



CLATSOP COMMUNITY COLLEGE

2004 - 2005 CATALOG
SUCCESS STARTS HERE

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.

Affirmative Action: The College encourages applications from students and job candidates who represent diverse backgrounds. (Board Policy 1.002)

Non-Discrimination: The College prohibits discrimination on the basis of race, religion, sex, national origin, disability, Vietnam era veteran status, parental or marital status, age or sexual orientation. This policy of non-discrimination extends to the College's employment practices, the educational opportunities and services for students, in courses and programs, student discipline, in location and use of facilities, and in educational offerings and materials. (Board Policy 1.001)

Sexual Harassment: Clatsop Community College is committed to maintaining a learning and working environment that is free from harassment. (Boar Policy 1.00)

Complaint Process: Students or staff members with concerns regarding discriminatory treatment or sexual harassment should contact the Affirmative Action Officer, (503) 338-2450. A complaint process is available to resolve these issues. Individuals may also contact the State Department of Education, the Bureau of Labor and Industry, the Office of Civil Rights, or the Equal Employment Opportunity Commission.

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

TABLE OF CONTENTS

	<u>Page</u>
ADMISSION TO THE COLLEGE	4
MONEY MATTERS.....	6
REGISTRATION	11
ACADEMIC INFORMATION.....	13
STUDENT SERVICES	18
CONTINUING EDUCATION.....	21
SPECIAL PROGRAMS	23
GRANT FUNDED PROGRAMS.....	24
ADULT EDUCATION & FAMILY LITERACY	25
 ACADEMIC PROGRAMS	
TRANSFER PROGRAMS	
ASSOCIATE OF ARTS, OREGON TRANSFER DEGREE.....	26
ASSOCIATE OF SCIENCE, OREGON TRANSFER DEGREE IN BUSINESS	30
ASSOCIATE OF GENERAL STUDIES DEGREE.....	34
APPLIED SCIENCE PROGRAMS, ASSOCIATE OF APPLIED SCIENCE DEGREE.....	36
OUS TRANSFER LIST A: AA, AS, AGS, AAS COURSE LIST	37
OUS TRANSFER LIST B: AGS & AAS COURSE LIST	39
APPLIED SCIENCE PROGRAMS INDEX.....	41
 REFERENCE	
COURSE DESCRIPTIONS.....	65
SEQUENCE OF WRITING, READING, AND MATHEMATICS COURSES.....	106
CONTACT LIST - DEPARTMENT PHONE NUMBERS	109
FACULTY/STAFF.....	110
EDUCATION AND DEPARTMENT OUTCOMES	114
INDEX	117
ACADEMIC CALENDAR	INSIDE BACK COVER



“Welcome to the 2004-2005 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 24-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!

A handwritten signature in black ink, consisting of stylized initials and a long horizontal flourish.

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 10,000 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 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 aid, 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 nonaccredited 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

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, and 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 it has been longer than a year since you exited the Nursing program, or if you withdrew from the program more than one time, you may apply for Advanced Placement into 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, if you failed or withdrew from the program more than one time, or if you did not qualify for Re-Entry, 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 at least \$15,372 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.

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.

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 Aid/Scholarship: A signed Clatsop Community College financial aid 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 aid, 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 aid 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 aid, 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 aid will be prorated in accordance with federal regulations and are returned to the financial aid programs, not to the student. Details are available at the Financial Aid 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
Per Credit Hour

Residency	Tuition
In-state**	\$54.00
Out-of-State	\$108.00
International	\$189.00

Note: Technology Fee* for 2003 - 2004 is \$4.00 per credit. The Technology Fee is not yet set for 2004 - 2005.

Rates are subject to change without notice. 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.

**Residents of Oregon, Washington, Idaho, Nevada, and California pay in-state 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:

	2004-2005
Admissions application.....	\$15.00
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

Residency (out-of-state tuition)

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.

FINANCIAL AID

Clatsop Community College has a comprehensive financial assistance program that includes grants, loans, and part-time employment for students who qualify. The primary purpose of financial aid is to provide financial assistance to students who would be unable to attend Clatsop Community College without such help. Financial aid 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 aid, 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 aid must also submit official copies of all previous post-secondary grade transcripts to the Admissions Office for evaluation. Financial aid (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 aid until the default has been cleared (See the Financial Aid Office if you need assistance 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 aid 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 Aid: Financial aid 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 Applica-

tion 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 Aid Office. Either of these situations requires a letter from the Department of Education. See the Financial Aid Office for further details.

Financial Need

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).

$$\begin{array}{r} \text{Cost of education} \\ - \text{Expected Family Contribution} \\ = \text{Financial need} \end{array}$$

The EFC is determined by the federal processor using the information on your financial aid 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 aid 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 Aid 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 aid 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 ex-

FINANCIAL AID **MONEY MATTERS**

penses, 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 aid 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

Financial Aid 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 aid 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 aid funds that must be returned by the student are calculated based on the student's withdrawal

Financial Aid 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 \$1,800. 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 \$2,562 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 2004-2005 academic year and are subject to change for 2005 - 2006. Please check with the Financial Aid Office for information on the 2005-2006 award amounts.

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 Aid Office. (Contact the Financial Aid Office for further details on withdrawal date determination.)

If a financial aid 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 aid 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 Aid 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 aid 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 aid.

Student-Owed Repayments

Students receiving cash payments from the financial aid 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 aid 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 aid 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 Aid 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 Aid 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 aid. SAP is determined each term based on your cumulative GPA and the total credits you have earned at Clatsop. Refer to the chart below:

<i>Credit Hours Funded</i>	<i>Cumulative GPA</i>	<i>Percent of Credits</i>
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 aid. Other guidelines also apply. See the *Financial Aid 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 Aid office, and must be submitted by Wednesday, 5:00 PM, the first week of classes. No petitions are accepted for Summer Term.

SCHOLARSHIPS

For High School Students: If you are a high school student considering study at Clatsop, you should meet with your school counselor to discuss eligibility and application for the following scholarships.

All graduating seniors in Clatsop County are given a one-term, half-tuition scholarship to be used at the College for any one term during the year after high school graduation. These are mailed to students in their final term of high school. If you do not receive a certificate in the mail, you should contact the Financial Aid Office.

For Clatsop Students: All applications are available at the Financial Aid office or on-line at www.clatsopcc.edu/scholarships. Scholarship information workshops are held each term. See "Financial Aid" section of class schedule for dates.

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 aid, 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 aid, you should check with the Financial Aid 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 aid eligibility. It may also affect funding for students receiving scholarship funds or funds from outside agencies. Contact the Financial Aid 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.

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

REGISTRATION

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 will 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 Aid. For example, if you need twelve credits to be a full-time financial aid 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 aid 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-seek-

ing 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 transcribed 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 transcribed, 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 aid; however, retakes of courses for which you previously received a passing or required grade cannot be funded.

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 vocational 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, Instructional Programs 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, Instructional Programs 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, Instructional Programs 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 usu-

ally 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 & Development 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 aid funds and CEUs do not count toward financial aid 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, Instructional Programs, 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 Aid. 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 aid, scholarships or Veterans benefits you will be required to maintain satisfactory academic progress in order to continue to receive benefits. (Review the Financial Aid, 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, Instructional Programs.
2. You must submit a formal application approved by the Administrative Assistant to the Vice President, Instructional Programs, 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 Instructional Programs 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, Instructional Programs 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 and to secure future work stations. 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 your learning objectives. Call (503) 338-2480 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 Center 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 at Fertig Hall. Local positions are posted on the Career Services 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 twenty-four 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, Instructional Programs 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 aid or are enrolling for your first term as a degree or certificate seeking student. Financial aid students **must** obtain their advisor's signature on their financial aid attendance form before their financial aid check will be released to them.

Career Services

Career assessment, exploration and planning is available to help you discover how your personal interests, values and abilities relate to your career choice. Your readiness for the workplace or ability to transfer successfully to a four-year college or university may depend on your early identification of career choice and an appropriate educational major.

Services available to you include: a course in career planning (HD 110), individualized counseling with a qualified career counselor, personality and interest assessments, and assistance using relevant career information web sites. The Career Services Office is located in Towler Hall, room 211. For appointments or information call: (503) 338-2480.

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) have 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

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 coordinator will help veterans and eligible dependents with VA educational paperwork and policies as well as general college information or referrals. Initiating VA educational benefit checks generally takes 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 their established program goals.

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 or benefits will be terminated. The VA will not pay for the student to repeat any classes they have previously passed.

Satisfactory Progress: A cumulative GPA of 2.00 is necessary to maintain benefits. Students will be notified of unsatisfactory progress at the end of any term in which they fail to meet minimum standards. A probation letter is sent to any student whose cumulative GPA falls below 2.00. A termination of benefits letter is sent to students who fail to bring their cumulative 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. The student will be certified and receive benefits retroactively by the VA after completion of a successful term.

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 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 many of the campus committees to provide 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

The intramural sports program offers a variety of activities that will allow you to interact with other students outside the classroom and learn about local recreational opportunities. The program varies year to year depending on student interest.

ASBG has equipment for you to use free of charge. A sample of equipment available for you to checkout includes a canoe, cross country skis, snowboards, tennis rackets, croquet sets and golf clubs. Contact ASBG at (503) 338 - 2495 for more information.

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 aid), 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 Aid Handbook. The Financial Aid Handbook includes descriptions of student aid programs, application procedures and eligibility criteria, and the rights and responsibilities of students receiving financial assistance. A Financial Aid Handbook may be picked up at the Financial Aid Office in Towler Hall, Room 201, or you may request one by phone at (503) 338-2322 or email at financial_aid@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 Aid Office. Information is also provided at scholarship workshops held each term. See "Financial Aid" 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.clatsopcc.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) 738-3346 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) 338-2408 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, 1761 N. Holladay, 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).

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.



SERVICES FOR BUSINESS AND INDUSTRY

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

Special Programs

Job Opportunities and 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 Training and Placement Services, 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. Season ticket packages are available. 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 "Stress Management." Classroom activities and discussions include:

- Improving self-esteem
- Promoting assertiveness and boundary-setting techniques
- Understanding grief
- 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.

Clatsop/Linfield Bachelor's Degree Program

Clatsop Community College and Linfield College in McMinnville, Oregon, cooperate to offer a joint program making it possible for you to earn a bachelor's degree in Social and Behavioral Sciences, Business Management, Accounting, Arts and Humanities, International Business, and Business Information Systems.

Registered Nurses with an Oregon license can complete a Bachelor's Degree in Nursing online in four semesters beginning every fall. Contact the Linfield advisor for prerequisite and admission information.

Lower division courses are provided by Clatsop; upper division courses are available online and on the Clatsop campus through arrangements with Linfield College's Division of Continuing Education.

The program features online classes, weekend and evening on-site classes and credit for prior learning. Contact the Clatsop/Linfield Advisor for further information. Phone: (503) 883-2447 or (800)452-4176.

Western Oregon University

Clatsop Community College and Western Oregon University in Monmouth, Oregon cooperate to offer a North Oregon Coast Program. WOU offers upper division and graduate courses for professional development and personal enrichment as well as course work that can earn credits towards a bachelor's or master's degree.

CCC provides lower division courses; upper division courses are brought to the Clatsop campus through arrangements with WOU's Division of Extended Programs. The North Oregon Coast Program includes Clatsop, Tillamook Bay and Oregon Coast community colleges

Contact WOU's North Oregon Coast Program Coordinator for further information. Call (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) 325-2869.

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. Adults who are eligible, who are not in college and who would like help entering college may also receive services. All ETS services are free; ETS has served the local area for over 12 years. If you are interested in more information, please contact the ETS office at (503) 338-2370.

Trio Grant Programs

Educational Talent Search (ETS)

Upward Bound (UB)

Student Support Services (Plus Program)

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 processes which prepare them 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 11 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.

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.

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 19 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. 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.

"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 requirements.

