ENG 201,202,203 ..... Shakespeare
ENG 204,205,206 ..... Survey of English Literature
ENG 214 ..... Literature of the Pacific Northwest
ENG 220 ..... Non-European Minority Literature
ENG 221 ..... Introduction to Children's Literature
ENG 253,254,255 ..... Survey of American Literature
ENG 260 ..... Introduction to Women's Literature
FR 101,102,103 ..... First Year French
FR 201,202,203 ..... Second Year French
HUM 101,102,103 ..... Introduction to Humanities
LIB 127 ..... Information Research Skills
PHL 101 ..... Philosophical Problems
PHL 102 ..... Ethics
PHL 103 ..... Critical Reasoning
R 201,202,203 ..... Great Religions of the World
SP 111 ..... Fundamentals of Public Speaking
SP 112 ..... Persuasive Speech
SP 115 ..... Intro. to Intercultural Communications
SP 130 ..... Business & Professional Speaking
SP 219 ..... Small Group Discussion
SPAN 101,102,103 ..... First Year Spanish
SPAN 111,112,113 ..... Conversational Spanish
SPAN 201,202,203 ..... Second Year Spanish
SPAN 211,212,213 ..... Conversational Spanish-Intermediate
WR 115 ..... Introduction to College Writing
WR 121,122,123 ..... English Composition
WR 227 ..... Technical Report Writing
WR 241,242,243 ..... Creative Writing
WR 249 ..... Writing Children's Books
WR 270 ..... Literary Publications

Business

BA 101 ..... Introduction to Business
BA 104 ..... Business Math with Electronic Calculators
BA 177 ..... Payroll & Business Tax Accounting
BA 206 ..... Management Fundamentals
BA 211,212,213 ..... Principles of Accounting
BA 214 ..... Business Communications
BA 222 ..... Financial Management
BA 223 ..... Principles of Marketing
BA 226,227 ..... Introduction to Business Law I & II
BA 228 ..... Computer Accounting Applications
BA 230 ..... Management Information Systems
BA 250 ..... Small Business Management
BA 256 ..... Income Tax
BA 285 ..... Human Relations in Business

Social Science

ANT 110 ..... General Anthropology: Cultural
ANT 150 ..... General Anthropology: Archeological
ANT 170 ..... General Anthropology: Physical
CJ 100 ..... Careers in Criminal Justice
CJ 101 ..... Introduction to Criminology
CJ 107 ..... Criminal Justice Workshop
CJ 109 ..... Public Safety Communications
CJ 110 ..... Introduction to Law Enforcement
CJ 120 ..... Introduction to the Judicial Process
CJ 121 ..... Concepts of Criminal Law
CJ 130 ..... Introduction to Corrections
CJ 132 ..... Introduction to Parole and Probation
CJ 203 ..... Crisis Intervention
CJ 210 ..... Criminal Investigation
CJ 215 ..... Issues in Criminal Justice Supv. & Admin.
CJ 219 ..... Introduction to Community Policing
CJ 223 ..... Rules of Evidence
CJ 232 ..... Introduction to Corrections Casework
CJ 243 ..... Alcohol & other Dangerous Drugs
CJ 244 ..... Sexual Exploitation of Children
CJ 281 ..... Cooperative Work Experience Seminar - Criminal Justice
CPL 120 ..... Credit for Prior Learning
EC 115 ..... Introduction to Economics
EC 201,202 ..... Principles of Economics
GEO 100 ..... Introduction to Physical Geography
GEO 110 ..... Cultural & Human Geography
GEO 120 ..... World/Regional Geography
GEO 130 ..... Economic/Resource Geography
HD 100 ..... College Survival & Success

OUS Transfer List - A continued

HD 110 ..... Career Planning
HD 145 ..... Coping Skills for Stress and Depression
HD 202 ..... Life Transitions
HD 209 ..... The Complete Job Finder
HD 215 ..... Transition to the University
HFS 226 ..... Growing Years - Child Development, Birth through Age Eight
HS 101 ..... Alcohol Use, Misuse & Addiction
HS 102 ..... Drug Use, Misuse & Addiction
HS 154 ..... Community Resources
HS 155 ..... Interviewing for Social Services
HS 201 ..... Family Alcoholism/Addiction
HS 202,203,204 ..... Counseling/Chemically Dependent Client
HST 101,102,103 ..... History of Western Civilization
HST 201,202,203 ..... History of the United States
PS 201, 202 ..... American Government
PS 203 ..... State & Local Government
PS 205 ..... International Politics
PSY 101 ..... Psychology of Human Relations
PSY 190 ..... Stress Theory and Management
PSY 201,202,203 ..... General Psychology
PSY 215 ..... Intro. to Developmental Psychology
PSY 216 ..... Social Psychology
PSY 219 ..... Introduction to Abnormal Psychology
PSY 231 ..... Introduction to Human Sexuality
SOC 204 ..... General Sociology: Intro. to Sociology
SOC 205 ..... General Sociology: Social Issues
SOC 210 ..... Marriage & Family & Intimate Relations
SOC 213 ..... Minorities: Dealing with Diversity
SOC 221 ..... Juvenile Delinquency
SOC 223 ..... Sociology of Aging
SOC 225 ..... General Sociology: Social Problems

Science/Mathematics/Microcomputers

BI 101,102,103 ..... General Biology
BI 121, 122 ..... Basic Human Anatomy & Physiology
BI 211, 212, 213 ..... Principles of Biology
BI 222 ..... Human Genetics
BI 231,232,233 ..... Human Anatomy and Physiology
BI 234 ..... Introduction to Microbiology
BOT 101 ..... Botany
CH 104,105,106 ..... Introductory Chemistry
CH 221,222,223 ..... General Chemistry
CS 101 ..... Fundamentals of Computing
CS 125H ..... Beginning Web Site Design & Development
CS 131 ..... Intro. to Computer Information Systems
CS 133S ..... Scripting Languages
CS 135H ..... Advanced Web Site Design & Development
CS 135W ..... Web Site Management
CS 160 ..... Intro. To Computer Programming
CS 161 ..... Computer Science I
CS 162 ..... Computer Science II
CS 163 ..... Computer Science III
CS 171 ..... Principles of Computer Organization
CS 271 ..... Computer Architecture
CS 278 ..... Data Communications & Networking
CS 279 ..... Network Management I
CS 288 ..... Network Management II
CS 295 ..... Computer Information Systems Directed Project
CSD 122 ..... Beg. Database Program Development
CSD 275 ..... Adv. Database Program Development
CSL 107 ..... Spreadsheets
ES 150 ..... Introduction to Environmental Science
ES 160 ..... Techniques in Environmental Info. Analysis
GS 104,105,106, 109 ..... Physical Science
MTH 105 ..... Intro. to Contemporary Mathematics
MTH 111 ..... College Algebra
MTH 112 ..... Elementary Functions - Trigonometry
MTH 211,212,213 ..... Fundamentals of Elementary Math
MTH 241 ..... Calculus for Management &Social Sciences
MTH 243,244 ..... Intro. to Probability & Statistics
MTH 251,252,253 ..... Calculus I, II & III
PH 201,202,203 ..... General Physics
PH 211,212,213 ..... General Physics with Calculus

Health, Physical Education, Dance

D 192 ..... Dance - Beginning Jazz
D 192 ..... Dance - Beginning Modern
D 192 ..... Dance - Beginning Tap
D 292 ..... Dance - Intermediate Jazz
D 292 ..... Dance - Intermediate Modern
D 292 ..... Dance - Intermediate Tap
D 294 ..... Dance - Advanced Jazz
D 294 ..... Dance - Advanced Modern
D 294 ..... Dance - Advanced Tap
HPE 295 ..... Health & Fitness for Life
NFM 225 ..... Human Nutrition
PE 185 ..... All Beginning/Intermediate Activity Classes

Performing Arts

D 260 ..... Dance Performance
MUP 171 - 192 ..... Individual Lessons
MUP 271 - 292 ..... Individual Lessons

Other

LIB 127 ..... Information Research Skills

Cooperative Work Experience

Work Experience (all 280 numbers) and Work Experience Seminar (all 281 numbers)

AGR - Agriculture
ANT - Anthropology
ART - Art
BA - Accounting
BA - Business Admin.
BI - Biology
BOT - Botany
CH - Chemistry
CJ - Criminal Justice
CS - Computer Science
CWE - Career Exploration
DH - Dental Hygiene
EC - Economics
ED - Education
EGR - Engineering
ENG - English
ES - Environmental Science
F - Forestry
FA - Film Arts
FR - French
FW - Fish & Wildlife
G - Geology
GEO - Geography
GER - German
GS - General Science
HE - Health
HPE - Health & PE
HR - Human Resources
HS - Human Services
HST - History
J - Journalism
MTH - Mathematics
MUS - Music
PA - Public Administrration
PE - Physical Education
PH - Physics
PHL - Philosophy
PS - Political Science
PSY - Psychology
RE - Real Estate
SPAN - Spanish
SOC - Sociology
SP - Speech
TA - Theatre
Z -Zoology

OUS Transfer List - B

The following courses are generally applicable to AGS and AAS certificate and degree programs. They may be accepted by Oregon University System (OUS) institutions. Effective Fall term 1998, up to 12 credits of Professional/Technical courses, numbered 100 and higher from the list below, can be used as elective credit for the AA-OT and AS-OT/Business degrees. **Consult an advisor at Clatsop and the four-year school regarding the transferability of specific programs and/or courses.**

BA 131,132,133 ..... Accounting Procedures I, II & III
DRF 139 ..... Technical Print Interpretation
DRF 185 ..... Computers in Design
DRF 213 ..... AutoCAD - Beginning
DRF 214 ..... AutoCAD - Intermediate
DRF 215 ..... AutoCAD - Advanced
DRF 217 ..... AutoCAD - Upgrade
DRF 228 ..... AutoCAD Exam Preparation
DRF 280 ..... CWE - CADD Technician
DRF 281 ..... CWE Seminar: CADD
DRF 295 ..... CADD Directed Projects
ECE 101 ..... Language Arts Activities for Young Children
ECE 103 ..... Math and Science for Young Children
ECE 105 ..... Nutrition, Health & Safety for Young Children
ECE 109 ..... Early Childhood Environments
ECE 119 ..... Self-concept, Guidance & Self-discipline of Young Children
ECE 124 ..... Physical Fitness Activities for Young Children
ECE 125 ..... Creative Activities for Young Children: Art
ECE 128 ..... Program Planning and Evaluation for Young Children
ECE 129 ..... Observation & Developmental Screening of Young Children
ECE 131 ..... Child Development for the Day Care Worker
ECE 134 ..... Statutes, Liability & Licensure Considerations for Childcare Facilities
ECE 137 ..... Child Abuse and the Law
ECE 139 ..... Infant and Toddler Programs
ECE 145 ..... Toys and Games for Learning
ECE 146 ..... Handicapping Conditions in Young Children
ECE 149 ..... Disease Control in ECE Settings
ECE 175 ..... Infant/Toddler Learning & Social Growth in a Group Setting
ECE 281 ..... CWE Seminar: Early Childhood Education
EM 101 ..... Introduction to Emergency Services
EMT 151 ..... Emergency Medical Tech. Basic, Part 1
EMT 152 ..... Emergency Medical Tech. Basic, Part 2
EMT 165 ..... Emergency Med. Tech. Intermediate, Part 1
EMT 166 ..... Emergency Med. Tech. Intermediate, Part 2
EMT 169 ..... Emergency Medical Tech. Rescue
EMT 170 ..... Emergency Communication & Transportation
EMT 280 ..... CWE - Emergency Medical Tech.
EMT 281 ..... CWE Seminar: Emergency Med. Tech.
FRP 151 ..... Firefighter Skills I
FRP 152 ..... Firefighter Skills II
FRP 153 ..... Firefighter Skills III
FRP 155 ..... Instructional Methodology
FRP 156 ..... Firefighter Law
FRP 157 ..... Firefighter Safety
FRP 158 ..... Pump Construction & Hydraulics
FRP 160 ..... Fundamentals of Fire Protection
FRP 164 ..... Hazardous Materials
FRP 166 ..... Building Construction
FRP 169 ..... Fire Department Leadership
FRP 170 ..... Firefighting Strategy & Tactics
FRP 171 ..... Fire Protection Systems & Extinguishers
FRP 172 ..... Fire Codes & Ordinances
FRP 181 ..... Fire Prevention & Inspection
FRP 280 ..... CWE: Fire Science
FRP 281 ..... CWE Seminar: Fire Science
HD 50 ..... College Skills
HD 281 ..... Coop. Work Experience Seminar-Human Development
IT 101 ..... Engine Rebuilding - Gasoline
IT 102 ..... Engine Rebuilding - Diesel
IT 105,106,107 ..... Principles of Technology I,II & III
IT 108 ..... Engine Principles
IT 110 ..... Applied Technology Projects
IT 140 ..... Industrial Safety
IT 141 ..... Tool and Shop Basics
IT 206 ..... Automotive Electrical/Electronics Foundations
IT 207 ..... Automotive Electrical/Electronics Applications
IT 208 ..... Mechanical Drives & Trans. of Power
IT 209 ..... Fluid Drives & Hydraulic Transmissions
IT 210 ..... Vehicle Tune Up and Instrumentation
IT 218 ..... Vehicle Steering and Suspension Systems
IT 219 ..... Vehicle Brake Systems
IT 226 ..... Industrial Refrigeration
IT 230 ..... Vehicle Heating & Air Conditioning Systems
IT 280 ..... CWE: Integrated Technologies
IT 281 ..... CWE Seminar: Integrated Technologies
MA 112 ..... Medical Assistant: Clinical Procedures I
MA 113 ..... Medical Assistant: Clinical Procedures II
MA 115 ..... Pharmacology For Medical Assistants I
MA 133 ..... Medical Assistant Clinical Practicum I
MA 231 ..... Medical Assistant Clinical Practicum II
MA 280 ..... CWE: Medical Assistant
MA 281 ..... CWE Seminar: Medical Assistant
MAS 100 ..... Maritime Occupations
MAS 110 ..... Limited Operator Uninspected Passenger Vessel Certification
MAS 111 ..... Limited Operator Uninspected Passenger Vessel Endorsement
MAS 120 ..... U.S. Coast Guard Marine License Training
MAS 121 ..... Able Seaman Training
MAS 122 ..... OUPV Training
MAS 123 ..... 100 ton Master Training
MAS 124 ..... 200 ton Master Training
MAS 125 ..... 500/1600/Unliminted License Prep
MAS 126 ..... Oceans Endorsement Program
MAS 130 ..... Radar Observer: Original Endorsement, Unlimited
MAS 131 ..... Radar Observer: Recertification
MAS 132 ..... Radar Observer: Rivers
MAS 133 ..... ARPA Training
MAS 134 ..... STCW GMDSS Training
MAS 135 ..... STCW Basic Safety Training

OUS Transfer List - B continued

MAS 136 ..... STCW Bridge Resource Management
MAS 137 ..... Radar Navigation
MAS 147 ..... Vessel Regulations
MAS 148 ..... Vessel Stability
MAS 150 ..... Marine Safety
MAS 155 ..... Introduction to Watchkeeping
MAS 164 ..... Introduction to Navigation
MAS 165 ..... Practical Navigation
MAS 167 ..... Celestial Navigation
MAS 168 ..... Charts, Aids to Navigation & Marine Compasses
MAS 170 ..... Marine Weather, Tides, Currents, & Waves
MAS 171 ..... Coastal Navigation & Voyage Planning
MAS 172 ..... Ocean Navigation & Voyage Planning
MAS 175 ..... Rules of the Road
MAS 180 ..... Marine Electronics
MAS 181 ..... Seamanship I
MAS 182 ..... Seamanship II
MAS 183 ..... Seamanship III
MAS 184 ..... Galley Cooking
MAS 185 ..... Bridge to Bridge Communication
MAS 186 ..... Small Vessel Operations I
MAS 187 ..... Small Vessel Operations II
MAS 188 ..... Small Vessel Operations III
MAS 189 ..... Applied Rigging Technology
MAS 190 ..... Vessel Practicum
MAS 191 ..... Deckhand Practicum
MAS 192 ..... Intro to Deck Machinery and Safety
MAS 193 ..... Intro to Engine Room Maintenance and Safety
MAS 280 ..... CWE: Maritime Science
MAS 281 ..... CWE Seminar: Maritime Science
MIC 145 ..... Introduction to Integrated Software
MIC 171 ..... Intermediate Spreadsheets
MIC 207 ..... Presentation Software
MIC 280 ..... CWE: Microcomputer
MIC 281 ..... CWE Seminar: Microcomputer
MIC 295 ..... Microcomputer Directed Project
MTH 10 ..... Math Improvement
MTH 20 ..... Basic Mathematics I
MTH 25 ..... Math Review
MTH 60 ..... Basic Mathematics II
MTH 65 ..... Math for the Applied Sciences
MTH 70 ..... Algebra - Beginning
MTH 95 ..... Algebra - Intermediate
NUR 101 ..... Nursing: Foundations of Care
NUR 102 ..... Nursing: Focus on Individuals
NUR 103 ..... Nursing: Focus on Families
NUR 109 ..... Nursing: Focus on Mental Health
NUR 111 ..... Nursing Concepts & Clinical Practice
NUR 112 ..... Collaborative Practice I: Pharmacology
NUR 113 ..... Collaborative Practice II: Pathophysiology and Pharmacology
NUR 201 ..... Nursing: Clients in Crisis
NUR 202 ..... Nursing: Families in Crisis
NUR 208 ..... Nursing: Transition into Practice
NUR 215 ..... Physical Assessment
NUR 231 ..... Collaborative Practice III: Pathophysiology
NUR 232 ..... Collaborative Practice IV: Pathophysiology and Pharmacology
NUR 280 ..... CWE: Nursing
NUR 281 ..... CWE Seminar: Nursing
OA 100 ..... Desktop Publishing for Writers
OA 104 ..... English for Business
OA 116 ..... Office Procedures
OA 120 ..... Computer Keyboarding
OA 121,122 ..... Keyboarding I, II
OA 124 ..... Keyboarding Skill Building
OA 135 ..... Legal Terminology
OA 139 ..... Legal Transcription
OA 140,141 ..... Medical Terminology I & II
OA 142 ..... Medical Transcription
OA 201,202 ..... Word Processing Procedures I & II
OA 205 ..... Desktop Publishing
OA 225 ..... Machine Transcription
OA 240 ..... Filing & Records Management
OA 280 ..... CWE: Office Systems
OA 281 ..... CWE Seminar: Business
OA 295 ..... Office Systems Directed Project
RD 80 ..... Preparation for College Reading I
RD 90 ..... Preparation for College Reading II
WLD 100 ..... Materials Processing
WLD 101 ..... Shielded Metal Arc Welding
WLD 102 ..... Gas Metal Arc Welding
WLD 103 ..... Flux Core Arc Welding
WLD 104 ..... Gas Tungsten Arc Welding
WLD 150 ..... Beginning Welding
WLD 160 ..... Intermediate Welding
WLD 170 ..... Advanced Welding
WLD 190 ..... Welding Certification Preparation
WLD 296 ..... Layout, Fabrication & Repair Practices
WR 40 ..... English Fundamentals

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Business Programs

Accounting
Associate of Applied Science Degree

Job Description:
This program prepares people for entry level positions as accounting clerks, junior accountants, or bookkeepers who maintain financial records needed for business management. They prepare financial statements, payroll records and reports, and keep books and records up to date. They put together reports to show statistics such as cash receipts and expenditures, accounts payable and receivable, profit and loss, and financial position. They may complete worksheets, bank reconciliations, inventory reports, depreciation schedules, and income tax forms. Knowing how to use the computer is essential.

Employment Opportunities:
The opportunities depend on the economy, replacement needs, and continued use of accounting and bookkeeping services in public, private, and governmental organizations. The use of computers to perform routine accounting and bookkeeping functions is present in all different sizes of organizations.

Potential Earnings:
The average entry wage is about $1,500 per month and the average maximum wage is about $2,831 per month.

First Year

Course Number	Course Title	Credits F	W	S
MTH 65	Math for Applied Sciences * or	4		
MTH 95	Intermediate Algebra*	(5)		
OA 104	English for Business	4		
CS 131	Intro to Computer Information Systems	4		
BA 131,132,133	Accounting Procedures I,II,III +	3	3	3
BA 101	Introduction to Business		3	
BA 104	Business Math/Electronic Calculators		4	
CSL 107	Spreadsheets		3	
BA 228	Computer Accounting Applications			3
OA 121	Keyboarding I**			3
SP 111	Fundamentals of Public Speaking or			3
SP 219	Small Group Discussion			(3)
WR 40	English Fundamentals*** or			3
WR 121	English Composition***			(3)

Second Year

Course Number	Course Title	Credits F	W	S
BA 226	Introduction to Business Law I	4		
BA 256	Income Tax ***	3		
BA 211,212, 213	Principles of Accounting I,II,III +	4	4	4
BA 177	Payroll & Business Tax Accounting ***		3	
BA 285	Human Relations in Business		3	
BA 250	Small Business Management ***or***		3	
BA 206	Management Fundamentals		(3)	
BA 214	Business Communications***			3
BA 222	Financial Management ***			3
EC 115	Introduction to Economics			3
BA 280	Coop Work Experience - Accounting			2
BA 281	Coop Work Experience Seminar ++			1
	Technical Electives****		3	
	Electives	4		

* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.

** Students must attain a typing proficiency equivalent to OA 121 Keyboarding. Those who meet this requirement ma substitute three credits of general electives.

*** Minimum grade C or higher for successful completion of program.

**** Students must complete 3 credits of technical electives to be selected from the list on page 49.

\+ C grade or better required in preceding course to take next level.

++ The Cooperative Work Experience seminar requirement for any Business degree can be met by completing one of the following courses: BA 281, CS 281, or OA 281.

Business Programs

Business Management
Associate of Applied Science Degree

Job Description:
Business management is a term that collectively describes those who have management responsibilities in an organization. They may own and/or operate small firms or work for larger firms that sell goods and services or manufacture products. Their duties may include marketing, managing finances, supervising employees, purchasing goods and services, and sales.

Employment Opportunities:
Employment in this field is expected to remain steady. Prospects are very good for those who want to own and manage a business, especially if they have determination, talent, and a unique service or product.

Potential Earnings:
A typical entry level wage could be $16,000 per year, depending on experience; maximum may go to $40,000 or more per year.

First Year

Course Number	Course Title	Credits F	W	S
OA 104	English for Business	4		
CS 131	Intro. to Computer Info. Systems	4		
MTH 65	Math for Applied Sciences * ***or***	4		
MTH 95	Intermediate Algebra*	(5)		
BA 131,132,133	Accounting Procedures I, II, III ***and*** ***	3	3	3
BA 222	Financial Management ***or***			3
BA 211,212,213	Principles of Acct. I, II, III ***,	(4)	(4)	(4)
CSL 107	Spreadsheets		3	
CSD122	Beginning Database Program Dev.		3	
BA 101	Introduction to Business		3	
BA 104	Business Math/Electronic Calculators		4	
BA 214	Business Communications**			3
SP 111	Fundamentals of Public Speaking ***or***			3
SP 219	Small Group Discussion			(3)
OA 201	Word Processing I			3

Second Year

Course Number	Course Title	Credits F	W	S
CS 160	Intro to Computer Programming	4		
BA 206	Management Fundamentals	3		
BA 226	Introduction to Business Law I	4		
WR 121	English Composition**	3		
BA 223	Principles of Marketing		3	
BA 227	Introduction to Business Law II		3	
BA 250	Small Business Management		3	
BA 285	Human Relations in Business		3	
MIC 207	Presentation Software		2	
EC 115	Introduction to Economics			3
BA 230	Management Info. Systems			3
BA 280	Coop Work Experience – Bus. Admin.			2
BA 281	CWE Seminar: Bus. Admin. +			1
	Technical Electives #			6
	Electives	1		

* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.

** Minimum grade C or higher.

*** Grade C or better required in preceding courses to take next level.

\+ The Cooperative Work Experience seminar requirement for any Business degree can be met by completing one of the following courses: BA 281, CS 281, or OA 281.

\# Students must complete six (6) credits of technical electives to be selected from the list on page 49.

MICROCOMPUTER BUSINESS APPLICATIONS
ASSOCIATE OF APPLIED SCIENCE DEGREE

Job Description:
The Microcomputer Applications program prepares students for careers which involve technology in roles of customer/user support, network or applications operations, and data entry. The Two-Year AAS Degree in Microcomputer Business applications could lead to employment opportunities in automated bookkeeping, database administration, network project teams and junior analyst positions in network systems, customer/user support and microcomputer applications.

Employment Opportunities:
Microcomputers are used in a variety of business, industrial, educational, and agency settings. This program prepares students to use both packaged and specially designed systems.

Potential Earnings:
Salaries for individuals completing the Two-Year AAS Degree may range from $15,500 to $24,750 per year. Salary potential and job availability in this field have expanded in the last five years. This expansion is projected to continue over the next five years, especially for employees holding degrees.

First Year

Course Number	Course Title	Credits F	W	S
OA 104	English for Business	4		
CS 131	Intro. to Computer Info. Systems	4		
MTH 65	Math for Applied Sciences * ***or***	4		
MTH 95	Intermediate Algebra *	(5)		
OA 201	Word Processing I	3		
OA 202	Word Processing II		3	
OA 205	Desktop Publishing		2	
CSD 122	Begin. Database Program Development		3	
CSL 107	Spreadsheets		3	
WR 40	English Fundamentals ** ***or***		3	
WR 121	English Composition **		(3)	
MIC 207	Presentation Software		2	
SP 111	Fundamentals of Public Speaking ***or***			3
SP 219	Small Group Discussion			(3)
CSD 275	Adv. Database Program Development			3
	Technical Electives ***			3
	Social Science/Humanities****			3
	Electives *(see "note")*			3

Second Year

Course Number	Course Title	Credits F	W	S
BA 101	Intro to Business	3		
CS 160	Intro to Computer Programming	4		
BA 131,132	Accounting Procedures ***or*** +	3	3	
BA 211,212	Principles of Accounting + *(see "**note**")*	(4)	(4)	
BA 285	Human Relations in Business		3	
ART 225	Computer Graphics I		3	
CS 280	Co-op Work Exper. - Microcomputer Apps.		2	
CS 281	CWE Seminar - Microcomputer App. ++		1	
BA 230	Management Info Systems			3
BA 214	Business Communications			3
BA 228	Computer Accounting Applications			3
MIC 295	Microcomputer Directed Project			4
	Social Science/Humanities ****	3		
	Technical Electives ***		3	
	Electives (*see "note"*)	3		

* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.

** Minimum grade C or higher.

*** Students must complete technical electives chosen from either the Science/Mathematics List on page 38 or the Business Technical Electives List on page 49.

**** Selected from Arts and Letters, and Social Science Lists on pages 37 & 38.

\+ C grade or better in preceding courses to take next level.

++ The Cooperative Work Experience seminar requirement for any Business degree can be met by completing one of the following courses: BA 281, CS 281, or OA 281.

Note: Students who complete the Principles of Accounting sequence (BA 211, 212) need only complete four (4) of the six (6) credits of Electives.

Business Programs ~ Office Systems

Office Systems Associate of Applied Science Degree

Following a common first year, students may elect one or more of the options listed on these two pages to complete their associate degree program.

First Year

Course Number	Course Title	Credits F	W	S
MTH 65	Math for Applied Sciences * ***or***	4		
MTH 95	Intermediate Algebra*	(5)		
OA 104	English for Business	4		
OA 116	Office Procedures +	4		
CS 101	Fundamentals of Computing	1		
BA 104	Business Math/Electronic Calculators		4	
WR 40	English Fundamentals** ***or***		3	
WR 121	English Composition**		(3)	
OA 240	Filing and Records Management		3	
BA 285	Human Relations in Business		3	
OA 201,202	Word Processing Procedures I,II		3	3
BA 214	Business Communications**			3
SP 111	Fundamentals of Public Speaking ***or***			3
SP 219	Small Group Discussion			(3)
	Technical Electives ++	3		
	Social Science/Humanities +++			3
	Electives			1

* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.

** Minimum grade C or higher.

\+ Contains human relations component

++ Students must complete 3 credits of technical electives to be selected from the list on page 49.

+++ Selected from Arts and Letters and Social Science lists, pages 37 & 38.

> Successful completion of program requires following competencies be demonstrated:

- 50 WAM/4 errors 3-min straight-copy timing
- 35 PWAM correctly format/key/edit a 175-word (avg.-size letter) no errors/5 min
- 20 PWAM correctly format/key/edit 1-page, rough-draft document, no errors/10 min

Second Year Option

Legal Word Processing Option - Office Systems Associate Of Applied Science Degree

Job Description:

Legal word processing secretaries perform various duties in the preparation of legal papers and correspondence including typing, using transcribing machines, maintaining files, and performing other clerical duties such as making initial drafts of legal documents, recording trial dates, scheduling the appearance of witnesses, having evidence at trials, delivering subpoenas, and helping with legal research.

Employment Opportunities:

Employment is expected to grow rapidly due to the need to replace experienced secretaries who leave the field.

Potential Earnings:

The average wage is $2,225 per month.

Second Year

Course Number	Course Title	Credits F	W	S
BA 226,227	Intro to Business Law I,II	4	3	
BA 131, 132	Accounting Procedures I,II ***	3	3	
CSL 107	Spreadsheets		3	
CSD 122	Beginning Database Program Development		3	
OA 135	Legal Terminology		3	
OA 225	Machine Transcription		3	
BA 230	Management Info Systems			3
OA 139	Legal Transcription			3
OA 295	Office systems Directed Project			4
OA 280	Co-op. Work Exper. - Office Administration			2
OA 281	Co-op. Work Exper. Seminar - Office Administration +			1
	Social Science/Humanities *	3		
	Electives**	3		1

* Selected from Arts and Letters and Social Science lists, pages 37 & 38.

** Strongly recommend WR 227, Technical Report Writing; SPN9752, Spanish Conversation: Business

*** C grade or better in preceding course to take next level.

\+ The Cooperative Work Experience seminar requirement for any Business degree can be met by completing one of the following courses: BA 281, CS 281, or OA 281.

See next page for ***Medical Word Processing*** *and* ***Office Management*** *Options*

Second Year Option

MEDICAL WORD PROCESSING OPTION - OFFICE SYSTEMS ASSOCIATE OF APPLIED SCIENCE DEGREE

Second Year

Course Number	Course Title	Credits F	W	S
BA 131, 132	Accounting Procedures I, II ***	3	3	
OA 140, 141	Medical Terminology I, II	3	3	
OA 225	Machine Transcription		3	
CSL 107	Spreadsheets		3	
CSD 122	Beginning Database Program Development		3	
BA 230	Management Info Systems			3
OA 142	Medical Transcription			3
OA 295	Office Systems Directed Project			4
OA 280	Coop. Work Experience - Office Administration			2
OA 281	Coop. Work Experience Seminar- Office Administration +			1
	Social Science/Humanities *	3		
	Technical Electives ++	3		
	Electives **	3		2

* Selected from Arts and Letters and Social Science lists, pages 37 & 38.

** Strongly recommend WR 227, Technical Report Writing; SPN9752, Spanish Conversation: Business

*** C grade or better in preceding course to take next level

\+ The Cooperative Work Experience seminar requirement for any Business degree can be met by completing one of the following courses: BA 281, CS 281, or OA 281.

++ Students must complete technical electives chosen from either the Science/Mathematics List on page 38 or the Business Technical Electives List on page 49.

See page 45 for first year requirements.

Second Year Option

OFFICE MANAGEMENT OPTION - OFFICE SYSTEMS ASSOCIATE OF APPLIED SCIENCE DEGREE

Second Year

Course Number	Course Title	Credits F	W	S
BA 177	Payroll	3		
BA 131, 132	Accounting Procedures I,II ***	3	3	
CSD 122	Beginning Database Program Development		3	
CSL 107	Spreadsheets		3	
OA 225	Machine Transcription		3	
BA 250	Small Business Management		3	
BA 230	Management Info Systems			3
OA 295	Office Systems Directed Project			4
OA 280	Coop. Work Experience - Office Administration			2
OA 281	Coop. Work Experience Seminar - Office Administration +			1
	Social Science/Humanities *	3		
	Technical Electives ++	3		3
	Electives **	3		2

* Selected from Arts and Letters and Social Science lists, pages 37 & 38.

** Strongly recommend WR 227, Technical Report Writing; SPN9752, Spanish Conversation: Business

*** C grade or better in preceding course to take next level

\+ The Cooperative Work Experience seminar requirement for any Business degree can be met by completing one of the following courses: BA 281, CS 281, or OA 281.

++ Students must complete technical electives chosen from either the Science/Mathematics List on page 39 or the Business Technical Electives List on page 49.

See page 45 for first year requirements.

MICROCOMPUTER APPLICATIONS
ONE-YEAR CERTIFICATE PROGRAM

Job Description:
The Microcomputer Applications program prepares students for careers which involve technology in roles of customer/user support, network or applications operations, and data entry. The program offers a One-Year Certificate and could lead to jobs such as data entry, customer service, word processing, and beginning network and applications operations.

Employment Opportunities:
Microcomputers are used in a variety of business, industrial, educational, and agency settings. This program prepares students to use both packaged and specially designed systems.

Potential Earnings:
Salary ranges for individuals with the One-Year Certificate may range from $18,000 to $22,000 per year depending upon location, size of company, and the specific job descriptions.

Course Number	Course Title	Credits F	W	S
OA 104	English for Business	4		
CS 131	Introduction to Computer Info. Systems	4		
OA 201	Word Processing I	3		
BA 101	Intro to Business	3		
CSD 122	Beginning Database Program Development		3	
OA 202	Word Processing II		3	
CSL 107	Spreadsheets		3	
BA 285	Human Relations in Business		3	
MTH 65	Math for Applied Sciences * ***or***			4
MTH 95	Intermediate Algebra *			(5)
CSD 275	Advanced Database Program Development			3
WR 40	English Fundamentals ** ***or***			3
WR 121	English Composition **			(3)
OA 205	Desktop Publishing		2	
MIC 207	Presentation Software		2	
	Technical Electives ***	3		2

* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.

** Minimum grade C or higher.

*** Students must complete technical electives chosen from either the Science/Mathematics List on page 38, or the Business Technical Electives List on page 49.

GENERAL OFFICE
ONE-YEAR CERTIFICATE PROGRAM

Job Description:
General office clerks perform a variety of clerical duties essential to office operations. Most clerks type, file, and operate calculating and copying machines. They may send, open, route, or answer mail; answer telephones; and greet visitors. They may also compile records and reports, tabulate and post data, and compute wages, taxes, and commissions or payments. Operating word processing equipment efficiently is essential.

Employment Opportunities:
Demand is greatest for those who have good clerical skills and who understand the organization, activities, and terminology of the business. Knowledge of bookkeeping or processing of payroll records may also increase chances for a job.

Potential Earnings:
The average wage is $1,200 - $1,800 per month.

Course Number	Course Title	Credits F	W	S
BA 131	Accounting Procedures I	3		
CS 101	Computer Fundamentals	1		
MTH 65	Math for Applied Sciences * ***or***	4		
MTH 95	Intermediate Algebra*	(5)		
OA 104	English for Business	4		
OA 116	Office Procedures +	4		
BA 104	Business Math/Electronic Calculators		4	
OA 201	Word Processing Procedures I		3	
OA 240	Filing and Records Management		3	
WR 40	English Fundamentals** ***or***		3	
WR 121	English Composition**		(3)	
MIC 145	Intro to Integrated Software		3	
BA 214	Business Communications**			3
OA 280	Cooperative Work Experience-Office Administration			2
OA 281	Coop Work Experience Seminar +/++			1
	Technical electives***			7

* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.