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

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

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	HS 201	Family Alcoholism/Addiction	3
ANT 150	General Anthropology: Archeological	3	HS 205	Youth Addiction	3
ANT 170	General Anthropology: Physical	3	HST 101,102,103	History of Western Civilization	3 ea
ANT 232	Native North Americans	3	HST 201,202,203	History of the United States	3 ea
CJ 100	Survey of Criminal Justice	3	PS 201, 202	American Government	3 ea
CJ 101	Introduction to Criminology	3	PS 203	State and Local Government	3
CJ 110	Introduction to Law Enforcement	3	PS 205	International Politics	3
CJ 114	Gender, Race, Class & Crime	3	PSY 101	Psychology of Human Relations	3
CJ 120	Introduction to the Judicial Process	3	PSY 201,202,203	General Psychology	3 ea
CJ 130	Introduction to Corrections	3	PSY 215	Intro. to Developmental Psychology	3
EC 115	Introduction to Economics	3	PSY 216	Social Psychology	3
EC 201,202	Principles of Economics	4 ea	PSY 219	Introduction to Abnormal Psychology	3
GEO 100	Introduction to Physical Geography	3	PSY 231	Introduction to Human Sexuality	3
GEO 110	Intro to Cultural & Human Geography	3	SOC 204	General Sociology: Introduction	3
GEO 120	World/Regional Geography	3	SOC 205	General Sociology: Social Issues	3
GEO 130	Economic/Resource Geography	3	SOC 225	General Sociology: Social Problems	3
HFS 226	Growing Years	3	SOC 210	Marriage, Family & Intimate Relations	3
HS 101	Alcohol Use, Misuse and Addiction	3	SOC 213	Minorities: Dealing with Diversity	3
HS 102	Drug Use, Misuse and Addiction	3	SOC 221	Juvenile Delinquency	3
HS 154	Community Resources	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	*ES 160	Techniques in Environmental Information Analysis	4
BI 121,122	Basic Human Anat. & Phys. I, II	3 ea	G 145	Field Geology of Oregon	3
*BI 201,202,203	General/Principles of Biology	4 ea	*G 201,202,203	Geology	4 ea
* 211, 212, 213		4 ea	*GS 104,105,106,109	Physical Science	4 ea
BI 222	Human Genetics	3	GS 161	Field Biology of Oregon	3
*BI 231,232,233	Human Anatomy and Physiology	4 ea	MTH 105	Intro. to Contemporary Mathematics	4
*BI 234	Introductory Microbiology	4	MTH 111	College Algebra	4
*BOT 101	Botany	4	MTH 112	Elementary Functions (Trigonometry)	4
*CH 104,105,106	Introductory Chemistry	4 ea	MTH 211,212,213	Fundamentals of Elementary Mathematics I,II,III	3 ea
*CH 221,222,223	General Chemistry	5 ea	MTH 241	Calculus for Management and the Social Sciences	4
CS 160	Intro to Computer Programming	4	MTH 243,244	Intro. to Probability and Statistics	4 ea
CS 161	Computer Science I	4	MTH 251	Calculus I	5
CS 162	Computer Science II	4	MTH 252,253	Calculus II,III	4 ea
CS 163	Computer Science III	4	MTH 254	Vector Calculus I	4
CS 171	Principles of Computer Organization	4	MTH 255	Vector Calculus II	4
CS 260	Data Structures	4	MTH 256	Differential Equations	4
CS 271	Computer Architecture	4	*PH 201,202,203	General Physics	5 ea
CS 279	Network Management I	3	*PH 211,212,213	General Physics with Calculus	5 ea
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			

*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).

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

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

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	HS 201	Family Alcoholism/Addiction	3
ANT 150	General Anthropology: Archeological	3	HS 205	Youth Addiction	3
ANT 170	General Anthropology: Physical	3	HST 101,102,103	History of Western Civilization	3 ea
ANT 232	Native North Americans	3	HST 201,202,203	History of the United States	3 ea
CJ 100	Survey of Criminal Justice	3	PS 201, 202	American Government	3 ea
CJ 101	Introduction to Criminology	3	PS 203	State and Local Government	3
CJ 110	Introduction to Law Enforcement	3	PS 205	International Politics	3
CJ 114	Gender, Race, Class & Crime	3	PSY 101	Psychology of Human Relations	3
CJ 120	Introduction to the Judicial Process	3	PSY 201,202,203	General Psychology	3 ea
CJ 130	Introduction to Corrections	3	PSY 215	Intro. to Developmental Psychology	3
EC 115	Introduction to Economics	3	PSY 216	Social Psychology	3
*EC 201,202	Principles of Economics	4 ea	PSY 219	Introduction to Abnormal Psychology	3
GEO 100	Introduction to Physical Geography	3	PSY 231	Introduction to Human Sexuality	3
GEO 110	Intro to Cultural & Human Geography	3	SOC 204	General Sociology: Introduction	3
GEO 120	World/Regional Geography	3	SOC 205	General Sociology: Social Issues	3
GEO 130	Economic/Resource Geography	3	SOC 225	General Sociology: Social Problems	3
HFS 226	Growing Years	3	SOC 210	Marriage, Family & Intimate Relations	3
HS 101	Alcohol Use, Misuse and Addiction	3	SOC 213	Minorities: Dealing with Diversity	3
HS 102	Drug Use, Misuse and Addiction	3	SOC 221	Juvenile Delinquency	3
HS 154	Community Resources	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	General/Principles of Biology	
211, 212, 213		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 in 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 an 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 101 - Criminology
CJ 110 - Introduction to Law Enforcement
CS 130 - Introduction to Corrections
SOC 221 - Juvenile Delinquency

Emphasis in Fire Science

FRP 150 - Introduction to Fire Protection
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:

CS 131 - Intro.- Computer Information Systems
CSL 107 - Spreadsheets
CSD 122 - Beginning Database
OA 201 - Word Processing I

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 Options	Technical options 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 an 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
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
SP 241 Media
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 213 Introduction to Evidence
CJ 215 Issues in Criminal Justice Supv. & Admin.
CJ 219 Introduction to Community Policing
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 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 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
 HE 112 Standard First Aid & Emergency Care
 HE 207 Stress Management
 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 (all 280 numbers)

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

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 degree. **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	FRP 152	Firefighter Skills II
BA 281	CWE Seminar: Accounting & Business Mgmt.	FRP 153	Firefighter Skills III
CS 281	CWE Seminar: Programming & Networking	FRP 154.....	Water Distribution Systems
DRF 139	Blueprint Reading & Sketching	FRP 155	Instructional Methodology
DRF 185	Computers in Design	FRP 156	Firefighter Law
DRF 213	AutoCAD - Beginning	FRP 157	Firefighter Safety
DRF 214	AutoCAD - Intermediate	FRP 158	Pump Construction & Hydraulics
DRF 215	AutoCAD - Advanced	FRP 160	Fundamentals of Fire Protection
DRF 228.....	AutoCAD Exam Preparation	FRP 164	Hazardous Materials
DRF 280.....	CWE - CADD Technician	FRP 166	Building Construction
DRF 281	CWE Seminar: CADD	FRP 169	Fire Department Leadership
DRF 295.....	CADD Directed Projects	FRP 170	Firefighting Strategy & Tactics
ECE 101	Language Arts Activities for Young Children	FRP 171	Fire Protection Systems & Extinguishers
ECE 103	Math and Science for Young Children	FRP 172	Fire Codes & Ordinances
ECE 105	Nutrition, Health & Safety for Young Children	FRP 181	Fire Prevention & Inspection
ECE 109	Early Childhood Environments	FRP 280.....	CWE: Fire Science
ECE 119	Self-concept, Guidance & Self-discipline of Young Children	FRP 281.....	CWE Seminar: Fire Science
ECE 124	Physical Fitness Activities for Young Children	HD 50.....	College Skills
ECE 125	Creative Activities for Young Children: Art	HD 281.....	Coop. Work Experience Seminar-Human Development
ECE 128	Program Planning and Evaluation for Young Children	IT 101	Engine Rebuilding - Gasoline
ECE 129	Observation & Developmental Screening of Young Children	IT 102	Engine Rebuilding - Diesel
ECE 131	Child Development for the Day Care Worker	IT 105,106,107	Principles of Technology I,II & III
ECE 134	Statutes, Liability & Licensure Considerations for Childcare Facilities	IT 108	Engine Principles
ECE 137	Child Abuse and the Law	IT 110	Applied Technology Projects
ECE 139	Infant and Toddler Programs	IT 206.....	Automotive Electrical/Electronics Foundations
ECE 145	Toys and Games for Learning	IT 207.....	Automotive Electrical/Electronics Applications
ECE 146	Handicapping Conditions in Young Children	IT 208	Mechanical Drives & Trans. of Power
ECE 149	Disease Control in ECE Settings	IT 209	Fluid Drives & Hydraulic Transmissions
ECE 175	Infant/Toddler Learning & Social Growth in a Group Setting	IT 210.....	Vehicle Tune Up and Instrumentation
ECE 281	CWE Seminar: Early Childhood Education	IT 218.....	Vehicle Steering and Suspension Systems
ELT 150	Intro. to Direct Current Circuit Analysis	IT 219.....	Vehicle Brake Systems
ELT 155	Intro. to Alternating Current Circuit Analysis	IT 225	HVAC
ELT 206	Semiconductor Devices	IT 226	Industrial Refrigeration
ELT 207	Industrial Process Controls	IT 230.....	Vehicle Heating & Air Conditioning Systems
ELT 208	Programmable Logical Controllers	IT 280.....	CWE: Integrated Technologies
ELT 219	Digital Computer Electronics	IT 281	CWE Seminar: Integrated Technologies
ELT 220	Introduction to Robotics	MA 112	Medical Assistant: Clinical Procedures I
ELT 231	Digital Circuits	MA 113	Medical Assistant: Clinical Procedures II
EM 101.....	Introduction to Emergency Services	MA 115	Pharmacology For Medical Assistants I
EMT 151	Emergency Medical Tech. Basic, Part 1	MA 123	Medical Insurance & Billing
EMT 152	Emergency Medical Tech. Basic, Part 2	MA 124	Medical Assistant: Clinical Procedures III
EMT 165	Emergency Med. Tech. Intermediate, Part 1	MA 125	Pharmacology For Medical Assistants II
EMT 166	Emergency Med. Tech. Intermediate, Part 2	MA 126	Medical Law And Ethics
EMT 169	Emergency Medical Tech. Rescue	MA 133	Medical Assistant Clinical Practicum I
EMT 170	Emergency Communication & Transportation	MA 231	Medical Assistant Clinical Practicum II
EMT 175	Intro. to Emergency Medical Services	MA 233	Medical Assistant Clinical Practicum III
EMT 280	CWE - Emergency Medical Tech.	MA 280	CWE: Medical Assistant
EMT 281	CWE Seminar: Emergency Med. Tech.	MA 281	CWE Seminar: Medical Assistant
FRP 150	Introduction to Fire Protection	MAS 100.....	Maritime Occupations
FRP 151	Firefighter Skills I	MAS 110	Limited Operator Uninspected Passenger Vessel Certification

OUS Transfer List - B continued

MAS 111 Limited Operator Uninspected
 Passenger Vessel Endorsement
 MAS 120 U.S. Coast Guard Marine License Training
 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
 MAS 136 STCW Bridge Resource Management
 MAS 137 Radar Navigation
 MAS 140 Intro. to Seamanship & Maritime Careers
 MAS 141 Intro. to Trawling & Trawl Safety
 MAS 142 Introduction to Fishing Gear Types & Safety, Part I
 MAS 143 Net Mending
 MAS 145 Handling, Repair, & Storage-Fishing Gear
 MAS 146 Vessel Operations
 MAS 147 Vessel Regulations
 MAS 148 Vessel Stability
 MAS 150 Marine Safety
 MAS 153 Seamanship
 MAS 155 Introduction to Watchkeeping
 MAS 160 Knots, Splices, Lines & Rigging
 MAS 164 Introduction to Navigation
 MAS 165 Practical Navigation
 MAS 166 Advanced 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 FCC GMDSS Training
 MAS 186 Small Vessel Operations I
 MAS 187 Small Vessel Operations II
 MAS 188 Small Vessel Operations III
 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
 MFG 150 Hazardous Materials & Industrial Safety
 MFG 179 Orientation to Machine Tools
 MFG 180,181 Machine Tools I & II
 MFG 250,251 Manufacturing Processes I & II
 MFG 282 Machine Tools III
 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 2: Pathophysiology
 and Pharmacology
 NUR 118,119,120 Nursing Science Skills I,II, & III
 NUR 121 Nursing Clinical Practicum: LPN Trans.
 NUR 201,202,203 Nursing IV ,V & VI
 NUR 206,208,209 Clinical Nursing of Adults & Children I, II, III
 NUR 207 Advanced Nursing: Mental Health
 NUR 215 Physical Assessment for Nurses
 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 Directed Field Experience - 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 195 General Shop Practices
 WLD 296 Layout, Fabrication & Repair Practices
 WR 40 English Fundamentals

APPLIED SCIENCES PROGRAM INDEX

BUSINESS PROGRAMS

ACCOUNTING (ASSOCIATE DEGREE)	42
BUSINESS MANAGEMENT (ASSOCIATE DEGREE)	43
MICROCOMPUTER BUSINESS APPLICATIONS (ASSOCIATE DEGREE)	44
OFFICE SYSTEMS (ASSOCIATE DEGREE)	45
LEGAL WORD PROCESSING OPTION	45
MEDICAL WORD PROCESSING OPTION	46
OFFICE MANAGEMENT OPTION.....	46
MICROCOMPUTER APPLICATIONS (ONE-YEAR CERTIFICATE).....	47
GENERAL OFFICE (ONE-YEAR CERTIFICATE PROGRAM).....	48
BUSINESS TECHNICAL OPTIONS	49

CRAFTS AND INDUSTRIAL TRADES (ASSOCIATE DEGREE).....	50
---	-----------

CRIMINAL JUSTICE (ASSOCIATE DEGREE).....	51
---	-----------

EARLY CHILDHOOD EDUCATION (CERTIFICATE PROGRAM).....	52
---	-----------

FIRE SCIENCE (ASSOCIATE DEGREE)	53
--	-----------

HEALTH OCCUPATIONS

MEDICAL ASSISTANT (ONE-YEAR CERTIFICATE PROGRAM)	54
--	----

INDUSTRIAL & MANUFACTURING TECHNOLOGIES

AUTOMOTIVE TECHNICIAN (ONE-YEAR CERTIFICATE).....	55
COMPUTER-AIDED DESIGN & DRAFTING (ONE-YEAR CERTIFICATE)	56
AMERICAN WELDING SOCIETY ENTRY LEVEL (ONE-YEAR CERTIFICATE)	57

MARITIME SCIENCES

MARITIME SCIENCES (ONE-YEAR CERTIFICATE)	58
VESSEL OPERATIONS (ASSOCIATE DEGREE)	59
MARITIME SCIENCES SPECIALIZED TRAINING PROGRAMS	60

NURSING

NURSING ADMISSION, ENTRY REQUIREMENTS	62
ASSOCIATE DEGREE NURSING.....	63
PRACTICAL NURSING CERTIFICATE PROGRAM	64

BUSINESS PROGRAMS

ACCOUNTING ASSOCIATE 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				Second Year					
Course Number	Course Title	Credits			Course Number	Course Title	Credits		
		F	W	S			F	W	S
MTH 65	Math for Applied Sciences * <i>or</i>	4			BA 226	Introduction to Business Law I	4		
MTH 95	Intermediate Algebra*	(5)			BA 256	Income Tax ***	3		
OA 104	English for Business	4			BA 211,212,213	Principles of Accounting I,II,III +	4	4	4
CS 131	Intro to Computer Information Systems	4			BA 177	Payroll and Business Tax Accounting ***		3	
BA 131,132,133	Accounting Procedures I,II,III +	3	3	3	BA 250	Small Business Management		3	
BA 101	Introduction to Business		3		BA 285	Human Relations in Business		3	
BA 104	Business Math/Electronic Calculators		4		BA 214	Business Communications***			3
CSL 107	Spreadsheets		3		BA 222	Financial Management ***			3
BA 228	Computer Accounting Applications			3	EC 115	Introduction to Economics			3
OA 121	Keyboarding I**			3	BA 280	Coop Work Experience - Accounting			2
SP 111	Fundamentals of Public Speaking <i>or</i>			3	BA 281	Coop Work Experience Seminar ++			1
SP 219	Small Group Discussion			(3)		Technical Options****			3
WR 40	English Fundamentals*** <i>or</i>			3		Electives	4		
WR 121	English Composition***			(3)					

* 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 may substitute three credits of general electives.

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

**** Students must complete 3 credits of technical options 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 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.

<u>First Year</u>				<u>Second Year</u>					
Course Number	Course Title	Credits			Course Number	Course Title	Credits		
		F	W	S			F	W	S
OA 104	English for Business	4			CS 160	Intro to Programming	4		
CS 131	Introduction to Computer Information Systems	4			CSD 122	Beginning Database	3		
MTH 65	Math for Applied Sciences * <i>or</i>	4			BA 206	Management Fundamentals	3		
MTH 95	Intermediate Algebra*	(5)			BA 226	Introduction to Business Law I	4		
BA 211,212	Principles of Acct. I,II <i>or</i> ***	4	4		BA 223	Principles of Marketing		3	
BA 131,132,133	Accounting Procedures I,II,III *** (see "note")	(3)	(3)	(3)	BA 227	Introduction to Business Law II		3	
CSL 107	Spreadsheets		3		BA 250	Small Business Management		3	
WR 121	English Composition**		3		BA 230	Management Info. Systems		3	
BA 101	Introduction to Business		3		BA 285	Human Relations in Business		3	
BA 104	Bus. Math/Electronic Calculators		4		EC 115	Introduction to Economics			3
BA 214	Business Communications**			3	MIC 207	Presentation Software			2
SP 111	Fundamentals of Public Speaking <i>or</i>			3	BA 280	Coop Work Experience - Business Administration			2
SP 219	Small Group Discussion			(3)	BA 281	Coop Work Experience Seminar: Business Administration + Technical Options #			1
OA 201	Word Processing I			3		Electives (see "note")		2	6
	Electives (see "note")			3					

* 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 6 credits of technical options to be selected from the list on page 49.

Note: Students who select Principles of Accounting sequence must complete two terms (BA 211, 212). Students who select Accounting Procedures sequence must complete three terms (BA 131, 132, 133) and therefore need complete only four (4) out of the five (5) credits of Electives.

BUSINESS PROGRAMS

MICROCOMPUTER BUSINESS APPLICATIONS ASSOCIATE 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.

<u>First Year</u>				<u>Second Year</u>					
Course Number	Course Title	Credits			Course Number	Course Title	Credits		
		F	W	S			F	W	S
OA 104	English for Business	4			CS 278	Data Communications and Networking		3	
CS 131	Introduction to Computer Information Systems	4			CS 160	Intro to Computer Programming		4	
MTH 65	Math for Applied Sciences * <i>or</i>	4			BA 131,132	Accounting Procedures <i>or</i> +	3		3
MTH 95	Intermediate Algebra *	(5)			BA 211,212	Principles of Accounting + (see "note")	(4)		(4)
OA 201	Word Processing I	3			BA 230	Management Info Systems		3	
OA 202	Word Processing II		3		BA 285	Human Relations in Business		3	
WR 40	English Fundamentals ** <i>or</i>		3		BA 214	Business Communications			3
WR 121	English Composition **		(3)		BA 228	Computer Accounting Applications			3
CSD 122	Beginning Database		3		CS 280	Coop. Work Experience - Microcomputer Applications			2
CSL 107	Spreadsheets		3		CS 281	Coop. Work Experience Seminar - Microcomputer Applications ++			1
CSD 275	Advanced Database			3	MIC 295	Microcomputer Directed Project			4
MIC 171	Intermediate Spreadsheets			3		Social Science/Humanities ****	3		3
ART 225	Computer Graphics I			3		Technical Options ***			3
SP 111	Fundamentals of Public Speaking <i>or</i>			3		Electives (see "note")	3		
SP 219	Small Group Discussion			(3)					
OA 205	Desktop Publishing			2					
MIC 207	Presentation Software			2					
	Technical Options			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 options chosen from either the Science/Mathematics List on page 38 or the Business Technical Options 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 one (1) of the three (3) credits of electives.

BUSINESS PROGRAMS ~ Office Systems

ASSOCIATE 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 * <i>or</i>	4			<p>* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.</p> <p>** Minimum grade C or higher.</p> <p>+ Contains human relations component</p> <p>++ Students must complete 3 credits of technical options to be selected for the list on page 49.</p> <p>+++ Selected from Arts and Letters and Social Science lists, pages 37 & 38.</p> <p>> Successful completion of program requires following competencies be demonstrated:</p> <ul style="list-style-type: none"> • 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
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** <i>or</i>	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 <i>or</i>		3		
SP 219	Small Group Discussion		(3)		
	Technical Options++	3			
	Social Science/Humanities +++		3		
	Electives		1		

Second Year Option

LEGAL WORD PROCESSING OPTION - Office Systems

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		<p>* Selected from Arts and Letters and Social Science lists, pages 37 & 38.</p> <p>** Strongly recommend WR 227, Technical Report Writing; SPN9752, Spanish Conversation: Business</p> <p>*** C grade or better in preceding course to take next level.</p> <p>+ 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.</p> <p style="text-align: right;"><i>See next page for Medical Word Processing and Office Management Options</i></p>
BA 131, 132	Accounting Procedures I,II ***	3	3		
CSD 122	Beginning Database Program Development	3			
CSL 107	Spreadsheets	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	Coop. Work Experience- Office Administration		2		
OA 281	Coop. Work Experience Seminar - Office Administration +		1		
	Social Science/Humanities *		3		
	Electives**	3	1		

BUSINESS PROGRAMS ~ Office Systems

Second Year Option

MEDICAL WORD PROCESSING OPTION - Office Systems

Second Year

Course Number	Course Title	Credits			
		F	W	S	
BA 131, 132	Accounting Procedures I, II ***	3	3		<p>* Selected from Arts and Letters and Social Science lists, pages 37 & 38.</p> <p>** Strongly recommend WR 227, Technical Report Writing; SPN9752, Spanish Conversation: Business</p> <p>*** C grade or better in preceding course to take next level</p> <p>+ 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.</p>
CSD 122	Beginning Database Program Development	3			
CSL 107	Spreadsheets	3			
OA 140, 141	Medical Terminology I, II	3	3		
OA 225	Machine Transcription		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 + Social Science/Humanities *	3		1	
	Technical Options			3	
	Electives **		3	2	

Second Year Option

OFFICE MANAGEMENT OPTION - Office Systems

Second Year

Course Number	Course Title	Credits			
		F	W	S	
CSL 107	Spreadsheets	3			<p>* Selected from Arts and Letters and Social Science lists, pages 37 & 38.</p> <p>** Strongly recommend WR 227, Technical Report Writing; SPN9752, Spanish Conversation: Business</p> <p>*** C grade or better in preceding course to take next level</p> <p>+ 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.</p>
BA 131, 132	Accounting Procedures I,II ***	3	3		
BA 177	Payroll	3			
CSD 122	Beginning Database Program Development	3			
OA 225	Machine Transcription		3		
BA 230	Management Info Systems		3		
BA 250	Small Business Management		3		
OA 295	Office Systems Directed Project			4	
OA 280	Coop. Work Experience - Office Administration			2	
OA 281	Coop. Work Experience Seminar - Office Administration + Social Science/Humanities *			1	
	Technical Options	3		3	
	Electives **		3	2	

BUSINESS PROGRAMS

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			* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.
CS 278	Data Communications and Networking	3			** Minimum grade C or higher.
OA 201	Word Processing I	3			*** Students must complete technical options chosen from either the Science/Mathematics List on page 38, or the Business Technical Options List on page 49.
MTH 65	Math for Applied Sciences * <i>or</i>		4		
MTH 95	Intermediate Algebra *		(5)		
OA 202	Word Processing II		3		
CSD 122	Beginning Database Program Development		3		
CSL 107	Spreadsheets		3		
BA 285	Human Relations in Business		3		
WR 40	English Fundamentals ** <i>or</i>			3	
WR 121	English Composition **			(3)	
CSD 275	Advanced Database Program Development			3	
OA 205	Desktop Publishing			2	
MIC 207	Presentation Software			2	
	Technical Options ***			5	