** Minimum grade C or higher.

*** Students must complete 4 credits of technical electives to be selected from the list on page 49. Another 3 credits of technical electives must be chosen from the following courses:

CSL 107	Spreadsheets,	3 credits
BA 132	Accounting Procedures II	3 credits
CSD 122	Beginning Database	3 credits

\+ Contains human relations components

++ The Cooperative Work Experience seminar requirement for any Business degree can be met by completing one of the following courses: BA 281, CS 281, or OA 281.

BUSINESS TECHNICAL ELECTIVES

Courses which are used to satisfy program requirements may not be used as technical electives.

Course Number	Course Title	Credits
ART 225	Computer Graphics I	3
ART 226	Computer Graphics II	3
BA 101	Introduction to Business	3
BA 104	Business Math with Electronic Calculators	4
BA 131,132,133	Accounting Procedures I, II, III	3 ea
BA 177	Payroll and Business Tax Accounting	3
BA 206	Management Fundamentals	3
BA 211,212,213	Principles of Accounting I,II,III	4 ea
BA 214	Business Communications	3
BA 222	Financial Management	3
BA 223	Principles of Marketing	3
BA 226	Introduction to Business Law I	4
BA 227	Introduction to Business Law II	3
BA 228	Computer Accounting Applications	3
BA 230	Management Information Systems	3
BA 250	Small Business Management	3
BA 256	Income Tax	3
BA 280	Cooperative Work Experience: Accounting	2-6
BA 280	Cooperative Work Experience: Business Administration	2-6
BA 281	CWE Seminar: Bus. Mgmt./Accounting	1
BA 285	Human Relations in Business	3
CS 101	Fundamentals of Computing	1
CS 125H	Begin. Web Site Design & Devel.	3
CS 131	Intro to Computer Information Systems	4
CS 133S	Scripting Languages	3
CS 135H	Adv. Web Site Design & Development	3
CS 135W	Website Management	3
CS 160	Introduction to Computer Programming	4
CS 161	Computer Science I	4
CS 162	Computer Science II	4
CS 163	Computer Science III	4
CS 171	Principles of Computer Organization	4
CS 271	Computer Architecture	4
CS 278	Data Communication & Networking	3
CS 279	Network Management I	3
CS 280	Cooperative Work Experience: Microcomputer Bus. Applications	2-6
CS 281	CWE Seminar: Microcomputer Business Applications	1
CS 288	Network Management II	3
CS 295	Computer Information Systems Directed Project	4
CSD 122	Beginning Database Program Development	3
CSD 275	Advanced Database Program Development	3
CSL 107	Spreadsheets	3
DRF 139	Technical Print Interpretation	3
DRF 185	Computers in Design	3
DRF 213	AutoCAD - Beginning	4
DRF 214	AutoCAD - Intermediate	4
DRF 215	AutoCAD - Advanced	4
DRF 217	AutoCAD Upgrade	1
EC 115	Introduction to Economics	3
EC 201,202	Principles of Economics	4 ea
EC 280	Cooperative Work Experience: Economics	2-6
EC 281	CWE Seminar: Economics	1
HD 110	Career Planning	2
MIC 145	Introduction to Integrated Software	3
MIC 171	Intermediate Spreadsheets	3
MIC 207	Presentation Software	2
MIC 295	Microcomputer Directed Project	4
OA 100	Desktop Publishing for Writers	1
OA 104	English for Business	4
OA 116	Office Procedures	4
OA 120	Computer Keyboarding	1
OA 121,122	Keyboarding I,II	3 ea
OA 124	Keyboarding Skill Building	3
OA 135	Legal Terminology	3
OA 139	Legal Transcription	3
OA 140,141	Medical Terminology I, II	3 ea
OA 142	Medical Transcription	3
OA 201,202	Word Processing Procedures I,II	3 ea
OA 205	Desktop Publishing	2
OA 225	Machine Transcription	3
OA 240	Filing and Records Management	3
OA 280	Cooperative Work Experience: Office Administration	2-6
OA 281	CWE Seminar: Office Systems	1
OA 295	Office Systems Directed Project	4
SP 130	Business & Professional Speaking	3
WR 227	Technical Report Writing	3

The following one (1) credit workshops:

CSC 9752920	Computer-Aided 3D Modeling
CSC 9733105	Desktop Publishing w/Pagemaker-Beginning
CSC 9733107	Desktop Publishing w/Pagemaker-Intermediate
CSC 9733114	Desktop Publishing w/Pagemaker-Advanced
CSC 9752913	Digital Imaging w/Photoshop-Beginning
CSC 9752916	Digital Imaging w/Photoshop-Intermediate
CSC 9752929	Digital Imaging w/Photoshop-Advanced
CSC 9733112	Dreamweaver-Beginning
CSC 9733113	Dreamweaver-Intermediate

Crafts and Industrial Trades

Crafts & Industrial Trades Associate Of Applied Science Degree

Job Description:
The Crafts and Industrial Trades program prepares students to gain academic and technical knowledge, skills, and attitudes required for entry and advancement in the crafts and industrial trades.

Employment Opportunities:
The trades include such professions as plumber, electrician, bricklayer, powerlinemen, auto technician, carpenter, or any trade recognized by the State, or Trades Apprenticeship Advisory Committee. Entry into these trades is limited, with openings offered by each trades committee only once every one to two years. Normally, applicants are ranked according to their education and experience related to the trade for which they are applying. Local Apprenticeship openings are determined by each trade operating within the College district.

Potential Earnings:
Starting wage ranges from $20-$36 an hour.

Entrance Requirements:
To qualify for this program, students must be:

1. Indentured in an apprentice program (see "**note**"). ***or***
2. Journeymen who have completed a registered program, ***or***
3. Journeymen who have not completed a registered program, but are recognized as Journeymen by a current State license and/or a Joint Apprenticeship Advisory Committee.

Note: To become indentured, an apprentice must follow the formal trade's standards and policies for being accepted in a specific trade. Each trade follows policies and guidelines that conform to their Apprenticeship Advisory Committee, State authorizing agency, and the licensing agent governing the trade if applicable. In most cases, minimum qualifications for an apprenticeship include a high school diploma or G.E.D., a minimum of a 'C' grade for one year of high school algebra or one academic quarter of college-level algebra, and to be at least 18 years of age. Apprenticeships are from one to five years in length and acceptance as an apprentice to a trade must be completed prior to admission to this degree option.

Course Number	Course Title	Credits
WR 40	English Fundamentals* ***or***	3
WR 121	English Composition	(3)
	Communications**	3
MTH 65	Math for Applied Sciences****or***	4
MTH 95	Intermediate Algebra***	(5)
	Social Sciences/Humanities****	3
PSY 101	Psychology of Human Relations	3
CS 131	Introduction to Computer Information Systems	4
	Trade Competency +	22
	Related Training ++	36
	Cooperative Work Experience +++	12
	Total Credits:	90

* Minimum grade C or higher.

** Three credits selected from WR 121 (if not previously taken), WR 122, WR 123 English Composition, WR 227 Technical Report Writing, or BA 214 Business Communications with a minimum C grade or higher.

*** Minimum grade C or higher. Higher level math may be substituted.

**** Selected from Arts and Letters and Social Science listed on pages 37 & 38.

\+ Awarded upon completion of general education requirements and advancement to or attainment of Journeyman status.

++ Total credits will vary with length of program, i.e., Powerlineman which is three years to Plumber which is a four-year program. General education credits may not be used to satisfy the related training or cooperative work experience. A Trade Committee can, however, identify other related training options.

+++ Cooperative Work Experience may be completed during the term of indentureship, and must be defined by current policies and procedures of Clatsop Community College.

Criminal Justice

Criminal Justice Associate Of Applied Science Degree

Job Description:

The field of criminal justice includes jobs such as law enforcement officers, probation and parole officers, correctional officers, and juvenile workers. Law enforcement officers (police officers) are responsible for enforcing laws and maintaining order. Their primary duties are to protect life and property, prevent crimes, and arrest and help prosecute violators. They also prepare written reports of their activities and testify in court.

Parole and probation officers help legal offenders adjust to society. They provide support and guidance to help people identify and solve their problems. Parole officers work with persons who have been released from a correctional institution and spend most of their time counseling offenders who have returned to the community. Probation officers work with juveniles and adults who have been released by the court without sentence or imprisonment. They perform presentence investigations, write reports, give court testimony, and help their clients work toward long range goals.

Correctional officers and juvenile detention workers supervise and control residents in prisons, jails, detention centers, and halfway houses to maintain security and enforce discipline. They oversee the daily activities of inmates, give out work assignments, and help the inmates with specific tasks. They inspect the facilities to ensure that conditions are sanitary and secure. They may supervise inmates in transit and escort them to and from cells, courts, and other facilities. They settle disputes among inmates, prevent escapes, and search and count inmates. Juvenile workers handle case loads similar to parole and probation officers, but work with offenders under 18 years of age.

Employment Opportunities:

Law enforcement officers: Employment is expected to grow as fast as the average for all occupations in Oregon. Parole and probation officers: A bachelor's degree is a minimum requirement for entering this field. Although there is currently a surplus of applicants, the recent passage of a ballot measure may eventually lead to the hiring of many more parole officers. Correctional officers: Employment is expected to grow as fast as the average for all occupations in Oregon. Juvenile Workers: These workers may also need to complete a four-year college degree for some types of employment. Employment opportunities do exist for persons with two years of college training.

Potential Earnings:

The average entry level wage for law enforcement officers is $2,800 per month and the average maximum wage is $3,800 per month; the average wage for correctional officers is about $2,800 per month. The average wage for parole and probation officers and juvenile workers is $3,500 per month.

First Year

Course Number	Course Title	Credits F	W	S
CJ 100	Careers in Criminal Justice	3		
CJ 101	Introduction to Criminology	3		
CJ 120	Introduction to the Judicial Process	3		
SP 111	Fundamentals of Public Speaking	3		
CJ 110	Introduction to Law Enforcement +		3	
CJ 121	Concepts of Criminal Law		3	
CJ 130	Introduction to Corrections +		3	
WR 121	English Composition *		3	
CJ 132	Introduction to Parole and Probation			3
SP 112	Persuasive Speech ***or***			3
SP 219	Small Group Discussion			(3)
CS 131	Introduction to Computer Information Systems ***or***			4
CS 101	Fundamentals of Computing ***and***			(1)
MIC 145	Intro. to Integrated Software			(3)
WR 122	English Composition * ***or***			3
WR 227	Technical Report Writing			(3)
	Social Science/Humanities **	3	3	3

* Minimum grade C or higher.

** Selected from Arts and Letters and Social Science lists, pages 27 & 28; psychology and/or sociology courses strongly recommended.

*** May be taken during the second year or during the summer between the first and second year.

**** Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.

\+ Contains human relations components.

Second Year

Course Number	Course Title	Credits F	W	S
SOC 221	Juvenile Delinquency	3		
CJ 210	Criminal Investigation		3	
CJ 107	Criminal Justice Workshop			3
CJ 243	Alcohol and Other Dangerous Drugs			3
MTH 65	Math for Applied Science **** ***or***			4
MTH 95	Intermediate Algebra ****			(5)
CJ 280	Cooperative Work Experience - Criminal Justice ***	1	2	2
CJ 281	Coop. Work Experience Seminar - Criminal Justice	1		
	Social Science/Humanities **	3		
	Technical electives	3	6	3
	Electives	4	3	

Technical Electives

Students must complete twelve credits from the following list of courses. Courses used to satisfy program requirements may not be used as technical electives.

Course Number	Course Title	Credits
CJ 109	Introduction to Public Safety Communications	3
CJ 114	Gender, Race, Class & Crime	3
CJ 203	Crisis Intervention	3
CJ 215	Issues in CJ Supervision and Administration	3
CJ 219	Introduction to Community Policing	3
CJ 230	Intro. to Juvenile Corrections	3
CJ 223	Rules of Evidence	3
CJ 232	Intro. to Corrections Casework or	3
HS 155	Interviewing for Social Services	(3)
CJ 244	Sexual Exploitation of Children	3
CJ 280	Cooperative Work Experience – Criminal Justice	3
HS 101	Alcohol Use, Misuse and Addiction	3
HS 102	Drug Use, Misuse and Addiction	3
HS 154	Community Resources	3
HS 201	Family Alcoholism/Addiction	3
HS 205	Youth Addiction	3
PHL 102	Ethics	3
PSY 101	Psychology of Human Relations	3
PSY 219	Intro to Abnormal Psychology	3
SPAN 101,102,103	First Year Spanish ***or***	4 ea
SPAN 111,112,113	Conversational Spanish	(3 ea)

Early Childhood Education

Early Childhood Education One-Year Certificate

The Early Childhood Education (ECE) program prepares individuals for careers as childcare workers or assistant teachers in early childhood education settings such as childcare centers, preschools and Head Start programs, and as teacher aides in the early grades. The coursework is also strong preparation for higher level positions such as preschool teacher and manager, and may be used towards an Associate of General Studies degree with a concentration in Early Childhood Education. A certificate will be awarded on completion of the required general education courses, with a minimum of 25 credits from the core ECE program and additional credits from the technical electives, for a total of 45 credits.

Childcare workers help supervise and provide care and learning experiences for children in daycare and preschool programs. Workers provide recreation and introduce basic concepts such as colors, shapes, numbers, and pre-reading skills. They plan classes and other activities designed to promote healthy mental and physical growth in children. They must also assist with classroom management, meals, and other childcare needs. Teacher aides provide classroom and clerical assistance to elementary and secondary teachers. Aides may grade papers and tests, assist with record keeping, supervise study halls, playgrounds, cafeterias, and hallways. Aides may also assist with classroom management, tutoring, and material preparation.

Employment Opportunities:
Employment opportunities vary, depending on public and private funding. Job opportunities are present in local daycare centers, Head Start Programs, private preschool programs, private and public elementary schools, and in-home day care.

Potential Earnings:
Many beginning childcare/aide positions start at minimum wage. Earnings potential ranges to $10.00 per hour. In-home day care earnings vary according to the number of children cared for.

Early Childhood Education Courses:

Course Number	Course Title	Credits
ECE/ED 280	Coop. Work Experience-Early Childhood Education / Education	6
ECE/ED 281	CWE Seminar - Early Childhood Education / Education	1
ECE 101	Language Arts Activities for Young Children	1
ECE 103	Math and Science for Young Children	1
ECE 105	Nutrition, Health and Safety for Young Children	1
ECE 109	Early Childhood Environment +	1
ECE 119	Self-Concept, Guidance and Self-Discipline of Young Children	1
ECE 124	Physical Activities for Young Children	1
ECE 125	Creative Activities for Young Children: Art	1
ECE 128	Program Planning and Evaluation for Young Children	1
ECE 129	Observation and Developmental Screening of Young Children	1
ECE 134	Statutes, Liability, Licensure Considerations for Childcare Facilities	1
ECE 137	Child Abuse and the Law	1
ECE 139	Infant and Toddler Programs	1
ECE 145	Toys and Games for Learning	1
ECE 146	Handicapping Conditions in Young Children	1
ECE 149	Disease Control in ECE Settings	1
ECE 175	Infant/Toddler Learning and Social Growth	1
PSY 215	Psychology of Human Development ***or***	3
HFS 226	Growing Years (Childhood Development) ***or***	(3)
ECE 131	Child Development for the Day Care Worker	(2)

Required General Education Courses:

Course Number	Course Title	Credits
MTH 65	Math for Applied Sciences* ***or***	4
MTH 95	Intermediate Algebra*	(5)
PSY 101	Psychology of Human Relations	3
WR 40	English Fundamentals** ***or***	3
WR 121	English Composition**	(3)

	Technical Electives	Credits
ECE/ED 280	Coop. Work Experience-Early Childhood Education / Education	1-6
CJ 244	Sexual Exploitation of Children	3
ASL 101	American Sign Language I	3
SPAN 101	First Year Spanish ***or***	3
SPAN 111	Conversational Spanish	(3)
SOC 210	Marriage, Family, and Intimate Relations	3
HS 101	Alcohol Use, Misuse and Addiction ***or***	3
HS 201	Addiction and the Family	(3)
HS 102	Drug Use, Misuse & Addiction	3
HS 154	Community Resources	3
ENG 221	Children's Literature	3
SOC 213	Minorities: Dealing with Diversity ***or*** +	3
SP 215	Introduction to Intercultural Communications ***or*** +	(3)
SOC 9536	Introduction to Intercultural Awareness +	(2)

* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.

** Minimum grade C or higher.

\+ Diversity Courses

Fire Science

Fire Science Associate Of Applied Science Degree

Job Description:
This program offers training and education for those wanting a fire science career or for those who are currently employed as firefighters. Many courses offered by Clatsop Community College allow students the option of completing lower division fire science requirements by independent study. Firefighters protect communities and forests against loss of life, injury, or destruction of property by fire. Firefighters work as a team with each person assigned to a special job. They operate and maintain fire stations, equipment, and trucks. They may also inspect buildings for fire hazards and investigate fire causes. They also spend time educating the public about fire safety, speaking in schools, and to civic and citizen groups. Coursework is accredited by the Oregon Fire Standards and Accreditation Board.

Students and entry level firefighters may be required to satisfactorily complete specific agility and endurance requirements, including climbing up and down the full length of a 24' ladder while carrying bundles; wearing self-contained breathing apparatus; entering confined spaces; carrying hoses and specified equipment, as well as demonstrating upper body physical strength and overall flexibility.

Employment Opportunities:
There is a surplus of qualified applicants, particularly in the metropolitan areas.

Potential Earnings:
The average salary for a firefighter is $2,800 per month. In rural areas firefighting may be a volunteer position.

Required General Education Courses:

Course Number	Course Title	Credits
MTH 65	Math for Applied Sciences * ***or***	4
MTH 95	Intermediate Algebra*	(5)
GS 104	Physical Science ***or***	4
PH 201	General Physics	(4)
HPE 295	Health and Fitness for Life	3
SP 111	Fundamentals of Public Speaking	3
WR 121	English Composition **	3
WR 227	Technical Report Writing **	3
CS 131	Intro to Computer Information Systems ***or***	4
OA 201	Word Processing Procedures I ***or***	(3)
MIC 145	Intro to Integrated Software	(3)
PSY 101	Psychology of Human Relations	3
	Social Science/Humanities ***	3
	Technical electives	8
	Electives	5

Technical Electives

Students must complete eight credits from the following list of courses. Courses which are used to satisfy program requirements may not be used as technical electives. Some listed courses may not be offered every year.

Course Number	Course Title	Credits
BI 231,232,233	Human Anatomy and Physiology	4 ea
CJ 203	Crisis Intervention	3
CPL 120	Credit for Prior Learning	3
EMT 165, 166	Emergency Medical Technician Intermediate-Part I,II	4 ea
FRP 155	Instructional Methodology	2
FRP 181	Fire Prevention and Inspection	3
FRP 280	Cooperative Work Experience - Fire Science	3
OA 140	Medical Terminology	3

Required Fire Science Courses

Course Number	Course Title	Credits
EM 101	Intro to Emergency Services	4
FRP 151	Firefighter Skills I ++	3
FRP 156	Firefighter Law	1
FRP 157	Firefighter Safety	1
FRP 158	Pump Construction and Hydraulics	3
FRP 164	Hazardous Materials	3
FRP 166	Building Construction +	3
FRP 169	Fire Department Leadership +	3
FRP 170	Firefighting Strategy and Tactics +	3
FRP 171	Fire Protection Systems & Extinguishers +	3
FRP 172	Fire Codes & Ordinances +	3
FRP 280	Cooperative Work Experience: Fire Science	2
FRP 281	CWE Seminar: Fire Science	1
EMT 151	Emergency Medical Technician Basic-Part I	5
EMT 152	Emergency Medical Technician Basic-Part 2	5
EMT 169	Emergency Medical Technician Rescue	3
EMT 170	Emergency Communication and Patient Transportation	3

The FRP courses will be offered on a rotating basis every two years.

\+ Independent study courses

++ FRP 151 requires pre-approval of Fire Science Coordinator.

* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.

** Minimum grade C or higher.

*** Selected from Arts and Letters and Social Science lists, pages 37 & 38.

Health Occupations

Medical Assistant
One-Year Certificate Program

The Medical Assistant Program prepares students for entry level employment in a physician's clinic or a variety of other health care settings. Program graduates will have the academic, administrative and clinical skills necessary for an allied healthcare professional. Courses cover anatomy, physiology, and medical terminology, as well as, computers, office procedures, communication, psychology and math.

Job Description:
Medical Assistants perform routine administrative and clinical tasks to keep healthcare delivery systems running smoothly. An MA will work in reception, scheduling, medical records, insurance billing, and as a medical office secretary. An MA will also work as a clinical assistant to the physician by preparing patients for examinations, assisting with treatments, collecting and testing specimens and educating patients on health promotion and disease prevention issues.

Employment Opportunities:
The job outlook is excellent, locally, regionally, nationally and is projected to grow.

Potential earnings:
The average rate of pay for Medical Assistants in Oregon is $26,530 annually.

Working conditions:
Medical Assistants work in well lighted, clean environments. They regularly interact with other people, and may have to handle several responsibilities at once. Most Medical Assistants work a regular forty-hour week. Some work part-time, evenings or weekends.

Course Number	Course Title	Credits F	W	S
MA 112	Medical Assistant Clinical Procedures	3		
OA 104	English for Business	4		
CS 131	Intro to Computer Info Systems	4		
OA 140	Medical Terminology I	3		
OA 116	Office Procedures	4		
MA 133	Medical Assistant Practicum I		4	
MTH 65	Math for Applied Science**		4	
OA 141	Medical Terminology II		3	
MA 113	Medical Assistant Clinical Procedures II		4	
BI 121	Basic Human Anatomy & Physiology I		3	
WR 40	English Fundamentals* ***or***			3
WR 121	English Composition*			(3)
BI 122	Basic Human Anatomy & Physiology II			3
MA 115	Pharmacology for Medical Assistants I			2
MA 231	Medical Assistant Practicum II			5
PSY 101	Psychology of Human Relations			3

* Minimum grade of "C" or higher.
** Minimum grade of "C" or higher. May substitute MTH 95 or higher.

AUTOMOTIVE TECHNICIAN
ONE-YEAR CERTIFICATE PROGRAM

This competency based program will provide an individual with the prerequisite knowledge, skills, work habits and attitude required to perform routine, predictable, proceduralized tasks as defined by the National Institute for Automotive Service Excellence. These entry-level tasks involve motor skills and limited theoretical knowledge and are performed under close supervision. Course curriculum follows specifications for qualification and certification of an entry level ASE Automotive Technician. This program is one step on the ladder of skills the trainees may achieve in their quest for a rewarding career. People who are creative and enjoy mind-hand challenges will find opportunities for advancement and experience a great sense of pride in workmanship as they ply their trade.

Employment Opportunities:
The job outlook for an ASE Automotive Technician is good regionally, nationally and globally. ASE Automotive Technicians are employed in a wide range of industries that use related tasks during daily operations.

Potential Earnings:
Presently starting wages in Oregon are about $9.00 per hour, with top wages near $80,000 per year as the individual's skill level increases.

Entrance Requirements:
ASSET test scores of 35 or higher for writing and 38 or higher for math.

Course Number	Course Title	Credits F	W	S
IT 140	Industrial Safety ***	1		
IT 141	Tool & Shop Basics	1		
IT 108	Engine Principles	4		
MIC 145	Introduction to Integrated Software ***or***	3		
CS 131	Introduction to Computer Info. Systems	(4)		
MTH 65	Mathematics For Applied Sciences* ***or***	4		
MTH 95	Intermediate Algebra*	(5)		
WR 40	English Fundamentals** ***or***	3		
WR 121	English Composition**	(3)		
IT 218	Vehicle Steering & Suspension Systems		4	
IT 206	Auto Electrical/Electronics Foundations		4	
IT 209	Fluid Drives and Hydraulic Transmissions		4	
IT 230	Vehicle Heating & Air Conditioning Systems		4	
PSY 101	Psychology of Human Relations		3	
IT 219	Vehicle Brake Systems			4
IT 207	Auto Electrical/Electronics Applications			4
IT 280	Cooperative Work Experience			2
IT 281	Cooperative Work Experience Seminar			1
WLD 150	Beginning Welding			3

Legend Notes:
* Minimum Grade C or higher. Math courses numbered higher than MTH 95 may be substituted.
** Minimum Grade C or higher.
*** IT 140 uses CD-ROM training modules. Satisfactory completion of this class is required before taking classes in any of the shop facilities.

Notes: The program addresses the application of technical writing skill as the trainee delivers written quality control reports. Students demonstrate practical math applications throughout the program.

Upon completion the trainees will receive a Certificate of Completion from CCC qualifying them as an entry level automotive technician. With the addition of two years minimum field experience and upon successful completion of the ASE exam, trainees may become a certified ASE Automotive Technician in their field of training.

CADD TECHNICIAN (COMPUTER-AIDED DESIGN & DRAFTING) ONE-YEAR CERTIFICATE PROGRAM

This competency based program will provide an individual with the prerequisite knowledge, skills, work habits and attitude required to perform both routine and creative tasks. These entry level CADD Technician tasks involve computer skills, design activities and limited theoretical knowledge and are performed under supervision. Course curriculum follows national specifications for qualification and certification of an entry level CADD Technician. This program is one step on the ladder of skills the trainees may achieve in their quest for a rewarding career. People who are creative and enjoy mind-hand challenges will find opportunities for advancement and experience a great sense of pride in workmanship as they ply their trade.

Employment Opportunities:
The job outlook for CADD Technicians is good regionally, nationally and globally. Entry level CADD Technicians are employed in a wide range of industries that use related tasks during daily operations.

Potential Earnings:
Presently starting wages in Oregon are about $11.00/hour, with top wages to about $22.00/hour as the individual's skill level increases.

Course Number	Course Title	Credits F	W	S
DRF 139	Technical Print Interpretation	3		
DRF 213	AutoCAD - Beginning	4		
ART 115	Basic Design	3		
MIC 145	Introduction To Integrated Software ***or***	3		
CS 131	Intro to Computer Info. Systems	(4)		
MTH 65	Mathematics For Applied Sciences* ***or***	4		
MTH 95	Intermediate Algebra*	(5)		
DFR 214	AutoCAD - Intermediate		4	
WR 40	English Fundamentals** ***or***		3	
WR 121	English Composition**		(3)	
PSY 101	Psychology of Human Relations ***or***		3	
BA 285	Human Relations in Business		(3)	
ART 225	Computer Graphics I		3	
DRF 215	AutoCAD - Advanced			4
DRF 295	CADD Directed Project			4
DRF 280	Cooperative Work Experience-CADD			2
DRF 281	Cooperative Work Experience Seminar			1
	Technical electives		3	3

Technical electives

6 Credits chosen from the following list:

ART 116	Basic Design	3
ART 131	Introduction to Drawing	3
ART 226	Computer Graphics II	3
CS 125H	Beginning Website Design/Development	3
MIC 207	Presentation Software	3
WR 227	Technical Report Writing	3
CSC 9733105	Desktop Publishing w/Pagemaker-Beg.	1
CSC 9733107	Desktop Publishing w/Pagemaker-Int.	1
CSC 9733114	Desktop Publishing w/Pagemaker-Adv.	1
CSC 9733112	Dreamweaver-Beg.	1
CSC 9733113	Dreamweaver-Int.	1
CSC 9752920	Computer-Aided 3D Modeling	1
CSC 9752913	Digital Imaging w/Photoshop-Beg.	1
CSC 9752916	Digital Imaging w/Photoshop-Int.	1
CSC 9752929	Digital Imaging w/Photoshop-Adv	1

Legend Notes:
* Minimum Grade C or higher Math courses numbered higher than MTH 95 may be substituted
** Minimum Grade C or higher

Note: Students will be prepared to take a national certification exam demonstrating their competency and proficiencies in CADD.

AMERICAN WELDING SOCIETY ENTRY LEVEL WELDING ONE-YEAR CERTIFICATE PROGRAM

Job Description:
This competency based program will provide an individual with the prerequisite knowledge, skills, work habits and attitude required to perform routine, predictable, proceduralized tasks as defined by the American Welding Society. These entry-level welding tasks involve motor skills and limited theoretical knowledge and are performed under close supervision. Course curriculum follows the AWS specifications for qualification and certification of QC10-95 entry level welder. This program is one step on the ladder of skills the trainees may achieve in their quest for a rewarding career. People who are creative and enjoy mind-hand challenges will find opportunities for advancement and experience a great sense of pride in workmanship as they ply their trade.

Employment Opportunities:
The job outlook for welding is good regionally, nationally and globally. Entry level welders are employed in a wide range of industries that use welding and welding-related tasks during daily operations.

Potential Earnings:
Presently starting wages in Oregon are about $9.50/hour, with top wages to about $18.00/hour as the individual's skill level increases.

Program Requirements: The department recommends that students enter the program at the beginning of a scheduled term, based on space availability. Some classes may not be offered every term. Acceptance into the program is based on demonstration of basic math and high school level reading/writing skills by meeting or exceeding the following ASSET test scores: Math 36-45; Reading 38-41; Writing 37-41. Because a variety of working conditions exist in the welding field, a person generally should be in good physical condition and be able to stand, stoop, kneel and bend. Good eyesight, especially depth perception, is necessary for a welder.

Course Number	Course Title	Credits F	W	S
IT 140	Industrial Safety ***	1		
IT 141	Tool & Shop Basics	1		
DRF 139	Technical Print Interpretation	3		
MTH 65	Mathematics For Applied Sciences* ***or***	4		
MTH 95	Intermediate Algebra*	(5)		
WLD 100	Materials Processing	4		
WLD 101	Shielded Metal Arc Welding Process	10		
WLD 102	Gas Metal Arc Welding Process		9	
WLD 103	Flux Core Arc Welding Process		9	
WR 40	English Fundamentals** ***or***		3	
WR 121	English Composition**		(3)	
PSY101	Psychology of Human Relations			3
WLD 104	Gas Tungsten Arc Welding Process			8
IT 280	Cooperative Work Experience			2
IT 281	Cooperative Work Experience Seminar			1

Legend Notes:
* Minimum Grade C or higher. Math courses numbered higher than MTH 95 may be substituted.
** Minimum Grade C or higher.
*** IT 140 uses CD-ROM training modules. Satisfactory completion of this class is required before taking classes in any of the shop facilities.

Notes: The program addresses the application of technical writing skill as the trainee delivers written quality control reports for each welding process workmanship sampling. Students demonstrate practical math applications throughout the program, especially in the workmanship assessment projects.

Upon completion the trainees will receive a Certificate of Completion from AWS qualifying them as a nationally recognized entry level welder. They will also be registered in the AWS databank for certificate verification purposes.

Maritime Sciences

One-Year Certificate in Seamanship

Job Description:
Individuals completing this competency-based training program will have the requisite knowledge, skills, work habits and attitude to perform work on a vessel in an entry level position. A seaman employed in the maritime industry works as a deckhand on commercial vessels and is responsible for keeping the vessel and its equipment in working order. The individual may stand watches--conducting the vessel from one point to another while adhering to the principles of navigation and the rules of the road. Upon completion of this program, students will have the skills and knowledge to pass the United States Coast Guard Able Seaman exam and, those meeting USCG requirements, may complete the program with a Merchant Mariner's Document.

Employment Opportunities:
The job outlook for crewmembers in the maritime industry is good regionally, nationally, and globally. Entry level deckhands work on a wide range of vessels performing a variety of tasks. Contracts often require crewmembers to work twelve hour days for weeks or months at a time while away from home.

Potential Earnings:
Entry level wages vary from $12 an hour in the merchant fleet to a share of profits in the commercial fishing fleet. Average wage for entry level deckhands in $100 to $150 per day.

Course Number	Course Title	Credits F	W	S
MAS 150	Marine Safety, ***or***	2		
MAS 135	STCW Basic Safety Training	(3)		
MAS 155	Introduction to Watch Keeping	2		
MAS 165	Practical Navigation	2		
MAS 168	Charts, Aids to Navigation, and Magnetic Compasses***	3		
MAS 175	Rules of the Road***	3		
MAS 181	Seamanship I	2		
MAS 184	Galley Cooking	2		
MAS 182	Seamanship II		2	
MTH 65	Math for Applied Science* ***or***		4	
MTH 95	Intermediate Algebra*		(5)	
MAS 183	Seamanship III			2
PSY 101	Psychology of Human Relations			3
WR 40	English Fundamentals** ***or***			3
WR 121	English Composition**			(3)
	Technical Electives	3	6	6

TECHNICAL ELECTIVES

Students must complete 15 credits form the following list of courses.

Course Number	Course Title	Credits
MAS 100	Maritime Occupations	2
MAS 121	Able Seaman Training	4
MAS 130	Radar Observer: Original Endorsement, Unlimited	2
MAS 135	STCW Basic Safety Training (if not already taken as a degree requirement)	3
MAS 137	Radar Navigation	2
MAS 147	Rules and Regulations	3
MAS 148	Vessel Stability	3
MAS 164	Introduction to Navigation***	3
MAS 170	Marine Weather, Tides, Currents, and Waves***	3
MAS 171	Coastal Navigation & Voyage Planning	3
MAS 180	Marine Electronics***	3
MAS 185	Bridge to Bridge Communication	3
MAS 189	Applied Rigging Technology	2
MAS 190	Vessel Practicum	1-3
MAS 191	Deckhand Practicum +	1-4
MAS 192	Intro to Deck Machinery & Safety	2
MAS 193	Intro to Engine Room Maintenance & Safety	2
MAS 280	Cooperative Work Experience: Maritime Sciences	4
	Welding (any class)	3

* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.
** Minimum grade C or higher.
*** Course is offered in an individualized format.
\+ Four (4) credits of MAS 191, Deckhand Practicum, may be applied toward the AGS degree, Associate of Applied Science degree, and the One-Year Maritime Science certificate.

Maritime Sciences

Vessel Operations Associate Of Applied Science Degree

Job Description:
This competency-based program will provide an individual with the requisite knowledge, skills, work habits and attitude to perform work on a vessel as an entry level deckhand. Job tasks include handling lines, performing routine vessel and gear maintenance, participating in drills, performing galley duties, standing watches, and becoming part of a working crew in a close quarters environment. Course curriculum follows industry needs as presented by the Maritime Science Department advisory committee. Classes are taught in a practical atmosphere and employ extensive use of a training vessel. This program would be of interest to people who desire a professional career path with advancement opportunities that are in a non-traditional setting. Students completing this program will be qualified to work as crewmembers on research vessels, merchant ships, tugs, charter and passenger vessels, and commercial fishing vessels. Professional licensing is available to students who meet US Coast Guard requirements.

Employment Opportunities:
The job outlook for crewmembers in the maritime industry is good regionally, nationally, and globally. Entry level deckhands work on a wide range of vessels performing a variety of tasks. Contracts often require crewmember to work twelve hour days for weeks or months at a time while away from home.

Potential Earning:
Entry level wages varies from $12 an hour in the merchant fleet to a share of profits in the commercial fishing fleet. Average wage for deckhands is $100 to $150 per day with operators receiving twice that amount.