BUSINESS PROGRAMS

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			* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.
MTH 65	Math for Applied Sciences * <i>or</i>	4			
MTH 95	Intermediate Algebra*	(5)			** Minimum grade C or higher.
OA 104	English for Business	4			*** Students must complete 4 credits of technical options to be selected from the list on page 49. Another 3 credits of technical options must be chosen from the following courses:
OA 116	Office Procedures +	4			
BA 104	Business Math/Electronic Calculators		4		
OA 201	Word Processing Procedures I	3			CSL 107 Spreadsheets, 3 credits
OA 240	Filing and Records Management	3			BA 132 Accounting Procedures II 3 credits
WR 40	English Fundamentals** <i>or</i>	3			CSD 122 Beginning Database 3 credits
WR 121	English Composition**	(3)			
MIC 145	Intro to Integrated Software	3			
BA 214	Business Communications**		3		+ Contains human relations components
OA 280	Cooperative Work Experience- Office Administration		2		++ 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.
OA 281	Coop Work Experience Seminar +/++ Technical Options***		1	7	

BUSINESS PROGRAMS

BUSINESS TECHNICAL OPTIONS

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

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

The following one (1) credit workshops:

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

CRAFTS AND INDUSTRIAL TRADES

ASSOCIATE 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*;

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* <i>or</i>	3
WR 121	English Composition	(3)
	Communications**	3
MTH 65	Math for Applied Sciences*** <i>or</i>	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

ASSOCIATE 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 \$2,600 per month and the average maximum wage is \$3,600 per month; the average wage for correctional officers is about \$2,600 per month. The average wage for parole and probation officers and juvenile workers is \$3,300 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 110	Introduction to Law Enforcement +		3	
CJ 120	Introduction to the Judicial Process	3		
CJ 121	Concepts of Criminal Law		3	
CJ 130	Introduction to Corrections +		3	
CJ 132	Introduction to Parole and Probation			3
SP 111	Fundamentals of Public Speaking	3		
SP 112	Persuasive Speech <i>or</i>			3
SP 219	Small Group Discussion			(3)
CS 131	Introduction to Computer Information Systems <i>or</i>			4
CS 101	Fundamentals of Computing <i>and</i>			(1)
MIC 145	Intro. to Integrated Software			(3)
WR 121	English Composition *		3	
WR 122	English Composition * <i>or</i>			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 107	Criminal Justice Workshop			3
CJ 210	Criminal Investigation		3	
CJ 243	Alcohol and Other Dangerous Drugs			3
CJ 280	Cooperative Work Experience - Criminal Justice ***	1	2	2
CJ 281	Coop. Work Experience Seminar - Criminal Justice	1		
MTH 65	Math for Applied Science **** <i>or</i>			4
MTH 95	Intermediate Algebra ****			(5)
	Social Science/Humanities **	3		
	Technical Options	3	6	3
	Electives	4	3	

Technical Options

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

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 213	Introduction to Evidence	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 232	Intro. to Corrections Casework <i>or</i>	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 <i>or</i>	4 ea
SPAN 111,112,113	Conversational Spanish	(3 ea)

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 options, 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 <i>or</i>	3
HFS 226	Growing Years (Childhood Development) <i>or</i>	(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* <i>or</i>	4
MTH 95	Intermediate Algebra*	(5)
PSY 101	Psychology of Human Relations	3
WR 40	English Fundamentals** <i>or</i>	3
WR 121	English Composition**	(3)
Technical Options		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 <i>or</i>	3
SPAN 111	Conversational Spanish	(3)
SOC 210	Marriage, Family, and Intimate Relations	3
HS 101	Alcohol Use, Misuse and Addiction <i>or</i>	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 <i>or</i> +	3
SP 215	Introduction to Intercultural Communications <i>or</i> +	(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

ASSOCIATE 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 * <i>or</i>	4
MTH 95	Intermediate Algebra*	(5)
GS 104	Physical Science <i>or</i>	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 <i>or</i>	4
OA 201	Word Processing Procedures I <i>or</i>	(3)
MIC 145	Intro to Integrated Software	(3)
PSY 101	Psychology of Human Relations	3
	Social Science/Humanities ***	3
	Technical Options	8
	Electives	5

TECHNICAL OPTIONS

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 options. 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 1	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* <i>or</i>			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.

INDUSTRIAL & MANUFACTURING TECHNOLOGIES

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 to about \$22.42 per hour 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 105	Principles Of Technology 1	4		
IT 108	Engine Principles	4		
MIC 145	Introduction to Integrated Software <i>or</i>	3		
CS 131	Introduction to Computer Info. Systems	(4)		
MTH 65	Mathematics For Applied Sciences* <i>or</i>	4		
MTH 95	Intermediate Algebra*	(5)		
IT 218	Vehicle Steering & Suspension Systems		4	
IT 206	Auto Electrical/Electronics Foundations		4	
IT 230	Vehicle Heating and Air Conditioning		4	
PSY 101	Psychology of Human Relations		3	
WR 40	English Fundamentals** <i>or</i>		3	
WR 121	English Composition**		(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			2

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 as well.

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 successfully completing the NIASE exam, trainees may become a certified ASE Automotive Technician in their field of training.

INDUSTRIAL & MANUFACTURING TECHNOLOGIES

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			Technical Options
		F	W	S	
DRF 139	Technical Print Interpretation	3			6 Credits chosen from the following list: ART 116 Basic Design 3 MIC 178 Using the Internet for Communications 3 MIC 207 Presentation Software 3 ART 225 Computer Graphics I 3 CS 125H Beginning Website Design/Development 3 WR 227 Technical Report Writing 3 CSC 9752920 Computer-Aided 3D Modeling 1 CSC 9733105 Desktop Publshng w/Pagemkr-Beg. 1 CSC 9733107 Desktop Publshng w/Pagemkr-Int. 1 CSC 9733114 Desktop Publshng w/Pagemkr-Adv. 1 CSC 9752913 Dgtl Imaging w/Photoshop-Beg. 1 CSC 9752916 Dgtl Imaging w/Photoshop-Int. 1 CSC 9752929 Dgtl Imaging w/Photoshop-Adv 1 CSC 9733112 Dreamweaver-Beg. 1 CSC 9733113 Dreamweaver-Int. 1
DRF 213	AutoCAD - Beginning	4			
ART 115	Basic Design	3			
MIC 145	Introduction To Integrated Software <i>or</i>	3			
CS 131	Intro to Computer Info. Systems	(4)			
MTH 65	Mathematics For Applied Sciences* <i>or</i>	4			
MTH 95	Intermediate Algebra*	(5)			
DFR 214	AutoCAD - Intermediate		4		
WR 40	English Fundamentals** <i>or</i>	3			
WR 121	English Composition**	(3)			
DRF 185	Computers in Design	3			
PSY 101	Psychology of Human Relations <i>or</i>	3			
BA 285	Human Relations in Business	(3)			
DRF 215	AutoCAD - Advanced		4		
DRF 295	CADD Directed Project		4		
DRF 228	AutoCAD Exam Preparation		2		
DRF 280	Cooperative Work Experience-CADD		2		
DRF 281	Cooperative Work Experience Seminar		1		
	Technical Options		3	3	

Legend Notes:

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

** Minimum Grade C or higher

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

INDUSTRIAL & MANUFACTURING TECHNOLOGIES

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* <i>or</i>	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** <i>or</i>		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 PROGRAM

Job Description:

Persons employed in the maritime industry work as deckhands or operators on commercial fishing vessels and/or other merchant vessels engaged in the transport of freight or passengers. Deckhands are responsible for keeping the vessel and its equipment in working order and, in the commercial fishing industry, may be responsible for standing a watch in the wheelhouse and conducting the vessel from one point to another while adhering to the principles of navigation and the rules of the road. Vessel operators are responsible for the operation and navigation of the vessel, as well as all safety issues aboard. In the merchant or passenger carrying trade, these operators are required to possess a United States Coast Guard (USCG) Merchant Marine Officers license.

Employment Opportunities:

Recent U.S. Coast Guard rulings dealing with minimum crew size have increased the demand for deckhands in the ocean towing industry. In the commercial fishing industry, the demand for deckhands is greatest in the trawl and longline fisheries. Deckhands who have obtained special skills in navigation, splicing, rigging, net mending, welding, and engine room systems have considerably enhanced employment opportunities. The demand for vessel operators in the charter fishing industry is dependent on geographical location. Towing vessel operators must possess a U.S. Coast Guard license.

Potential Earnings:

The entry level wage varies from \$12 an hour in the merchant fleet to a share of the profit of the catch in the commercial fishing fleet. The average wage for operators is \$125 to \$250 a day.

Course Number	Course Title	Credits		
		F	W	S
MAS 150	Marine Safety, <i>or</i>	2		
MAS 135	STCW Basic Safety Training	(3)		
MAS 155	Introduction to Watch Keeping	2		
MAS 165	Practical Navigation	2		
MAS 181	Seamanship I	2		
MAS 182	Seamanship II	2		
MAS 183	Seamanship III	2		
MTH 65	Math for Applied Science* <i>or</i>		4	
MTH 95	Intermediate Algebra*		(5)	
PSY 101	Psychology of Human Relations			3
WR 40	English Fundamentals** <i>or</i>			3
WR 121	English Composition**			(3)
	Technical Options	2	11	10

TECHNICAL OPTIONS

Students must complete 23 credits from the following list of courses.

Course Number	Course Title	Credits
MAS 100	Maritime Occupations	2
MAS 110	Limited Operator Uninspected Passenger Vessel Certification	3
MAS 111	Limited Operator Uninspected Passenger Vessel Endorsement	1
MAS 120	US Coast Guard Marine License Preparation***/+	3-9
MAS 130	Radar Observer: Original Endorsement, Unlimited	2
MAS 131	Radar Observer: Recertification	1
MAS 132	Radar Observer: Rivers	1
MAS 133	ARPA Training	1
MAS 134	STCW GMDSS Training	3
MAS 135	STCW Basic Safety Training (<i>if not already taken as a degree requirement</i>)	3
MAS 136	STCW Bridge Resource Management	1
MAS 137	Radar Navigation	2
MAS 140	Introduction to Seamanship & Maritime Careers	2
MAS 141	Introduction to Trawling & Trawl Safety	2
MAS 142	Introduction to Fishing Gear Types & Safety	2

MAS 143	Net Mending	2
MAS 145	Handling, Repair, & Storage of Fish Gear	2
MAS 146	Vessel Operations	2
MAS 147	Rules and Regulations	3
MAS 148	Vessel Stability	3
MAS 153	Seamanship	2
MAS 164	Introduction to Navigation***	3
MAS 167	Celestial Navigation***	4
MAS 168	Charts, Aids to Navigation, and Magnetic Compasses***	3
MAS 170	Marine Weather, Tides, Currents, and Waves***	3
MAS 171	Coastal Navigation & Voyage Planning	3
MAS 172	Ocean Navigation & Voyage Planning	4
MAS 175	Rules of the Road***	3
MAS 180	Marine Electronics***	3
MAS 184	Galley Cooking	2
MAS 185	FCC GMDSS Training (Global Marine Distress Safety System)	3
MAS 186	Small Vessel Operations I	2
MAS 187	Small Vessel Operations II	2
MAS 188	Small Vessel Operations III	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 Welding	4 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.

+ Nine (9) credits of MAS 120, Marine License Preparation, may be applied toward the AGS degree, Associate of Applied Science degree, and the One-Year Maritime Science certificate.

++ 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 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.

<u>First Year</u>		
Course Number	Course Title	Credits
MTH 65	Math for Applied Sciences * <i>or</i>	4
MTH 95	Intermediate Algebra * (<i>or a course higher than MTH 95</i>)	(5)
WR 40	English Fundamentals * (<i>or WR 121 or course higher than WR 121</i>)	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, <i>or</i>	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

<u>Second Year</u>		
Course Number	Course Title	Credits
BA 214	Business Communications * (<i>or WR 121 if not taken in first year, or course higher than WR 121</i>)	3
HS 101	Alcohol use, Misuse, and Addiction (<i>or HS 102, Drug Use, Misuse, and Addiction; or any acceptable three credit Humanities or Social Science course</i>)	3
CS 101	Fundamentals of Computing (<i>or computer course higher than CS 101</i>)	1
IT 105	Principles of Technology I **	4
IT 106	Principles of Technology II **	4
IT 107	Principles of Technology III **	3
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
MAS 190	Vessel Practicum	S 2
MAS 147	Rules and Regulations	S 3
MAS 148	Vessel Stability	S 3
MAS 185	FCC GMDSS Training	S 3
MAS 130	Radar Observer: Original Endorsement, Unlimited	S 2
IT 110	Applied Technology Project	S 2

Technical Options Course List

The following technical options may be substituted for any suggested elective (S)

MAS 190	Vessel Practicum	1 - 3
MAS 191	Deckhand Practicum	1 - 4
MAS 120	USCG License Prep	3 - 9
MAS 280	Marine Cooperative Work Experience	1 - 4
MAS	Any other Maritime Science course numbered 100 or above may be used for Technical Options	
WLD	Maximum of eight (8) credits of welding courses	1 - 8
MFG 180	Machine Tools I	1 - 6
IT 101	Engine Rebuilding – Gasoline	4
IT 102	Engine Rebuilding – Diesel	4
IT 108	Engine Principles	4
IT 110	Applied Technology Project	2
IT 121	Principles of Fluid Power	3
IT 141	Tool & Shop Basics	1
IT 208	Mechanical Drives and Transmission of Power	4
IT 209	Fluid Drives and Hydraulic Transmissions	4

S = Suggested Elective

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

** **Note:** Either of the following three-term series classes may be substituted for the Principles of Technology IT 105, 106, 107 series:
PH 201, 202, 203 General Physics (5 credits each)
PH 211, 212, 213 Physics with Calculus (5 credits each)

MARITIME SCIENCES

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)*

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.

NURSING

NURSING ADMISSION REQUIREMENTS

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.

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. You may enter the program, depending on your education and experience. If you think you may qualify for advanced placement, contact the Admissions Office for more information about this option.

Minimum Requirements for Nursing Program Admission:

You need to meet the following requirements to be considered for admission to the nursing program, whether you are applying for initial or advanced placement:

- A. A high school diploma with a C+ average (a GPA of 2.5) or higher, **or** a GED certificate with an average score of 460, **or** 24 credits of college level courses with a cumulative GPA of 2.5 or higher, **or** a cumulative GPA of 2.5 for all college level credits earned within the past three years
- B. An ASSET reading placement test score of 42 or higher.
- C.
 1. One year of high school chemistry with lab within the past five years, **or** CH 104 and CH 105 Introductory Chemistry, **or** its equivalent as determined by the Clatsop Community College nursing faculty completed with a grade of C or above.
 2. Mathematics requirement:
 - a. MTH 95 Intermediate Algebra completed with a grade of C or above, **or**
 - b. MTH 111 College Algebra completed with a grade of C or above, **or**
 - c. a course for which MTH 111 College Algebra is a prerequisite, **or**
 - d. readiness for MTH 111 College Algebra as demonstrated by an ASSET math placement test score of 34 or higher.
 3. Readiness for WR 121 English Composition as demonstrated by ASSET placement test score of 45 or higher, **or** completion of WR 40 English Fundamentals or higher with a grade of C or above.
- D. A completed Clatsop Community College nursing application packet and college placement tests.

If you do not meet the minimum requirements for nursing program admission at this time, you may begin taking college classes as a pre-nursing student. An advisor will help you plan your program and select courses to meet the minimum requirements for admission.

NURSING

ASSOCIATE 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					Second Year				
Course Number	Course Title	F	W	Su	Course Number	Course Title	F	W	S
BI 231,232,233	Human Anatomy & Physiology	4	4	4	NFM 225	Human Nutrition		4	
BI 234	Introductory Microbiology	4			NUR 201	Nsg: Clients in Crisis+	8		
NUR 101	Nsg: Found. of Care+	8			NUR 202	Nsg: Families in Crisis+		9	
NUR 102	Nsg: Focus on Individ.+		9		NUR 208	Nsg: Transit. to Practice+			8
NUR 103	Nsg: Focus on Fam.+		9		NUR 215	Physical Assessment+	3		
NUR 109	Nsg: Mental Health +			4	NUR 231	Collab. Practice III	2		
NUR 112	Collab. Practice I		2		NUR 232	Collab. Practice IV		1	
NUR 113	Collab. Practice II			1	WR 122, 123	English Composition <i>or</i>			3
PSY 215	Devl. Psychology		3		WR 227	Tech. Report Writing			(3)
WR 121	English Composition			3		Hlth, PE, or Dance elect.*			1-3
NUR 111	Nursing Concepts & Clinical Practice #			1-3		Social Science elective**			3
	CS or MIC elective	1				Arts & Letters elective***			3
	Hlth, PE, or Dance elect.*	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 to be taken during any term prior to graduation.

Total credits to graduate (does not include prerequisites): 107

+ 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; HE 207 Stress Management; HPE 295 Health and Fitness for Life; or PE 185 Physical Education.

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

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

NUR 111 required for selected advanced placement students only.

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 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:

The licensed practical nurse (LPN) cares for patients under the direction of an RN, physician, or dentist. LPNs collect information 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 also may work in medical or dental offices, clinics, and caring for patients in the home.

Employment Opportunities:

Employment opportunities for LPNs are good and expected to increase in coming years.

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 231,232,233	Human Anatomy & Physiology	4	4	4	
BI 234	Microbiology	4			
NUR 101	Nsg: Found. of Care+	8			
NUR 102	Nsg: Focus on Indiv.+		9		
NUR 103	Nsg: Focus on Fam.+			9	
NUR 109	Nsg: Mental Health +				4
NUR 112	Collab. Practice I		2		
NUR 113	Collab. Practice II			1	
PSY 215	Devl. Psychology		3		
WR 121	English Composition			3	
	CS or MIC elective	1			
	Hlth, PE, or Dance elect.*	1-3			

* 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; HE 207 Stress Management; HPE 295 Health and Fitness for Life; or PE 185 Physical Education.

+ Contains human relations components.

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): 64

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	LIB: Library	89
ART: Art	66 - 70	MA: Medical Assistant.....	89 - 90
ASL: American Sign Language.....	70	MAS: Maritime Science	90 - 93
BA: Business	70 - 72	MTH: Mathematics.....	94 - 95
BI: Biology	72 - 73	MUP: Music	95
BOT: Botany	73	NFM: Nutrition & Food Management	95
CH: Chemistry.....	73 - 74	NUR: Nursing.....	95 - 97
CJ: Criminal Justice	75	OA: Office Assistant.....	97 - 98
CPL: Credit for Prior Learning	75	PE: Physical Education	98 - 100
CS: Computer Science.....	75 - 77	PH: Physics	100
CSD: Computer Science.....	77	PHL: Philosophy	100
CSL: Computer Science.....	77	PS: Political Science.....	100 - 101
D: Dance	77 - 78	PSY: Psychology	101
DCO: Developmental Communication	78	R: Religion.....	101
DESL: Developmental ESL	78	RD: Reading.....	102
DFL: Developmental Family Literacy	78	SOC: Sociology.....	102
DGED: Developmental GED:.....	78 - 79	SP: Speech.....	102 - 103
DMTH: Developmental Math.....	79	SPAN: Spanish	103 - 104
DPD: Developmental Personal Development ..	79	WLD: Welding	104
DRF: Drafting	79	WR: Writing	105
DWR: Developmental Writing.....	80		
EC: Economics.....	80		
ECE: Early Childhood Education	80 - 81		
ED: Education	81		
EGR: Engineering.....	81		
EM: Emergency Services	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		
HE: Health.....	86		
HFS: Health & Family Studies.....	86		
HM: Hazwoper (listed with Maritime Science)	93		
HPE: Health & Physical Education	87		
HS: Human Services.....	87		
HST: History	87		
HUM: Humanities	87 - 88		
IT: Integrated Technologies.....	88 - 89		

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 complete projects which develop their knowledge and skill regarding lettering principles, techniques, and functions; traditions and historical development of letters; the Roman alphabet; and practical and creative uses of calligraphy.

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 Computer Graphics I.

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.

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 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, 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 & 132, or BA 211 & BA 212, 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.

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 recommended.

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 recommended.

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 animals and plants. 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 recommended.

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. No prerequisite, but a previous course in biology and completion of MTH 60 are recommended.

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:** BI 102, or 121, or 122, and CH 104, and MTH 60 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:** MTH 60 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, unit conversion, 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, equilibria, thermodynamics, 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, solid state structure of minerals and metals, intermolecular forces, colligative properties, solutions, chemical kinetics, acids and bases, and aqueous equilibria. In lab, study the environmental and geological influences on the water quality of a local aquifer. 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, geological and chemical aspects of lava and volcanos, nuclear chemistry, and an introduction to organic chemistry. Involves extensive algebraic problem-solving. In lab, study the environmental and geological influences on the water quality of a local aquifer. **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 213**INTRODUCTION TO EVIDENCE****(3.00 Lecture Hrs./Wk.)****3 Credits**

In this course, students survey 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 and Miranda rules, differences between public and private documents, gathering and use of evidence in criminal cases, the nature and use of circumstantial evidence, documentary and photographic evidence, and physical evidence.

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 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. **Prerequisite:** CS131 or instructor approval.

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. (Offered on demand).

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. (Offered on demand).

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. (Offered on demand).

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. (Offered on demand).

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 161, 162. (Offered on demand).

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. (Offered on demand).

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. (Offered on demand).

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. (Offered on demand).

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. (Offered on demand).

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. (Offered on demand).

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. (Offered on demand).

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. (Offered on demand).

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. These courses are offered on an "on demand" basis.

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 foot-work 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 blueprints. Students master the use, application, and interpretation of symbols, lines, abbreviations, dimensions, and measurements 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, AND 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 CPR certificate, current measles and hepatitis B immunizations, negative TB test; valid driver's license; ASSET Placement Test; 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 document; 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****(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****(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****(3.00 Lecture Hrs./Wk.) 3 Credits**

Students gain knowledge of the literary styles and historical significance of works of European, 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. Theme will vary by term.

ENG 180**GOTHIC LITERATURE****(3.00 Lecture Hrs./Wk.) 3 Credits**

Students will read, interpret, and analyze 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. (Offered in 2005 - 2006).

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. (Offered 2005 - 2006).

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. (Offered 2005 - 2006).

ENG 204**SURVEY OF ENGLISH LITERATURE****(3.00 Lecture Hrs./Wk.)****3 Credits**

The Medieval Period. 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. (Offered 2005 - 2006)..

ENG 205**SURVEY OF ENGLISH LITERATURE****(3.00 Lecture Hrs./Wk.)****3 Credits**

The Renaissance to Enlightenment. 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. (Offered 2005 - 2006).

ENG 206**SURVEY OF ENGLISH LITERATURE****(3.00 Lecture Hrs./Wk.)****3 Credits**

Victorian to Modern Period. 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. (Offered 2005 - 2006).

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. **Prerequisite:** WR 121 or instructor approval.

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 reading and examining 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. **Prerequisite:** WR 40.

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 and MTH 243 or instructor permission.

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 equivalent.

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. **Prerequisite:** FRP 151 or equivalent.

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****(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, light and rainbows. Need not be taken in sequence. **Prerequisite:** MTH 70.

GS 105**PHYSICAL SCIENCE****(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 70.

GS 106**PHYSICAL SCIENCE****(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 60.

GS 109

PHYSICAL SCIENCE

(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 70.

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 decisions by participating in activities that help them to understand their skills, values, and interests and expose them to a variety of occupations. Students learn to research the labor market and understand employment projections. Students develop career research skills, participate in an informational interview, and develop a career action plan.

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:** Lives in Transition Director's approval.

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.

HE HEALTH

HE 112

STANDARD FIRST AID AND EMERGENCY CARE

(1.00 Lecture Hr./Wk.)

1 Credit

Students develop the basic knowledge and skills to help adult victims of physical emergencies including calling emergency medical services (EMS) for assistance, keeping victims and assisting parties safe, and caring for a victim until EMS arrives.

HE 207

STRESS MANAGEMENT

(3.00 Lecture Hrs./Wk.)

3 Credits

This class provides a clear understanding of the meaning of stress in everyday life. Students learn how they react and adjust to stressors. Includes learning and practicing relaxation techniques.