First Year

Course Number	Course Title		Credits
MTH 65	Math for Applied Sciences * ***or***		4
MTH 95	Intermediate Algebra * *(or a course higher than MTH 95)*		(5)
WR 40	English Fundamentals * *(or WR 121 or course higher than WR 121)*		3
PSY 101	Psychology of Human Relations		3
IT 140	Industrial Safety		1
MAS 181	Seamanship I		2
MAS 182	Seamanship II		2
MAS 183	Seamanship III		2
MAS 184	Galley Cooking		2
MAS 150	Crewmember Training Marine Safety, ***or***		2
MAS 135	STCW Basic Safety Training		(3)
MAS 155	Introduction to Watchkeeping		2
MAS 164	Introduction to Navigation		3
MAS 165	Practical Navigation		2
MAS 168	Charts, Aids to Navigation, & Marine Compasses		3
MAS 175	Rules of the Road		3
MAS 190	Vessel Practicum	S	1
MAS 100	Maritime Occupations	S	2
MAS 170	Marine Weather, Tides, Currents, and Waves	S	3
WLD	Welding	S	1

Second Year

Course Number	Course Title		Credits
BA 214	Business Communications * *(or WR 121 if not taken in first year, or course higher than WR 121)*		3
HS 101	Alcohol use, Misuse, and Addiction *(or HS 102, Drug Use, Misuse, and Addiction; or any acceptable three credit Humanities or Social Science course)*		3
CS 101	Fundamentals of Computing *(or computer course higher than CS 101)*		1
IT 105	Principles of Technology I ** ***or***		4
PH 201	General Physics ***or***		(5)
PH 211	Physics with Calculus		(5)
MAS 186	Small Vessel Operations I		2
MAS 187	Small Vessel Operations II		2
MAS 188	Small Vessel Operations III		2
MAS 171	Coastal Navigation & Voyage Planning		3
MAS 180	Marine Electronics		2
HM 120	Hazardous Materials & Emergency Response Training		1
	Electives *(see Technical Electives)*		33
MAS 190	Vessel Practicum	S	2
MAS 147	Rules and Regulations	S	3
MAS 148	Vessel Stability	S	3
MAS 185	Bridge to Bridge Communication	S	3
MAS 130	Radar Observer: Original Endorsement, Unlimited	S	2
IT 110	Applied Technology Project	S	2

Technical Electives Course List
Students must complete 33 elective credits from either the suggested electives or the list of technical electives.
The following technical electives may be substituted for any suggested elective (S)

MAS 190	Vessel Practicum	1 - 3
MAS 191	Deckhand Practicum	1 - 4
MAS 125	500/1600/Unlimited License Prep.	2 - 8
MAS 280	Marine Cooperative Work Experience	1 - 4
MAS	Any other Maritime Science course ***numbered 100 or above*** may be used for Technical electives	
WLD	Maximum of eight (8) credits of welding courses	1 - 8
IT 101	Engine Rebuilding – Gasoline	4
IT 102	Engine Rebuilding – Diesel	4
IT 108	Engine Principles	4
IT 110	Applied Technology Project	2
IT 141	Tool & Shop Basics	1
IT 208	Mechanical Drives and Transmission of Power	4
IT 209	Fluid Drives and Hydraulic Transmissions	4
PH 202,203	General Physics	5 ea
PH 212,213	Physics with Calculus	5 ea

S = Suggested Elective
* Minimum grade C or higher.

SPECIALIZED TRAINING PROGRAMS AND COURSES IN THE MARITIME SCIENCES

Clatsop Community College's Maritime Science Department (MSD) offers specialized maritime training programs and courses. We offer training for individuals at entry skill levels and for mariners employed within the industry. An example of a group of specialized training courses and programs are the U.S. Coast Guard approved programs. The approved programs may do one, or more, of following; (1) meet U.S. Coast Guard and International Maritime Organization (IMO) training requirements; (2) lead to Coast Guard and STCW (Standards of Training, Certification and Watchkeeping for Seafarers) endorsements; (3) or satisfy Code of Federal Regulation (CFR) requirements.

Courses that lead to U.S. Coast Guard license endorsements include:

1. Radar Observer Original, "Unlimited". (40-hour course)
2. Radar Observer Original, "Rivers". (24-hour course)
3. Radar Observer Re-Certification, "Unlimited" and "Rivers". (8 and 24-hours)
4. Automatic Radar Plotting Aids. (ARPA)
5. Global Marine Distress Safety System. (GMDSS)
6. Celestial Navigation, "Upon Ocean" endorsement for licenses up to 1600 gross tons. (Minimum of 60-hours required for licenses of 500 gross tons or greater)*
7. Proficiency in Survival Craft (32-hour)

The College's License Training Program is approved to satisfy CFR requirements. The approval allows students to complete the Training Program in lieu of U.S. Coast Guard testing for the following licenses:

1. Master/Mate 200 Gross Tons - Near Coastal/Inland Waters.*
2. Master/Mate 100 Gross Tons - Near Coastal/Inland Waters.*
3. Operator of Uninspected Passenger Vessels.*
4. Master/Operator Limited Scope Waters. (40-hours)

*See the section on Modular Classes for an explanation of required hours.

Maritime Science Department courses that meet CFR, IMO or Federal Communication Commission (FCC) requirements include:

1. Marine Safety (24-hours), CFR requirements
2. Basic Safety Training (40-hours), IMO and CFR requirements
3. HAZWOPER (24 and 40 hour), CFR requirements
4. FCC examination, Element 1 (Marine Radio Operator Permit) and Element 1 and 7
5. Global Marine Distress Safety System (GMDSS) Radio Operator, CFR requirements
6. Bridge Resource Management (24 hour) IMD & CFR requirements.

Maritime Science Department's class format

Classes in the Maritime Science Department meet 8:00 A.M. - 5:00 P.M., Monday through Friday. The courses, or programs, marked with an asterisk * are modular classes. Students may start modular classes any day of the week and complete the required modules at their own learning rate. We sell most modules in forty-hour blocks of time.

The modular format allows students working in the industry additional flexibility for upgrading skills and training requirements.

Maritime Sciences

Marine Safety Training

The College offers marine safety courses that are U.S. Coast Guard approved. Classes are conducted coast-wide with other community colleges and Sea Grant agencies. Marine safety classes cover the following topics: preparation for an emergency; cold water near drowning; hypothermia; cold water survival skills; sea survival; stability; marine fire fighting; and emergency procedures.

Classes can be arranged to meet the needs of specific groups. The course is aimed at certifying commercial fishermen to meet or exceed international maritime organization standards as well as those of the U.S. Marine Safety Advisory Committee. Graduates meet compliance criteria as set forth by the Fishing Vessel Safety Act of 1988.

Other affected groups which can benefit are charter operators and crews; government agencies such as National Oceanic and Atmospheric Administration, United States Coast Guard, and National Marine Fisheries Service; local and state police; fisheries observers; park rangers; lifeguards; and the general public.

Additional information about this program can be obtained by contacting the Maritime Science Center, (503) 325-7962.

Radar Observer Program

The U.S. Coast Guard approved Radar Observer Program offers you five different courses: Five-day original endorsement, three-day "Rivers" original endorsement, one-day "Rivers" recertification, three-day recertification, and one-day recertification. The five-day original endorsement class is required if you are operating vessels 200 gross tons or over on an ocean route or 300 gross tons on any route. The three-day "Rivers" original endorsement course meets federal requirements for operators of towing vessels of 26 feet or more in length operating solely on rivers. The three-day recertification class is designed for you if you need to renew your "unlimited" endorsement and would like to practice your plotting skills before taking the renewal exam. The one-day recertification class does not include any instruction or practice time and is limited to the exam only. The one-day recertification class is recommended only if you have recent time on direct plotting radars. Instruction in the three- and five-day classes will include radar operation, characteristics of radar waves, target identification, plotting (three-day "Rivers" does not include plotting), and rules of the road for using radar.

Cost of the classes includes books and classroom materials. You must pay at the time you reserve your class seat. For more information about registering for the radar school, call the Maritime Science Center, (503) 325-7962.

ARPA Training

The U.S. Coast Guard approved Automatic Radar Plotting Aid (ARPA) course meets the requirements for STCW certification and endorsement for master, mate and officer in charge of a navigational watch on ships equipped with ARPA radar. Students must currently hold an unlimited radar endorsement. The 32-hour course covers principles, performance standards and operation of ARPA radar and includes recertification for the unlimited radar endorsement Additional information about this program can be obtained by contacting the Maritime Science Center, (503) 325-7962.

STCW GMDSS Training

The U.S. Coast Guard approved 70-hour Global Marine Distress Safety System (GMDSS) course meets the minimum required training for certification as GMDSS operator in accordance with USCG and STCW standards. The course includes principles of communications, GMDSS communications system, GMDSS equipment, distress alerting and operational procedures. The student will operate actual GMDSS equipment with state of the art simulation hardware. Additional information about this program can be obtained by contacting the Maritime Science Center, (503) 325-7962.

Basic Safety Training

The U.S. Coast Guard STCW-95 approved 40-hour Basic Safety Training class includes the following modules; Personal Safety; Social Responsibility; Basic Fire Fighting and Elementary First Aid. This Class meets the STCW-95 requirements for mariners sailing beyond the boundary line.

Bridge Resource Management

The U.S. Coast Guard STCW-95 approved 24-hour Bridge Resource Management course satisfies the requirements for procedures for bridge team work, as set forth in Title 46 CFR, parts 10.205(3)(0) and Section B-VIII/2 of the STCW code.

Proficiency in Survival Craft (Lifeboat)

The U.S. Coast Guard approved 32-hour Proficiency in Survival Craft course satisfies the requirements for individuals in charge of survival craft, as set forth in title 46 CFR parts 12.10 and table A-V/1/2-1 of the STCW code.

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NURSING

NURSING ADMISSION REQUIREMENTS

Nursing program enrollment is limited. You must apply for admission; if accepted, you will begin nursing classes fall term. Applications are accepted by the Admissions Office between February 1 and the end of March. For specific dates, you can request a nursing program information and application packet. If you meet the minimum requirements for admission, you will be awarded points toward admission for such things as grades, completed college classes, and work experience in health care. Applicants who have the highest number of points are offered program admission. If you don't fall within this group, you will be placed on a ranked list of alternates. Once you are accepted into the program, you will need to pay a non-refundable fee and meet other requirements for immunizations, basic nursing skills, and CPR training.

If you are a licensed practical nurse (LPN) or have been enrolled in a nursing program at Clatsop or another college, you may qualify for advanced placement into the nursing program. If you think you may qualify for advanced placement, contact the Admissions Office for more information about this option.

MINIMUM EVALUATION REQUIREMENTS

1. GPA REQUIREMENT: You must meet one of the following criteria.
- A minimum of 24 college credits with a cumulative 2.5 GPA for all college credits earned.
- ***OR*** You may choose to use only those college credits you earned in the last 7 years if you have earned a minimum of 24 credits. All of those credits must have a cumulative GPA of 2.5.
  PLEASE NOTE: If you choose to use only those college credits that you have earned in the last 7 years, any nursing degree requirements completed more than 7 years ago will not be applied to your degree requirements. You must meet those requirements to graduate.
- ***OR*** A high school diploma with a 2.5 GPA.*
- ***OR*** A GED certificate with a minimum overall average score of 460 (or prior to 2001, an overall average score of 46).*

* If you have at least 24 college credits, your GPA will be computed using your college credits, not your high school credits, or your GED score.

2. WRITING REQUIREMENT: You must meet one of the following criteria.
- Completion of WR 121 English Composition or higher completed with a grade of C or above.
- ***OR*** Demonstrated readiness for WR 121 by a minimum score of 45 on the ASSET Writing Placement Test or 77 on the COMPASS Writing Placement Test.

3. READING REQUIREMENT: You must meet this requirement.
- Minimum score of 42 on the ASSET Reading Placement Test or 81 on the COMPASS Reading Placement Test.

THE FOLLOWING REQUIREMENTS MUST BE COMPLETED IN THE LAST 7 YEARS:

4. MATH REQUIREMENT: You must meet one of the following criteria.
- MTH 95 Intermediate Algebra or MTH 111 College Algebra or a course for which MTH 111 is a prerequisite completed with a grade of C or above.
- ***OR*** Demonstrated readiness for MTH 111 College Algebra or higher demonstrated by a minimum score of 34 on the ASSET College Algebra Test or 36 on the COMPASS College Algebra Test.

5. CHEMISTRY REQUIREMENT: You must meet one of the following criteria.
- One year of high school chemistry with lab with a grade of C or above.
- ***OR*** CH 104 and CH 105 Introductory Chemistry or the equivalent as determined by the Clatsop Community College Registrar's Office completed with a grade of C or above.

6. ANATOMY AND PHYSIOLOGY REQUIREMENT: You must meet this requirement.
- Completion of BI 231 and BI 232 or the equivalent as determined by the Clatsop Community College Registrar's Office with a grade of C or above.

PLEASE NOTE: If selected for the Nursing Progam, you must complete BI 233 or the equivalent as determined by the Clatsop Community College Registrar's Office with a grade of C or above by the start of FALL TERM 2005. BI 233 may not be offered at Clatsop summer term.

NURSING

ASSOCIATE OF APPLIED SCIENCE DEGREE NURSING

Job Description:
Registered nurses (RNs) are caring and use their knowledge, skills, and problem-solving to help individuals, families, and groups with health needs. RNs plan care and work with people to help them become healthier or to regain health after illness or surgery. Nurses teach health practices to clients and other health care providers, and frequently supervise the work of nursing assistants and practical nurses. RNs also administer medications and perform treatments for patients. Nurses work in a variety of settings, including hospitals and long-term care, schools, industry, clinics, and patients' homes. With advanced education, nurses may work as managers, educators, public health nurses, as a clinical specialist, or independently as a nurse practitioner.

Employment Opportunities:
The need for registered nurses is critical at the present time, and is expected to increase.

Potential Earnings:
The average wage in Oregon is approximately $25 per hour depending where the nurse works. Nurse practitioners and nurse managers earn salaries at a range of $60,000 to $75,000 per year.

First Year

Course Number	Course Title	Credits F	W	S	Su
BI 234	Introductory Microbiology	4			
NUR 101	Nursing: Foundations of Care+	8			
NUR 102	Nursing: Focus on Individuals+		9		
NUR 112	Collaborative Practice I		2		
PSY 215	Developmental. Psychology		3		
NUR 103	Nursing: Focus on Families+			9	
NUR 113	Collaborative Practice II			1	
WR 121	English Composition			3	
NUR 109	Nursing: Mental Health +				4
NUR 111	Nursing Concepts & Clinical Practice #				1-3
	CS or MIC elective	1			
	Health, PE, or Dance elect.*	1-3			

Second Year

Course Number	Course Title	Credits F	W	S
NUR 201	Nursing: Clients in Crisis+	8		
NUR 231	Collaborative. Practice III	2		
NUR 215	Physical Assessment+	3		
NUR 202	Nursing: Families in Crisis+		9	
NUR 232	Collaborative Practice IV		1	
NFM 225	Human Nutrition		4	
NUR 208	Nursing: Transition to Practice+			8
WR 122, 123	English Composition *or*			3
WR 227	Technical Report Writing			(3)
	Health, PE, or Dance elective*			1-3
	Social Science elective**			3
	Arts & Letters elective***			3

In addition to above, either MTH 95, MTH 111, or a course for which MTH 111 is a prerequisite, must be successfully completed with a grade "C" or higher. Math course to be taken during any term prior to graduation.

Total credits to graduate (does *not* include prerequisites)**:** 95

\+ Contains human relations components.

* Any of the following classes may be selected to fill the health or physical activity elective: D 192, D 292, D 294 Dance, Beginning, Intermediate, or Advanced; HPE 295 Health and Fitness for Life; or PE 185 Physical Education.

** Selected from Social Science list on page 37 & 38.

\# NUR 111 required for selected advanced placement students only.

*** Selected from Arts and Letters list on page 37.

Notes: All nursing classes must be completed with a C grade or higher to continue in the program and progress to the next term. All first year program requirements must be completed with a C grade or higher to enter the second year of the program. All required courses must be completed with a C grade or higher to receive the degree.

NURSING

PRACTICAL NURSING FOUR-TERM CERTIFICATE PROGRAM

Job Description:

□ -
tion about the patient's health, help plan care, and administer medications and other treatments. Practical nurses work primarily in hospitals and long-term care. They may also work in medical or dental offices, clinics, and caring for patients in the home.

Employment Opportunities:

Employment opportunities for LPNs are fairly stable at this time, with some growth expected.

Potential Earnings:

The average wage for LPNs is approximately $16.50 per hour in Oregon.

Course Number	Course Title	Credits F	W	S	Su
BI 234	Microboiology	4			
NUR 101	Nursing: Foundations of Care+	8			
NUR 102	Nursing: Focus on Individuals+		9		
NUR 112	Collaborative. Practice I		2		
PSY 215	Developmental. Psychology		3		
NUR 103	Nursing: Focus on Families+			9	
NUR 113	Collaborative Practice II			1	
WR 121	English Composition			3	
NUR 109	Nursing: Mental Health +				4
	CS or MIC elective	1			
	Health, PE, or Dance elective*	1-3			

In addition to above, either MTH 95, MTH 111, or a course for which MTH 111 is a prerequisite, must be successfully completed with a grade "C" or higher. Math course may be taken during any term prior to graduation.

Total credits to graduate (does *not* include prerequisites)**:** 52

* Any of the following classes may be selected to fill the health or physical activity elective: D 192, D 292, D 294 Dance, Beginning, Intermediate, or Advanced; HPE 295 Health and Fitness for Life; or PE 185 Physical Education.

\+ Contains human relations components.

Note: All nursing classes must be completed with a C grade or higher to continue in the program and progress to the next term. All required courses must be completed with a C grade or higher to receive the certificate.

COURSE DESCRIPTIONS

ANT: Anthropology 66
ART: Art ..... 66 - 70
ASL: American Sign Language 70
BA: Business ..... 70 - 72
BI: Biology ..... 72 - 73
BOT: Botany 73
CH: Chemistry ..... 73 - 74
CJ: Criminal Justice ..... 74 - 75
CPL: Credit for Prior Learning 75
CS: Computer Science ..... 75 - 77
CSD: Computer Science 77
CSL: Computer Science 77
D: Dance ..... 77 - 78
DCO: Developmental Communication 78
DESL: Developmental ESL 78
DFL: Developmental Family Literacy 78
DGED: Developmental GED ..... 78 - 79
DMTH: Developmental Math 79
DPD: Developmental Personal Development .. 79
DRF: Drafting 79
DWR: Developmental Writing 80
EC: Economics 80
ECE: Early Childhood Education ..... 80 - 81
ED: Education 81
EGR: Engineering 81
EM: Emergency Services 81
EMT: Emergency Medical Technician 81-82
ENG: English ..... 82 - 83
ES: Environmental Science ..... 83 - 84
FR: French 84
FRP: Fire Protection ..... 84 - 85
GEO: Geography 85
GS: General Science ..... 85 - 86
HD: Human Development 86
HFS: Health & Family Studies 86
HM: Hazwoper (listed with Maritime Science) 94
HPE: Health & Physical Education 87
HS: Human Services 87
HST: History 87
HUM: Humanities ..... 87 - 88
IT: Industrial & Manufacturing Tech. ..... 88 - 89
LIB: Library 89
MA: Medical Assistant ..... 89 - 90
MAS: Maritime Science ..... 90 - 94
MIC: Microcomputer Applications 94
MTH: Mathematics ..... 94 - 95
MUP: Music 95
NFM: Nutrition & Food Management 95
NUR: Nursing ..... 95 - 97
OA: Office Assistant ..... 97 - 99
PE: Physical Education ..... 99 - 100
PH: Physics ..... 100 - 101
PHL: Philosophy 101
PS: Political Science 101
PSY: Psychology ..... 101 - 102
R: Religion 102
RD: Reading 102
SOC: Sociology ..... 102 - 103
SP: Speech 103
SPAN: Spanish ..... 103 - 104
WLD: Welding ..... 104 - 105
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COURSE DESCRIPTIONS

ANT ANTHROPOLOGY

ANT 110
GENERAL ANTHROPOLOGY: CULTURAL
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop a basic understanding of the variety of cultures in the world, the sources of information used by cultural anthropologists, and an overview of evolutionary, ecological, functional and symbolic paradigms. Students examine the basic concepts of ethnocentrism, holism and cultural relativism, and learn about culture as a symbolic, dynamic, integrated, adaptive system of complex relationships.

ANT 150
GENERAL ANTHROPOLOGY: ARCHAEOLOGICAL
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate knowledge of archaeological methods and theories including techniques used in gathering and interpreting data on past cultures, preservation of such data, development of culture and civilization, and description of the prehistory of Oregon and Washington.

ANT 170
GENERAL ANTHROPOLOGY: PHYSICAL
(3.00 Lecture Hrs./Wk.) 3 Credits
Students acquire basic knowledge of the processes of human evolution and variation; historical perspective and current controversy in physical anthropology; Mendelian and population genetics; modern human variation and classification; and primates and fossil man.

ART ART

ART 115
BASIC DESIGN
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
This is a foundation course for most professions in the visual arts including architecture, interior architecture, graphic design, landscape design, and all commercial applications. Students complete two-dimensional projects exploring the basic elements and principles of design; gain a basic knowledge of the concepts underlying fundamental composition and formal theory in the visual arts; and develop a vocabulary for work and criticism. **Note:** This class is a prerequisite to ART 116.

ART 116
BASIC DESIGN
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students complete studio exercises exploring the basic elements and principles of three-dimensional design and continue to master the concepts underlying fundamental composition and formal theory in the visual arts. Students gain a fundamental understanding of vocabulary, function and applications of three-dimensional design concepts. Students learn the processes of visual thinking and creative problem solving. **Prerequisite:** ART 115 or instructor approval.

ART 117
BASIC DESIGN
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students complete two-and three-dimensional projects demonstrating an understanding of creative process within the context of modern and contemporary art movements. Students learn how to independently make use of creative thought processes and visual problem solving. **Prerequisite:** ART 116 or instructor approval.

ART 118
INTRODUCTION TO CALLIGRAPHY
(4.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students study and demonstrate lettering principles, techniques, and functions, and discussion of the traditions and historical development of letters. During fall term students study the Roman alphabet; winter term focuses on the Italic alphabet; and spring term the Carolingian and Uncial styles are studied. The practical and creative uses of calligraphy will be covered each term in connection with class projects and assignments. Each term may be taken once for a maximum of six credits.

ART 131
INTRODUCTION TO DRAWING
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
This is a foundation course for most professions in the visual arts including architecture, interior architecture, graphic design, landscape design, and all commercial applications. Students gain drawing experience through exercises which build basic drawing skills, learn to observe and record the form of a variety of objects with communicative accuracy, and develop personal expression and creative innovation. Introduction to drawing media, graphic structure, value rendering, and 1 and 2 point perspective.

ART 132
INTRODUCTION TO DRAWING
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students complete projects which demonstrate their knowledge of portrait and figure drawing emphasizing the structure of the human form and the expressive and creative use of drawing media. **Prerequisite:** ART 131 or instructor approval.

ART 133
INTRODUCTION TO DRAWING
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students complete projects which demonstrate understanding of form and explore drawing content. They develop individual interpretation and adapt technique to complete independent work which addresses more personal goals. **Prerequisite:** ART 131 & 132 or instructor approval.

ART 161
INTRODUCTION TO PHOTOGRAPHY
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students learn basic camera operation, black and white film developing, printing, and composition. They cultivate creative processes and study critiquing and the conceptual implications of photographs. They also survey historical and contemporary photography. **Recommended prerequisite:** ART 115.

ART 162
INTRODUCTION TO PHOTOGRAPHY
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students learn to handle a wide variety of situation, continue the survey of published photographs, study critiquing and conceptual implications and produce a photo essay. They are introduced to digital image capture, file preparation, printing, and color. **Prerequisite:** ART 161.

ART 163
INTRODUCTION TO PHOTOGRAPHY
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students continue to refine technique, survey of published photographs, and increase critiquing and editing skills and conceptual understanding. They produce a stronger photo essay and add digital color balancing, retouching, and composition skills. **Prerequisite:** ART 162.

ART 194
INTRODUCTION TO WATERCOLOR
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students develop basic watercolor techniques including color mixing, paint application, and basic composition. **Prerequisite:** Drawing and design classes recommended.

ART 195
INTRODUCTION TO WATERCOLOR
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students further develop basic skills in watercolor painting including color mixing, paint application, and basic composition. **Prerequisite:** ART 194 recommended.

ART 196
INTRODUCTION TO WATERCOLOR
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students continue to develop basic skills in watercolor painting including color mixing, paint application, and basic composition. **Prerequisites:** ART 194 & 195 or instructor approval.

ART 204
HISTORY OF WESTERN ART
(3.00 Lecture Hrs./Wk.) 3 Credits
In this three-course sequence, students have the opportunity to appreciate and enjoy art, explore Western styles, and relate specific works of art to each other and the ideas that animated the life of their times. This class provides an historical survey of the visual arts in the Western world from the Egyptian through the Byzantine periods. **Note:** Need not be taken in sequence.

ART 205
HISTORY OF WESTERN ART
(3.00 Lecture Hrs./Wk.) 3 Credits
This class provides an historical survey of the visual arts in the Western world from the Romanesque through the Baroque periods. **Note:** Need not be taken in sequence.

ART 206
HISTORY OF WESTERN ART
(3.00 Lecture Hrs./Wk.) 3 Credits
This class provides an historical survey of the visual arts in the Western world from the Rococo period through the 20th Century. **Note:** Need not be taken in sequence.

ART 211
SURVEY VISUAL ARTS OF THE 20TH CENTURY
(3.00 Lecture Hrs./Wk.) 3 Credits
Through the study of 20th century art, principally focused on European and American art and culture from approximately 1880 to 1910, students will develop an understanding of the role of art and culture from the turn of the century to the present day. Special emphasis will be placed on examining paintings, sculptures, and some graphic arts through field trips and classroom discussion. **Prerequisite:** minimal background in history or art history helpful, but not required.

ART 212
SURVEY VISUAL ARTS OF THE 20TH CENTURY
(3.00 Lecture Hrs./Wk.) 3 Credits
Through the study of 20th century art, principally focused on European and American art and culture in the first half of the century, students will develop an understanding of the role of art and culture from the turn of the century to the present day. Special emphasis will be placed on examining paintings, sculptures, and some graphic arts through field trips and classroom discussion. **Prerequisite:** minimal background in history or art history helpful, but not required.

ART 213
SURVEY VISUAL ARTS OF THE 20TH CENTURY
(3.00 Lecture Hrs./Wk.) 3 Credits
Through the study of 20th century art, principally focused on European and American art and culture of the post-war era 1945 to present, students will develop an understanding of the role of art and culture from the turn of the century to the present day. Special emphasis will be placed on examining paintings, sculptures, and some graphic arts through field trips and classroom discussion. **Prerequisite:** minimal background in history or art history helpful, but not required.

ART 218
CALLIGRAPHY - INTERMEDIATE
(4.00 Lecture/Lab Hrs./Wk.) 2 Credits
This class is the first of a three-course series which prepares students to produce calligraphic and drawn letters on a commercial basis. Students develop skill in Humanist Bookhand, Simple Roman Capital, and a style of writing based upon basic script which may be used for personal expression. **Prerequisite:** ART 118 or instructor approval.

ART 219
CALLIGRAPHY - INTERMEDIATE
(4.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students demonstrate their skill in Italic hand, both lowercase and capitals including work with a pointed lettering brush, edged pens, and a script-written Italic. **Prerequisite:** ART 118 or instructor approval.

ART 220
CALLIGRAPHY - INTERMEDIATE
(4.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students demonstrate their skill in the Uncial and Carolingian script, including work with a flat, edged lettering brush as a variation to write the basic scripts. **Prerequisite:** ART 118 or instructor approval.

ART 225
COMPUTER GRAPHICS I
(2.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
Introduction to the theory and use of digital media in the design process. Students use a variety of software and techniques for visual communication including typography, page layout, digital imaging and three dimensional modeling. Design principles and concepts, creative use of media and critical analysis of work are emphasized.

ART 226
COMPUTER GRAPHICS II
(2.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students continue to develop the use of tools and techniques of computer graphics in the design process. Students engage more advanced aspects of composition, digital imaging, three dimensional modeling, rendering and animation. Creative problem solving, concept development, design applications and communication issues are explored. **Prerequisite:** ART 225.

ART 231
DRAWING - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students continue to build a visual vocabulary for formal problem solving. They will increase their technical and expressive drawing skills introduced in previous drawing classes. **Prerequisite:** ART 131, 132 & 133 or instructor approval.

ART 232
DRAWING - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students continue to build a visual vocabulary for formal problem solving. They will increase their technical and expressive drawing skills introduced in previous drawing classes. **Prerequisite:** ART 131, 132 & 133 or instructor approval.

ART 233
DRAWING - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students continue to build a visual vocabulary for formal problem solving. They will increase their technical and expressive drawing skills introduced in previous drawing classes. **Prerequisite:** ART 131, 132 & 133 or instructor approval.

ART 250
INTRODUCTION TO CERAMICS
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students develop basic skills in ceramics including clay preparation, throwing, and glaze application.

ART 251
INTRODUCTION TO CERAMICS
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students develop basic skills in ceramics including the production of functional and expressive forms.

ART 252
INTRODUCTION TO CERAMICS
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students learn clay-forming processes in beginning ceramics including throwing, decorating, and glazing.

ART 253
CERAMICS - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students have the opportunity to apply the techniques learned in introductory ceramics and conduct experimental research with clay bodies, glazes, and firing methods. **Prerequisite:** ART 250, 251 and 252; or instructor approval.

ART 253A
ATMOSPHERIC FIRING (CERAMICS)
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Experienced ceramics students will explore the results from firing clay using atmospheric firing processes such as Wood, Raku, and Sager firing. **Prerequisite:** ART 250 or instructor approval.

ART 254
CERAMICS - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
In this class students glaze pottery forms using the glaze research from ART 253 Ceramics - Intermediate. **Prerequisites:** ART 250, 251, 252, and 253; or instructor approval.

ART 255
CERAMICS - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
This class provides the opportunity for students to focus on expressive methods of producing pottery forms. **Prerequisites:** ART 250, 251, 252, 253 and 254; or instructor approval.

ART 270
INTRODUCTION TO PRINTMAKING
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
This is the first course in a year-long sequence recommended for students preparing for architecture, interior architecture, and graphic design programs. During the sequence, students learn techniques for woodcut, monoprint and etching. Students may work in the media introduced this term or any media they have studied in a previous course. **Prerequisites:** None, but drawing and design classes are recommended.

ART 271
INTRODUCTION TO PRINTMAKING
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students demonstrate knowledge of the techniques of making original fine art prints acquired through lectures, studio projects, and individual applications. Students may work in the media introduced this term and/or any media they have studied in a previous course. **Prerequisites:** None, but drawing and design classes are recommended.

ART 272
INTRODUCTION TO PRINTMAKING
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students demonstrate knowledge of the techniques of making original fine art prints acquired through lectures, studio projects, and individual applications. Students may work in the media introduced this term and/or any media they have studied in a previous course. **Prerequisites:** None, but drawing and design classes are recommended.

ART 273
PRINTMAKING - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students continue to develop skill in printmaking applying the techniques learned in introductory printmaking classes. Students complete independent work which contributes to their personal portfolio. **Prerequisites:** ART 270, 271 & 272 or instructor approval.

ART 274
PRINTMAKING - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students continue to develop skill in printmaking applying the techniques learned in introductory printmaking classes. Students complete independent work which contributes to their personal portfolio. **Prerequisites:** ART 270, 271 & 272 or instructor approval.

ART 275
PRINTMAKING - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students continue to develop skill in printmaking applying the techniques learned in introductory printmaking classes. Students complete independent work which contributes to their personal portfolio. **Prerequisites:** ART 270, 271 & 272 or instructor approval.

ART 276
INTRODUCTION TO SCULPTURE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
This class provides the opportunity for students to develop skill in basic portrait study emphasizing construction of facial features and forms.

ART 277
INTRODUCTION TO SCULPTURE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
This class provides the opportunity for students to develop skill in techniques of sculpture involving basic figure study emphasizing construction of human features.

ART 278
INTRODUCTION TO SCULPTURE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
This class provides the opportunity for students to develop skill in techniques of stone carving emphasizing form, carving techniques, and finishing processes.

ART 279
INTRO TO MIXED MEDIA & HYBRID FORMS: MULTIDISCIPLINARY
(6.00 Lecture/Lab Hrs./Wk. 3 Credits
Students will learn about theory, methods, and compositional problems of creating with mixed media and installation art forms. **Prerequisites:** ART 115, ART 131 and one other studio class, or instructor approval.

ART 281
INTRODUCTION TO PAINTING
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students complete projects addressing compositional and technical problems, develop skill with the human form, explore oil and acrylic media, and exhibit individual creativity. **Prerequisites:** None, but drawing and design classes are strongly recommended.

ART 282
INTRODUCTION TO PAINTING
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students complete projects which demonstrate skill in portrait and figure composition, emphasize the structure of the human form; use painting media and color expressively and creatively; emphasize space concept; and enrich their visual vocabulary. **Prerequisite:** ART 281 or instructor approval.

ART 283
INTRODUCTION TO PAINTING
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students create paintings which demonstrate their knowledge of technique, theory, philosophy of painting and their skill with the human form. Students complete independent work which contributes to their personal portfolio. **Prerequisite:** ART 282 or instructor approval.

ART 284
PAINTING - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students complete projects which demonstrate applied knowledge of methods, materials, composition, and technique with attention to the human form. Students complete independent work which contributes to their personal portfolio. **Prerequisite:** ART 281, 282 & 283; or instructor approval.

ART 285
PAINTING - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students complete projects which demonstrate applied knowledge of methods, materials, composition, and technique with emphasis on the human figure. Students complete independent work which contributes to their personal portfolio. **Prerequisite:** ART 281, 282 & 283; or instructor approval.

ART 286
PAINTING - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students complete projects which demonstrate applied knowledge of methods, materials, composition, and technique with attention to the human form. Students complete independent work which contributes to their personal portfolio. **Prerequisite:** ART 281, 282 & 283; or instructor approval.

ART 291
SCULPTURE - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.)
3 Credits
Application of techniques introduced in introductory sculpture. **Prerequisite:** ART 276, 277, 278 or instructor approval.

ART 292
SCULPTURE – INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) **3 Credits**
Application of techniques introduced in introductory sculpture. **Prerequisite:** ART 276, 277, 278 or instructor approval.

ART 293
SCULPTURE - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) **3 Credits**
Students will apply techniques introduced in introductory sculpture. **Prerequisite:** ART 276, 277, 278 or instructor approval.

ART 294
WATERCOLOR - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) **3 Credits**
Students complete projects which apply their knowledge of watercolor painting techniques, concepts, and theories of expression. Students complete independent work which contributes to their personal portfolio. **Prerequisites:** ART 194, 195 & 196; or instructor approval.

ART 295
WATERCOLOR - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) **3 Credits**
Students complete watercolor paintings which demonstrate individual variations of technique. Students complete independent work which contributes to their personal portfolio. **Prerequisites:** ART 194, 195 & 196, or instructor approval.

ART 296
WATERCOLOR - INTERMEDIATE
(6.00 Lecture/Lab Hrs./Wk.) **3 Credits**
Students complete watercolor paintings which demonstrate skill in composition and incorporate theories of expression. Students complete independent work which contributes to their personal portfolio. **Prerequisites:** ART 194, 195 & 196; or instructor approval.

ASL AMERICAN SIGN LANGUAGE

ASL 101
AMERICAN SIGN LANGUAGE I
(3.00 Lecture Hrs./Wk.) **3 Credits**
This is the first in a related series of courses that focus on the use and study of American Sign Language (ASL), the language that is widely used by Deaf Americans. Students will learn basic ASL vocabulary, grammatical structures, and conversational behaviors. Students are introduced to cultural values, beliefs, and behavioral norms shared by those within the Deaf Community.

ASL 102
AMERICAN SIGN LANGUAGE II
(3.00 Lecture Hrs./Wk.) **3 Credits**
This is the second in a related series of courses that focus on the use and study of American Sign Language (ASL). Students will improve their skills in vocabulary, grammatical structures, and conversational behaviors. Special focus will be emphasized on developing more awareness of the cultural values and beliefs shared by the Deaf Community. **Prerequisite:** ASL 101.

ASL 103
AMERICAN SIGN LANGUAGE III
(3.00 Lecture Hrs./Wk.) **3 Credits**
This is the third in a related series of courses that focus on the use and study of American Sign Language (ASL). Students will continue to increase their skills in vocabulary, grammatical structures, and in depth cultural awareness. Cultural information centers upon the ways in which hearing people can work with Deaf people to establish culturally appropriate relationships. **Prerequisite:** ASL 102.

ASL 201
AMERICAN SIGN LANGUAGE-CONVERSATIONAL SKILLS
(3.00 Lecture Hrs./Wk.) **3 Credits**
Present and past ASL students and others wishing to improve and maintain their conversational ASL skills will learn additional sign vocabulary, grammar concepts, and further develop conversational skills. In addition, ASL idiomatic signs will be presented. Students may also work on projects (poems, songs, choral works, etc.). **Prerequisite:** ASL 103.

BA BUSINESS

BA 101
INTRODUCTION TO BUSINESS
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students demonstrate a basic understanding of the concepts, elements, and issues involved in the United States business system.

BA 104
BUSINESS MATH WITH ELECTRONIC CALCULATORS
(4.00 Lecture Hrs./Wk.) **4 Credits**
Students demonstrate the application of mathematics skills to business and consumer problems and use an electronic calculator keyboard by touch. **Prerequisite:** MTH 60 or 65, or instructor approval.

BA 131
ACCOUNTING PROCEDURES I
(3.00 Lecture Hrs./Wk.) **3 Credits**
Bookkeeping basics. This class prepares students to perform simple accounting in service organizations emphasizing the accounting cycle, banking procedures, and payroll accounting. This is the first course of a year-long sequence in which students learn to organize financial information and prepare financial reports.

BA 132
ACCOUNTING PROCEDURES II
(3.00 Lecture Hrs./Wk.) **3 Credits**
Bookkeeping basics. This class prepares students to perform accounting tasks in merchandising organizations including special journals and ledgers; purchases and sales; inventory and prepaid expenses; tangible long-lived assets; and notes and receivables. **Prerequisite:** BA 131 with a C grade or better, or instructor approval.

BA 133
ACCOUNTING PROCEDURES III
(3.00 Lecture Hrs./Wk.) 3 Credits
Bookkeeping basics. This class prepares students to perform accounting tasks in manufacturing organizations, partnerships, and corporations. Students learn to prepare statements of cash flows; analyze financial statements; and complete other accounting procedures involving stock, bonds, corporate earnings, and investments. **Prerequisite:** BA 132 with a C grade or better, or instructor approval.

BA 177
PAYROLL & BUSINESS TAX ACCOUNTING
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop the knowledge and skills needed to complete payroll forms and records and to comply with federal and state requirements.

BA 206
MANAGEMENT FUNDAMENTALS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of the fundamental principles for thinking and operating as a manager, including organizational interaction and human relations.

BA 211
PRINCIPLES OF ACCOUNTING I
(4.00 Lecture Hrs./Wk.) 4 Credits
Students learn to use basic accounting concepts and procedures including the accounting cycle and dealing with cash, receivables, and merchandise inventories common to a sole proprietorship. Students will also become familiar with a commonly used computerized accounting program or spreadsheet. **Note:** This is the first course in a year-long sequence which is intended for students who are planning to transfer to a four-year college.

BA 212
PRINCIPLES OF ACCOUNTING II
(4.00 Lecture Hrs./Wk.) 4 Credits
Students learn to use accounting concepts and procedures required to prepare cash flow statements and manage tangible and intangible assets; payroll; partnerships and corporations; long-term investments and liabilities; stocks; and bonds. They demonstrate knowledge of professional accounting standards. Students will also become familiar with a commonly used computerized accounting program or spreadsheet. **Prerequisite:** BA 211 with a C grade or better, or instructor approval.

BA 213
PRINCIPLES OF ACCOUNTING III
(4.00 Lecture Hrs./Wk.) 4 Credits
Managerial accounting. Students demonstrate an understanding of the use of internal accounting data to direct the affairs of businesses. Students will also become familiar with a commonly used computerized accounting program or spreadsheet. **Prerequisites:** BA 211 & 212 with a C grade or better, or instructor approval.

BA 214
BUSINESS COMMUNICATIONS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate the ability to prepare memos, letters, and informal reports; conduct research; and prepare analytical business and/or technical reports. **Prerequisites:** ASSET writing score of 45+ or OA 104; OA 121; and instructor approval.

BA 222
FINANCIAL MANAGEMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of the concepts, techniques, decision processes and other factors that are used to manage a firm's sources and uses of funds. **Prerequisite:** BA 131 or 211, or instructor approval.

BA 223
PRINCIPLES OF MARKETING
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate knowledge of the basic issues and practices in marketing management including marketing strategy planning. Students design a marketing mix.

BA 224
HUMAN RESOURCE MANAGEMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate knowledge of principles and techniques related to managing human resources emphasizing hiring practices, training and employee development, and personnel management.

BA 226
INTRODUCTION TO BUSINESS LAW I
(4.00 Lecture Hrs./Wk.) 4 Credits
Students demonstrate a basic knowledge of law and its origins, court systems, legal rights and duties, formation of contracts, operation and discharge of contracts, law of sales of goods, and bailments.

BA 227
INTRODUCTION TO BUSINESS LAW II
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate an understanding of the various areas of business law: agency, sales, partnerships, corporations, bankruptcy, real and personal property, and landlord and tenant.

BA 228
COMPUTER ACCOUNTING APPLICATIONS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate the ability to use an integrated accounting program to perform accounting functions and solve problems including general ledger, accounts receivable, accounts payable, and inventory. **Prerequisite:** BA 131 or 211, or instructor approval.

BA 230
MANAGEMENT INFORMATION SYSTEMS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate an understanding of the systems that exist for business management's use in making intelligent decisions, including computers and alternative paper-oriented systems. Students use an integrated software applications package (data base, spreadsheet, word processing, graphics, and communications) to develop solutions to problems or case studies from social, business, or other applications. **Prerequisite:** OA 201, CSL 107 and CSD 122, or instructor approval.

BA 250
SMALL BUSINESS MANAGEMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate knowledge of managing the small business enterprise, emphasizing its general functions, procedures, and problems.

BA 256
INCOME TAX
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate an understanding of the theory and practice of preparing of federal and state individual income tax returns.

BA 281
COOPERATIVE WORK EXPERIENCE SEMINAR - BUSINESS ADMINISTRATION/ACCOUNTING
(1.00 Lecture Hr./Wk.) 1 Credit
Students enrolling in Cooperative Work Experience will participate in this seminar to discuss and develop an understanding of appropriate and effective work practices. **Prerequisite:** placement in an appropriate cooperative work experience job and instructor approval.

BA 285
HUMAN RELATIONS IN BUSINESS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate an understanding of the communication aspects of interpersonal behavior including perception, power and influence, group dynamics, conflict, and motivation which are essential for success in the workplace and with friends and family.

BI BIOLOGY

BI 101
GENERAL BIOLOGY - EMPHASIS ON ECOLOGY
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Students demonstrate knowledge of the basic principles of biology including evolution and diversity of organisms, with a strong emphasis on ecology. Includes field work. **Note:** Does not meet requirements for biology majors. Need not be taken in sequence. If you have completed one term of college biology, consult the instructor. **Prerequisite:** WR 115 or 121, and MTH 60.

BI 102
GENERAL BIOLOGY - EMPHASIS ON HUMAN BIOLOGY
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Students demonstrate knowledge of the basic principles of biology including the chemical and cellular basis of life, genetics, and human organ systems. **Note:** This course is recommended for pre-nursing students. Does not meet requirements for biology majors. Need not be taken in sequence. If you have completed one term of college biology, consult the instructor. **Prerequisite:** WR 115 or 121, and MTH 60.

BI 103
GENERAL BIOLOGY - EMPHASIS ON THE BIOLOGY OF PLANTS
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Students will demonstrate knowledge of the basic principles of biology including structure and function of systems of the five major kingdoms of organisms. This class involves field work. **Note:** Does not meet requirements for biology majors. Need not be taken in sequence. If you have completed one term of college biology, consult the instructor. **Prerequisite:** WR 115 or 121, and MTH 60.

BI 121
BASIC HUMAN ANATOMY & PHYSIOLOGY I
(3.00 Lecture Hrs./Wk.) 3 Credits
Examines the structure and function of the human body including all characteristics, tissues, organs and body systems. Covers integumentary, musculoskeletal, nervous, endocrine systems, as well as the special senses. **Prerequisite:** completion of MTH 60 or a higher level math with a C grade or higher.

BI 122
BASIC HUMAN ANATOMY & PHYSIOLOGY II
(3.00 Lecture Hrs./Wk.) 3 Credits
Examines the structure and function of the human body including all characteristics, tissues, organs and body systems. Covers cardiovascular, digestive, respiratory, renal, immune, and reproductive systems. **Prerequisite:** completion of BI 121 with a C grade or higher, or instructor approval.

BI 211
PRINCIPLES OF BIOLOGY
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
An introduction to biology for pre-professionals, natural resources students, and those majoring in biological sciences. Students conduct laboratory investigations and demonstrate knowledge in the following areas: Cell structure and function, biological energy transformations, cell life cycles, and basic principles of inheritance. Introduction to experimental design, data collection and analysis. **Note:** Pre-nursing can substitute BI 211 for BI 102. **Prerequisite:** High school chemistry or instructor approval. MTH 95 and concurrent enrollment in CH 221 recommended.

BI 212
PRINCIPLES OF BIOLOGY
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
An introduction to biology for pre-professionals, natural resources students, and those majoring in biological sciences. Students conduct laboratory investigations and demonstrate knowledge in the following areas: Mendelian and molecular genetics, biotechnology, evolutionary biology, protists, fungi, and animal diversity. **Prerequisite:** BI 211, or instructor approval. MTH 95 and CH 222 recommended.

BI 213
PRINCIPLES OF BIOLOGY
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
An introduction to biology for pre-professionals, natural resources students, and those majoring in biological sciences. Students conduct laboratory investigations and demonstrate knowledge in the following areas: Ecology, evolution, plant diversity, and plant and animal physiology. **Prerequisite:** BI 212, or instructor approval. MTH 95 and CH 223 recommended.

BI 222
HUMAN GENETICS
(3.00 Lecture, Hrs./Wk.) 3 Credits
Students demonstrate knowledge of human genetics including classical principles of heredity, population genetics, contemporary molecular biology, biotechnology, and medical genetics. A previous course in biology is recommended. **Prerequisite:** MTH 60.

BI 231
HUMAN ANATOMY AND PHYSIOLOGY
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
The year-long sequence provides students with the knowledge of the structure and function of the dynamic human body which is required for health service occupations and further study in the biological sciences. Students master knowledge and concepts of organization of the human body, homeostasis, cells and tissues, the skeletal and muscular systems, and the nervous system. **Prerequisite:** High School biology or, BI 102, or 121, or 122, and CH 104, and MTH 70 or higher, or instructor approval. College level chemistry is recommended.

BI 232
HUMAN ANATOMY AND PHYSIOLOGY
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Continuation of a year-long sequence. Students master knowledge and concepts of the endocrine system, the blood and cardiovascular system, lymphatics and body defenses, and the respiratory system. **Prerequisite:** satisfactory completion of BI 231 with a "C" grade or better, or instructor approval.

BI 233
HUMAN ANATOMY AND PHYSIOLOGY
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Continuation of a year-long sequence. Students master knowledge and concepts of the digestive system, nutrition and metabolism, fluids and electrolytes, the urinary and reproductive systems, and heredity. **Prerequisite:** Satisfactory completion of BI 232 with a "C" grade or better, or instructor approval.

BI 234
INTRODUCTION TO MICROBIOLOGY
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
This course is designed for allied health areas; not for science majors or those in pre-medicine, pre-dental or pre-veterinary science. Students demonstrate knowledge of the basic and applied aspects of microbiology with emphasis on the role of the microorganism in relation to humans. **Prerequisite:** CH 104 and MTH 70 or higher, or instructor approval.

BOT BOTANY

BOT 101
BOTANY
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Introductory study of plants. Students apply science processes to investigate plant/people relations, ecology, genetics, diversity, nutrition, propagation, and evolutionary relationships among plants, and demonstrate content knowledge of these topics. Includes several local field trips.

CH CHEMISTRY

CH 104
INTRODUCTORY CHEMISTRY
(3.00 Lecture, 2.00 Lecture/Lab, & 1.00 Lab Hrs./Wk.) 4 Credits
Students master basic knowledge of atomic theory, elements, compounds, bonding, naming, and radioactivity. **Note:** This course is designed for students with no prior chemistry course work and emphasizes applications to nursing and related areas. The two-quarter series is good preparation for CH 221 General Chemistry. **Prerequisite:** Mastery of basic arithmetic, percentages, ratios and proportions, and conversions (equivalent to a "C" grade in MTH 65).

CH 105
INTRODUCTORY CHEMISTRY
(3.00 Lecture, 2.00 Lecture/Lab, & 1.00 Lab Hrs./Wk.) 4 Credits
This is the second term of a two-quarter introductory general chemistry series. Students master basic knowledge of chemical reactions, gases, liquids, solids, acids, and bases. **Prerequisite:** Completion of CH 104 or equivalent with a "C: grade or higher.

CH 106
INTRODUCTORY CHEMISTRY - BIOCHEMISTRY
(3.00 Lecture, 2.00 Lecture/Lab, & 1.00 Lab Hrs./Wk.) 4 Credits
Students master basic knowledge of the fundamental principles of biochemistry including organic chemistry and the four important classes of biomolecules: carbohydrates, lipids (fats and oils), proteins, and nucleic acids. **Prerequisite:** CH 104 & 105 or equivalent with a "C" grade or higher.

CH 221
GENERAL CHEMISTRY
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
This three-term series is designed for all science and engineering majors. The first term students master knowledge and concepts of stoichiometry, energy in chemical reactions, quantum mechanics, atomic and molecular structure, periodicity, and chemical bonding. **Prerequisites:** Two years of high school algebra or MTH 95, one year of high school chemistry or CH 105, and instructor approval.

CH 222
GENERAL CHEMISTRY
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
Second term of the general chemistry series for all science and engineering majors. Students master knowledge and concepts including gas laws, liquids and solids, intermolecular forces, colligative properties, solutions, chemical kinetics, acids and bases, and aqueous equilibria. Involves extensive algebraic problem-solving. **Prerequisites:** completion of CH 221 with a grade "C" or higher; MTH 111 is highly recommended.

CH 223
GENERAL CHEMISTRY
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
Third term of the general chemistry series for all science and engineering majors. Students master knowledge and concepts including chemical thermodynamics, electrochemistry, atmospheric chemistry, lava chemistry, nuclear chemistry, and an introduction to organic chemistry. Involves extensive algebraic problem-solving. **Prerequisites:** completion of CH 222 with a grade "C" or higher; MTH 111 is highly recommended.

CJ CRIMINAL JUSTICE

CJ 100
CAREERS IN CRIMINAL JUSTICE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop knowledge of processes, people, components, and problems involved in the American system of criminal justice; and of the various careers and employment opportunities now and in the future.

CJ 101
INTRODUCTION TO CRIMINOLOGY
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop knowledge of crime as a social problem including theoretical perspectives on the causes, treatment, and prevention of crime.

CJ 107
CRIMINAL JUSTICE WORKSHOP
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of ideas, issues, and recent events relating to the criminal justice system, for example computerization, women's roles, administration, organization, unionization, deadly force, polygraph, stress, health systems, and new research data.

CJ 109
INTRODUCTION TO PUBLIC SAFETY COMMUNICATIONS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will be introduced to the field of emergency communications. Includes history, role of the dispatcher, field operations (police, fire, ambulance), radio broadcasting, telephone techniques, radio codes and equipment operations. Presents an overview of federal, state and local law enforcement computer systems.

CJ 110
INTRODUCTION TO LAW ENFORCEMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop in-depth knowledge of the roles and responsibilities of law enforcement in American society, including historical development, role concept and conflicts, professionalism, use of discretion, and current enforcement practices.

CJ 114
GENDER, RACE, CLASS AND CRIME
(3.00 Lecture Hrs./Wk.) 3 Credits
Students examine the cultural diversity issues that challenge our criminal justice system including the historical treatment of minorities, cross cultural communications, and diversification within the law enforcement system.

CJ 120
INTRODUCTION TO THE JUDICIAL PROCESS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of the judicial and social functions within the criminal justice system from arrest to appeal and comprehend the jurisdictional authority of federal and state court systems.

CJ 121
CONCEPTS OF CRIMINAL LAW
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate an understanding of the history, basic theories, and philosophical foundations of criminal law.

CJ 130
INTRODUCTION TO CORRECTIONS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students gain knowledge of the historical development and current processes in corrections including incarceration, probation, parole, treatment theories, and the human relations aspects of criminal justice careers.

CJ 132
INTRODUCTION TO PAROLE AND PROBATION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate knowledge and critical analysis of the principles and techniques used in parole and probation in the administration of criminal justice.

CJ 203
CRISIS INTERVENTION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate knowledge of crisis intervention techniques used in domestic disputes, in suicide attempts, and in dealing with sexual assault victims and/or persons experiencing the trauma of a crisis.

CJ 210
CRIMINAL INVESTIGATION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop knowledge of the history, theory, and principles of criminal investigation; strategies and procedures; forensic science and the crime lab; and crime lab techniques, capabilities and limitations.

CJ 215
ISSUES IN CRIMINAL JUSTICE SUPERVISION & ADMINISTRATION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate knowledge of the history, structure, and current issues in criminal justice which deal with supervision and management.

CJ 219
INTRODUCTION TO COMMUNITY POLICING
(3.00 Lecture Hrs./Wk.) 3 Credits
Students explore how the police and citizens can work together to solve community problems. Topics include the history, current programs and future trends in community policing.

CJ 223
RULES OF EVIDENCE
(3.00 Lecture Hrs./Wk.) 3 Credits
This course surveys the fundamental legal rules which apply to the gathering and use of evidence in criminal cases. Topics include the history of evidence law; the Hearsay, Miranda, and Exclusionary rules; the legal use of witnesses; gathering and use of evidence in criminal cases; and the nature and use of circumstantial, documentary, photographic, and physical evidence.

CJ 232
INTRODUCTION TO CORRECTIONS CASEWORK
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate a basic knowledge of the theories and current methods of behavior modification used by corrections personnel. They attain rudimentary skills in counseling and interviewing and gain the knowledge required for further study of advanced methods used by professional counselors.

CJ 243
ALCOHOL AND OTHER DANGEROUS DRUGS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop a basic understanding of the history of drug use, basic drug effects and symptoms of abuse and proper referral, emphasizing effects of drug trafficking and abuse on American society, and criminal justice system responses to illegal drug use.

CJ 244
SEXUAL EXPLOITATION OF CHILDREN
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of the issues faced by criminal justice personnel who deal with sexual exploitation of children; strategies for cooperation between service agencies; and characteristics and treatment of victims, offenders, and non-offending family members.

CJ 281
COOPERATIVE WORK EXPERIENCE SEMINAR - CRIMINAL JUSTICE
(1.00 Lecture Hr./Wk.) 1 Credit
Students enrolling in Cooperative Work Experience will participate in this seminar to discuss and develop an understanding of appropriate and effective work practices. **Prerequisite:** placement in an appropriate cooperative work experience job and instructor approval.

CPL CREDIT FOR PRIOR LEARNING

CPL 120
CREDIT FOR PRIOR LEARNING
(3.00 Lecture Hrs./Wk.) 3 Credits
This course guides students through the process of requesting college credit for learning acquired through work experience, volunteer work, industry training, etc. Each student develops a portfolio correlating non-academic learning experiences with related courses at Clatsop Community College. Typically, students gain new insights into past achievement and future goals. **Note:** A maximum of 22 portfolio credits and six credits of CPL 120 may be applied to an associate degree.

CS COMPUTER SCIENCE

CS 101
FUNDAMENTALS OF COMPUTING
(1.00 Lecture Hr./Wk.) 1 Credit
Students master contemporary computer terminology and the use of applications software including familiarization with hardware, disk formatting and management, software, startup, log in/out, Windows, and file management.

CS 125H
BEGINNING WEB SITE DESIGN AND DEVELOPMENT
(2.00 Lecture and 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students create World Wide Web sites using Hypertext Markup Language (HTML) and web site design tools. Students examine the principles and elements of effective web page design.

CS 131
INTRODUCTION TO COMPUTER INFORMATION SYSTEMS
(4.00 Lecture Hrs./Wk.) 4 Credits
This class provides hands-on experience in preparation for more advanced classes. Students learn and apply basic concepts, elements, and structures of microcomputer systems to develop a basic understanding of programming, classifying, calculating, and reporting functions. **Prerequisite:** keyboarding skills required.

CS 133S
SCRIPTING LANGUAGES
(2.00 Lecture, 3.00 Lab Hrs./Wk.) 3 Credits
Many specialized areas of computing employ light-duty programming languages. Frequently they are variants of a full-featured language. In this course, students will explore popular scripts used in web programming. **Prerequisite:** CS 160 or instructor approval.

CS 135H
ADVANCED WEB SITE DESIGN AND DEVELOPMENT
(2.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
This is the second course in Web site design and development. Students create interactive World Wide Web sites using scripting and programming languages. Students examine the principles and elements of effective web page design for interactive web sites. **Prerequisites:** CS125H, or instructor approval.

CS 135W
WEB SITE MANAGEMENT
(2.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students explore the issues and techniques of managing web sites. Topics include setting up web sites, file maintenance and management, controlling access, security, testing, server side technologies, managing dynamic web applications, task management, and interacting with clients. **Prerequisite:** CS 125H.

CS 160
INTRODUCTION TO COMPUTER PROGRAMMING
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Introduction to the discipline of computer programming for both computer science and non-computer science majors. Topics include problem solving, computer logic, data representation, algorithms, features of structured programming and issues in software development. Students study how computers use software to perform useful tasks, how such software is constructed and build Graphic User Interfaces (GUIs) for data input and display. **Prerequisite:** Familiarity with the Windows operating system.

CS 161
COMPUTER SCIENCE I
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Using a high-level computer programming language, students apply algorithm design and structured programming principles to solve problems. They utilize the concepts of sequence, selection, repetition and modularity in program structure and gain an introductory understanding of arrays and pointers. Students examine the ethical and social issues in computer programming. **Prerequisite:** CS 160.

CS 162
COMPUTER SCIENCE II
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Students develop a more advanced understanding of problem solving, algorithm design, and structured programming using a high-level language. Students solve problems using a variety of data structures and algorithms for storing and manipulating data including searching and sorting techniques, implementation of stacks, queues, linked lists and algorithm analysis. **Prerequisite:** CS 161.

CS 163
COMPUTER SCIENCE III
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
With this third course in programming, students will finish learning the important techniques of modern software development, and then leverage these skills by applying them in the important specialized domain of server-side web programming. **Prerequisite:** CS 162.

CS 171
PRINCIPLES OF COMPUTER ORGANIZATION
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Students gain and apply knowledge of the organization of a digital computer including number systems, encoding of data, Boolean and digital logic fundamentals, processor components and instruction execution. Students gain an introductory understanding of assembly language programming and the Assembler process. **Prerequisite:** CS 160.

CS 260
DATA STRUCTURES
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Students achieve and demonstrate their knowledge of the implementation and analysis of iterative and recursive algorithms to solve complex problems by completing programming exercises using scalar variables, arrays, linked lists, stacks, queues, trees, graphs, and table structures. **Prerequisite:** CS 161, 162.

CS 271
COMPUTER ARCHITECTURE
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Building on the knowledge and skills gained in CS 171, students gain a more sophisticated knowledge of microprogramming, machine language instructions, interrupts, operating system interface, and virtual memory. They gain and apply knowledge of assembly language programming, macros, linking and loading. **Prerequisite:** CS 171.

CS 278
DATA COMMUNICATIONS AND NETWORKING
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students gain knowledge of the hardware, media and software used in data communications. They gain an understanding of data communication protocols, topologies, data formats and network management techniques. **Prerequisite:** CS 131 or equivalent.

CS 279
NETWORK MANAGEMENT I
(2.00 Lecture, 3.00 Lab Hrs./Wk.) 3 Credits
Students achieve and demonstrate fundamental knowledge of the implementation, installation, and management of local and wide area networks. They install and configure hardware and software to support client-server computing and services. **Prerequisite:** CS 278.

CS 281
COOPERATIVE WORK EXPERIENCE SEMINAR – COMPUTER INFORMATION SYSTEMS
(1.00 Lecture Hr./Wk.) 1 Credit
Students enrolling in cooperative Work Experience will participate in this seminar to discuss and develop an understanding of appropriate and effective work practices. **Prerequisite:** placement in an appropriate work experience job and instructor approval.

CS 281
COOPERATIVE WORK EXPERIENCE SEMINAR - MICROCOMPUTER APPLICATIONS
(1.00 Lecture Hr./Wk.) 1 Credit
Students enrolling in cooperative Work Experience will participate in this seminar to discuss and develop an understanding of appropriate and effective work practices. **Prerequisite:** placement in an appropriate work experience job and instructor approval.

CS 288
NETWORK MANAGEMENT II
(2.00 Lecture, 3.00 Lab Hrs./Wk.) 3 Credits
Students achieve and demonstrate advanced knowledge of the implementation, installation, and management of local area networks. They install and configure hardware and software to support client-server computing and services. **Prerequisite:** CS 279.

CS 295
COMPUTER INFORMATION SYSTEMS DIRECTED PROJECT
(2.00 Lecture, 6.00 Lab Hrs./Wk.) 4 Credits
This is the capstone course for the Computer Information Systems program. Students build on knowledge gained in other courses and use critical thinking and problem solving skills to address a significant problem in their area of specialization. Students research, design and develop a comprehensive project and make a professional presentation. **Prerequisite:** Completion of all but the last quarter of coursework for the AAS Degree.

CSD COMPUTER SCIENCE

CSD 122
BEGINNING DATABASE PROGRAM DEVELOPMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students become familiar with the capabilities of standard database management systems including concepts, elements, and structure. They learn how to store, access, sort, and make additions, deletions, and changes to that database. **Prerequisite:** MIC 145 or CS 131 or instructor approval.

CSD 275
ADVANCED DATABASE PROGRAM DEVELOPMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students build on techniques learned in CSD 122 to create a database system and utilize its special features to create interfaces and enhancements. **Prerequisite:** CSD 122 or instructor approval.

CSL COMPUTER SCIENCE

CSL 107
SPREADSHEETS
(3.00 Lecture Hrs./Wk.) 3 Credits
Through hands-on exercises, students gain an understanding of worksheet design, formulas, charting, what-if analysis, linking and consolidating worksheets. **Prerequisite:** basic keyboarding skills and computer literacy preferred.

D DANCE

A maximum of ten credits of D 192 Beginning Dance; eight credits of D 292 Intermediate Dance, and six credits of D 294 Advanced Dance may be applied to an associate degree provided that a dance style and level is not repeated.

D 192
DANCE - BEGINNING BALLET
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Introduction to ballet, utilizing the French vocabulary. Stresses clean technique, coordination, flexibility. Steps are approached gradually from rough schematic form to expressive dance. Will cover balance point, use of rotative source, proper arms.

D 192
DANCE - BEGINNING JAZZ
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students of professional and recreational dance develop skill in jazz dance techniques.

D 192
DANCE - BEGINNING MODERN
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students of professional and recreational dance develop skill in modern dance techniques.

D 192
DANCE - BEGINNING TAP
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students of professional and recreational dance develop skill in the basic vocabulary, body movement, footwork, rhythm, and coordination necessary to execute tap dance steps and routines.

D 260
DANCE PERFORMANCE
(3.00 Lab Hrs./Wk./Cr.) 1-3 Credits
Students develop their skills in dance and gain experience performing dance as a theatre art through dealing with production problems in choreographing, staging, lighting, and costuming for dance. **Prerequisite:** None; some dance experience helpful.

D 292
DANCE - INTERMEDIATE BALLET
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Ballet, emphasizing a complete foundation for all types of body movement. Stresses clarity, precision, body mechanics. Enchainments giving emphasis to epaulment. **Prerequisite:** D 192 Beginning Ballet.

D 292
DANCE - INTERMEDIATE JAZZ
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students of professional and recreational dance apply movement theory in jazz dance. **Prerequisite:** D 192 Beginning Jazz.

D 292
DANCE - INTERMEDIATE MODERN
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students of professional and recreational dance apply movement theory in modern dance. **Prerequisite:** D 192 Beginning Modern.

D 292
DANCE - INTERMEDIATE TAP
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students expand their skills in the basic vocabulary, body movement, rhythm, and coordination necessary to perform combinations of footwork steps and routines. **Prerequisite:** D 192 Beginning Tap.

D 294
DANCE - ADVANCED BALLET
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Continuation of growth in stamina, coordination, and muscle memory, as begun in two previous levels. **Prerequisite:** D 292 Intermediate Ballet.

D 294
DANCE - ADVANCED JAZZ
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students develop skills in advanced movement and theory, and complete an apprenticeship in teaching jazz dance. **Prerequisite:** D 292 Intermediate Jazz.

D 294
DANCE - ADVANCED MODERN
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students develop skills in advanced movement and theory, and complete an apprenticeship in teaching modern dance. **Prerequisite:** D 292 Intermediate Modern.

D 294
DANCE - ADVANCED TAP
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students develop skill in fast-paced barre with emphasis on increasing complexity of tap rhythms and sounds. They also improve balance, endurance, and style. **Prerequisite:** D 292 Intermediate Tap.

DCO DEVELOPMENTAL COMMUNICATIONS

DCO 10
ABE-READING/WRITING
(20.00 Lecture/Lab Hrs./Cr.) 1-6 Credits
Through individualized course work and group activities, students develop the reading and writing skills necessary in college preparation courses and the workforce.

DCO 22
PRACTICAL COMMUNICATIONS
(4.00 Lecture Hrs./Wk.) 4 Credits
Students improve their vocabulary and comprehension skills in reading, as well as their writing and editing skills. **Prerequisite:** Either ASSET reading score 27-32 or ASSET writing score 27-30 or instructor approval. Concurrent enrollment in HD 50 recommended.

DESL DEVELOPMENTAL ENGLISH

DESL 01
ENGLISH FOR SPEAKERS OF OTHER LANGUAGES
(20.00 Lecture/Lab Hrs./Cr.) 1-10 Credits
Students improve their skills in speaking, reading, and writing English necessary for success in daily life and the workforce.

DESL 07
ENGLISH FOR SPEAKERS OF OTHER LANGUAGES - ADVANCED
(3.00 Lecture Hrs./Wk.) 3 Credits
Through advanced studies, students will develop their skills in speaking, reading and writing English in preparation for college courses or vocational training.

DFL DEVELOPMENTAL FAMILY LITERACY

DFL 70
THE MAGIC BOX
(3.00 Lecture Hrs./Wk.) 3 Credits
Parents and children will work together on basic reading and writing skills through group activities focusing on life experience and a collection of stories written by class participants. Literacy efforts will be reinforced through art activities, including music and dance. Parents and children will strengthen reading, writing and language acquisition skills while parents learn ways to participate in their children's education.

DGED DEVELOPMENTAL GED PREPARATION

DGED 48
PRE-GED PREPARATION
(20.00 Lecture/Lab Hrs./Cr.) 1-6 Credits
Students improve their skills in reading writing and math in preparation for taking the GED test. **Prerequisite:** DMTH 07 and/or DCO 10 or CASAS score of 215-235 or instructor approval.

DGED 49
GED PREPARATION
(20.00 Lecture/Lab Hrs./Cr.) 1-6 Credits
Students improve their knowledge of social studies, writing, literature, science, and mathematics. **Prerequisites:** DGED48 or CASAS score of 236-242(Math/Reading) or score of 4 or 5 on writing test or instructor approval.

DMTH DEVELOPMENTAL MATH

DMTH 07
ABE - MATHEMATICS
(20.00 Lecture/Lab Hrs./Cr.) 1-6 Credits
Students develop skills in whole number mathematics, including adding, subtracting, multiplying, dividing, rounding, estimating and problem solving.

DPD DEVELOPMENTAL PERSONAL DEVELOPMENT

DPD 70
CAREER EDUCATION
(2.00 Lecture Hrs./Wk.) 2 Credits
Students analyze work force skills, recognize the requirements of the workplace, and understand the diversity and preparations for various occupations in order to make informed career decisions.

Developmental Reading: See "RD" - Reading

DRF DRAFTING

DRF 139
TECHNICAL PRINT INTERPRETATION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students learn and apply the principles of reading and interpreting technical prints. They learn the purpose of different types of drawings in a variety of disciplines, and the use of conventions, symbols, notes and dimensions in planning, construction and assembly.

DRF 185
COMPUTERS IN DESIGN
(2.00 Lecture, 3.00 Lab Hrs/Wk.) 3 Credits
Students gain and apply knowledge and skills to use digital systems in the process of design. Students complete exercises exploring digital image processing, two-dimensional drawing and three-dimensional modeling as means to create and communicate design ideas. **Prerequisite:** CS 131 or MIC 145.

DRF 213
AUTOCAD - BEGINNING
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Students gain and apply introductory knowledge and skills of computer aided drafting/design (CAD) including the hardware and operating system. Students complete exercises utilizing fundamental AutoCAD tools to create, modify and display drawings. **Prerequisites:** CS 131 or MIC 145; and DRF 139 or instructor approval.

DRF 214
AUTOCAD - INTERMEDIATE
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Students gain and apply the knowledge and skills needed to utilize AutoCAD in more advanced applications. Students complete exercises using CAD techniques to draw and sketch three-dimensional objects and to create complex drawings using dimensions and symbols. **Prerequisite:** DRF 213 or instructor approval.

DRF 215
AUTOCAD - ADVANCED
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Students gain and apply the knowledge and skills needed for three dimensional modeling and customizing AutoCAD. Students complete exercises in creating, manipulating and viewing three-dimensional CAD models and customizing the AutoCAD environment to suit specific user needs. **Prerequisite:** DRF 214 or instructor approval.

DRF 217
AUTOCAD - UPGRADE
(16 Lecture Hours Total) 1 Credit
This course is for individuals who are skilled in using AutoCAD and need to upgrade to the latest release. Students develop skills in using new and modified tools and features to get the most out of recent system enhancements. **Prerequisite:** DRF 213, 214, and/or 215.

DRF 228
AUTOCAD EXAM PREPARATION
(4.00 Lecture/Lab Hrs/Wk.) 2 Credits
Students prepare to complete AutoCAD Level I and II Certification Exams. Students review the format and requirements of the certification exams, strengthen knowledge and skills necessary for successful completion of the exams and complete a series of preparative exams. **Prerequisite:** DRF 213 and DRF 214 or instructor approval.

DRF 281
COOPERATIVE WORK EXPERIENCE SEMINAR - CADD TECHNICIAN
(1.00 Lecture Hr./Wk.) 1 Credit
Students enrolling in cooperative Work Experience will participate in this seminar to discuss and develop an understanding of appropriate and effective work practices. **Prerequisite:** placement in an appropriate work experience job and instructor approval.

DRF 295
CADD DIRECTED PROJECT
(2.00 Lecture, 6.00 Lab Hrs/Wk.) 4 Credits
This is the capstone course for the entry-level CAD technician program. Students build on knowledge gained in other courses and use critical thinking and problem solving skills to address a significant problem in their area of specialization. Students prepare a comprehensive report and make a professional presentation. **Prerequisite:** Completion of all but the last quarter of coursework for the certificate program.