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, physical, social and emotional changes in abilities, needs and interests, of children from the prenatal period through middle childhood.

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.

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. (Offered 2005 - 2006).

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. (Offered 2005 - 2006).

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. (Offered 2005 - 2006).

IT INDUSTRIAL & 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 may bring their own.) Work includes valve train reconditioning, engine crank shaft and oil pump removal/replacement, and cylinder and piston 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 may 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. **Prerequisite:** IT 121.

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 225**HVAC****(2.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.)****3 Credits**

This class enables students to accurately identify the similarities and differences among standard heating and cooling systems and new technology, for example heat pumps, high efficiency furnaces, and reclaiming refrigerants. **Prerequisite:** IT 121 and MTH 65(or higher) or tested equivalent.

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; concurrent registration in BI 121.

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.

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 113, MA 115, and MA 133 with a C grade or higher; concurrent registration in MA 125.

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 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's 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****(20 Lecture, 20 Lecture/Lab Hrs.; 40 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****(20 Lecture, 20 Lecture/Lab Hrs.; 40 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:** 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.

MAS 164**INTRODUCTION TO NAVIGATION****(20 Lecture, 20 Lecture/Lab Hrs.; 40 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.

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.

MAS 167**CELESTIAL NAVIGATION****(30 Lecture, 30 Lecture/Lab Hrs.; 60 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. Students solve the types of celestial navigation problems incorporated in USCG examinations.

MAS 168**CHARTS, AIDS TO NAVIGATION, AND MARINE COMPASSES****(20 Lecture, 20 Lecture/Lab hrs.; 40 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
(20 Lecture, 20 Lecture/Lab Hrs.; 40 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
(20 Lecture, 20 Lecture/Lab Hrs.; 40 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 permission.

MAS 172
OCEAN NAVIGATION AND VOYAGE PLANNING
(20 Lecture, 40 Lecture/Lab Hrs.; 60 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 permission.

MAS 175
RULES OF THE ROAD
(20 Lecture, 20 Lecture/Lab Hrs.; 40 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
FCC GMDSS TRAINING
(20 Lecture, 20 Lecture/Lab Hrs.; 40 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 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.

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:** Taken in conjunction with IT 140.

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:** Taken in conjunction with IT 105, 106, 107.

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 & 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 ASSET score 26-33, 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 ASSET score 26-33, 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 ASSET score 36-37, 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 20, 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 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 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. (Offered 2005 - 2006).

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 or instructor approval. (Offered 2005 - 2006).

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 or instructor approval. (Offered 2005 - 2006).

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 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 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.

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 111 and MTH 112 or equivalents.

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.

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.

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:** Concurrent enrollment in nursing courses or instructor permission.

NUR 101
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 to Nursing program, documentation of immunization and CPR training, current CNA certification or satisfactory completion of a CNA course within the past year.

NUR 102
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.

NUR 103
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.

NUR 109
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.

NUR 111
NURSING CONCEPTS AND CLINICAL PRACTICE
(12 Lec/6 Lab Hrs. 1 Cr; 12 Lec/20 Lab Hrs. 2 Cr; 20 Lec/30 Lab Hrs. 3 Cr) **1-3 Credits**
 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, concurrent registration in 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 and concurrent registration in NUR 103.

NUR 201
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:** NUR 109 and all first year nursing program course requirements with C grade or higher.

NUR 202
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, 231 with C grade or higher.

NUR 208
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.

NUR 215**PHYSICAL ASSESSMENT****(2.00 Lecture, 2.00 Lecture/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.

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 and concurrent registration in NUR 201.

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, 231 with grade C or higher, concurrent registration in 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 122, 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 185 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 185 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 185 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 185 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 185 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 185 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 185 Personal Fitness - 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. (Offered 2005 - 2006).

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. (Offered 2005 - 2006).

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. (Offered 2005 - 2006).

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 view philosophy as a discipline to apply to the sum of human knowledge, develop a concept of self in relation to the world, and understand the philosophical questions that have focused human speculation throughout history.

PHL 102**ETHICS****(3.00 Lecture Hrs./Wk.)****3 Credits**

Students develop an understanding of the main ethical problems that have confronted humans in all cultures throughout all time.

PHL 103**CRITICAL REASONING****(3.00 Lecture Hrs./Wk.)****3 Credits**

Students develop concepts and tools for critical 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 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. 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. 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, with emphasis on the social, emotional, and cognitive changes over the life span. **Note:** PSY 201, 202 or 203 strongly recommended.

PSY 216**SOCIAL PSYCHOLOGY****(3.00 Lecture Hrs./Wk.)****3 Credits**

Students 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 develop knowledge of psychological, social, and biological aspects of human sexual functioning, including sexual identity, interest, response, behaviors, myths, attitudes and cultural values. **Note:** PSY 201 strongly 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.

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.

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.

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.

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.

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.

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 or 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 or 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 122.

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. **Prerequisite:** instructor approval or WR 121.

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. **Prerequisite:** instructor approval or WR 121.

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. **Prerequisite:** instructor approval or WR 121.

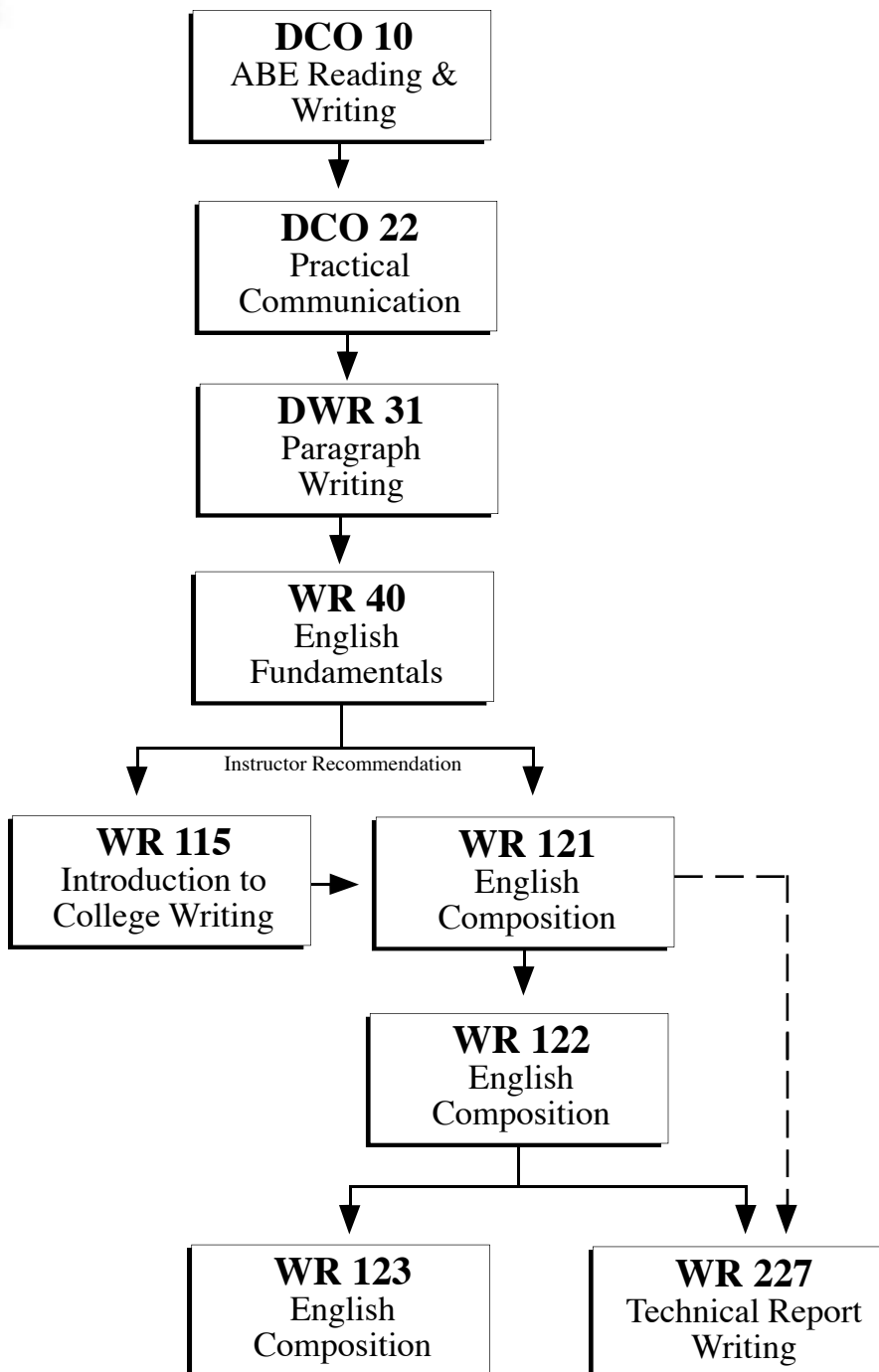
WR 249**WRITING CHILDREN'S BOOKS****(3.00 Lecture Hrs./Wk.)****3 Credits**

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.

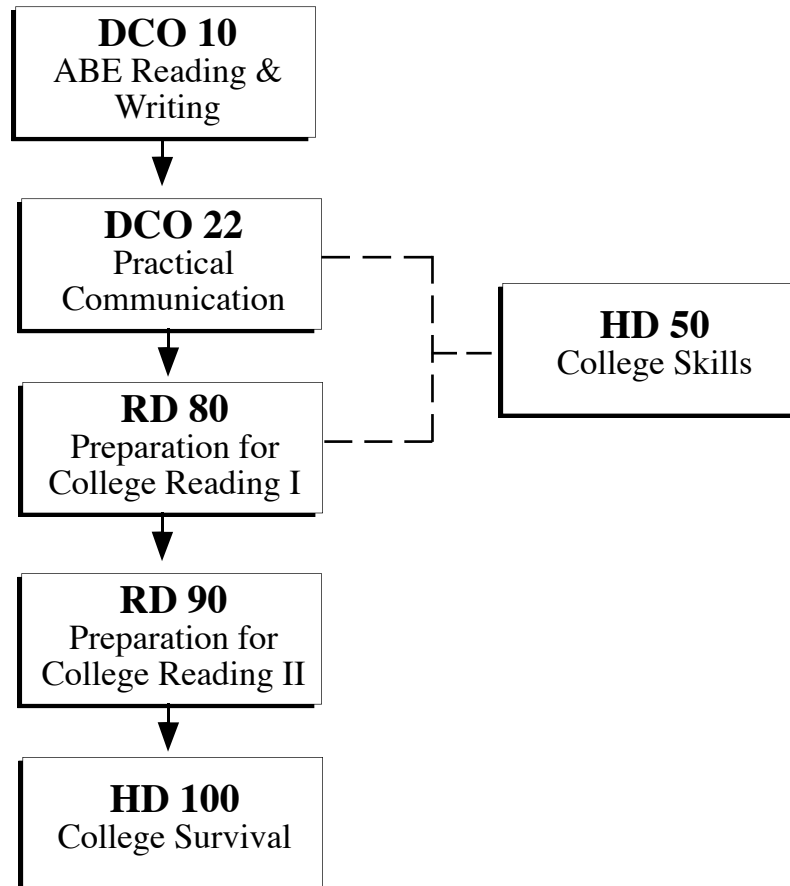
WR 270**LITERARY PUBLICATIONS****(3.00 Lecture Hrs./Wk.)****3 Credits**

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.