DWR DEVELOPMENTAL WRITING

DWR 31
PARAGRAPH WRITING
(2.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students develop skill in writing short, well-developed and well-edited paragraphs. **Prerequisite:** DCO 22, ASSET score 31-34, and writing sample. Concurrent enrollment in HD 50 recommended.

EC ECONOMICS

EC 115
INTRODUCTION TO ECONOMICS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of major economic concepts, utilize models, and identify and analyze economic choices which apply to current economic problems. This course is not for business students who are intending to transfer to a four-year program.

EC 201
PRINCIPLES OF ECONOMICS
(4.00 Lecture Hrs./Wk.) 4 Credits
Students gain a basic understanding of micro-economics, which examines the allocation of resources and distribution of income in the market system.

EC 202
PRINCIPLES OF ECONOMICS
(4.00 Lecture Hrs./Wk.) 4 Credits
Students develop a basic understanding of macro-economics, which examines our national economic issues including fiscal and monetary policies and their implementation.

ECE EARLY CHILDHOOD EDUCATION

ECE 101
LANGUAGE ARTS ACTIVITIES FOR YOUNG CHILDREN
(10 Lecture Hrs.) 1 Credit
Students develop an understanding of curriculum analysis, development, planning, implementation, and evaluation of language arts activities.

ECE 103
MATH AND SCIENCE FOR YOUNG CHILDREN
(10 Lecture Hrs.) 1 Credit
Students acquire and demonstrate an understanding of curriculum analysis, development, planning, implementation, extension, and evaluation of math and science activities.

ECE 105
NUTRITION, HEALTH AND SAFETY FOR YOUNG CHILDREN
(10 Lecture Hrs.) 1 Credit
Students develop knowledge of children's nutritional needs, health routines, communicable diseases and safety issues, and develop activities for the preschool environment.

ECE 109
EARLY CHILDHOOD ENVIRONMENTS
(10 Lecture Hrs.) 1 Credit
Students demonstrate knowledge of the multicultural environmental setting of the classroom including learning centers, appropriate celebrations, toys and instructional materials.

ECE 119
SELF-CONCEPT, GUIDANCE, & SELF-DISCIPLINE OF YOUNG CHILDREN
(10 Lecture Hrs.) 1 Credit
Students develop an understanding of theories and practices that promote the development of self-concept and appropriate guidance and self-discipline for children from birth to age six.

ECE 124
PHYSICAL FITNESS ACTIVITIES FOR YOUNG CHILDREN
(10 Lecture Hrs.) 1 Credit
Students develop an understanding of curriculum analysis, development, planning, implementation, extension, and evaluation of physical fitness activities for young children.

ECE 125
CREATIVE ACTIVITIES FOR YOUNG CHILDREN: ART
(10 Lecture Hrs.) 1 Credit
Students demonstrate an understanding of curriculum analysis, development, planning, implementation, extension, and evaluation of art activities for young children.

ECE 128
PROGRAM PLANNING &EVALUATION FOR YOUNG CHILDREN
(10 Lecture Hrs.) 1 Credit
Students demonstrate knowledge of methods of planning, developing and evaluating programs in early childhood education, with special attention to comparing program requirements with the developmental needs of young children.

ECE 129
OBSERVATION & DEVELOPMENTAL SCREENING OF YOUNG CHILDREN
(10 Lecture Hrs.) 1 Credit
Students demonstrate and apply knowledge of objective techniques for recording and interpreting children's behavior.

ECE 131
CHILD DEVELOPMENT FOR THE DAY CARE WORKER
(20 Lectures Hrs.) 2 Credits
Students gain and use knowledge of child development theories as they apply to working with young children from prenatal to middle childhood in the early childhood educational setting.

ECE 134
STATUTES, LIABILITY, LICENSURE CONSIDERATIONS FOR CHILDCARE FACILITIES
(10 Lecture Hrs.) 1 Credit
Students are prepared as teachers and directors of child care centers and day care homes , to develop a facility while complying with state and federal laws and regulations.

ECE 137
CHILD ABUSE AND THE LAW
(10 Lecture Hrs.) 1 Credit
Students demonstrate knowledge of the types of child abuse identified by state and federal law, and the procedures that must be followed when abuse is suspected.

ECE 139
INFANT AND TODDLER PROGRAMS
(10 Lecture Hrs.) 1 Credit
Students develop knowledge of infant-toddler developmental theory, programs, program regulations, and the differences between these and regular childcare programs.

ECE 145
TOYS AND GAMES FOR LEARNING
(10 Lecture Hrs.) 1 Credit
Students use their personal creativity to develop and make age-appropriate games and toys. Students also evaluate commercially available toys for children from birth to age six.

ECE 146
HANDICAPPING CONDITIONS IN YOUNG CHILDREN
(10 Lecture Hrs.) 1 Credit
Students demonstrate an understanding of a variety of handicapping conditions, current special education law, and resources available for teachers and parents.

ECE 149
DISEASE CONTROL IN ECE SETTINGS
(10 Lecture Hrs.) 1 Credit
Students develop knowledge of prevention, identification, follow-up, and state immunization law concerning communicable diseases commonly found in early childhood settings.

ECE 175
INFANT/TODDLER LEARNING AND SOCIAL GROWTH IN A GROUP SETTING
(10 Lecture Hrs.) 1 Credit
Students develop an understanding of infant/toddler cognitive and social/emotional development, how it impacts learning and self-esteem, and how to address these developmental needs in a group setting.

ECE 281
COOPERATIVE WORK EXPERIENCE SEMINAR - EARLY CHILDHOOD EDUCATION
(1.00 Lecture Hr./Wk.) 1 Credit
Students enrolling in Cooperative Work Experience will participate in this seminar to discuss and develop an understanding of appropriate and effective work practices. **Prerequisite:** current enrollment in ECE 280 and instructor approval.

ED EDUCATION

ED 281
COOPERATIVE WORK EXPERIENCE SEMINAR - EDUCATION
(1.00 Lecture Hr./Wk.) 1 Credit
Students enrolling in Cooperative Work Experience will participate in this seminar to discuss and develop an understanding of appropriate and effective work practices. **Prerequisite:** current enrollment in ED 280 and instructor approval.

EGR ENGINEERING

EGR 101
ENGINEERING ORIENTATION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate familiarity with the engineering disciplines, curricula at four-year colleges, professional ethics, and licensing requirements for professional engineers. Students gain experience in data collection and engineering problem analysis using tools such as graphing calculators, spreadsheets and word processing programs. Course includes a team-engineering project. **Prerequisite:** MTH 111 or High School Trigonometry.

EM EMERGENCY SERVICES

EM 101
INTRODUCTION TO EMERGENCY SERVICES
(4.00 Lecture Hrs./Wk.) 4 Credits
Provides an overview of and introduction to emergency services. Includes history of fire protection and emergency medical services; responsibility of emergency services in a community; roles and responsibilities of an emergency medical technician and a firefighter; organization and function of emergency services agencies and allied organizations; disaster response; education and certification; sources of professional literature; leadership and career development issues and requirements.

EMT EMERGENCY MEDICAL TECHNICIAN

EMT 151
EMERGENCY MEDICAL TECHNICIAN BASIC, PART 1
(44 Lecture, 30 Lecture/Lab Hrs.; 74 Hrs. Total) 5 Credits
This two-part course meets Oregon State Health Division and Federal Department of Transportation requirements for EMT-Basic and prepares the student to provide basic pre-hospital emergency medical care and transportation of the sick and injured. On successful completion of EMT 152, the student will be prepared to take the Oregon State Health Division certification examination for EMT-Basic. **Prerequisite:** Current AHA health care provider CPR certification, current measles and hepatitis B immunizations, negative TB test; valid driver's license; self-verification of ability to meet Oregon Health Division requirements for certification.

EMT 152
EMERGENCY MEDICAL TECHNICIAN BASIC, PART 2
(44 Lecture, 22 Lecture/Lab Hrs.; 66 Hrs. Total) 5 Credits
Continuation of EMT 151. Students demonstrate the knowledge and skills required to provide basic pre-hospital emergency medical care and transportation of the sick and injured. On successful completion of this course, the student will be prepared to take the Oregon State Health Division certification examination for EMT-Basic. **Prerequisite:** Successful completion of EMT 151.

EMT 165
EMERGENCY MEDICAL TECHNICIAN INTERMEDIATE, PART 1
(38 Lecture, 22 Lecture/Lab Hrs.; 60 Hrs. Total) 4 Credits
This class prepares students to perform the procedural responsibilities delegated to the EMT-Intermediate. **Prerequisite:** Certified as EMT-Basic; current AHA healthcare provider CPR certification; 80% or better on EMT-Intermediate pretest; and demonstrated proficiency in specified skills.

EMT 166
EMERGENCY MEDICAL TECHNICIAN INTERMEDIATE, PART 2
(38 Lecture, 22 Lecture/Lab Hrs.; 60 Hrs. Total) 4 Credits
Students master the knowledge and skills required of an EMT-Intermediate. **Prerequisite:** Successful completion of EMT 165.

EMT 169
EMERGENCY MEDICAL TECHNICIAN RESCUE
(22 Lecture, 30 Lab Hrs.; 52 Hrs. Total) 3 Credits
Students demonstrate the knowledge and skills needed to rescue and extricate patients while maintaining personal safety; control and management of the accident scene; and considering needs of the accident trauma patient and the use and maintenance of rescue tools and equipment.

EMT 170
EMERGENCY COMMUNICATION AND TRANSPORTATION
(30 Lecture, 12 Lab Hrs.; 42 Hrs. Total) 3 Credits
This class prepares emergency medical services personnel to handle telecommunications and transportation of the sick and injured. **Prerequisite:** Current valid driver's license.

ENG ENGLISH

ENG 104
INTRODUCTION TO LITERATURE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will read, discuss, and analyze a variety of short stories and novels. They will learn the techniques of literary criticism for use in oral and written responses to the literature.

ENG 105
INTRODUCTION TO LITERATURE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will read, discuss, and analyze a variety of plays. They will learn about the conventions of literary drama and dramatic literature's implications both on the page and on the stage.

ENG 106
INTRODUCTION TO LITERATURE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will read, discuss, and analyze a variety of poems, both historical and contemporary. Emphasis will be on finding personal meaning in poetry as well as mastering the techniques of literary criticism.

ENG 107
WORLD LITERATURE: THE ANCIENT WORLD
(3.00 Lecture Hrs./Wk.) 3 Credits
Students gain knowledge of the literary styles and historic significance of works from Sumerian, Greek, Roman, Hebrew, and Italian literature from 3000 BC to the Middle Ages with emphasis epic and tragedy.

ENG 108
WORLD LITERATURE: MEDIEVAL/RENAISSANCE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students gain knowledge of the literary styles and historical significance of works from Medieval and Renaissance European literature including epic, drama, essay, novel, and the sonnet. **Note:** ENG 107 recommended.

ENG 109
WORLD LITERATURE: AFRICA, ASIA & LATIN AMERICA
(3.00 Lecture Hrs./Wk.) 3 Credits
Students gain knowledge of the literary styles and historical significance of works of Latin American, Asian, and African literature from the 18th to the 20th Century including the genres of novel, drama, and poetry. **Note:** ENG 107 and 108 recommended.

ENG 110
INTRODUCTION TO FILM STUDIES
(3.00 Lecture, 1.00 Lab Hrs./Wk.) 3 Credits
Students will enhance their visual literacy by viewing, discussing, and analyzing contemporary film with emphasis on cinematic technique and critical approaches to this media. Participants will also discuss the relationship of film to cultural values and the various influences on contemporary film practice. Offered winter term. Students will run the annual Rainy Day Film Festival at two local theaters.

ENG 180
GOTHIC LITERATURE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will study a sampling of literature written in the Gothic tradition. Students will read both British and American literature from 1800 to the present. Emphasis will be on reading the works, discussing them, and analyzing possible meanings. We will also examine how the themes of Gothic literature have been "resurrected" in popular culture today (film, fashion, music).

ENG 201
SHAKESPEARE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students learn to read and respond to plays from Shakespeare's early period with an emphasis on dramatic technique and poetic devices. Course will examine critical approaches to Shakespeare's early comedies and tragedies. **Note:** Need not be taken in sequence.

ENG 202
SHAKESPEARE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students read and respond to representative comedies, tragedies, and problem plays from Shakespeare's middle period. Course will emphasize dramatic technique, tragedy and comedy genres. **Note:** Need not be taken in sequence.

ENG 203
SHAKESPEARE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will read , analyze and explore Shakespeare's later tragedies and romances. Course will emphasize dramatic and poetic technique and plays' political and historical contexts. **Note:** Need not be taken in sequence.

ENG 204
ENGLISH LITERATURE: MEDIEVAL
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will read a variety of texts including fairy tales, epic poetry, Arthurian Legend, and works by early women authors. We will study the political, literary, religious, and social contexts of each work, as well as the early history of the English language.

ENG 205
ENGLISH LITERATURE: RENAISSANCE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will read a variety of texts including Shakespearean and non-Shakespearean drama, lyric poetry, epic poetry, and an early novel. We will study the political, literary, religious, and social contexts of each work and will discuss how the printing press revolutionized literature.

ENG 206
ENGLISH LITERATURE: VICTORIAN & MODERN
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will read a variety of texts including novels, free-verse poetry, and short stories. We will study the rise of the female author in England and will examine works by post-colonial authors. We will also discuss how changes in the British Empire altered the voice of British literature.

ENG 214
LITERATURE/PACIFIC NORTHWEST
(3.00 Lecture Hrs./Wk.) 3 Credits
Students explore fictional, factual, and poetic works by Northwest writers from before the arrival of Euro-Americans to the present. Emphasizes the relationships between Northwest writing and Northwest social, cultural, and physical environment.

ENG 220
NON - EUROPEAN MINORITY LITERATURE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students read, discuss, and analyze the literature of one or more American minority groups. **Note:** May meet state institutions cultural diversity requirement.

ENG 221
INTRODUCTION TO CHILDREN'S LITERATURE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will be introduced to children's literature by studying folk tales, fairy tales, classic stories, nursery rhymes, poems, picture books, and chapter books. The main emphasis is on reading and discussing the works in terms of their literary merits. We will also discuss the ways this literature might be useful to parents, teachers, and others who work with children.

ENG 253
SURVEY OF AMERICAN LITERATURE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students read, respond to, and analyze works of major authors of American poetry and prose during the period from 1630 to 1860 in the context of the literary movements including Puritanism, Classicism, and Romanticism.

ENG 254
SURVEY OF AMERICAN LITERATURE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students read, respond to, and analyze 19th Century American prose and poetry in light of the development of American civilization.

ENG 255
SURVEY OF AMERICAN LITERATURE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students explore literature written in America from 1920-present, including works by the Lost Generation, the Beat Generation, and Generation X.

ENG 260
INTRODUCTION TO WOMEN'S LITERATURE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students read, respond to, and analyze works of all genres written by women of many lands and ages, with an emphasis on contemporary American writers. **Note:** May meet state institutions' cultural diversity requirement.

ES ENVIRONMENTAL SCIENCE

ES 150
INTRODUCTION TO ENVIRONMENTAL SCIENCE
(2.00 Lecture/Lab Hrs./Wk.) 1 Credit
For students who are interested in the academic and professional opportunities in environmental science. Students conduct field investigations and present their findings, investigate career options, and develop a portfolio.

ES 160
TECHNIQUES IN ENVIRONMENTAL INFORMATION ANALYSIS
(3.00 Lecture, 3.00 Lab. Hrs./Wk.) 4 Credits
Students learn principles and application of environmental measurement, instrumentation, and data analysis. They develop mapping, modeling, and group problem solving skills. This class involves field work. **Prerequisites:** ES 150.

FR FRENCH

FR 101
FIRST YEAR FRENCH
(4.00 Lecture Hrs./Wk.) 4 Credits
Students develop skill in hearing, speaking, reading, and writing the French language through the immersion method - target language spoken in the classroom. **Note:** Must be taken in sequence or with instructor approval.

FR 102
FIRST YEAR FRENCH
(4.00 Lecture Hrs./Wk.) 4 Credits
Students continue to develop skill hearing, speaking, reading, and writing through the immersion method target language spoken in the classroom. **Prerequisite:** FR 101 or instructor approval.

FR 103
FIRST YEAR FRENCH
(4.00 Lecture Hrs./Wk.) 4 Credits
Students continue to develop skill hearing, speaking, reading, and writing through the immersion method - target language spoken in the classroom. **Prerequisite:** FR 102 or instructor approval.

FRP FIRE PROTECTION

FRP 151
FIREFIGHTER SKILLS I
(2.00 Lecture and 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
Provides the student with the knowledge and skills to meet the minimum requirements of competence required of a person to serve as a paid or volunteer firefighter. Students will become familiar with the various types of equipment and procedures needed to function safely as a member of a firefighting team under direct supervision. This course fulfills the requirements of OR-OSHA and the Department of Public Safety Standards and training for entry level firefighters. **Prerequisite:** Instructor approval.

FRP 152
FIREFIGHTER SKILLS II
(2.00 Lecture and 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
A continuation of FRP 151 Firefighter Skills I. Students complete Basic First Aid and CPR and are provided a practicum for Driver and Pump Operator. **Prerequisite:** FRP 151 or instructor approval.

FRP 153
FIREFIGHTER SKILLS III
(2.00 Lecture and 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
A continuation of FRP 152 Firefighter Skills II. Students complete requirements for the Department of Public Safety Standards and Training standard NFPA Firefighter I, Hazardous Material Awareness, Wildland Firefighting and are provided a practicum for Driver and Pump Operator and single company evolutions. **Prerequisite:** Instructor approval.

FRP 155
INSTRUCTIONAL METHODOLOGY
(2.00 Lecture Hrs./Wk.) 2 Credits
Students develop proficiency in the methodologies and skills needed to conduct fire science instruction using prepared course outlines and materials.

FRP 156
FIREFIGHTER LAW
(1.00 Lecture Hr./Wk.) 1 Credit
Students demonstrate knowledge of the basic Oregon laws relating to fire protection.

FRP 157
FIREFIGHTER SAFETY
(1.00 Lecture Hr./Wk.) 1 Credit
Students learn the most common causes of injuries and deaths to firefighters and the responsibilities of the company officer for firefighter safety and survival. The class emphasizes the need for an appropriate attitude regarding firefighter safety.

FRP 158
PUMP CONSTRUCTION & HYDRAULICS
(22 Lecture, 22 Lecture/Lab Hrs.; 44 Hrs. Total) 3 Credits
Students develop the knowledge and skills required to operate various fire pumps and accessories. They will demonstrate competency in drafting, hydrant and tanker operations, and rule of thumb fire ground hydraulic calculations. **Prerequisite:** FRP 151 or instructor approval.

FRP 160
FUNDAMENTALS OF FIRE PREVENTION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students gain knowledge of the philosophy and history of fire protection with emphasis on issues, programs, regulations, and responsibilities, especially company inspections.

FRP 164
HAZARDOUS MATERIALS
(20 Lecture, 20 Lecture/Lab Hrs.; 40 Hrs. Total) 3 Credits
Students gain the knowledge and skills needed to safely respond to and manage a chemical emergency. This includes proper application of foam for vapor suppression and basic plugging and patching of minor hazardous material releases.

FRP 166
BUILDING CONSTRUCTION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students acquire the knowledge and skills required to assess building stability and resistance to fire; locate special hazards stemming from construction type, design features, alterations of materials; and determine likely paths of fire extension.

FRP 169
FIRE DEPARTMENT LEADERSHIP
(3.00 Lecture Hrs./Wk.) 3 Credits
This class explains the unique aspects of a company officer's job, basic functions of management, organization, and the leadership and interpersonal skills required of a supervisor.

FRP 170
FIREFIGHTING STRATEGY AND TACTICS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students gain knowledge of the fire command system, rescue, offensive and defensive fire attack, property conservation, staging and apparatus placement, sectoring, company functions, communications, and command procedures.

FRP 171
FIRE PROTECTION SYSTEMS AND EXTINGUISHERS
(33.00 Lecture Hrs. Total) 3 Credits
Students gain knowledge of types and uses of portable fire extinguishers, their care, inspection and recharging procedures. Students become familiar with various detection, reporting, and extinguishing systems including sprinklers and standpipes.

FRP 172
FIRE CODES AND ORDINANCES
(33.00 Lecture Hrs. Total) 3 Credits
Students study the Uniform Fire Code, State Fire Marshal Fire Safety Regulations and related Oregon revised statutes, National Fire Prevention Association, and other codes relating to fire prevention and life safety.

FRP 181
FIRE PREVENTION AND INSPECTION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students learn methods of contemporary fire prevention inspection including preparation, pre-approach information, written inspection notices, relations with owners and occupants, and compliances.

GEO GEOGRAPHY

GEO 100
INTRODUCTION TO PHYSICAL GEOGRAPHY
(3.00 Lecture Hrs./Wk.) 3 Credits
Students gain an introductory knowledge of the physical elements of geography and the environment in which people live, with emphasis on themes pertaining to economic development. Student learning focuses on natural processes that create physical diversity on the natural landscape, including weather and climate, vegetation and soils and landform development and change.

GEO 110
CULTURAL AND HUMAN GEOGRAPHY
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of the evaluation, use, and modification of landscapes and the environment of the earth by the cultural groups occupying them in the past, present, and future.

GEO 120
WORLD / REGIONAL GEOGRAPHY
(3.00 Lecture Hrs./Wk.) 3 Credits
This class provides a survey of the realms and regions of the modern world. Students gain knowledge of world environments and how people have adjusted to, organized, used, and modified them.

GEO 130
ECONOMIC / RESOURCE GEOGRAPHY
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop knowledge of structures, patterns, and locational principles of economic activities; examine regional economic development, agricultural land use, industrial location, and distribution of service activity; and compare real-world examples with theory.

GS GENERAL SCIENCE

GS 104
PHYSICAL SCIENCE - PHYSICS
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
For non-science majors and pre-service teachers interested in obtaining a solid understanding of the scientific endeavor to make intelligent and informed decisions. This course uses guided inquiry and student projects to study topics on: motion, force, rainbows and light. Need not be taken in sequence. **Prerequisite:** MTH 070.

GS 105
PHYSICAL SCIENCE - CHEMISTRY
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
For non-science majors and pre-service teachers interested in obtaining a solid understanding of the scientific endeavor to make intelligent and informed decisions. This course uses guided inquiry and student projects to study topics on: magnets, charge, buoyancy and pressure. Need not be taken in sequence. **Prerequisite:** MTH 070.

GS 106
PHYSICAL SCIENCE - GEOLOGY
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
For non-science majors and pre-service teachers interested in obtaining a solid understanding of the scientific endeavor to make intelligent and informed decisions. This course uses guided inquiry and student projects to study topics on: volcanoes, tsunamis, minerals and energy resources. Need not be taken in sequence. **Prerequisite:** MTH 060.

GS 109
PHYSICAL SCIENCE - METEOROLOGY
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
For non-science majors and pre-service teachers interested in obtaining a solid understanding of the scientific endeavor to make intelligent and informed decisions. Students will use guided inquiry and projects to study topics on heat, cloud formation, climate and the greenhouse effect, in order to develop an understanding of basic atmospheric phenomena. **Prerequisite:** MTH 070.

GS 161
FIELD BIOLOGY OF OREGON
(20.00 Lecture, 20.00 Lecture/Lab Hrs. Total) 3 Credits
A field oriented survey of several Oregon ecosystems. Communities to be studied include: coastal dunes and forest, coastal scrub forest, temperate rain forests - old growth and second/third growth, coastal riparian, mid elevation coniferous forest, alpine, sage shrub, and rocky intertidal.

HD HUMAN DEVELOPMENT

HD 050
COLLEGE SKILLS
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits
Students become familiar with college offices, services, and programs; establish skills in taking notes, reading efficiently, and taking tests; use self-assessment to explore learning and thinking styles, values, and skills; and set educational and career goals. Concurrent enrollment in DCO 22 and RD 080, or WR 40 and RD 090 recommended.

HD 100
COLLEGE SURVIVAL & SUCCESS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop attitudes, skills, and strategies known to promote college success, including goal setting, time management and other personal skills; critical/creative thinking, personal learning style; note taking, study techniques, test taking; and use of college resources. Reading and writing levels at DRD 40 and WR 40 and above. Work is set at university level.

HD 110
CAREER PLANNING
(2.00 Lecture Hrs./Wk.) 2 Credits
Students prepare to make informed career choices by clarifying their personality, values, and general abilities; exploring present and future career opportunities; setting career and educational goals; and developing a career action plan.

HD 145
COPING SKILLS FOR STRESS AND DEPRESSION
(2.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students will study basic theory, overview and practice of managing stress and depression. Topics include recognizing, managing, and modifying causes of stress, altering individual perception of stressful events, and modifying the stress response. The symptoms, causes, and forms of depression will be described, including an overview of methods used in treating depression. The topic of stress will be covered in more detail than depression. This course provides a supportive classroom environment and an educational approach to managing stress and depression. **Prerequisite:** approval of Lives in Transition Coordinator.

HD 202
LIFE TRANSITIONS
(2.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students focus on self-exploration and development of life-planning skills. By analyzing predictable life transitions, students develop and learn how to integrate skills in goal setting, decision making, and plan implementation for personal growth and career planning. Introduces non-traditional careers and careers in the professional and technical trades. **Prerequisite:** approval of Lives in Transition Coordinator.

HD 209
THE COMPLETE JOB FINDER
(2.00 Lecture Hrs./Wk.) 2 Credits
Students will develop strategies for job search inquiry, position exploration, application completion, and job offer evaluation; as well as enhance their skills in writing resumes, cover letters, and applications, Includes participation in video role-playing of interviewing techniques.

HD 215
TRANSITION TO THE UNIVERSITY
(2.00 Lecture Hrs./Wk.) 2 Credits
Students learn how to make a successful academic and personal transition from the community college to the university by developing a Transfer Action Plan. They also acquire academic and personal survival skills for success at the university level.

HD 281
COOPERATIVE WORK EXPERIENCE SEMINAR - HUMAN DEVELOPMENT
(1.00 Lecture Hr./Wk.) 1 Credit
Liberal Arts and Sciences students develop appropriate and effective work practices through discussing and analyzing their cooperative work experience with the instructor. **Prerequisite:** Concurrent enrollment in an appropriate work experience "XX" 280 and instructor approval.

HFS HEALTH & FAMILY STUDIES

HFS 226
GROWING YEARS: CHILDHOOD DEVELOPMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of normal human development, mental, social, emotional and physical changes in abilities, needs and interests, of children from the prenatal period through age eight, emphasizing major theorists and research findings.

HPE HEALTH & PHYSICAL EDUCATION

HPE 295
HEALTH AND FITNESS FOR LIFE
(2.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students develop an understanding of the relationship between optimal health, wellness, and physical fitness by gaining knowledge of the interacting roles of physical fitness, nutritional status, and the ability to cope with stress. **Prerequisite:** MTH 060 recommended.

HS HUMAN SERVICES

HS 101
ALCOHOL, ABUSE AND ADDICTION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students learn concepts and perspectives about alcohol abuse and addiction based on a bio-psycho-social approach to alcohol problems. Pharmacology of the drug, personal impact on the user and family, and treatment approaches are stressed.

HS 102
DRUG ABUSE AND ADDICTION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students gain knowledge about mind/mood-altering (psychoactive) drugs as they impact the user, the biological, social and psychological context of drug use; their effects on body, brain, behavior and quality of life; approaches to prevention and treatment of drug problems.

HS 154
COMMUNITY RESOURCES
(3.00 Lecture Hrs./Wk.) 3 Credits
Students acquire and demonstrate knowledge of history, purpose, philosophy, and values of community resources developed for people with specific disadvantages or disabilities. Students become acquainted with local social service agencies and organizations, and how to refer clients to them.

HS 155
INTERVIEWING FOR SOCIAL SERVICES
(3.00 Lecture Hrs./Wk.) 3 Credits
Students acquire theory and demonstrate specific basic interviewing techniques for establishing an effective professional helping relationship, and recommended approaches for specific populations. Students interview peers for professional observation and feedback. **Note:** HS 154 recommended.

HS 201
FAMILY ALCOHOLISM / ADDICTION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students gain knowledge of the effects of chemical dependency on the whole family: addictive behavior in the family system, dynamics, roles, therapeutic interventions, and approaches to recovery. **Note:** HS 101 or HS 102 recommended.

HST HISTORY

HST 101
HISTORY OF WESTERN CIVILIZATION
(3.00 Lecture Hrs./Wk.) 3 Credits
Against the background of Eurasia, students gain knowledge of the origins and development of Western civilization from ancient times to AD 500. **Note:** need not be taken in sequence.

HST 102
HISTORY OF WESTERN CIVILIZATION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of the cultural, social, economic and political development of Western civilization from AD500 to AD1700, against the background of Eurasia and the world. **Note:** Need not be taken in sequence.

HST 103
HISTORY OF WESTERN CIVILIZATION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students survey the cultural, social, economic and political development of Western civilization from AD1650 to the present, against a global background. **Note:** Need not be taken in sequence.

HST 201
HISTORY OF THE UNITED STATES
(3.00 Lecture Hrs./Wk.) 3 Credits
Students increase their understanding of the political, economic, social, intellectual, and cultural history of the United States from the arrival of Native Americans until the 1830's.

HST 202
HISTORY OF THE UNITED STATES
(3.00 Lecture Hrs./Wk.) 3 Credits
Students gain knowledge of the political, economic, intellectual, and foreign relation patterns of the United States between the 1840's and 1918, with emphasis on the impact of the Civil War on culture, expansion, and technology.

HST 203
HISTORY OF THE UNITED STATES
(3.00 Lecture Hrs./Wk.) 3 Credits
Students demonstrate knowledge of the political, economic, intellectual, cultural, and foreign relation patterns of the United States from World War I to the present; recent global involvement; and the technological revolution from automobiles through computers.

HUM HUMANITIES

HUM 101
INTRODUCTION TO HUMANITIES I
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will gain an understanding of the ideas and modes of vision Western culture has inherited from the classical, medieval, and Renaissance periods. Readings and discussions focus on literature, philosophy, history, art, music, and religion.

HUM 102
INTRODUCTION TO HUMANITIES II
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will use a topical and interdisciplinary approach to an understanding of Western culture. Students will examine the art, literature, drama, history, and music regarding some aspect of human behavior such as war, crime, evil, marriage, disease, etc.

HUM 103
INTRODUCTION TO HUMANITIES III
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will learn about literature, history, language, geography, music and art of a particular human culture.

IT INDUSTIAL & MANUFACTURING TECHNOLOGIES

IT 101
ENGINE REBUILDING - GASOLINE
(1.00 Lecture, 6.00 Lecture/Lab Hrs./Wk.) 4 Credits
Each student evaluates, removes, rebuilds and restores an engine. (Student should bring their own.) Work includes valve train reconditioning, engine crank shaft and oil pump removal/replacement, and cylinder reconditioning. **Prerequisite:** IT 108.

IT 102
ENGINE REBUILDING - DIESEL
(1.00 Lecture, 6.00 Lecture/Lab Hrs./Wk.) 4 Credits
Students demonstrate an understanding of diesel engine construction and the principles of operation, servicing, and adjustment. (Student should bring their own.) Students participate in evaluating, disassembling, assembling, and reconditioning and/or replacing engine components. **Prerequisite:** IT 108.

IT 105
PRINCIPLES OF TECHNOLOGY I
(2.00 Lecture, 4.00 Lecture/Lab Hrs./Wk.) 4 Credits
In this three course sequence, students analyze and apply technical concepts of physics to equipment and devices in mechanical, fluid, and electrical systems, and transformers. This term, students demonstrate an understanding of and apply the concepts of force, work, rate, resistance, and energy. **Prerequisite:** MTH 65 or higher, or Georgia-Pacific pre-applicant program.

IT 106
PRINCIPLES OF TECHNOLOGY II
(2.00 Lecture, 4.00 Lecture/Lab Hrs./Wk.) 4 Credits
Students develop an understanding of and apply the technical concepts of power, force transformers, momentum, waves and vibrations, and energy converters. **Prerequisite:** IT 105.

IT 107
PRINCIPLES OF TECHNOLOGY III
(1.00 Lecture, 4.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students gain an understanding of and apply the technical concepts of transducers, radiation, optical systems, and time constants. **Prerequisite:** IT 106.

IT 108
ENGINE PRINCIPLES
(3.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 4 Credits
In this class students gain knowledge of the theory and operational principles of the internal combustion engine. Students follow a diagnostic procedure to disassemble, evaluate condition, reassemble, and operate a four-stroke gasoline engine.

IT 110
APPLIED TECHNOLOGY PROJECTS
(20.00 Lecture/Lab Hrs./Cr.) 1-3 Credits
Students complete individual projects which apply and advance the laboratory skills and theories they have learned in other professional technical classes. **Prerequisite:** instructor approval.

IT 121
PRINCIPLES OF FLUID POWER
(2.00 Lecture, 3.00 Lab Hrs./Wk.) 3 Credits
Students demonstrate knowledge of the basic components of hydraulic and pneumatic systems and their combination into circuits. They also learn to maintain and size equipment. **Prerequisite:** MTH 65.

IT 140
INDUSTRIAL SAFETY
(20 Lecture/Lab Hrs. Total) 1 Credit
Students use a competency-based program with associated lab activities to provide the prerequisite amount of knowledge and skills necessary to develop and maintain safe work habits while engaged in various industrial job settings. Course curriculum follows OSHA guidelines and suggested safety practices. An overview is provided for the safe use of tools/equipment commonly found in the fabrication/construction industry. Students must demonstrate competency before entering the shop work areas.

IT 141
TOOL AND SHOP BASICS
(20 Lecture/Lab Hrs. Total) 1 Credit
Students use a competency-based program with associated lab activities to provide the prerequisite amount of knowledge and skills necessary to use hand tools and perform basic shop practices in layout, measuring, fastener identification and information retrieval.

IT 206
AUTO ELECTRICAL/ELECTRONIC FOUNDATIONS
(8.00 Lecture/Lab Hrs./Wk.) 4 Credits
Electrical theory and fundamentals, meter use, circuit construction and operation. Lab assignments involving building and testing circuits as well as live repair and testing projects will reinforce the classroom material. **Prerequisites:** IT 140 Industrial Safety, MTH 065 or instructor's approval.

IT 207
AUTO ELECTRICAL/ELECTRONIC APPLICATIONS
(8.00 Lecture/Lab Hrs./Wk.) 4 Credits
Building on the skills learned from IT 206, students will gain, apply and demonstrate knowledge of automotive starters and alternators, ignition systems and electronic engine control systems. Use of more advanced electronic tools will be stressed. **Prerequisites:** IT 206 Automotive Electrical/Electronic Foundation or instructor approval.

IT 208
MECHANICAL DRIVES AND TRANSMISSION OF POWER
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits
Students demonstrate and apply an understanding of the basic theory required to service and repair mechanical devices that transmit power to perform work including a variety of clutches, gearboxes, fixed shafts, and universal joints. **Prerequisite:** MTH 65.

IT 209
FLUID DRIVES AND HYDRAULIC TRANSMISSIONS
(2.00 Lecture, 4.00 Lecture/Lab Hrs./Wk.) 4 Credits
Students demonstrate and apply knowledge of the principles of fluid power as used to propel equipment and machinery in industrial applications including fluid coupler, torque converters, automatic and hydrostatic transmissions.

IT 210
VEHICLE TUNE UP AND INSTRUMENTATION
(2.00 Lecture, 6.00 Lab Hrs./Wk.) 4 Credits
Theory of ignition systems; methods of testing engine performance using the electronic scope and other diagnostic instruments. Laboratory sessions provide hands-on experience with live projects. **Prerequisite:** IT 108, IT 206, IT 207, or instructor approval.

IT 218
VEHICLE STEERING AND SUSPENSION SYSTEMS
(2.00 Lecture, 6 Lab Hrs./Wk.) 4 Credits
Theory and applications for service and repair of suspension systems; wheel alignment; wheel bearings; tires and wheels; wheel balance; and steering systems. Applications made on live projects.

IT 219
VEHICLE BRAKE SYSTEMS
(2.00 Lecture, 6.00 Lab Hrs./Wk.) 4 Credits
Theory of vehicle brake systems; repair of drum and disc type brakes; disassembly and reassemble of brake components; and assignments on live projects. **Prerequisite:** IT 121 or instructor approval.

IT 226
INDUSTRIAL REFRIGERATION
(2.00 Lecture, 4.00 Lecture/Lab Hrs./Wk.) 4 Credits
Students learn to service commercial and industrial refrigeration systems and control circuits. Students learn absorption and centrifugal chiller theory and acquire electrical, mechanical, and tubing skills. **Prerequisite:** IT 225 or equivalent competencies.

IT 230
VEHICLE HEATING AND AIR CONDITIONING SYSTEMS
(80 Lecture/Lab Hrs. Total) 4 Credits
Students will learn the operational theory, diagnostic and repair processes common with automotive heating, cooling and air conditioning systems. **Prerequisite:** MTH 65 or tested equivalent or higher and/or instructor approval.

IT 281
COOPERATIVE WORK EXPERIENCE SEMINAR - INTEGRATED TECHNOLOGIES
(1.00 Lecture Hr./Wk.) 1 Credit
Students enrolling in cooperative Work Experience will participate in this seminar to discuss and develop an understanding of appropriate and effective work practices. **Prerequisite:** placement in an appropriate work experience job and instructor approval.

LIB LIBRARY

LIB 127
INFORMATION RESEARCH SKILLS
(12.00 Lecture Hrs. Total) 1 Credit
In this introduction to finding information in the Library, students will build skills in searching the library catalog, periodical indexes, and reference and Internet resources. Students will learn how to construct an effective search strategy, evaluate sources of information, and use and cite information correctly.

MA MEDICAL ASSISTANT

MA 112
MEDICAL ASSISTANT: CLINICAL PROCEDURES I
(2.00 Lecture, 3.00 Lab Hrs./Wk.) 3 Credits
Students demonstrate knowledge and skills necessary to provide basic care to clients and work in medical office or clinic settings. **Prerequisite:** Completion of / or concurrently enrolled in WR 40 or WR121, and OA 116.

MA 113
MEDICAL ASSISTANT: CLINICAL PROCEDURES II
(2.00 Lecture, 6.00 Lab Hrs./Wk.) 4 Credits
Students demonstrate increasing knowledge and skills necessary to provide care to clients and work in medical office or clinic settings, including: preparing clients for examinations and procedures; performing diagnostic tests; recognizing and responding appropriately to emergencies; client teaching; and office management. **Prerequisite:** completion of MA 112 with a C grade or higher; completion of or concurrently enrolled in BI 121. **Corequisite:** MA 231.

MA 115
PHARMACOLOGY FOR MEDICAL ASSISTANTS I
(2.00 Lecture Hrs./Wk.) 2 Credits
Students acquire and demonstrate knowledge of basic principles and practice of pharmacology and administering drugs. They identify roles and responsibilities of the medical assistant in safely administering selected medications by various routes. **Prerequisite:** completion of MA 112 and BI 121 with a C grade or higher.

MA 133
MEDICAL ASSISTANT CLINICAL PRACTICUM I
(12.00 Lab Hrs./Wk.) 4 Credits
Students apply knowledge and skills in a medical office setting to provide direct care for patients and to support office functions. **Prerequisite:** completion of OA 116 and MA 112 with a C grade or higher. **Corequisite:** MA 113.

MA 231
MEDICAL ASSISTANT CLINICAL PRACTICUM II
(15.00 Lab Hrs./Wk.) 5 Credits
Students apply increasing knowledge and skills in a medical office setting. Students demonstrate increasing independence in providing direct care for patients and supporting office functions. **Prerequisite:** completion of MA 112, MA 113, and MA 133 with a C grade or higher. **Corequisite:** MA 115.

MA 281
COOPERATIVE WORK EXPERIENCE SEMINAR - MEDICAL ASSISTANT
(1.00 Lecture Hr./Wk.) 1 Credit
Students enrolling in cooperative Work Experience will participate in this seminar to discuss and develop an understanding of appropriate and effective work practices. **Prerequisite:** placement in an appropriate work experience job and instructor approval.

MAS MARITIME SCIENCE

MAS 3.451
CHARTER BOAT DECKHAND
(40 Lecture/Lab Hrs. Total) 2 Credits
Students will develop an understanding of terminology and back deck practices including most aspects of commercial angling. Participants will also learn how to deal successfully with the public; help promote and preserve the resource and the industry by actions both on and off the job; help maintain the vessel and equipment in good working order; create a safe and pleasurable experience for the client encouraging repeat business; as well as basic seamanship skills and work ethic. **Prerequisite:** Instructor approval and student must pass drug screen prior to receiving certificate.

MAS 100
MARITIME OCCUPATIONS
(40 Lecture/Lab Hrs. Total) 2 Credits
For students who are interested in maritime occupations such as towing, commercial fishing, passenger vessels, or research. Students demonstrate and apply skills in safe seamanship onboard the training vessel Forerunner while learning about the Columbia River Estuary and its user groups. Students will learn how to apply to the US Coast Guard for an Ordinary Seaman Merchant Mariner's Document.

MAS 110
LIMITED OPERATOR UNINSPECTED PASSENGER VESSEL CERTIFICATION
(20 Lecture, 20 Lecture/Lab Hrs.; 40 Hrs. Total) 3 Credits
U.S. Coast Guard approved course where students demonstrate knowledge of rules of the nautical road; basic firefighting; marine safety; piloting and dead reckoning; marine electronics; basic seamanship; and tides, currents, and weather. Successful course completion will stand in lieu of the required exam for an original Limited Scope License from the Portland Marine Safety Office. Those who complete will earn 20 eight-hour days of sea time toward a license. **Note:** Most instruction takes place onboard the college's training vessel.

MAS 111
LIMITED OPERATOR UNINSPECTED PASSENGER VESSEL ENDORSEMENT
(24 Lecture/Lab Hrs. Total) 1 Credit
Students demonstrate knowledge of the Nautical Rules of the Road and U.S. Aids to Navigation System (lateral) and acquire the skills and knowledge required to navigate safely and properly interact with vessel traffic found on navigable inland waters.

MAS 120
U.S. COAST GUARD MARINE LICENSE TRAINING
(20 Lecture, 20 Lecture/Lab Hrs.; 40 Hrs. Total) 3 Credits
Students demonstrate knowledge of the information contained on U.S. Coast Guard examinations, Master or Mate (limited tonnage) near coastal and/or inland waters. **Note:** This course is U.S. Coast Guard approved to be taken in lieu of testing for licenses not to exceed 200 gross tons. A total of nine (9) credits of MAS 120 may be applied toward the AGS degree, Associate of Applied Science degree, and the One-Year Maritime Science certificate.

MAS 121
ABLE SEAMAN TRAINING
(80 Lecture/Lab Hrs. Total) 4 Credits
Students learn and practice the skills required to pass the US Coast Guard (USCG) Merchant Mariner exam for Able Seaman. It is highly recommended that students have their Merchant Mariner's application approved by the USCG before enrolling in the course. **Prerequisite:** Instructor approval

MAS 122
OUPV TRAINING
(80 Lecture/Lab Hrs. Total) 4 Credits
Students learn and practice the skills required to pass the US Coast Guard (USCG) Merchant Mariner Exam for Operator of Un-inspected Passenger Vessel (OUPV). Upon successful completion of this training course the student will receive a certificate of completion that satisfies the USCG testing requirements for OUPV. To insure that the student meets the USCG licensing requirements it is strongly recommended that students have received their USCG approval for OUPV prior to enrolling in the class. **Prerequisite:** Instructor approval.

MAS 123
100 TON MASTER TRAINING
(100 Lecture/Lab Hrs. Total) 5 Credits
Students learn and practice the skills required to pass the US Coast Guard (USCG) Merchant Mariner exam for Master of Inspected Vessels of not more than 100-gross ton (100-ton Master). Upon successful completion of this training course the student will receive a certificate of completion that satisfies the USCG testing requirements for licenses within the scope of the course. To insure that the student meets the USCG licensing requirements it is strongly recommended that students have received their USCG approval prior to enrolling in the class. **Prerequisite:** Instructor approval.

MAS 124
200 TON MASTER TRAINING
(120 Lecture/Lab Hrs. Total) 6 Credits
Students learn and practice the skills required to pass the US Coast Guard (USCG) Merchant Mariner Exam for Master of Inspected Vessel not to exceed 200-gross ton. Upon successful completion of this training course the student will receive a certificate of completion that satisfies the USCG testing requirements for licenses within the scope of the course. To insure that the student meets the USCG licensing requirements it is strongly recommended that students have received their USCG approval prior to enrolling in the class. **Prerequisite:** Instructor approval.

MAS 125
500/1600/UNLIMITED LICENSE PREP
(40 Lecture/Lab Hrs. Total) 2 Credits
This course is for professional mariners who wish to review examination subjects prior to testing at the US Coast Guard Marine Safety Office for an upgrade increase in scope of an existing license. Students purchase time in forty-hour blocks to meet training objects determined through sample exams and evaluations. This course may be purchased up to four times depending on the extent of the training needs of the student. Testing is completed at a USCG Marine Safety Office. It is highly recommended that students have their USCG approval for the license prior to training. Additional classes may be required to satisfy the STCW requirements. Course may be taken up to four (4) times for a total of eight (8) credits. **Prerequisite:** Instructor approval.

MAS 126
OCEANS ENDORSEMENT PROGRAM
(80 Lecture/Lab Hrs. Total) 4 Credits
Students learn and practice the skills required to pass the US Coast Guard (USCG) Merchant Mariner Exam for an Ocean's Endorsement. Upon successful completion of this course the student will receive a certificate of completion that is accepted, in lieu of testing, at the USCG Marine Safety Office, for an ocean endorsement on a license up to and including 1600 ton master of inspected vessels. **Prerequisite:** Instructor approval.

MAS 130
RADAR OBSERVER: ORIGINAL ENDORSEMENT, UNLIMITED
(10 Lecture, 30 Lab Hrs.; 40 Hrs. Total) 2 Credits
Students develop proficiency in radar operations gained through lecture, demonstration, transfer plotting, and direct plotting using radar simulators. Students engage in the simulator use of Automatic Radar Plotting Aids (ARPA).

MAS 131
RADAR OBSERVER: RECERTIFICATION
(24 Lecture/Lab Hrs. Total) 1 Credit
Students increase their proficiency in direct plotting problems, and review plotting techniques, and operation of radar. **Note:** For individuals who would like to refresh their skills before taking the radar endorsement final exam.

MAS 132
RADAR OBSERVER: RIVERS
(24 Lecture/Lab Hrs. Total) 1 Credit
Students demonstrate mastery of the knowledge and skills required to safely navigate a vessel, with the aid of radar, upon rivers covered by the Inland Navigation Rules of the Road.

MAS 133
ARPA TRAINING (AUTOMATIC RADAR PLOTTING AIDS)
(32 Lecture/Lab Hrs. Total) 1 Credit
Students demonstrate the knowledge of the principles and application of ARPA (Automatic Radar Plotting Aids). The U.S. Coast Guard approved course meets or exceeds the minimum level of knowledge specified in the US Coast Guard, STCW and IMO requirements for ARPA. **Prerequisite:** Instructor approval and successfully completed an approved "Unlimited" Radar Observer's course.

MAS 134
STCW GMDSS TRAINING (GLOBAL MARINE DISTRESS SAFETY SYSTEM)
(70 Lecture/Lab Hrs. Total) 3 Credits
Students demonstrate knowledge and skill in the proper use of GMDSS communications systems and other GMDSS equipment such as Emergency Position Indicating Radio Beacons (EPIRB's), and Search and Rescue Transponder (SART). This U.S. Coast Guard approved course meets or exceeds the minimum level of knowledge specified in the US Coast Guard, STCW and IMO requirements for training in Global Marine Distress Safety System (GMDSS). **Prerequisite:** instructor approval.

MAS 135
STCW BASIC SAFETY TRAINING
(20 Lecture, 20 Lecture/Lab Hrs. 40 Hrs.Total) 3 Credits
Students demonstrate knowledge and practical application of the skills required by the U.S. coast Guard for all persons employed on offshore vessels. Skill areas include safe work habits, proper use of safety and survival equipment, basic firefighting and first aid.

MAS 136
STCW BRIDGE RESOURCE MANAGEMENT
(12 Lecture, 12 Lecture/Lab Hrs. 24 Hrs. Total) 1 Credit
This Coast Guard approved, STCW Bridge Resource Management course meets or exceeds the requirements to attain certification under the standards set forth by the U.S. Coast Guard, and STCW95 IMO regulations. Students demonstrate skills and knowledge needed to operate effectively in an operational shipboard bridge environment.

MAS 137
RADAR NAVIGATION
(10 Lecture, 22 Lecture/Lab Hrs. 32 Hrs. Total) 2 Credits
Students demonstrate an understanding of radar theory and operation. Students will use radar/ARPA simulators for navigation and collision avoidance exercises. Students will demonstrate knowledge of previously learned navigation and plotting skills. **Prerequisite:** instructor approval.

MAS 147
VESSEL REGULATIONS
(60 Lecture/Lab Hrs. Total) 3 Credits
Students learn to use the Code of Federal Regulations for Marine Transportation (46 CFR) for owner/operator drills and inspection and the preparation of a vessel for US Coast Guard inspection. **Prerequisite:** instructor approval.

MAS 148
VESSEL STABILITY
(60 Lecture/Lab Hrs. Total) 3 Credits
Students demonstrate and apply the principles of stability, including free surface effect, center of gravity, effects of loading, and the rolling period. **Prerequisite:** completed or concurrent enrollment in MTH 65 or higher, or instructor approval.

MAS 150
MARINE SAFETY
(10 Lecture, 30 Lab Hrs.; 40 Hrs. Total) 2 Credits
Students demonstrate mastery of the skills and techniques needed for prevention and treatment of cold water near drowning and hypothermia; cold water survival skills; sea survival; fire fighting and emergency drills; orientation; and emergency instructions.

MAS 155
INTRODUCTION TO WATCHKEEPING
(10 Lecture, 30 Lab Hrs.; 40 Hrs. Total) 2 Credits
Students demonstrate and apply watchkeeping skills including application of compass error; rules of the road; aids to navigation; marine radios; and position fixing and distance measuring on the nautical chart. Class includes practical experience during boat labs. Concurrent enrollment in MAS 175 is encouraged.

MAS 164
INTRODUCTION TO NAVIGATION
(60 Lecture/Lab Hrs. Total) 3 Credits
Students demonstrate the knowledge and skills required to conduct a vessel safely from one position to another including position, direction, and distance on the water. Celestial navigation is not included in this course. **Prerequisite:** MAS 168 or instructor approval.

MAS 165
PRACTICAL NAVIGATION
(10 Lecture, 30 Lab Hrs.; 40 Hrs. Total) 2 Credits
Students demonstrate mastery of navigation skills used on Mercator charts, including dead reckoning, fixing a position, and maintaining nautical charts. Students demonstrate proper use of major navigation publications. Concurrent enrollment in MAS 164 is encouraged.

MAS 167
CELESTIAL NAVIGATION
(80 Lecture/Lab Hrs. Total) 4 Credits
Students demonstrate knowledge and skill in the practical application of plotting lines of position using the sun, moon, planets and stars by sight reduction tables. Completion of this course satisfies USCG testing requirements for up to 1600 Oceans endorsement.

MAS 168
CHARTS, AIDS TO NAVIGATION, AND MARINE COMPASSES
(60 Lecture/Lab Hrs. Total) 3 Credits
Students demonstrate in-depth knowledge of the Lateral and International Association of Lighthouse Authorities aids to navigation systems; the charts used in marine navigation; the magnetic compass, its deviation and compensation; and the basics of gyrocompasses.

MAS 170
MARINE WEATHER, TIDES, CURRENTS AND WAVES
(60 Lecture/Lab Hrs. Total) 3 Credits
Students demonstrate in-depth knowledge of the effects of tides and currents, use of tables for calculating tides and currents, weather patterns found in the Pacific Northwest, and the use and interpretation of various weather instruments found onboard vessels.

MAS 171
COASTAL NAVIGATION AND VOYAGE PLANNING
(60 Lecture/Lab Hrs. Total) 3 Credits
Introduction to principles of coastal navigation including tides and currents, set and drift, coastal radar navigation, dead reckoning, estimated positions, and bathymetric navigation. Students will be introduced to proper and effective voyage planning oriented to the Pacific coast and Pacific Northwest including selection of appropriate charts, research of publications, pre-plotting intended course, planning for set and drift, waypoint selection, ETA's, weather, and hazards that may be encountered. **Prerequisite:** MAS 164 or instructor approval.

MAS 172
OCEAN NAVIGATION AND VOYAGE PLANNING
(80 Lecture/Lab Hrs. Total) 4 Credits
Students will be introduced to the tools and techniques of ocean navigation including great circle routes, electronic position fixing, use of sextant in ocean navigating, latitude by Polaris, latitude by meridian passage, ETA's, universal time, Nautical Almanac, and other publications used for ocean passages. Students will become familiar with ocean passage planning and enroute activities. **Prerequisite:** MAS 171 or instructor approval.

MAS 175
RULES OF THE ROAD
(60 Lecture/Lab Hrs. Total) 3 Credits
Students gain an in-depth knowledge of the Navigation Rules through studying the history of the Navigation rules, reading case studies of collisions, and analyzing the application of the Navigation Rules. It is suggested that this course be taken consecutively with MAS 155 Introduction to Watchkeeping.

MAS 180
MARINE ELECTRONICS
(40 Lecture/Lab Hrs. Total) 2 Credits
Students demonstrate and apply knowledge and skill in the use and operation of marine electronic equipment including radios, sounders, radar, sonar, loran, and Global Positioning System (GPS). **Prerequisite:** instructor approval.

MAS 181
SEAMANSHIP I
(40 Lecture/Lab Hrs. Total) 2 Credits
Students learn and apply knowledge of marlinespike seamanship skills which includes the use of synthetic lines, line handling, and knots and splices, while actively participating in vessel operations. Includes five days of vessel time. **Prerequisite:** instructor approval.

MAS 182
SEAMANSHIP II
(40 Lecture/Lab Hrs. Total) 2 Credits
Students acquire basic skills and knowledge of rigging techniques including the proper use of wire rope and blocks and tackles. Students continue to develop and refine marlinespike seamanship skills. Includes five days of vessel time. **Prerequisite:** completion of MAS 181 and instructor approval.

MAS 183
SEAMANSHIP III
(40 Lecture/Lab Hrs. Total) 2 Credits
Students acquire basic skills and knowledge of the safe operation of deck machinery found on workboats. Students continue to develop marlinespike seamanship skills. Successful completion of the US Coast Guard Able Seaman Practical Knot Exam and demonstration of skills mastered in previous Seamanship classes is required. Includes five days of vessel time. **Prerequisite:** completion of MAS 182 and instructor approval.

MAS 184
GALLEY COOKING
(40 Lecture/Lab Hrs. Total) 2 Credits
Students learn to select healthy, appetizing foods that can be prepared on a vessel underway. Includes safe storage techniques, meal selection, and budgeting. **Prerequisite:** instructor approval.

MAS 185
BRIDGE TO BRIDGE COMMUNICATION
(60 Lecture/Lab Hrs. Total) 3 Credits
Students will learn basic radio law and operation practices of marine radios, general information about Global Marine Distress Safety System (GMDSS) as required under STCW and IMO guidelines. Students will be prepared to take an FCC exam on Elements 1 and 7.

MAS 186
SMALL VESSEL OPERATIONS I
(40 Lecture/Lab Hrs. Total) 2 Credits
Students are introduced to the duties and responsibilities of small vessel operations. They demonstrate vessel-handling skills under a variety of conditions while emphasizing standards of safe seamanship. Includes five days of vessel time. **Prerequisite:** instructor approval.

MAS 187
SMALL VESSEL OPERATIONS II
(40 Lecture/Lab Hrs. Total) 2 Credits
Focuses on advancing the skills required to safely handle small vessels under adverse conditions, minimizing the hazards of loading, and organizing and managing a navigational watch. Students are required to demonstrate skills learned in the previous small vessel operation class while onboard the training vessel. **Prerequisite:** completion of MAS 186 and instructor approval.

MAS 188
SMALL VESSEL OPERATIONS III
(40 Lecture/Lab Hrs. Total) 2 Credits
Students develop and demonstrate the skills required for safe operation of a small vessel. Students apply 46 CFR Sub-chapter T regulations for small passenger vessels, including conducting the required drills and inspections. Students also demonstrate advanced vessel handling skills and bridge management strategies. Demonstration of previously learned skills is required while onboard the training vessel. **Prerequisite:** completion of MAS 187 and instructor approval.

MAS 189
APPLIED RIGGING TECHNOLOGY
(40 Lecture/Lab Hrs. Total) 2 Credits
In this hands-on rigging class held onboard the training vessel, students will learn about, and be able to demonstrate techniques and knowledge in, wire and synthetic rope, rigging hardware, tackle blocks, chain, slings, crane operation, crane safety, and load lifting. This course compliments the seamanship series. **Prerequisite:** Instructor approval.

MAS 190
VESSEL PRACTICUM
(40 Lab Hrs. Total) 1 Credit
Students complete predetermined projects onboard the training vessel using skills learned in the classroom. Requires a consultation with an instructor to determine outcome objectives. **Prerequisite:** instructor consultation and predetermination of projects.

MAS 191
DECKHAND PRACTICUM
(40 Lab Hrs. Total) 1 Credit
Students demonstrate knowledge and skills in vessel safety by actively performing the duties of a deckhand on the college's training vessel. **Note:** a total of four (4) credits of MAS 191 may be applied toward the AGS degree, Associate of Applied Science degree, and the One-Year Maritime Science certificate. Students required to enroll in College's drug test program.

MAS 192
INTRODUCTION TO DECK MACHINERY AND SAFETY
(40 Lecture/Lab Hrs. Total) 2 Credits
Students demonstrate knowledge of terminology; back deck practices including the safe operation of all deck equipment onboard the training vessel; safe working practices dockside and under way; making repairs and replacing worn or damaged gear; using crane signals; and maintaining a safe working environment. **Prerequisite:** instructor approval.

MAS 193
INTRODUCTION TO ENGINE ROOM MAINTENANCE & SAFETY
(40 Lecture/Lab Hrs. Total) 2 Credits
Students demonstrate knowledge of terminology; engine room layout and machinery identification; working with limited space and accessibility; repair and maintenance procedures; preventive maintenance; emergency repair; use and care of hand tools; checking fluid levels and grease fittings; good housekeeping; and safe working practices. **Prerequisite:** instructor approval.

HM 120
HAZWOPER TRAINING
(12 Lecture, 12 Lab Hrs.; 24 Hrs. Total) 1 Credit
A hands-on course with instruction in terminology, toxicology, hazard evaluation, chemical identification systems, personal protective equipment and hazardous waste site operations. Meets Federal requirement for HAZWOPER training as outlined in the Code of Federal Regulations, Part 29.

MIC MICROCOMPUTER APPLICATIONS

MIC 145
INTRODUCTION TO INTEGRATED SOFTWARE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students learn to use an integrated software package which includes word processing, database, spreadsheet, graphics, and communications operations. **Prerequisite:** Keyboarding skill required.

MIC 171
INTERMEDIATE SPREADSHEETS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students use advanced features and functions of an electronic spreadsheet program which will include the creation of database tables, analysis of data, and development of complex graphs and advanced macros. **Prerequisite:** CSL 107.

MIC 178
USING THE INTERNET FOR COMMUNICATION AND RESEARCH
(3.00 Lecture Hrs./Wk.) 3 Credits
Students get overview information and hands-on experience in accessing and using the resources of the INTERNET. Students learn the basics of networked communications and have the opportunity to use their knowledge of a networked environment. **Prerequisite:** CS 131.

MIC 207
PRESENTATION SOFTWARE
(2.00 Lecture Hrs./Wk.) 2 Credits
Students use software packages and creative design principles to create professional quality presentations which may include on-screen, multi-media, slide show, and hard copy applications. **Prerequisites:** CS 131 or MIC 145.

MIC 210
MICROCOMPUTER INTEGRATED APPLICATIONS
(2.00 Lecture & 4.00 Lecture/Lab Hrs./Wk.) 4 Credits
Students use an integrated software applications package (database, spreadsheet, word processing, graphics, and communications) to develop solutions to problems or case studies from social, business, or other applications. **Prerequisites:** CSD 122, CSL 107, OA 201.

MIC 295
MICROCOMPUTER DIRECTED PROJECT
(2.00 Lecture, 6.00 Lab Hrs./Wk.) 4 Credits
The capstone course for the Microcomputer Business Applications and Computer Information Systems programs. Students build on knowledge gained in other courses and use critical thinking and problem solving skills to address a significant problem in their area of specialization. Students prepare a comprehensive report and make a professional presentation. **Prerequisite:** completion of all but the last quarter of coursework for the AAS Degree

MTH MATHEMATICS

MTH 10
MATH IMPROVEMENT
(2.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students will recognize, and develop skills to cope with, test and math anxiety. Students develop skills in functional math concepts including place value identification, estimating, rounding, whole number operations, fractions, and decimals. Instruction emphasizes vocabulary and math life skills including patterning, grouping, and logical thinking sequences. **Prerequisite:** DMTH 07 or approved ASSET score, or instructor approval.

MTH 20
BASIC MATHEMATICS I
(3.00 Lecture Hrs./Wk.) 3 Credits
For students who need a review of basic arithmetic. Students solve a variety of applications using whole numbers and fractions. Emphasis is placed on using formulas to solve equations. **Prerequisite:** DMTH07 or approved ASSET score, or instructor approval.

MTH 25
MATH REVIEW
(3.00 Lecture Hrs./Wk.) 3 Credits
For students who need a review of basic arithmetic and includes pre-algebra. Students work with applications involving fractions, decimals, and formulas. Students will also use tables, solve, and graph linear equations. **Prerequisite:** MTH 20, or approved ASSET score, or instructor approval.

MTH 60
BASIC MATHEMATICS II
(3.00 Lecture Hrs./Wk.) 3 Credits
Students master the fundamentals of algebra numerically, graphically, and algebraically. Topics include simplifying algebraic expressions, solving linear equations, working with formulas, and modeling with tables, graphs, and equations. **Prerequisite:** MTH 25, or appropriate score on the ASSET mathematics placement tests.

MTH 65
MATHEMATICS FOR THE APPLIED SCIENCES
(4.00 Lecture Hrs./Wk.) 4 Credits
This course satisfies the general education mathematics requirement for most of the Professional and Technical degrees. Students solve problems from a variety of occupations using fractions, decimals, percents, proportions, right angle trigonometry, graphs, and statistics. **Prerequisite:** Passing score on Math Competency exam or MTH 60 grade of A or B.

MTH 70
ALGEBRA - BEGINNING
(5.00 Lecture Hrs./Wk.) 5 Credits
Students employ communication and problem solving skills that involve mathematical reasoning. Topics include integer exponents, polynomial arithmetic, linear inequalities and linear systems of equations. Students will begin to use graphing calculators as a mathematical tool. **Prerequisite:** MTH 60 with a C grade or better, or ASSET placement at MTH 70 level or instructor approval.

MTH 95
ALGEBRA - INTERMEDIATE
(5.00 Lecture Hrs./Wk.) 5 Credits
For students who have had only one year of high school algebra and who need a review in preparation for college algebra. Students demonstrate an understanding of algebraic concepts such as polynomials, exponents, first and second-degree equations, inequalities, functions and graphs, systems of equations, and logarithms. **Prerequisite:** MTH 70 with a C grade or better, or appropriate score on the ASSET mathematics placements tests.

MTH 105
INTRODUCTION TO CONTEMPORARY MATHEMATICS
(4.00 Lecture Hrs./Wk.) 4 Credits
A survey of mathematical concepts and techniques for non-science majors. Students will be expected to use systematic reasoning to solve a variety of problems. Both basic algebra and a solid command of written English are presupposed. **Prerequisite:** MTH 95 or appropriate score on the ASSET mathematics placements tests.

MTH 111
COLLEGE ALGEBRA
(4.00 Lecture Hrs./Wk.) 4 Credits
For students who have had two years of algebra and one year of geometry in high school. Students will demonstrate their knowledge of polynomial, exponential and logarithmic functions through the modeling of real life situations and the use of current technology. **Prerequisite:** MTH 95 or appropriate score on the ASSET mathematics placement tests.

MTH 112
ELEMENTARY FUNCTIONS - TRIGONOMETRY
(4.00 Lecture Hrs./Wk.) 4 Credits
For students planning to take MTH 251 Calculus I who have little or no background in trigonometry. Students are introduced to concepts and applications of trigonometric functions and their inverses by exploring topics such as triangle ratios, periodic functions, and trigonometric identities. **Prerequisite:** MTH 111 or instructor approval.

MTH 211
FUNDAMENTALS OF ELEMENTARY MATHEMATICS I
(3.00 Lecture, 1.00 Lab Hrs./Wk.) 3 Credits
This course is for prospective elementary teachers. Does not satisfy the general education mathematics requirement for the AA degree. Students gain knowledge of concepts and teaching techniques used in elementary school mathematics including problem solving strategies; sets; numeration; whole number operations; number theory; and mental, electronic, and written computation. **Prerequisite:** MTH 95 or instructor approval.

MTH 212
FUNDAMENTALS OF ELEMENTARY MATHEMATICS II
(3.00 Lecture, 1.00 Lab Hrs./Wk.) 3 Credits
For prospective elementary teachers. Does not satisfy the general education mathematics requirement for the AA degree. Students learn concepts and teaching techniques used in elementary school mathematics including fractions and rational number operations; decimals, ratio and proportion; percent; introduction to algebra; and descriptive statistics. **Prerequisite:** MTH 95 with a C grade or better, or instructor approval.

MTH 213
FUNDAMENTS OF ELEMENTARY MATHEMATICS III
(3.00 Lecture, 1.00 Lab Hrs./Wk.) 3 Credits
For prospective elementary teachers. Does not satisfy the general education mathematics requirement for the AA degree. Students demonstrate knowledge of concepts and teaching techniques used in elementary school mathematics including the metric system, informal geometry of measurement, graphing, and basic probability theory. **Prerequisite:** MTH 95 with a C grade or better, or instructor approval.

MTH 241
CALCULUS FOR MANAGEMENT AND THE SOCIAL SCIENCES
(4.00 Lecture Hrs./Wk.) 4 Credits
For students in programs that require only one term of calculus. Students apply techniques of differential and integral calculus to solve a variety of standard problems. **Prerequisite:** MTH 111 with a C grade or better, or instructor approval.

MTH 243
INTRODUCTION TO PROBABILITY AND STATISTICS
(4.00 Lecture Hrs./Wk.) 4 Credits
For students majoring in the arts, sciences and business programs. Students will demonstrate their knowledge of descriptive statistics by the collection, summarization, and analysis of data and the use of current technology. **Prerequisite:** MTH 111 with a C grade or better, or instructor approval.

MTH 244
INTRODUCTION TO PROBABILITY AND STATISTICS
(4.00 Lecture Hrs./Wk.) 4 Credits
For students majoring in the arts, sciences and business programs that require two terms of statistics. Students will demonstrate their knowledge of descriptive and inferential statistics through the use of basic one- and two-sample inferential techniques and current technology. **Prerequisite:** MTH 243 with a C grade or better.

MTH 251
CALCULUS I
(5.00 Lecture Hrs./Wk.) 5 Credits
First course in the standard calculus sequence. Students learn to read, understand, and discuss differential calculus concepts. Students utilize graphical, numerical, and analytical approaches in order to learn differentiation with an emphasis on concept applications to the real world. Graphing calculators and computer technology are used to enhance the learning experience. **Prerequisites:** MTH 112 with a C grade or better.

MTH 252
CALCULUS II
(4.00 Lecture Hrs./Wk.) 4 Credits
Second course in the standard calculus sequence. Students develop an understanding of Riemann sums, definite integrals, and the fundamental theorem of calculus. Students utilize graphing calculators and computer technology to enhance the learning experience. **Prerequisite:** MTH 251 with a C grade or beter.

MTH 253
CALCULUS III
(4.00 Lecture Hrs./Wk.) 4 Credits
Third course in the standard calculus sequence. Students demonstrate an understanding of sequences, geometric series, power series, Taylor series, and Fourier series. Students utilize graphing calculators and computer technology to enhance the learning experience. **Prerequisite:** MTH 252 with a C grade or better.

MUP MUSIC

MUP 174
INDIVIDUAL LESSONS - VOICE
(.50 Lecture, 6.00 Lab Hrs./Wk.) 2 Credits
Individual instruction in voice or instruments. Recitals may be required. No more than 12 credits on a major instrument and six credits on a secondary instrument of individual lessons numbered MUP 171-192 and 271-292 may be applied to an associate degree.

MUP 180
INDIVIDUAL LESSONS - GUITAR
(.50 Lecture, 6.00 Lab Hrs./Wk.) 2 Credits
Students take individual instruction in guitar and may perform in recitals. **Note:** No more than 12 credits on a major instrument and six credits on a secondary instrument of individual lessons numbered MUP 171-192 and 271-292 may be applied to an associate degree.

MUP 275
INDIVIDUAL LESSONS - VIOLIN
(.50 Lecture, 6.00 Lab Hrs./Wk.) 2 Credits
Students take individual instruction in advanced violin and may perform in recitals. **Note:** No more than 12 credits on a major instrument and six credits on a secondary instrument of individual lessons numbered MUP 171-192 and 271-292 may be applied to an associate degree.

NFM NUTRITION & FOOD MANAGEMENT

NFM 225
HUMAN NUTRITION
(4.00 Lecture Hrs./Wk.) 4 Credits
Students develop an understanding of nutrients, their functions, food sources, effects of deficiency, recommended dietary allowances, assessment of nutritional status, practical human nutrition, and nutritional controversies including food fads and fallacies.

NUR NURSING

NUR 60
NURSING SEMINAR
(1.00 Lecture Hr./Wk.) 1 Credit
Nursing students improve their study skills and enhance learning by recognizing alternative learning styles and methods, organizing for effective study, and preparing for testing. **Prerequisite:** Admission into Nursing Program.

NUR 101 and NUR 101L
NURSING: FOUNDATIONS OF CARE
(5.00 Lecture, 9.00 Lab Hrs./Wk.) 8 Credits
Prepares students to provide beginning nursing care for clients in the hospital or extended care setting. Students learn and apply selected functional health patterns in providing individualized nursing care. Students develop an understanding of and use core concepts, including caring, holistic health, critical thinking, the nursing process, and professional behaviors. **Prerequisite:** admission into Nursing program. **Corequisite:** NUR 101 with NUR 101L.

NUR 102 and NUR 102L
NURSING: FOCUS ON INDIVIDUALS
(5.00 Lecture, 12.00 Lab Hrs./Wk.) 9 Credits
Students continue to build on concepts and skills learned in NUR 101. Students learn and practice health restoration interventions for individual clients with adult health problems. Students learn and apply selected functional health patterns in planning and providing care. Students practice more complex psychomotor skills and develop client-teaching strategies. **Prerequisite:** NUR 101 with C grade or higher. **Corequisite:** NUR 102 with NUR 102L, and NUR 112.