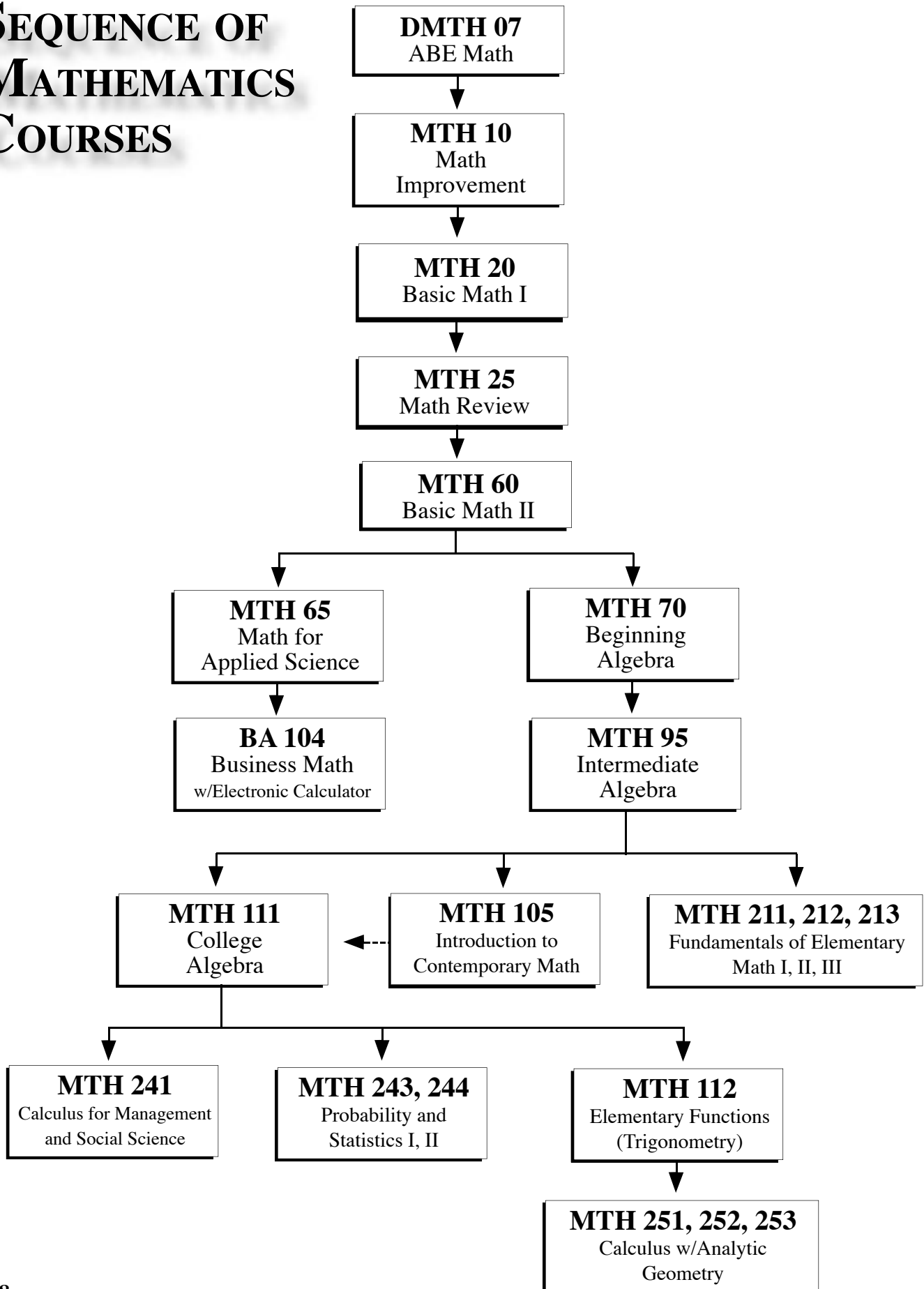
SEQUENCE OF WRITING COURSES



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) 338-2443
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) 338-2468..... 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 AID	(503) 338-2322..... financial_aid@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
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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
S.B.D.C	(503) 738-3347 OR 1-800-206-7352
S.C.C.	(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

FACULTY

Clatsop Community College

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.

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.

FACULTY

Clatsop Community College

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.

**INSTRUCTOR, WRITING
& LITERATURE**

KNUTSON-HAWES, CAROL

B.A. English and Language Arts Degree in secondary ed., 1977; M.A. English, University of Oregon, 1985; at Clatsop Community College since 1998.

KOEHMSTEDT, MARIA D. **INSTRUCTOR, AEFL**

B.A. English, North Dakota State University, 1972; M.L. Librarianship, University of Washington, 1977. At Clatsop Community College since 1977.

MCGLOTHIN, JAMES **INSTRUCTOR, MATHEMATICS**

BS Mathematics and Computer Science, Willamette 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.

**INSTRUCTOR, FOREIGN
LANGUAGES/SPANISH**

MORRISSEY, PATRICIA

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. 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.

**INSTRUCTOR, AUTOCAD & COMPUTER
SWERDLOFF, LUCIEN** **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.

**INSTRUCTOR, COLLEGE PREP/
TYSON, MARIAN** **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
Laura Harris	2007
Dr. Marilyn Lane	2007
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.

BANDURRAGA, ABIGAIL

GUIDANCE COORDINATOR

B.A. English, University of Idaho, 1996; at Clatsop Community College since 2002.

BOHART, B. EDWARD

DIRECTOR, EDUCATIONAL TALENT SEARCH/UPWARD BOUND

B.A. Social Sciences, Michigan State University, 1967; M.A. Counseling and Guidance, University of Montana, 1974; Ed.D. Oregon State University, 2003; at Clatsop Community College since 1991.

BORING, SHARON

DIRECTOR, FINANCIAL AID

Legal and financial aid experience; at Clatsop Community College since 1990.

BRICE, BOBBI

GUIDANCE COORDINATOR, EDUCATIONAL TALENT SEARCH

B.S. Special Education, University of Wisconsin, 1972; M.S. Education, Portland State University, 2000. Teaching experience, special education K-12; experience career counselor/academic advisor, community college level; at Clatsop Community College since 1994.

CARVER, ROMY

JOBS PROGRAM COORDINATOR

Juvenile Corrections certificate from the Oregon Juvenile Justice Training Academy; at Clatsop Community College since 2003.

COLLVER, RANDALL

DIRECTOR, LEARNING RESOURCE CENTER

B.A. Education, Western Oregon University, 1970; M.L.S. University of Oregon, 1972; at Clatsop Community College since 2003.

DEWITT, CHARLOTTE

DIRECTOR, STUDENT SUPPORT SERVICES (PLUS PROGRAM)

B.A. Sociology, Boston University, 1977; M.A., Counseling and Educational Psychology, University of Nevada (Reno), 1991; at Clatsop Community College since 2001.

DORCHEUS, GREGORY

DIRECTOR, FACILITIES MAINTENANCE

Extensive training and working in the physical plant maintenance field; at Clatsop Community College since 1997.

FAITH, NADINE

DIRECTOR, FOUNDATION, COLLEGE RELATIONS & MARKETING

B.A. Communication, Southern Oregon University, 1986; J.D. University of Oregon, 1989; at Clatsop Community College since 2004.

FRIESEN, ROGER

DIRECTOR OF ENROLLMENT SERVICES/REGISTRAR

B.A. Management of Human Resources Colorado Christian University, 1988; M.A. Human Communication, University of Northern Colorado, 1990; at Clatsop Community College since 1999.

FRIMOTH, MARGARET

LIVES IN TRANSITION COORDINATOR

Bachelor's degree in Human Studies from the World College West; Master's degree in Values from the San Francisco Theological Seminary; at Clatsop Community College since 2003.

GALLINO, LINDA K.

DEAN, STUDENT SERVICES

A.S. Data Processing/Accounting, Clatsop Community College, 1978; B.S. Management, Linfield College, 1983; M.B.A. Business Administration, Oregon State University, 1987. Two years coordinator Linfield off-campus program; at Clatsop Community College since 1987.

GOERGES, CAROL

DIRECTOR, HUMAN RESOURCES

B.S. Business Administration, Southern Oregon State College, 1987; M.B.A. Business Administration, Southern Oregon State College, 1992; at Clatsop Community College since 1998.

GYDÉ, ANN

COORDINATOR, COMMUNICATIONS & COPY CENTER

B.F.A. Design, Northern Arizona University, 1983; at Clatsop Community College since 1994.

HAGGARD, WILLIAM (PAT)

NETWORK ADMINISTRATOR

Computer manufacturing and field service experience; installing, administering and maintaining networks. At Clatsop Community College since 2000.

HAMANN, GREGORY

PRESIDENT

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.

ADMINISTRATIVE & SUPERVISORY STAFF

Clatsop Community College

HARRISON, ESTELLE

GUIDANCE COORDINATOR, STUDENT SUPPORT SERVICES (Plus)

B.S. Sociology, 1987; Graduate Certificate Women's Studies, 1989; M.S. Counseling Psychology, 1989, University of Oregon. Special education/counseling experience. Licensed Mental Health Counselor - State of Washington; National Certified Counselor; Trauma Counseling; at Clatsop Community College since 1993.

HORSMAN, KELLEY

DIRECTOR, JOBS PROGRAM

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.

KNIPPA, AUDREY E.

DIRECTOR, HEALTH OCCUPATIONS

B.A. English, Colgate University, 1976; M.S.N. Nursing, Pace University, 1979; M.P.H. Public Health, University of California, 1983. Experience as Registered and Staff nurse; at Clatsop Community College since 1983.

LEE-GORDON, KRISTEN

SPECIAL PROGRAM MANAGER (Carl Perkins Grant)

B.A. Political Science, Pepperdine University, 1994; M.P.A.. Public Administration, Portland State University, 1996; at Clatsop Community College since 1999.

MORFITT, MICHELLE

REGISTRATION COORDINATOR

B.S. Liberal Studies, Eastern Oregon University; at Clatsop Community College since 1995.

MORRISSON, PATRICK S.

GUIDANCE COORDINATOR, EDUCATIONAL TALENT SEARCH

B.S. Liberal Studies, California State University-Sacramento, 1977; Multiple Subject Teaching Credential, California State University-Sacramento, 1978; Veteran's Counselor, American River College-Placerville. Experience in elementary school teaching; itinerant teacher/coordinator of Academic Talented and Gifted Program; independent video producer; mentor, Upward Bound Grant Program, 1993; at Clatsop Community College since 1993.

VERTON, LINDI

VICE PRESIDENT, COLLEGE SERVICES

B.A. English, Lindenwood College, 1973; M.S. Accounting, University of Missouri, 1987; Ph.D. Education, St. Louis University, 1997; at Clatsop Community College since 1998.

PAINO, KATHLEEN

DEAN, CONTINUING EDUCATION

B.S. Humanities Education, Oregon State University, 1974; M.S. Art Education, 1978, M.S. Curriculum and Instruction, 1984, University of Oregon; at Clatsop Community College since 1979.

PICKERING, JENNIFER

WEB DEVELOPER/TRAINER

AA, Liberal Arts, Grays Harbor Community College, 1998; Self-employed web developer; at Clatsop Community College since 2004.

PIERIE, TERRI

STUDENT SERVICES SPECIALIST

Student services and financial aid experience. At Clatsop Community College since 1989.

PURCELL, EILEEN

OUTREACH LITERACY TUTOR COORDINATOR

BA and MA, History; Master's of Library Science, State University of New York; at Clatsop Community College since 2004.

RIEHL, CHRISTINE

Guidance Coordinator

Bachelor's degree in Biochemistry/Biophysics, Oregon State University, 1987; Master's degree in Human Development, Counseling, and Family Studies, University of Rhode Island, 1991; at Clatsop Community College since 2004.

RIEHL, GREG

DIRECTOR, COMPUTER SERVICES

BA, Foreign Languages and Literatures, minor in Naval Science, Oregon State University; at Clatsop Community College since 2004.

STOCK, LOREN

USER APPLICATION & DATA CONTENT SPECIALIST

B.S. Mechanical Engineering, University of Washington, 1977. At Clatsop Community College since 2003.

SWENSON, JOANNE

ADMISSIONS COORDINATOR

B.S. Managerial Leadership, Northwest Christian College, 1990; at Clatsop Community College since 2001.

WALSH, KARI

EXECUTIVE ASSISTANT TO THE PRESIDENT

Experience in office/secretarial field; at Clatsop Community College since 1999.

WEATHERLY, REBECCA J.

DIRECTOR, WORK EXPERIENCE AND CAREER COUNSELING

B.A. Speech Communication, University of Utah, 1993; M.S. Counseling, Portland State University, 1999; at Clatsop Community College since 1999.

WHITMAN, JENNIFER

DISABILITY SPECIALIST/GUIDANCE COORDINATOR

B.S. Psychology, College of Charleston, 1994; M.S.W. University of Washington, 1996; at Clatsop Community College since 1998.

WONDER, JOHN

BOOKSTORE MANAGER

B.A. Political Science & Economics, University of California at Davis, 1966. Business management experience; at Clatsop Community College since 1981.

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.

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 four 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.

INDEX

A

Academic Calendar.....	inside back cover
Academic Information.....	13-17
Academic Programs.....	26-39
Academic Standards.....	15
Accounting.....	42, 70-71
Accreditation.....	3
Activities, Student.....	19
Administrative Staff.....	112-113
Admission to the College.....	4-5
Adult Education (and Family Literacy).....	25, 78
Advising.....	18
Aerobics.....	98
Affirmative Action Policy.....	inside front cover
Algebra.....	94
American Sign Language.....	70
American Welding Society Entry Level Welding Cert.	57
Anatomy & Physiology.....	72-73
Anthropology.....	66
Application for Admission.....	4
Applied Science Degree.....	36
Applied Science Programs.....	42-64
Program Index.....	41
Warranty.....	13
Apprenticeship.....	22
ARPA Training.....	61, 91
Art.....	66-70
Arts & Ideas.....	23
ASBG (Associated Student Body Government).....	19
Assessment Center.....	19
ASSET.....	4, 19
Associate of Applied Science Degree (AAS).....	36
Associate of Arts - Oregon Transfer Degree (AA/OT) ..	26-29
Associate of Arts Worksheet (AA/OT).....	29
Associate of General Studies (AGS).....	34-35
Associate of Science - Oregon Transfer Degree in Business (AS/OT-Bus).....	30-33
Associated Student Body Government (ASBG).....	19
Auditing a Class.....	12
AutoCAD.....	56, 79
Automotive Technician 1-Year Certificate.....	55
Automotive Courses.....	88-89
Awards.....	17

B

Bachelor's Degree Programs.....	23
Ballet (Dance).....	77-78
Basketball.....	98-99
Biology.....	72-73
BizCenter.....	22
Board of Directors.....	112

Bookstore.....	19
Botany.....	73
Business & Industry, Services For.....	22
Business Capital Resource Center.....	22
Business Courses.....	70-72
Business Management Associate Degree.....	43
Business Programs.....	42-48
Business Technical Options.....	49

C

CADD Technician.....	56, 79
Cafeteria.....	19
Calculus.....	95
Calendar, Academic.....	inside back cover
Calligraphy.....	66-68
Campus Safety Report.....	20
Cancellations, refunds.....	6
Career Services.....	18
Carl Perkins Prof./Tech. Improvement Grant.....	24
Ceramics Courses.....	68
Certificates.....	13
Chemistry.....	73-74
Childhood Education.....	52, 80-81
Clatsop County Information.....	3
Code of Conduct.....	20
College Level Examination Program (CLEP).....	15
College Preparation.....	25
Community Education (<i>see Continuing Education</i>).....	
Computer Aided Design & Drafting (CADD).....	56, 79
Computer Graphics.....	68
Computer Science Courses.....	75-77
Consumer Information, Students.....	20
Contact Information.....	109
Continuing Education.....	21-22
Continuing Education Units (CEUs).....	13
Cooperative Education (<i>Work Experience</i>).....	16
Counseling.....	18
Course Descriptions.....	65-105
Course Numbering.....	13
Crafts & Industrial Trades Degree.....	50
Credit.....	13
Credit by Examination.....	15
Credit for Prior Learning.....	16, 75
Criminal Justice.....	51, 74-75
Cross Training.....	99
Customized Training (<i>Workforce Development</i>).....	22

INDEX

D

Dance Courses	77-78
Database	77
Dean's List.....	17
Degree Seeking Students, Registration.....	11
Degrees	13
Associate of Applied Sciences (AAS)	36
Associate of Arts, Oregon Transfer Degree (AA/OT)..	26
Associate of General Studies (AGS).....	34
Associate of Science, Oregon Transfer Degree in Business (AA/OT-Bus)	30
Design Courses	66
Developmental Education.....	25
Developmental Course Descriptions	78-80, 102
Directory Information	12
Disabled Students Services	18
Disclosure Statement	20
Distance Education	21
Dora Badollet Learning Resource Center	16
Drafting	79
Drawing.....	66, 68

E

Early Childhood Education	52, 80-81
Economics.....	80
Educational Talent Search (ETS).....	24
Educational Outcomes	114-116
Emergency Medical Technician (EMT) Courses.....	81-82
ENCORE.....	21
Engineering.....	81
English Courses (<i>also see Writing</i>).....	82-83
English for Speakers of Other Languages & ELL.....	25, 78
Environmental Science	83-84
Ethics.....	100

F

Faculty.....	110-111
Family Education Rights and Privacy Act (FERPA)	20
Family Literacy.....	25, 78
Fees	7
Fencing, Foil	99
Film Studies	82
Financial Aid.....	8-10
Fire Science.....	53, 84-85
First Aid	86
Fitness	94
French	84
Full-time Students.....	4

G

G.E.D.	25, 78-79
General Office Certificate Program	48
General Science	85-86
Genetics.....	73
Geography.....	85
Global Marine Distress Safety System (GMDSS)..	61, 91-92
Gold Card.....	6
Golf.....	99
Government Courses.....	100-101
Government, Student (ASBG).....	19
Grading Policies.....	13-14
Graduation Honors.....	17
Graduation Rates.....	20
Graduation Requirements	16
Guitar Lessons	95

H

Hatha Yoga.....	99
Hazwoper	93
Health.....	86-87
Health and Family Studies.....	86
History Courses.....	87
History Courses (Art).....	67
Honor Roll	17
Honors & Awards.....	17
Human Development	86
Human Services	87
Humanities	87-88

I

Incomplete.....	14
Independent Study	15
Industrial & Manufacturing Technologies	55-57, 88-89
Installment Payment Plan	6
International Students	5

J

Jazz (Dance).....	77-78
JOBS Program	23

K

Keyboarding.....	97
------------------	----

INDEX

L

Late Registration.....	7, 11
Law Enforcement (<i>See Criminal Justice</i>)	
Learning Resource Center.....	16
Legal Word Processing	45
Library (Learning Resource Center).....	16
Library Course	89
Lifelong Learning	21
Linfield/Clatsop Program.....	23
Literacy Program	25
Literacy Tutor Program.....	19
Literature.....	82-83
Lives in Transition (LIT)	23

M

Marine Safety Training	61
Maritime Science Courses	90-93
Maritime Sciences, 1-Year Certificate	58
Maritime Sciences Vessel Operations Degree	59
Maritime Science Training.....	58-61
Mathematics Courses	79, 94-95
Mathematics Sequence Chart.....	108
Mathematics Tutoring (SEA Services)	18
Maximum Credit Limit, Financial Aid	10
Medical Assistant	54, 89-90
Medical Word Processing	46
Microbiology.....	73
Microcomputer Applications, 1-Year Certificate	47
Microcomputer Business Applications, Assoc. Degree	44
Microcomputer Courses.....	93
Mission Statement.....	inside front cover
Money Matters	6-10
Multiple Degrees.....	16
Music.....	95

N

Navigation (Marine).....	91-92
New Student Orientation (NSO).....	4
Non-Degree Seeking Students	11
Non-Refundable Fees.....	7
Numbering, Course	13
Nursing.....	5, 62-64, 95-97
Nursing, Admission Requirements	5, 62
Nutrition.....	95

O

Off Campus Classes.....	21
Office Administration Courses.....	97-98

Office Management Degree	46
Office Systems Degree.....	45-46
One-Year Certificates	13
Organizations & Activities.....	19
Orientation, New Student (NSO).....	4
OUS Transfer Degree Lists.....	37-40
Out-of-State Tuition	7
Outcomes, General Education	114
Outcomes, Departmental.....	114-116

P

Painting	67, 69-70
Payment Options, Obligations	6
Payment Plan (Installment).....	6
Phi Theta Kappa.....	17
Philosophy	100
Phone Numbers.....	109
Photography	66-67
Physical Education.....	98-100
Physical Science.....	85-86
Physics	100
Plus Program.....	18, 24
Political Science.....	100-101
Politics	101
Practical Nursing (LPN)	5, 62, 64
Printmaking.....	68-69
Psychology.....	101

R

Radar Observer	61, 90-91
Reading, College Prep.	102
Reading Sequence Chart	107
Readmission.....	4
Readmission, Nursing Program (Re-entry).....	5
Records, Student	12
Refundable Fees.....	7
Refunds	6
Refunds, Financial Aid.....	6, 8-10
Registered Nurse (RN), Associate Degree.....	63
Registration	11-12
Registration, Continuing Education.....	21
Registration, Degree Seeking Students.....	11-12
Registration, Non-Degree Seeking Students.....	11
Religion Courses	101
Residency	7
Rights & Responsibilities	20

INDEX

S

Satisfactory Progress (for Financial Aid).....	10
Safety Report	20
Scholarships	10
Sculpture	69-70
SEA Services.....	18
Senior Discount (<i>Gold Card</i>).....	6
Sequence Chart, Mathematics.....	108
Sequence Chart, Reading	107
Sequence Chart, Writing	106
Shakespeare.....	82-83
Sign Language	70
Small Business Development Center (SBDC).....	22
Small Business Management	22
Social Security Number (Disclosure Statement)	20
Sociology	102
Spanish.....	103-104
Special Admissions	5
Speech.....	102-103
Spreadsheets.....	77
STCW Approved Courses	61, 91
Staff, Supervisory and Administrative	112-113
Student Activities	19
Student Center.....	19
Student Code of Conduct	20
Student Consumer Information.....	20
Student Government (ASBG).....	19
Student Records	12
Student Rights & Responsibilities	20
Student Services.....	18-20
Student Support Services (Plus Program).....	18, 24
Summer Term.....	17

T

Table of Contents	1
Table of Contents, Applied Sciences Programs	41
Talent Search, Educational (ETS).....	24
Tap (Dance).....	77-78
Technical Options, Business	49
Tennis.....	99
Transcripts.....	12
Transfer (to Clatsop) Admission Information	4
Transfer Credit	13
Transfer Degrees	26-33
Trigonometry	94
TRIO Programs	24
Tuition & Fees	7
Tutoring.....	18-19, 25

U

Underage Students	11
Upward Bound.....	24

V

Vessel Operations, Associate Degree.....	59
Veterans Services	19
Violin Lessons.....	95
Vocational Programs (<i>See Applied Science</i>)	
Voice Lessons.....	95
Volleyball	99
Volunteer Literacy Tutor Program	19

W

Warranty, AAS Degree.....	13
Watercolor	67, 70
Web Design	75-76
Weight Training	100
Welding	57, 104
Western Oregon University.....	25
Withdrawal from Courses/College.....	11
Work Experience for Credit	16
Work Study Aid (<i>See Financial Aid</i>)	
Workforce Development	22
Writing	80, 105
Writing Sequence Chart	106

Y

Yoga, Hatha.....	99
------------------	----

ACADEMIC CALENDAR 2004 - 2005

	SUMMER 2004	FALL 2004	WINTER 2005	SPRING 2005	SUMMER 2005
REGISTRATION	June 1 - June 25	June 1 - October 1	November 22 - January 7	Feb. 28 - April 1	May 31 - June 24
CLASSES BEGIN	June 21	September 27	January 3	March 28	June 20
LATE REGISTRATION	June 28 - July 1	October 4 - 8	Jan. 10 - 14	April 4 - 8	June 27 - July 5
HOLIDAYS & COLLEGE CLOSURES	July 5, Sept. 3 & 6, all fridays in July & Aug.	November 11, Nov. 25 & 26 December 23 - January 2	January 1 & 17, February 21	May 30	July 4, Sept. 2 & 5, all fridays in July & Aug.
FINAL EXAMS	Aug. 9 - 12	Dec. 6 - 10	March 15 - 18	June 6 - 10	Aug. 8 - 11
VACATIONS	Aug. 13 - Sept. 26	Dec. 11 - Jan. 2	March 19 - 27	June 11 - 19	August 12 - Sept. 25
END OF TERM	August 12	December 10	March 18	June 10	August 11
GRADUATION				June 10	



Clatsop Community College
1653 Jerome Avenue
Astoria, Oregon 97103
(503) 325-0910
1-866-CLATSOP
FAX (503) 325-5738
www.clatsopcc.edu