NUR 103 and NUR 103L
NURSING: FOCUS ON FAMILIES
(5.00 Lecture, 12.00 Lab Hrs./Wk.) 9 Credits
Continues to build on concepts and skills learned in NUR 102. Students use the concepts of wellness promotion, health maintenance and health restoration and functional health patterns in planning and providing care for clients as individuals and members of families. **Prerequisite:** NUR 102, 112 with C grade or higher. **Corequisite:** NUR 103 with NUR 103L, and NUR 113.

NUR 109 and NUR 109L
NURSING: FOCUS ON MENTAL HEALTH
(24 Lecture and 64 Lab Hrs. Total) 4 Credits
Prepares students to provide nursing care for clients with mental health or psychiatric disorders in an inpatient setting. Students incorporate selected functional health patterns in providing care. Students use the concepts of caring, holistic health, critical thinking, and professional behaviors in the mental health setting. **Prerequisite:** NUR 103, 113 with C grade or higher. **Corequisite:** NUR 109 with NUR 109L.

NUR 111
NURSING CONCEPTS AND CLINICAL PRACTICE 1-3 Credits
(12 Lec/6 Lab Hrs/1Cr; 12 Lec/20 Lab Hrs/2Cr; 20 Lec/30 Lab Hrs/3Cr)
Introduces fundamental concepts of the Clatsop Community College nursing curriculum and reviews previously learned information and skills for students who have previous nursing education (ie., advanced placement students into the Nursing Program). **Prerequisite:** Advanced placement admission to the nursing program (admission at any point beyond NUR 101).

NUR 112
COLLABORATIVE PRACTICE I: PHARMACOLOGY
(2.00 Lecture Hrs./Wk.) 2 Credits
Students acquire and demonstrate knowledge of basic principles of pharmacology applied to the nursing role in administering medications. Learners identify nursing roles and responsibilities in caring for clients receiving medications used to treat common conditions. **Prerequisite:** NUR 101 with a C grade or higher. **Corequisite:** NUR 102.

NUR 113
COLLABORATIVE PRACTICE II: PATHOPHYSIOLOGY & PHARMACOLOGY
(1.00 Lecture Hr./Wk.) 1 Credit
Students acquire knowledge of pathophysiology and pharmacology that they can apply to the nursing role. Students identify nursing roles and responsibilities in administering selected medications to treat selected conditions. **Prerequisite:** NUR 102 and NUR 112 with a C grade or higher. **Corequisite:** NUR 103.

NUR 201 and NUR 201L
NURSING: CLIENTS IN CRISIS
(4.00 Lecture, 12.00 Lab Hrs./Wk.) 8 Credits
Continues to build on previously learned concepts and skills. Prepares the developing professional nurse to apply functional health patterns in caring for clients with acute and/or critical problems in the hospital setting. Students learn and use complex psychomotor skills and incorporate core concepts into practice. Nursing management strategies such as delegation and supervision are introduced. **Prerequisite:** All first year Nursing Program course requirements with C grade or higher. **Corequisite:** NUR 201 with NUR 201L.

NUR 202 and NUR 202L
NURSING: FAMILIES IN CRISIS
(5.00 Lecture, 12.00 Lab Hrs./Wk.) 9 Credits
Continues to build on previously learned concepts and skills. Students develop the ability to use functional health patterns in providing care for individuals and families in times of crisis. Students demonstrate increasing independence and use of nursing management strategies in providing care. **Prerequisite:** NUR 201, 215 and 231 with C grade or higher. **Corequisite:** NUR 202 with NUR 202L.

NUR 208 and NUR 208L
NURSING: TRANSITION INTO PRACTICE
(3.00 Lecture/ 15.00 Lab Hrs./Wk.) 8 Credits
Continues to build on concepts and skills in the previous terms. It prepares students for the transition from nursing student to registered nurse. Students apply learned skills and concepts, providing client care in a community or institutional setting under the guidance of a preceptor nurse. They incorporate concepts in professional behavior and leadership/management issues. **Prerequisites:** NUR 202, 232 with a C grade or higher. **Corequisite:** NUR 208 with NUR 208L.

NUR 215 and NUR 215L
PHYSICAL ASSESSMENT
(2.00 Lecture, 3.00 Lab Hrs./Wk.) 3 Credits
Reviews principles and techniques of physical assessment for the practicing nurse or nursing student. Each section will include a review of related anatomy and physiology; principles, techniques, and practice of physical examination; and common changes from the norm. Students should be able to perform a complete history and physical examination in an organized, systematic manner by the end of the course. **Prerequisite:** limited to currently enrolled nursing students, currently licensed nursing personnel, or those employed or employable in the field of nursing. **Corequisite:** NUR 215 with NUR 215L, and NUR 201 and 231.

NUR 231
COLLABORATIVE PRACTICE III: PATHOPHYSIOLOGY & PHARMACOLOGY
(2.00 Lecture Hrs./Wk.) 2 Credits
Students acquire knowledge of pathophysiology and pharmacology that they can apply to the nursing role. Learners demonstrate an increasing understanding of the effects of acute and chronic diseases and trauma on clients. Students identify nursing roles and responsibilities in administering selected medications used to treat acute, chronic, and critical conditions. **Prerequisite:** All first year nursing program course requirements with grade C or higher. **Corequisite:** NUR 201 and 215.

NUR 232
COLLABORATIVE PRACTICE IV: PATHOPHYSIOLOGY & PHARMACOLOGY
(1.00 Lecture Hr./Wk.) 1 Credit
Students acquire knowledge of pathophysiology and pharmacology that they can apply to the nursing role. Learners demonstrate an understanding of the effects of HIV infection, its complications on the client, and current drug therapies for treatment of HIV infection. Students identify the effects of various pediatric and genetic disorders, enteritis, and complications of the prenatal and postpartum periods. Students identify pathophysiological changes that occur with asthma and tuberculosis, and nursing responsibilities when administering antimycobacterials. Students identify elements of the pharmacological treatment of Parkinson's disease. **Prerequisite:** NUR 201, 215 and 231 with grade C or higher. **Corequisite:** NUR 202.

OA OFFICE ADMINISTRATION

OA 100
DESKTOP PUBLISHING FOR WRITERS
(1.00 Lecture Hr./Wk.) 1 Credit
Students create professional publications for all types of writing that can be printed personally or sent out to a professional printer. **Prerequisite:** student must be concurrently enrolled in WR 270.

OA 104
ENGLISH FOR BUSINESS
(4.00 Lecture Hrs./Wk.) 4 Credits
Students improve their skill in grammar, spelling, vocabulary, punctuation, and the use of reference sources and electronic aids. **Prerequisite:** Score of 37+ on the ASSET English placement test, concurrent enrollment in DRD 40, or instructor approval.

OA 116
OFFICE PROCEDURES
(4.00 Lecture Hrs./Wk.) 4 Credits
Students become proficient in procedures of office work including business communication skills, office management and support duties, and human relations skills. **Prerequisite:** Keyboarding skills and OA 121 or instructor approval.

OA 120
COMPUTER KEYBOARDING
(2.00 Lecture/Lab Hrs./Wk.) 1 Credit
Students develop basic keyboarding techniques using a computer terminal. Applicable to all disciplines.

OA 121
KEYBOARDING I
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students develop skill in keyboarding techniques, proofreading, and machine composition. They acquire skill in producing simple letters, reports, and memorandums. **Note:** Students are placed in keyboarding classes according to their demonstrated proficiency.

OA 122
KEYBOARDING II
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students apply keyboarding skill to moderately complex letters, tables, forms, and manuscripts; increase production words per minute; and master computer word processing vocabulary and concepts. **Prerequisite:** OA 121 or instructor approval.

OA 124
KEYBOARDING SKILL BUILDING
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Based on their current skill level, students identify and correct keyboarding problems, develop overall keyboarding skill, and evaluate skill development progress. **Prerequisite:** OA 121 or ability to key at least 20 words per minute.

OA 135
LEGAL TERMINOLOGY
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students develop a vocabulary of legal terminology and a basic understanding of the United States court system.

OA 139
LEGAL TRANSCRIPTION
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students become proficient in the transcription of legal correspondence and documents. **Prerequisites:** OA 121, OA 135 and OA 225 or instructor approval.

OA 140
MEDICAL TERMINOLOGY I
(3.00 Lecture Hrs./Wk.) 3 Credits
Students master basic medical terminology dealing with specific body systems.

OA 141
MEDICAL TERMINOLOGY II
(3.00 Lecture Hrs./Wk.) 3 Credits
Students master medical terminology dealing with specific body systems. **Prerequisite:** successful completion of OA 140.

OA 142
MEDICAL TRANSCRIPTION
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students review and apply their knowledge of medical terminology through simulated transcription of medical correspondence and reports. **Prerequisites:** OA 141, OA 121 and OA 225 or instructor approval.

OA 201
WORD PROCESSING PROCEDURES I
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students develop word processing knowledge and skills necessary for using IBM-compatible computers and Windows software to prepare and edit documents. **Prerequisite:** OA 121 or instructor approval.

OA 202
WORD PROCESSING PROCEDURES II
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students increase their proficiency in using word processing, develop skill in using advanced-level functions, and practice desktop publishing operations and detailed office-style formatting. **Prerequisites:** OA 201 or instructor approval.

OA 205
DESKTOP PUBLISHING
(2.00 Lecture Hrs./Wk.) 2 Credits
Students develop skill in using desktop publishing software to create presentations, reports, and camera-ready copy. **Prerequisite:** OA 202 or MIC 145 or equivalent.

OA 225
MACHINE TRANSCRIPTION
(6.00 Lecture/Lab Hrs./Wk.) 3 Credits
Students demonstrate skill in using transcribing equipment in rough-draft, memorandum, and letter formats. They become proficient in proofreading and editing copy. **Prerequisite:** OA 121 or instructor approval.

OA 240
FILING AND RECORDS MANAGEMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop competence in basic filing rules; proficiency in setting up manual filing systems; and an understanding of the overall records management function in both small and large businesses.

OA 281
COOPERATIVE WORK EXPERIENCE SEMINAR - BUSINESS
(1.00 Lecture Hr./Wk.) 1 Credit
Students enrolling in cooperative Work Experience will participate in this seminar to discuss and develop an understanding of appropriate and effective work practices. **Prerequisite:** placement in an appropriate work experience job and instructor approval.

OA 295
OFFICE SYSTEMS DIRECTED PROJECT
(2.00 Lecture & 6.00 Lab Hrs./Wk.) 4 Credits
The capstone course for the Office Systems programs. Students build on knowledge gained in other courses and use critical thinking and problem solving skills to address a significant problem in their area of specialization. Students prepare a comprehensive report and make a professional presentation. **Prerequisite:** completion of all but the last quarter of coursework for the AAS Degree.

PE PHYSICAL EDUCATION

No more than six credits of PE 185 earned in different activities at different levels may be applied to an associate degree.

PE 185AA
AEROBIC EXERCISE - BEGINNING
(3.00 Lab Hrs./Wk.) 1 Credit
Students participate in aerobic exercises designed to increase the strength of the cardiovascular system, promote coordination, and develop total body strength and flexibility.

PE 185AB
AEROBIC EXERCISE - INTERMEDIATE
(3.00 Lab Hrs./Wk.) 1 Credit
Students increase cardiovascular strength and understand the importance of exercise as a lifestyle. Students practice simple routines and develop their own routines to achieve individual goals. **Prerequisite:** PE 185AA Aerobic Exercise - Beginning.

PE 185BA
BASKETBALL - BEGINNING
(3.00 Lab Hrs./Wk.) 1 Credit
Students develop and practice basketball skills. They develop sufficient skill and knowledge to serve their recreational interest as a player or spectator.

PE 185BB
BASKETBALL - INTERMEDIATE
(3.00 Lab Hrs./Wk.) 1 Credit
Students will develop and practice more advanced offensive and defensive patterns of basketball play. **Prerequisite:** PE 185BA Basketball - Beginning.

PE 185CA
CROSS TRAINING FOR FITNESS - BEGINNING
(3.00 Lab Hrs./Wk.) 1 Credit
Combines different components of sports and recreational activities along with fitness components producing a workout that will enhance one's cardiovascular fitness as well as agility, speed, strength, balance, and flexibility. Includes components of kickboxing, plyometrics, martial arts, aerobic conditioning, yoga, and other activities related to fitness, recreation, and sports.

PE 185CB
CROSS TRAINING FOR FITNESS - INTERMEDIATE
(3.00 Lab Hrs./Wk.) 1 Credit
Combines different components of sports and recreational activities along with fitness components producing a workout that will continue to enhance one's cardiovascular fitness as well as agility, speed, strength, balance, and flexibility. Includes components of kickboxing, plyometrics, martial arts, aerobic conditioning, yoga, and other activities related to fitness, recreation, and sports. **Prerequisite:** PE 185CA Cross Training For Fitness - Beginning.

PE 185FA
FOIL FENCING - BEGINNING
(3.00 Lab Hrs./Wk.) 1 Credit
Emphasizes safety, skill acquisition and development, and an appreciation for the traditions of fencing. Students will develop skills through a combination of drills, lecture, lessons and practice.

PE 185FB
FOIL FENCING - INTERMEDIATE
(3.00 Lab Hrs./Wk.) 1 Credit
Emphasizes safety, skill acquisition and development, and an appreciation for the traditions of fencing. Students will develop skills through a combination of drills, lecture, lessons and practice. The intermediate class emphasizes more advanced techniques and refinements of ability. **Prerequisite:** PE 185FA Fencing - Beginning.

PE 185GA
GOLF - BEGINNING
(3.00 Lab Hrs./Wk.) 1 Credit
Students develop their golf swing and learn the rules and etiquette of the game of golf.

PE 185GB
GOLF - INTERMEDIATE
(3.00 Lab Hrs./Wk.) 1 Credit
While playing golf each week, students refine their golf swing with emphasis on making special shots. **Prerequisite:** PE 185GA Golf - Beginning.

PE 185HA
HATHA YOGA - BEGINNING
(3.00 Lab Hrs./Wk.) 1 Credit
Students practice the yoga of physical well being, emphasizing breathing techniques and the development of a strong, flexible, relaxed and well-toned body.

PE 185HB
HATHA YOGA - INTERMEDIATE
(3.00 Lab Hrs./Wk.) 1 Credit
Students practice the basic techniques of Hatha Yoga and understand its philosophy as related to western culture. **Prerequisite:** PE 185HA Hatha Yoga - Beginning.

PE 185PA
PERSONAL FITNESS - BEGINNING
(3.00 Lab Hrs./Wk.) 1 Credit
Students develop and actively practice an individualized conditioning program emphasizing cardiovascular fitness, muscular strength, endurance, and flexibility. They receive information on weight control and nutrition.

PE 185PB
PERSONAL FITNESS - INTERMEDIATE
(3.00 Lab Hrs./Wk.) 1 Credit
Students continue to develop and actively practice an individualized conditioning program emphasizing cardiovascular fitness, muscular strength, endurance, and flexibility. **Prerequisite:** PE 185PA Personal Fitness - Beginning.

PE 185PC
PILATES - BEGINNING
(3.00 Lab Hrs./Wk.) 1 Credit
Students will participate in a specific series of exercises, known as Pilates, done in a certain sequence while lying on a mat. The exercises are designed to promote a balanced musculoskeletal system, resulting in core strength, flexibility, good posture and improved body awareness.

PE 185PD
PILATES - INTERMEDIATE
(3.00 Lab Hrs./Wk.) 1 Credit
Students will participate in a specific series of exercises, known as Pilates, done in a certain sequence while lying on a mat. The exercises are designed to promote a balanced musculoskeletal system, resulting in core strength, flexibility, good posture and improved body awareness. Students will further there Pilates practice by practicing more advanced and difficult exercises. **Prerequisite:** PE 185PC Pilates - Beginning.

PE 185TA
TENNIS - BEGINNING
(3.00 Lab Hrs./Wk.) 1 Credit
Students develop and apply the basic skills, strategies, and rules needed to play the game of tennis at a recreational level.

PE 185TB
TENNIS - INTERMEDIATE
(3.00 Lab Hrs./Wk.) 1 Credit
Students develop and apply more advanced skills and strategies needed to play the game of tennis at an advanced recreational level. **Prerequisite:** PE 185 Tennis - Beginning.

PE 185VA
VOLLEYBALL - BEGINNING
(3.00 Lab Hrs./Wk.) 1 Credit
Students develop and apply the fundamental skills, strategies, rules, and etiquette of volleyball.

PE 185VB
VOLLEYBALL - INTERMEDIATE
(3.00 Lab Hrs./Wk.) 1 Credit
Students improve volleyball skills, develop team play and strategies and acquire advanced individual and team skills and techniques. **Prerequisite:** PE 185 Volleyball - Beginning.

PE 185WA
WEIGHT TRAINING - BEGINNING
(3.00 Lab Hrs./Wk.) 1 Credit
Students engage in various methods of weight training which emphasize personal lifetime fitness.

PE 185WB
WEIGHT TRAINING - INTERMEDIATE
(3.00 Lab Hrs./Wk.) 1 Credit
Students engage in methods of weight training which emphasize the planning of personal weight workout goals. **Prerequisite:** PE 185 Weight Training - Beginning.

PH PHYSICS

PH 201
GENERAL PHYSICS
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
Students develop a general knowledge of physics from mechanics to nuclear physics, particularly the law of conservation of energy and how it relates to humans in everyday life. **Prerequisite:** MTH 95, concurrent or prior.

PH 202
GENERAL PHYSICS
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
Students utilize direct inquiry, discussion with peers, and a microcomputer to take the role of a physicist. Students develop mathematical descriptions of mechanical motion. **Prerequisite:** MTH 111, concurrent or prior.

PH 203
GENERAL PHYSICS
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
Students utilize direct inquiry, discussion with peers, and a microcomputer to take the role of a physicist. Students develop mathematical descriptions of thermodynamics, electrical current, and nuclear radiation. **Prerequisite:** PH 202.

PH 211
GENERAL PHYSICS WITH CALCULUS
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
This sequence is for students planning further study in science or engineering. Students utilize direct inquiry, discussion with peers, and a microcomputer to take the role of a physicist: observing, taking data, and analyzing results rapidly and accurately. Students develop mathematical descriptions of mechanical motion. **Prerequisite:** MTH 251 or MTH 241, concurrent or prior.

PH 212
GENERAL PHYSICS WITH CALCULUS
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
Students utilize direct inquiry, discussion with peers, and a computer to develop mathematical descriptions for mechanical energy, rotational motion and electricity. **Prerequisite:** PH 211; and MTH 252 or MTH 241, concurrent or prior.

PH 213
GENERAL PHYSICS WITH CALCULUS
(4.00 Lecture, 3.00 Lab Hrs./Wk.) 5 Credits
Students utilize direct inquiry, discussion with peers, and a computer to develop mathematical descriptions for electricity, magnetism and thermodynamics. **Prerequisite:** PH 212; and MTH 252 or MTH 241, concurrent or prior.

PHL PHILOSOPHY

PHL 101
PHILOSOPHICAL PROBLEMS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students learn to use philosophy as a discipline to apply to all human experience and knowledge, and understand the philosophical questions that have focused human speculation about reality, humanity, the mind and the self throughout human history.

PHL 102
ETHICS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of key ethical problems that have confronted mankind across cultures and times, ethical codes used to resove them, and how these can be applied to current social issues.

PHL 103
CRITICAL REASONING
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop concepts and tools for rational analysis and creative thinking, and learn to assess habits of mind that lead to shallow and fallacious thinking.

PS POLITICAL SCIENCE

PS 201
AMERICAN GOVERNMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students acquire information and concepts about economic, social, and ideological aspects of modern America in relation to our national government institutions.

PS 202
AMERICAN GOVERNMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of the economic, social, and ideological aspects of modern America in relation to our national goals, emphasizing government institutions, focusing on national political processes.

PS 203
STATE AND LOCAL GOVERNMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of the economic, social, and ideological aspects of modern America in relation to our national goals, focusing on the practical operation and contemporary reforms in government at the state and local levels.

PS 205
INTERNATIONAL POLITICS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop understanding of ten major issues in the global community, including American foreign policy, the nature of relations between contemporary nations, nationalism, economic rivalries, and quest for security; international cooperation, and economic and cultural competition.

PSY PSYCHOLOGY

PSY 101
PSYCHOLOGY OF HUMAN RELATIONS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of factors that influence communication in human relationships, including personality differences, learned behaviors and conflict styles. Students practice interpersonal skills and self-observation.

PSY 190
STRESS THEORY AND MANAGEMENT
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop a basic theoretical understanding of the biopsychology of stress, psychosocial factors contributing to stress, and strategies that reduce stress responses.

PSY 201
GENERAL PSYCHOLOGY
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of psychology as a behavioral and social science, including its history, theories, research methods, current knowledge, and its application to human problems. Students focus on research methods, the nervous system, various mental states, sensation and perception. Courses can be taken out of sequence.

PSY 202
GENERAL PSYCHOLOGY
(3.00 Lecture Hrs./Wk.) 3 Credits
Students gain knowledge of learning memory, cognition, language, motivation, personality, and emotion. **Note:** strong reading and writing skills required. Courses can be taken out of sequence.

PSY 203
GENERAL PSYCHOLOGY
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop an understanding of psychological development, assessment, disorders and their treatment, social cognition and behavior, and psychological aspects of physical health. **Note:** strong reading and writing skills required. Courses can be taken out of sequence.

PSY 215
INTRODUCTION TO DEVELOPMENTAL PSYCHOLOGY
(3.00 Lecture Hrs./Wk.) 3 Credits
Students develop knowledge of human development from conception to old age and death, with emphasis on the cognitive, social, and emotional changes over the life span. **Note:** general psychology or human biology strongly recommended..

PSY 216
SOCIAL PSYCHOLOGY
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students learn to analyze and explore human social behavior from a social psychology perspective. The course surveys how psychological processes influence the behavior of groups and how individuals are influenced by culture, society, and other groups.

PSY 219
INTRODUCTION TO ABNORMAL PSYCHOLOGY
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students develop a basic understanding of the variety of emotional, mental, and behavioral disorders experienced by humans. **Note:** PSY 201 strongly recommended.

PSY 231
INTRODUCTION TO HUMAN SEXUALITY
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students demonstrate knowledge of the psychological, social, and biological aspects of human sexual functioning with emphasis on psycho-sexual responses, sexual attitudes and sexual myths and the cultural "values" aspects of human sexuality. **Note:** PSY 201 recommended.

R RELIGION

R 201
GREAT RELIGIONS OF THE WORLD
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students develop an understanding of Joseph Campbell's perspective on myths and world religions, as well as the philosophy of religion, and of early religion, American Native religion, Egyptian religion, the goddess in religion, and Hinduism.

R 202
GREAT RELIGIONS OF THE WORLD
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students develop knowledge of Joseph Campbell's perspective on myths and world religions, as well as knowledge of philosophy of religion, and of Buddhism, Yoga, Tibetan Buddhism, Taoism, and Confucianism.

R 203
GREAT RELIGIONS OF THE WORLD
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students develop knowledge of Joseph Campbell's perspective on myths and world religions, the philosophy of religion, and of Zoroastrianism, Judaism, Greek mystery religions, Christianity, the spiritual dimension of Arthurian romances, and Islam.

RD READING

RD 80
PREPARATION FOR COLLEGE READING I
(3.00 Lecture Hrs./Wk.) **3 Credits**
For students who are experiencing difficulty with college level reading. Course work emphasizes development of skills needed to read academic material. Group and individual activities will help students increase their vocabulary and comprehension skills, learn to apply a variety of reading strategies for different reading situations, and develop an appreciation of reading as a source of education and enjoyment. **Prerequisite:** ASSET score 33-37 or DCO 22; concurrent enrollment in HD 50 recommended.

RD 90
PREPARATION FOR COLLEGE READING II
(3.00 Lecture Hrs./Wk.) **3 Credits**
For students who need to further develop their critical/analytical reading skills. Course work emphasizes development of higher level reading skills improving student understanding and retention of sophisticated reading materials. Group and individual activities will help students increase their vocabulary, comprehension, critical reading, and content reading skills, and develop an appreciation of reading as a source of education and enjoyment. **Prerequisites:** ASSET score 38-41 in reading or RD 80. Concurrent enrollment in HD 50 recommended.

SOC SOCIOLOGY

SOC 204
GENERAL SOCIOLOGY: INTRODUCTION TO SOCIOLOGY
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students become familiar with the terms, concepts, and theories employed by sociologists, with social processes, patterns and institutions, and the historical development of social theory and method.

SOC 205
GENERAL SOCIOLOGY: SOCIAL ISSUES
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students demonstrate knowledge of the sociology of everyday life and social issues with emphasis on descriptive studies, relating forms of interpersonal relationships, conceptual studies, and definitions of the situations by participants.

SOC 210
MARRIAGE, FAMILY & INTIMATE RELATIONS
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students examine intimate relationships, courtship, marriage, and family patterns; address how relationships are built, maintained, changed, and terminated; and consider the influence of intimacy, marriage and family on human development.

SOC 213
MINORITIES: DEALING WITH DIVERSITY
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students develop an awareness of the variety of cultural perspectives in contemporary American society; the values, beliefs, problems, and communication patterns of minorities; and the historic, economic, and political aspects of prejudice and discrimination.

SOC 221
JUVENILE DELINQUENCY
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students develop a theoretical and practical understanding of juvenile delinquency and crime; diversity of delinquent expression; roles of law enforcement, social service agencies, and the court system; relationships with family and schools; and treatment models.

SOC 223
SOCIOLOGY OF AGING
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students develop knowledge of biological and behavioral research on the process of aging and its sociological implications, particularly viewing the aged as a minority group subject to prejudice and discrimination.

SOC 225
GENERAL SOCIOLOGY: SOCIAL PROBLEMS
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students utilize the sociological perspective to analyze contemporary social problems in the United States, particularly primary social problems, including poverty, prejudice and discrimination, overpopulation, and deviance.

SP SPEECH

SP 111
FUNDAMENTALS OF PUBLIC SPEAKING
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students practice public communication skills both as presenters and as involved audience members. Students learn to research, organize, and deliver the major types of speeches. **Prerequisite:** ASSET writing score 35 or above.

SP 112
PERSUASIVE SPEECH
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students study and apply persuasion for a variety of purposes, including debate, irony, stumping, and the jeremiad. Students become aware of their unique strengths as speakers. **Prerequisite:** SP 111 or instructor approval.

SP 115
INTRODUCTION TO INTERCULTURAL COMMUNICATIONS
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students explore stereotypes, general attitudes, values, life styles and cultural patterns of communication in an effort to understand different cultures, how individuals react to change and differences, and how languages shape our perspective. **Prerequisite:** ASSET writing score 42 or above.

SP 130
BUSINESS AND PROFESSIONAL SPEAKING
(3.00 Lecture Hrs./Wk.) **3 Credits**
Emphasizing practical speaking needs of business and professional speakers, students will improve speech efficiency, self-confidence, and skill in planning, organizing and delivering the kinds of presentations encountered in organizations. **Prerequisite:** SP 111 or instructor approval.

SP 219
SMALL GROUP DISCUSSION
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students demonstrate knowledge and skill in the social and task functions of small groups. Social functions include leadership, participation, verbal and non-verbal communication and interpersonal interaction. Task functions include problem solving, conflict management, and agenda setting and group presentations. **Prerequisite:** SP 111 recommended. ASSET writing score 42 or above.

SPAN SPANISH

SPAN 101
FIRST YEAR SPANISH
(4.00 Lecture, 1.00 Lecture/Lab Hrs./Wk.) **4 Credits**
Students develop skills in reading, writing, hearing, and speaking Spanish and develop an insight into Spanish culture.

SPAN 102
FIRST YEAR SPANISH
(4.00 Lecture, 1.00 Lecture/Lab Hrs./Wk.) **4 Credits**
Students expand their comprehension and communication skills in Spanish. **Prerequisite:** SPAN 101 or instructor approval.

SPAN 103
FIRST YEAR SPANISH
(4.00 Lecture, 1.00 Lecture/Lab Hrs./Wk.) **4 Credits**
Students further expand their comprehension and communication skills in Spanish. **Prerequisite:** SPAN 102 or instructor approval.

SPAN 111
CONVERSATIONAL SPANISH
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students develop skills in Spanish conversation using basic vocabulary, grammatical structures, present tense, and cultural concepts. **Note:** This sequence focuses on oral communication--speaking and hearing--with less emphasis on reading and writing.

SPAN 112
CONVERSATIONAL SPANISH
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students improve their skills in Spanish conversation including the use of past tense, more complex grammatical structures, and vocabulary related to traveling, jobs and shopping. **Prerequisite:** SPAN 111 or instructor approval.

SPAN 113
CONVERSATIONAL SPANISH
(3.00 Lecture Hrs./Wk.) **3 Credits**
Students become more proficient in Spanish conversation through using past and future tense and learning vocabulary related to sports, health sciences and everyday situations. **Prerequisite:** SPAN 112 or instructor approval.

SPAN 201
SECOND YEAR SPANISH
(4.00 Lecture Hrs./Wk.) **4 Credits**
Students advance their listening, speaking, reading, and writing skills. This class is conducted entirely in Spanish and stresses grammatical correctness and communicative ability. **Prerequisite:** SPAN 103 or three years of high school Spanish or instructor approval.

SPAN 202
SECOND YEAR SPANISH
(4.00 Lecture Hrs./Wk.) 4 Credits
Students continue to advance their listening, speaking, reading, and writing skills in Spanish. Students use authentic magazine and newspaper articles to expand their cultural awareness. **Prerequisites:** SPAN 201 or instructor approval.

SPAN 203
SECOND YEAR SPANISH
(4.00 Lecture Hrs./Wk.) 4 Credits
Students continue to advance their listening, speaking, reading, and writing skills in Spanish. Students use authentic materials dealing with politics, environmental discussions, and health related issues. **Prerequisite:** SPAN 202 or instructor approval.

SPAN 211
CONVERSATIONAL SPANISH-INTERMEDIATE
(3.00 Lecture Hrs./Wk.) 3 Credits
Students will practice conversational skills concentrating in present and past tenses and grammatical expressions. Class presentations and oral drills will be emphasized. Cultural material will be presented through class discussions, audio-visual material and text readings. **Prerequisite:** SPAN 111, 112, 113 sequence, First Year Spanish sequence, or instructor approval.

SPAN 212
CONVERSATIONAL SPANISH-INTERMEDIATE
(3.00 Lecture Hrs./Wk.) 3 Credits
A continuation of SPAN 211. Students will continue enhancing their conversational skills as they learn complex tenses within new conversational situations. Class presentations, extensive vocabulary and oral drills will be emphasized. Cultural material will be presented through class discussions, audio-visual material and text readings. **Prerequisite:** SPAN 211, SPAN 111, 112, 113 sequence, First Year Spanish sequence, or instructor approval.

SPAN 213
CONVERSATIONAL SPANISH-INTERMEDIATE
(3.00 Lecture Hrs./Wk.) 3 Credits
A continuation of SPAN 212. Students will continue to practice conversational skills covering a variety of topics, tenses and grammatical expressions. Class presentations vocabulary and oral drills will be emphasized. Cultural material will be presented through class discussions, audio-visual material and text readings. **Prerequisite:** SPAN 211, 212; SPAN 111, 112, 113 sequence; First Year Spanish sequence; or instructor approval.

WLD WELDING

WLD 100
MATERIALS PROCESSING
(20.00 Lecture/Lab Hrs./Cr.) 1-4 Credits
Students gain and apply knowledge of the principles, equipment and skills necessary to identify and process varied material utilized in the fabrication industry. Course curriculum follows AWS specifications for qualification and certification of QC 10-95 Entry Level Welder. **Prerequisite:** instructor approval.

WLD 101
SHIELDED METAL ARC WELDING
(20.00 Lecture/Lab Hrs./Cr.) 1-10 Credits
Students gain and apply knowledge of the principles, equipment and skills related to the shielded metal arc welding process, involving various base metals and joints common to industry. Course curriculum follows AWS specifications for qualification and certification of QC 10-95 Entry Level Welder. **Prerequisite:** instructor approval.

WLD 102
GAS METAL ARC WELDING
(20.00 Lecture/Lab Hrs./Cr.) 1-9 Credits
Students gain and apply knowledge of the principles, equipment and skills related to the gas metal arc welding process, involving various base metals and joints common to industry. Course curriculum follows AWS specifications for qualification and certification of QC 10-95 Entry Level Welder. **Prerequisite:** instructor approval.

WLD 103
FLUX CORE ARC WELDING
(20.00 Lecture/Lab Hrs./Cr.) 1-9 Credits
Students gain and apply knowledge of the principles, equipment and skills related to the flux core arc welding process, involving various base metals and joints common to industry. Course curriculum follows AWS specifications for qualification and certification of QC 10-95 Entry Level Welder. **Prerequisite:** instructor approval.

WLD 104
GAS TUNGSTEN ARC WELDING
(20.00 Lecture/Lab Hrs./Cr.) 1-9 Credits
Students gain and apply knowledge of the principles, equipment and skills related to the gas tungsten arc welding process, involving various base metals and joints common to industry. Course curriculum follows AWS specifications, qualification and certification of QC 10-95 Entry Level Welder. **Prerequisite:** instructor approval.

WLD 150
BEGINNING WELDING
(20.00 Lecture/Lab Hrs./Cr.) 1-9 Credits
In this flexible, variable credit course, students develop basic skills in oxy-acetylene and/or shielded metal arc welding. Student entry level depends on previous experience. Credit earned per term depends on the number of new skills mastered. **Prerequisite:** Instructor approval.

WLD 160
INTERMEDIATE WELDING
(20.00 Lecture/Lab Hrs./Cr.) 1-12 Credits
Students develop welding skills to industrial standards in any or all of the following processes: shielded metal arc welding, gas metal arc welding, and flux cored arc welding in all positions; and tungsten inert gas welding on carbon steel, stainless steel and aluminum. Students learn basic welding metallurgy and weld testing methods. Entry level dependent on completion of WLD 150 or previous experience. **Prerequisite:** Instructor approval.

WLD 170
ADVANCED WELDING
(20.00 Lecture/Lab Hrs./Cr.) 1-15 Credits
Students develop welding skills to job entry level including welding design and fabrication methods, joint design, and fundamental welding metallurgy. **Prerequisite:** WLD 160 or instructor approval.

WLD 190
WELDING CERTIFICATION PREPARATION
(20.00 Lecture/Lab Hrs./Cr.) 1-9 Credits
Students develop skill in the forms of welding tested in various welding certification examinations including pipe and plate welding skills. A maximum of five credits may be applied to an associate degree. **Prerequisite:** WLD 160 and instructor approval.

WLD 296
LAYOUT, FABRICATION, AND REPAIR PRACTICES
(2.00 Lecture, 4.00 Lecture/Lab Hrs./Wk.) 4 Credits
Students demonstrate advanced knowledge and/or skills required for welding fabrication repairs. Students complete group and individual projects including a major welded project, as well as repair projects. **Prerequisite:** DRF 139 and WLD 160 and instructor approval.

WR WRITING

WR 40
ENGLISH FUNDAMENTALS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students write descriptive, narrative, and expository paragraphs and essays to improve organization, coherence, sentence control, mechanics, and usage. **Note:** This class is for students who have ASSET writing scores below 45 or need practice before enrolling in WR 121.

WR 115
INTRODUCTION TO COLLEGE WRITING
(3.00 Lecture Hrs./Wk.) 3 Credits
Students study a variety of rhetorical situations, the contextual appropriateness of language, the individual and collaborative nature of the writing process, and the beginning of critical inquiry. **Prerequisites:** WR 40 or a score of 42-44 on the ASSET.

WR 121
ENGLISH COMPOSITION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students read and write essays to explore the writing process, investigate the essay form, and improve thinking, reading, and writing skills. **Prerequisite:** Writing ASSET placement score of 45 or above or equivalent.

WR 122
ENGLISH COMPOSITION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students write effective essays arguing their own ideas, as well as responding to other texts. **Prerequisite:** WR 121.

WR 123
ENGLISH COMPOSITION
(3.00 Lecture Hrs./Wk.) 3 Credits
Students apply library skills, conduct research, and produce integrated, evaluative, and appropriately documented academic papers using multiple sources. **Prerequisite:** WR 121.

WR 227
TECHNICAL REPORT WRITING
(3.00 Lecture Hrs./Wk.) 3 Credits
Students research, organize, and present written and oral technical communications in a variety of fields. **Prerequisite:** WR 121.

WR 241
CREATIVE WRITING - FICTION
(3.00 Lecture Hrs./Wk.) 3 Credits
The first of three-course sequence that focuses on the techniques of creative writing in varied forms. Students write short stories or novel chapters and read and critique short stories written by members of the class and published authors.

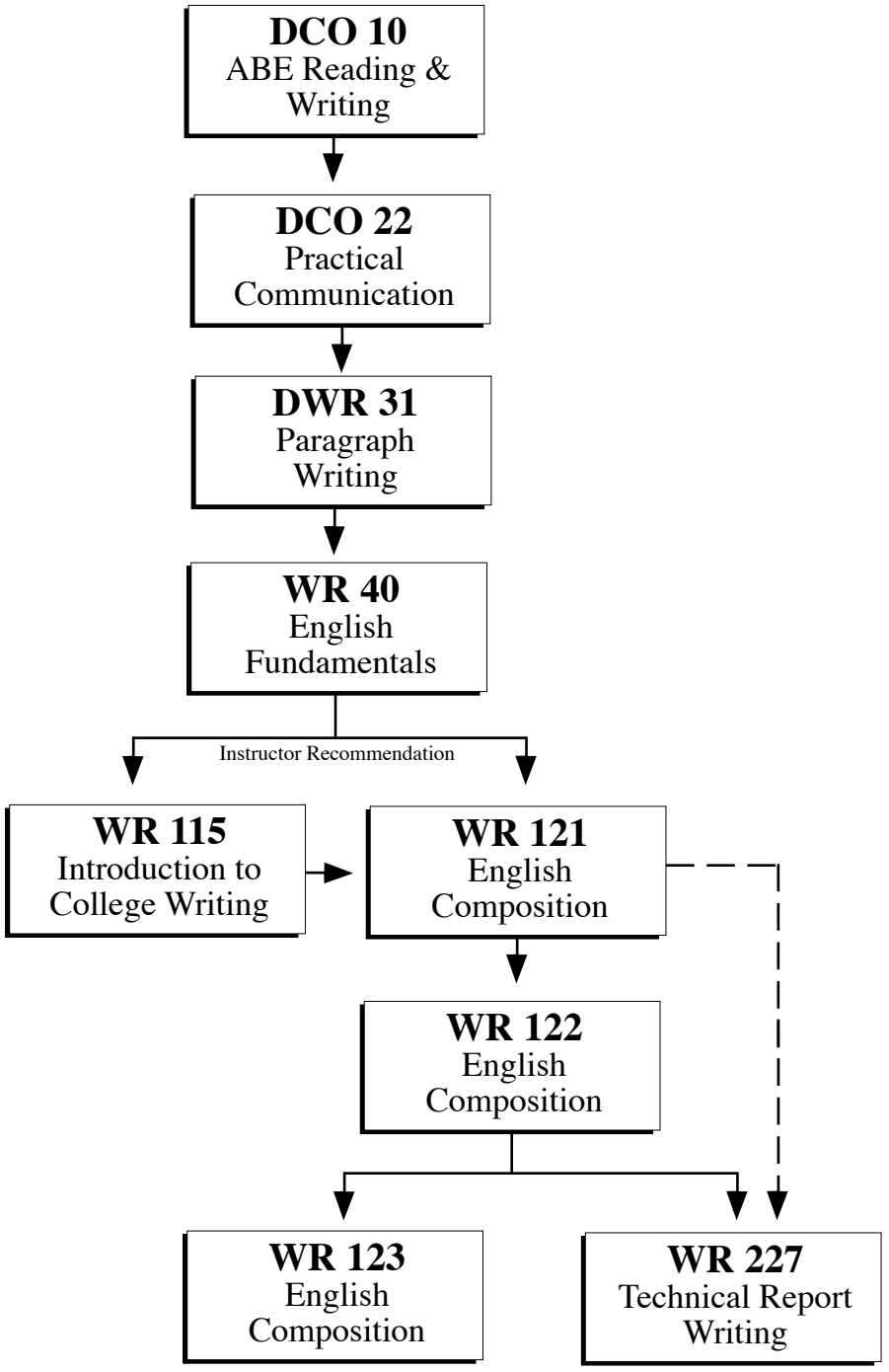
WR 242
CREATIVE WRITING - POETRY
(3.00 Lecture Hrs./Wk.) 3 Credits
Students read and write poetry with or without meter, rhyme, or stanzas and critique poems written by members of the class and published authors.

WR 243
CREATIVE WRITING - DRAMA
(3.00 Lecture Hrs./Wk.) 3 Credits
Students read plays written for stage, radio, TV, and reading; write monologues and 1-3 act plays; and critique plays written by members of the class and published authors.

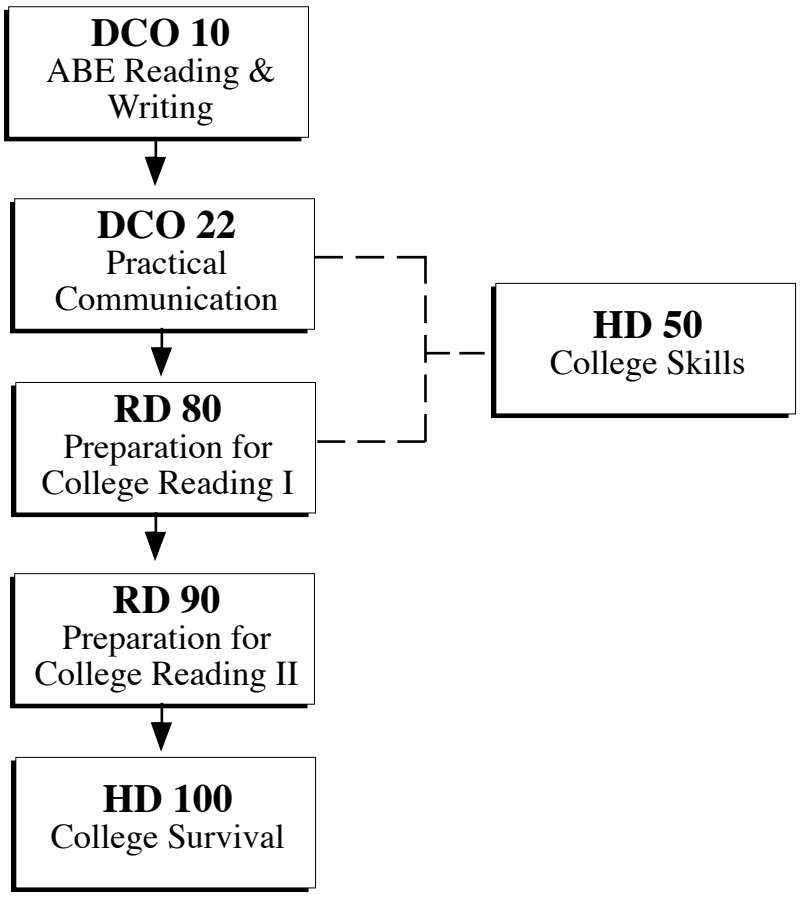
WR 249
WRITING CHILDREN'S BOOKS
(3.00 Lecture Hrs./Wk.) 3 Credits
A creative writing course designed for those who want to learn the techniques of writing for children: choosing an appropriate topic, creating vivid characters, using visual imagery, editing for young readers, and determining age appropriateness. Students will write fiction, non-fiction, and poems, and will design a picture book. Publishing will also be discussed.

WR 270
LITERARY PUBLICATIONS
(3.00 Lecture Hrs./Wk.) 3 Credits
Students learn the fundamentals of professionally editing a literary magazine. Students develop a philosophy of editing and, through active participation in publishing a college literary magazine, develop an understanding of the principles and procedures of editing and publishing. **Prerequisite:** instructor approval or WR 121.

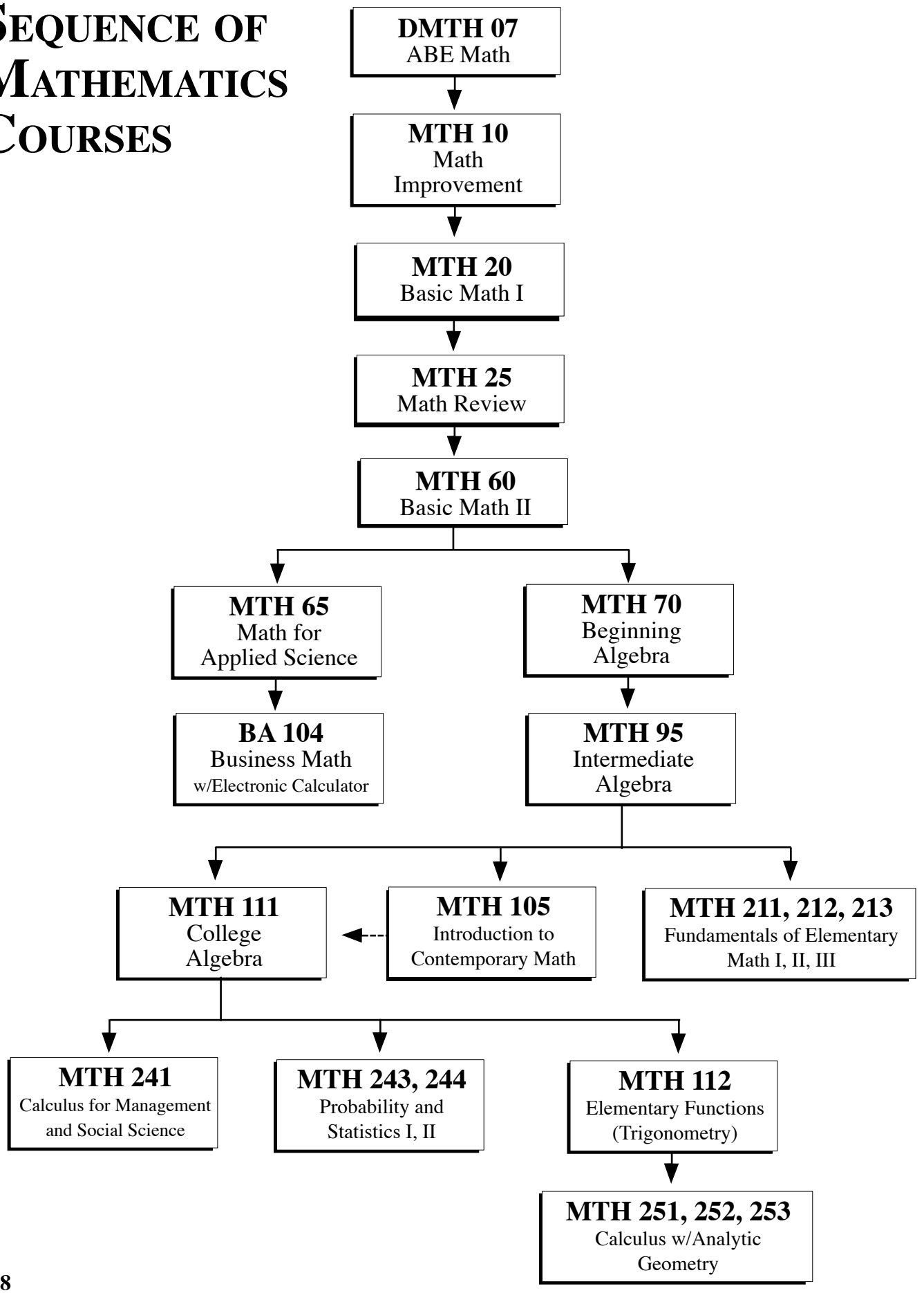
Sequence of Writing Courses



Sequence of Reading Courses



Sequence of Mathematics Courses



Contact Information

GENERAL INFORMATION ..... (503) 325-0910
REGISTRATION..... (503) 338-2437

Admissions	(503) 338-2411 or 1-866 CLATSOP (toll free)	admissions@clatsopcc.edu
Arts & Ideas	(503) 338-2473	
A.S.B.G. Office	(503) 338-2495 *or* 338-2359	
Assessment Center	(503) 338-2426	
Cafeteria	(503) 338-2446	
Carl Perkins Program	(503) 338-7675	
College Services	(503) 338-2422	
Continuing Education & Development	(503) 338-2408	
Computer Lab, Fertig	(503) 338-2429	
Computer Lab, Towler	(503) 338-2493	
Co-op Work Experience	(503) 338-2480	cwe@clatsopcc.edu
Copy Center	(503) 338-2304	
Counseling	(503) 338-2474	
Developmental Education	(503) 338-2347	
Disabilities Specialist	(503) 338-2474	
Educational Talent Search	(503) 325-2869	etsub@clatsopcc.edu
Financial Assistance	(503) 338-2322	financial_assistance@clatsopcc.edu
Foundation	(503) 338-2323 or 338-2477	
G.E.D. Program	(503) 338-2475	
G.E.D. Testing	(503) 338-2426	
Human Resources	(503) 338-2406	
Integrated Marine Tech Center	(503) 338-7670	
J.O.B.S. Direct Line	(503) 325-2021 ext. 403	
Instructional Services	(503) 338-2440	
Learning Skills Center	(503) 338-2347	
Linfield Program	(503) 338-2308	
Literacy Coordinator	(503) 338-2557	
Lives in Transition	(503) 338-2377	
Maritime Science Center	(503) 325-7962	
Payroll	(503) 338-2439	
Personnel	(503) 338-2406	
Phi Theta Kappa	(503) 338-2319	
Plus Program	(503) 338-2346	plusprogram@clatsopcc.edu
President's Office	(503) 338-2425	
Public Information	(503) 338-2350	
Records/Registration	(503) 338-2437	registrar@clatsopcc.edu
Small Business Development Center	(503) 738-3347 or 1-800-206-7352	
South County Center	(503) 738-3346 or (503) 338-2405	
Scholarships	(503) 338-2468	scholarships@clatsopcc.edu
Student Services	(503) 338-2411	
Tutoring Lab	(503) 338-2455	
Upward Bound	(503) 325-2869	etsub@clatsopcc.edu
Veteran's Services	(503) 338-2414	
Western Oregon University	(503) 338-2310	extend@wou.edu
Work Experience	(503) 338-2480	cwe@clatsopcc.edu

ALDERMAN, JERRY — **INSTRUCTOR, MARITIME FIRE SCIENCE**
B.S. Sociology, University of Oregon, 1962. Experience as Fire Operations Chief; at Clatsop Community College full-time since 2001.

ANTILLA, WILLIAM — **INSTRUCTOR, MARITIME SCIENCE**
Experience in commercial fishing; licensing through US Coast Guard; at Clatsop Community College since 1995.

BARNES, CORIN — **INSTRUCTOR, NURSING**
BS Nursing, University of Portland, 1995; at Clatsop Community College since 2004.

BEVERIDGE, RICHARD — **INSTRUCTOR, MATHEMATICS**
BS Mathematics, University of Maine; BA French, University of Virginia; MA Mathematics, University of Maine; MEd., Oklahoma City University; at Clatsop Community College since 2004.

BLACK, JO ANN — **INSTRUCTOR, NURSING**
B.S. Nursing, Arizona State, 1971; MS in Community Health Nursing, University of Portland, 1997. Experience as Infection Control Nurse and Staff Nurse; at Clatsop Community College since 1992.

BOCK, GENE — **INSTRUCTOR, MARITIME SCIENCE**
A.A. Forestry, Southwestern Community College, Coos Bay, 1970. Commercial fishing experience; licensing through U.S. Coast Guard; at Clatsop Community College since 1999 (part-time), 2000 (full-time).

BRISTOL, HARLEY — **INSTRUCTOR, WELDING**
Thirty-seven years of experience in welding and fabrication; AWS certified; at Clatsop Community College since 2001.

BROWN, JULIE — **INSTRUCTOR, WRITING**
B.S. English, Oregon State University, 1979; M.F.A. Creative Writing, University of Montana, 1985; Ph.D. English, University of Wisconsin, Milwaukee, 1990; at Clatsop Community College since 1995.

BUNCH, MICHAEL — **INSTRUCTOR, BIOLOGY**
B.A. Zoology, M.A. Biology, Humboldt State University, 1970; M.Ed., Educational Technology, Arizona State University, 1985; Doctor of Arts, Biology, Idaho State University, 1975. At Clatsop Community College since 1993.

CAMPBELL, SARA — **LIBRARIAN**
M.L.S. Librarianship, University of Washington; B.A. South Asian Area Studies, University of CA at Berkeley; at Clatsop Community College since 1996.

CAZEE, CAROLYN — **INSTRUCTOR, NURSING**
B.S. Nursing, St. Joseph's College, 2001; at Clatsop Community College since 2005.

CHOATE, LAURIE — **INSTRUCTOR, BIOLOGICAL SCIENCES**
M.S.N. Maternal Child Nursing, University of Washington, 1978; B.S. Nursing, University of Washington 1976; at Clatsop Community College since 1997.

CONNAWAY, DEBRA — **INSTRUCTOR, MEDICAL ASSISTING**
Nationally certified Medical Assistant Program Educator; at Clatsop Community College since 2000.

COOK, NANCY — **INSTRUCTOR, WRITING**
BS, Interdisciplinary Studies emphasizing creative writing and environmental science, Evergreen State College; MFA -Writing, University of Alaska; at Clatsop Community College since 2004.

DEGNER, DENNIS — **INSTRUCTOR, MARITIME SCIENCE**
Experience in commercial fishing; licensing through U.S. Coast Guard; at Clatsop Community College since 1994.

ENTLER, JIM — **INSTRUCTOR, SMALL BUSINESS MANAGEMENT**
B.A., Ambassador College; M.M., Adkison Graduate School of Management Willamette University, 1991. Consulting for EMC2 Consulting/ Business and Management; at Clatsop Community College since 1992.

GOODFRIEND, HEATHER — **INSTRUCTOR, CHEMISTRY**
B.A. Chemistry, University of Minnesota; M.S. Physical Chemistry, University of Minnesota; at Clatsop Community College since 2000.

GUIDI, DALE (DEAC) — **INSTRUCTOR, SPEECH**
B.A. Speech Communication, Montana State University; M.A. Speech Communication, Idaho State University; at Clatsop Community College since 2000.

GUNDERSON, LUANN — **INSTRUCTOR, OFFICE/MICRO-COMPUTER APPLICATIONS**
M.A. Business & Industry Education, University of Minnesota, 1997; B.S. Business Education/Vocational Education, Minot State University, 1994; at Clatsop Community College since 1997.

HAM, BILL — **INSTRUCTOR, MARITIME SCIENCE**
Has thirty years service in the U.S. Coast Guard and licensing through U.S. Coast Guard; at Clatsop Community College since 1998.

HARRIS, REBECCA — **SOCIAL SCIENCE INSTRUCTOR**
B.A. Anthropology & Classics, University of Florida, 1993: M.A. Anthropology, 1998, Florida Atlantic University; at Clatsop Community College since 2003.

HYLTON, ELIZABETH — **INSTRUCTOR, MATHEMATICS**
B.S., Mathematics, Portland State University, 1994; M.Ed., Mathematics, Portland State University, 1998; MST Mathematics, Portland State University, 2003; at Clatsop Community College since 2001.

KASPAR, DEBBIE E. INSTRUCTOR, MATH & HISTORY
B.S. Secondary Education, 1973, M.A. History, 1975, University of Idaho; at Clatsop Community College since 1981.

KEEFE, PAT INSTRUCTOR, PHYSICS/PHYSICAL SCIENCE
B.S. Physics, Baker University, 1986; M.S. Physics, Portland State University, 1990. Experience in training staff of volunteers at OMSI for public hands-on experiments; at Clatsop Community College since 1991.

KENNEDY, DEBBIE INSTRUCTOR, NURSING
ASN, Cabrillo College; BSN, Oregon Health Sciences University; at Clatsop Community College since 2004.

KNUTSON-HAWES, CAROL INSTRUCTOR, WRITING & LITERATURE
B.A. English and Language Arts Degree in secondary ed., 1977; M.A. English, University of Oregon, 1985; at Clatsop Community College since 1998.

MCGLOTHIN, JAMES INSTRUCTOR, MATHEMATICS
BS Mathematics and Computer Science, Williamette University; BFA Radio-TV Broadcasting, University of Cincinnati; MST in Mathematics from Portland State University; MBA from the University of Cincinnati; at Clatsop Community College since 2004.

MOHA, CARLA INSTRUCTOR, ACCOUNTING
B.A. Accounting, Western State College, Colorado; M.B.A. at Regis University; at Clatsop Community College since 2000.

MORRISSEY, PATRICIA INSTRUCTOR, FOREIGN LANGUAGES/SPANISH
M.A. in Marine Affairs, University of Rhode Island, 1991; M.S Marine Biology, ITESM, Mexico, 1983; five years adjunct Spanish instructor at CCC; at Clatsop Community College full-time since 1997.

REDWINE, TOMMIE INSTRUCTOR, OFFICE SYSTEMS
M.A.T. (Teaching), Pacific university, 1996; M.B.A., Pepperdine University, 1994; B.A., Psychology, Speech and Drama, 1969; at Clatsop Community College full-time since 2002.

ROWLAND, RICHARD INSTRUCTOR, ART (Ceramics Emphasis)
B.A. Ceramics/Sculpture, Pacific University, 1974; at Clatsop Community College since 2001.

SAGE, FLORENCE E. INSTRUCTOR, SOCIAL SCIENCE
M.Ed. Counseling, Montana State University, 1986; M.A. English, University of New Brunswick, 1967. Journalist and public information experience; Licensed Professional Counselor; at Clatsop Community College since 1987.

SANDERS, STEPHEN INSTRUCTOR, AUTOMOTIVE TECHNOLOGY
AA, Merced College, 1980, Merced, CA; ASE Master certified, 19 years experience in automotive; at Clatsop Community College since 2003..

SELIGMAN, ROSS INSTRUCTOR, PSYCHOLOGY
Advanced B.A. Psychology, Occidental College, 1989; M.A. Clinical Psychology, California State University at Los Angeles, 1991; at Clatsop Community College since 1998.

SEXTON, DAVID INSTRUCTOR, CRIMINAL JUSTICE
B.A. Community Studies, Evergreen State College 1984; FBI Academy, Quantico, VA, 1996; M.A. Criminal Justice Administration, University of Alaska, 2004; 24 years of law enforcement experience; at Clatsop Community College since 2003.

SHAUCK, KRISTEN INSTRUCTOR, ART (2-D)
BFA ,Baylor University, 1989; MFA ,Texas A&M-Commerce,1993; at Clatsop Community College since 2004.

SWERDLOFF, LUCIEN INSTRUCTOR, AUTOCAD & COMPUTER INFORMATION SYSTEMS
B.A. Mathematics, State University of New York, 1981; Masters of Architecture, SUNY, Buffalo, 1986; M.S. Computer Science SUNY, Buffalo, 1988; at Clatsop Community College since 2000.

TOYAS, TEENA INSTRUCTOR, PHYSICAL EDUCATION/HEALTH
B.S. Health and Physical Education; Austin Peay State University, 1978; M.A., Health, PE, and Recreation, Murray State University, 1979; at Clatsop Community College full-time since 2001.

TYSON, MARIAN INSTRUCTOR, COLLEGE PREP/ BASIC SKILLS/ESL/GED
B.A. Spanish, George Fox College, 1973; M.A. TESOL, Portland State University, 1989; at Clatsop Community College since 1998.

WILLIAMS, THOMAS INSTRUCTOR, MARITIME SCIENCE
A.A.-MLT, Shoreline Community College, 1977, Seattle, WA. Tow boating and oil spill response experience; licensing through U.S. Coast Guard; at Clatsop Community College since 2000.

ADMINISTRATIVE & SUPERVISORY STAFF

Clatsop Community College

BOARD OF DIRECTORS	Term Expires in June
Paul Gillum	2007
Doug Grant	2007
Laura Harris	2007
Dr. Marilyn Lane	2007
Rosemary Baker-Monaghan	2005
Karen Mellin	2005
Dr. Frank Satterwhite	2005
Dr. Gregory Hamann, President and Clerk of the District	

ADAMS, JUDY
PROGRAM FACILITATOR, JOBS PROGRAM
B.A. Social Service, University of Portland, 1971. Industry experience; at Clatsop Community College since 1989.

ALSBURY, ROSE
EDUCATION COORDINATOR, CONTINUING EDUCATION
B.S. Liberal Studies, Eastern Oregon University, 2000; at Clatsop Community College since 1996.

ANTILLA, MARGARET
DIRECTOR, ACCOUNTING SERVICES
A.A.S. Accounting, College of the Albemarle, NC; at Clatsop Community College since 1995.

BAILEY, CAROLYN
GUIDANCE COORDINATOR, UPWARD BOUND
B.A. Liberal Arts, University of New Hampshire, 1983; M.A. Teaching, University of New Hampshire, 1990; at Clatsop Community College since 2004.

BANDURRAGA, ABIGAIL
GUIDANCE COORDINATOR
B.A. English, University of Idaho, 1996; at Clatsop Community College since 2002.

BORING, SHARON
DIRECTOR, FINANCIAL AID
Legal and financial aid experience; at Clatsop Community College since 1990.

BRICE, BOBBI
GUIDANCE COORDINATOR, EDUCATIONAL TALENT SEARCH
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B.S. Psychology and Social Studies Education, University of Minnesota, 1976; M.A. Counseling Psychology, Trinity Evangelical Divinity School, 1980; Ph.D. Educational Leadership, Gonzaga University, 1996; at Clatsop Community College since 2003.

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B.A. Communication Studies, Eastern Washington University, 1987; M.S. Human Resource Development, Eastern Washington University, 1993. Experience in service delivery and administration of employment programs; at Clatsop Community College since 1994.

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OUTCOMES

General Education • Accounting • Business Management • Crafts and Industrial Trades

GENERAL EDUCATION OUTCOMES

Clatsop Community College has adopted the following list of general education outcomes as they apply to our Degrees and Certificates. Upon completing the specified degree program, the successful student should be able to:

1. Demonstrate recognition of the significance of science and mathematics. Applies to: AA-OT
2. Demonstrate awareness of the value of the arts and letters and social sciences. Applies to: AA-OT
3. Demonstrate introductory or intermediate college level knowledge in the sciences and mathematics. Applies to: AA-OT, AAS, AGS
4. Demonstrate introductory or intermediate college level knowledge in the social sciences. Applies to: AA-OT, AAS, AGS
5. Demonstrate introductory or intermediate college level knowledge in arts and letters. Applies to: AA-OT, AAS, AGS
6. Demonstrate the ability to communicate effectively through writing, reading, speaking and listening. Effective communications include the ability to:
    a. Write clear, correct, effective prose.
    b. Argue a point using appropriate supporting evidence.
    c. Analyze a written or spoken argument.
    d. Read and analyze college level prose.

    Applies to: AA-OT, AAS, AGS, Certificates
7. Demonstrate the ability to use current information technology. Applies to: AA-OT, AAS, AGS, Certificates
8. Demonstrate the ability to work as a member of a team. Applies to: AA-OT, AAS, AGS, Certificates

Additionally, the Applied Science Programs have developed more specific expected outcomes upon completion of each degree or certificate.

INDIVIDUAL DEPARTMENTAL OUTCOMES

Accounting

- A majority of program graduates will report overall satisfaction with the Accounting education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Accounting Program coursework prepared them well for tasks they must perform on the job.
- 80% of students receiving an Accounting degree will be employed in a related field within six months of completing degree requirements or be continuing in a four-year degree program or other post-secondary program.
- A majority of the Accounting degree program graduates will have completed the AAS requirements within nine terms.

Business Management

- A majority of program graduates will report overall satisfaction with the Business Management education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Business Management program coursework prepared them well for tasks they must perform on the job.
- 80% of students receiving a Business Management degree will be employed in a related field within six months of completing degree requirements or be continuing in a four-year degree program or other post-secondary program.
- A majority of the Business Management graduates will have completed the AAS requirements within nine terms

Crafts and Industrial Trades

- A majority of program graduates will report overall satisfaction with the Crafts and Industrial Trades education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Crafts and Industrial Trades program coursework prepared them well for tasks they must perform on the job.
- 80% of graduates receiving a Crafts and Industrial Trades degree will be employed as a journeyman (or journeywoman) within six months of completing degree requirements.
- A majority of the Crafts and Industrial graduates will have completed the AAS requirements within 15 terms.

OUTCOMES

Criminal Justice

- A majority of program graduates will report overall satisfaction with Criminal Justice education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Criminal Justice program coursework prepared them well for tasks they must perform on the job.
- 80% of students receiving a Criminal Justice degree will be employed in a related field within six months of completing degree requirements or be continuing in a four-year degree program or other post-secondary program.
- A majority of the graduates will have completed the AAS requirements for Criminal Justice within nine terms.

Early Childhood Education

- A majority of program graduates will report overall satisfaction with the Early Childhood education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Early Childhood Education program coursework prepared them well for tasks they must perform on the job.
- 80% of ECE graduates completing either an ECE certificate or an AGS-Option B with an Early Childhood education cluster will be employed within six months in a related field or if already employed in a related field will obtain a more desirable position or an improvement in salary or compensation.
- A majority of the Early Childhood certificate graduates will have completed the certificate requirements within six terms.

Fire Science

- A majority of program graduates will report overall satisfaction with the Fire Science education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Fire Science program coursework prepared them well for tasks they must perform on the job.
- 80% of students receiving a Fire Science degree will be employed as firefighters or serving as volunteer firefighters within six months of completing degree requirements or be continuing in a four-year degree program or other post-secondary program.
- A majority of the Fire Science graduates will have completed the AAS requirements within nine terms.

Industrial and Manufacturing Technologies

Certificate, Automotive Technician
Certificate, Computer-Aided Design and Drafting
Certificate, American Welding Society Entry Level Welder

- A majority of program graduates will report overall satisfaction with the Industrial and Manufacturing Technologies Certificate programs' education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education that they received in the Industrial and Manufacturing Technologies Certificate programs' coursework prepared them well for tasks they must perform on the job.
- 75% of students receiving an Industrial and Manufacturing Technologies certificate, who are seeking employment, will be employed in an entry-level (or better) position in the related field within six months of completing certificate requirements or be continuing in a four-year degree program (or other post secondary program).
- A majority of the Industrial and Manufacturing Technologies graduates will have completed the certificate requirements within five terms.

Maritime Science

- A majority of Maritime Science majors completing a one-year certificate program in Maritime Sciences or the AAS degree in Vessel Operations will report overall satisfaction with the Maritime Sciences education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education that they received in the Maritime Science program coursework prepared them well for tasks they must perform on the job.
- 67% of the Maritime Science majors completing a one-year certificate program in Maritime Sciences or the AAS degree program in Vessel Operations will find employment, within six months, in the maritime industry.
- A majority of Maritime Science graduates will have completed the certificate requirements within four terms or the AAS requirements within nine terms.

OUTCOMES

Medical Assistant • Microcomputer Business Applications • Nursing • Office Systems

Medical Assistant

- A majority of program graduates will report overall satisfaction with the Medical Assistant education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Medical Assistant program coursework prepared them well for tasks they must perform on the job.
- 80% of students receiving a Medical Assistant certificate will be employed in a related field within six months of completing certificate requirements or be continuing in a four-year degree program or other post-secondary program.
- A majority of the graduates will have completed the Medical Assistant certificate requirements within four terms.

Microcomputer Business Applications

- A majority of program graduates will report overall satisfaction with the Microcomputer Business Application education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Microcomputer Business Applications program coursework prepared them well for tasks they must perform on the job.
- 80% of students receiving a Microcomputer Business Application certificate or degree will be employed in a related field within six months of completing certificate or degree requirements or be continuing in a four-year degree program or other post-secondary program (or working on an Associates degree if a certificate was earned).
- A majority of the Microcomputer Business Application graduates will have completed the certificate requirements within four terms or the AAS requirements within nine terms.

Nursing-LPN

- A majority of program graduates will report overall satisfaction with the Practical Nursing education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Practical Nursing program coursework prepared them well for tasks they must perform on the job.
- 80% or more of Practical Nursing program graduates who become licensed and are seeking employment (no pursuing the RN degree) will be employed as LPN's within six months of licensure.
- 80% or more of Practical Nursing graduates will have completed the program within six terms.

Nursing-RN

- A majority of program graduates will report overall satisfaction with the Registered Nursing education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Registered Nursing program coursework prepared them well for tasks they must perform on the job.
- 80% of Registered Nursing program graduates who become licensed as RN's will be employed as RN's within six months of licensure.
- 80% or more of graduates of the RN program, after being admitted to the program, will complete the program within ten terms.

Office Systems

- A majority of program graduates will report overall satisfaction with the Office Systems education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Office Systems program coursework prepared them well for tasks they must perform on the job.
- 80% of students receiving an Office Systems certificate or degree will be employed in a related field within six months of completing certificate or degree requirements or be continuing in a four-year degree program or other post-secondary program (or continuing on for an associates degree if a certificate was earned).
- A majority of the Office Systems' graduates will have completed the certificate requirements within four terms or the AAS requirements within nine terms.

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ACADEMIC CALENDAR 2005 - 2006

	SUMMER 2005	FALL 2005	WINTER 2006	SPRING 2006	SUMMER 2006
REGISTRATION	May 31 - June 24	May 31 - September 30	November 21 - January 13	Feb. 27 - April 7	May 30 - June 30
CLASSES BEGIN	June 20	Sept. 26	January 9	April 3	June 26
LATE REGISTRATION	June 27 - July 5	October 3 - 7	Jan. 16 - 20	April 10 - 14	July 3 - 7
NO SCHEDULED CLASSES - COLLEGE OPEN	August 12 - Sept. 25	October 24-25, November 23 December 15	January 3-6, March 24 - April 2	April 28, June 19 - 23	August 21 - September 22
HOLIDAYS & COLLEGE CLOSURES	July 4, Sept. 2 & 5, All Fridays in July & Aug.	November 11, 24 & 25, December 23 - January 2	January 2 &16, February 20	May 29	July 4, Sept. 1 & 4, All Fridays in July & Aug.
FINAL EXAMS	Aug. 8 - 11	Dec. 9, 12 -14	March 20 - 23	June 12 - 15	Aug. 14 - 17
END OF TERM	August 11	December 15	March 24	June 16	August 18
GRADUATION				June 16	

Associate of Art, Oregon Transfer Degree
Associate of Science, Oregon Transfer Degree in Business
Associate of General Studies

Associate of Applied Science Degrees in Accounting, Business Management, Microcomputer Business Applications, Crafts & Industrial Trades, Criminal Justice, Fire Science, Vessel Operations and Nursing.

Applied Science One-Year Certificates in Microcomputer Applications, General Office, Early Childhood Education, Medical Assistant, Automotive Technician, Computer-Aided Design & Drafting, Welding, Seamanship and Practical Nursing.

Front Cover Photo: Ross Seligman

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