

## 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.

Complaint Process: Students or staff members with concerns regarding discriminatory treatment or sexual harassment should contact the Affirmative Action Officer, 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 Directorate of Civil Rights.

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

Clatsop Community College<br>Admissions Office<br>1653 Jerome, Astoria, OR 97103<br>(503) 338-2411 or Toll Free 1-866-CLATSOP<br>FAX (503) 325-5738<br>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/EEO Officer or Human Resources Director

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Academic Calendar Inside Back Cover

## Welcome to Clatsop Community College

"Welcome to one of the most people-centered colleges in the nation! At Clatsop Community College we are constantly striving to make you - our valued students and customers - feel at home. Our faculty demonstrate a truly caring approach toward their students. You will enjoy getting to know them as fascinating individuals as well as knowledgeable professionals in their fields.

Some of our outstanding students can tell you better than I about Clatsop Community College:

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"Everyday that I am here is an adventure. The comfortable class size and incredible view add to an ideal
learning environment in the Biology and Chemistry labs. I've also really benefited from the study hall
arrangement and the library set up, as well as from SEA Services."
    Tangela Kassler
"Clatsop Community College has provided me with a second chance at an education. Every
student and instructor I've met has been a positive experience. This college has re-energized my
desire to learn."
    Ben McGraw
```

At Clatsop we provide many special services to students to help them be as successful as possible. Here are just a few:
$\checkmark$ Financial aid resources and scholarships
$\checkmark$ TRIO Programs (guidance and support services)
$\checkmark$ Assessment and academic advising
$\sqrt{ }$ Counseling
$\sqrt{ }$ Tutoring
$\sqrt{ }$ Assistance with basic learning and study skills
$\checkmark$ Cooperative work experience (earning while learning)
$\sqrt{ }$ Disabled student services
Since 1958 Clatsop Community College has demonstrated its commitment to active participation in the lives of its communities, providing a variety of educational opportunities and leadership in the business, social, and cultural life of the North Coast.

Clatsop Community College is accredited. Our graduates transfer successfully to colleges and universities or enter the job market with excellent preparation for the demands of a changing workforce. We provide over 350 different educational offerings to nearly 2500 students each term.

Our commitment is to continuing improvement in everything we do so that you - our students and community members - ultimately benefit."

- John Wubben, President


## Clatsop Community College



Clatsop Community College is a public, twoyear 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, community 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 Commission on Colleges and Universities, Northwest Association of Schools and of Colleges and 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

ToA
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, equalaccess 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 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.

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 also 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 Admissions Office to update your status as an admitted student.

## Clatsop Community College Admissions/Registration Procedure for Degree Seeking Students



Special Admissions

## 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 54.

## 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 Form, you have one opportunity to reenter the Nursing program within one year after the term you withdrew, 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, and 3) a financial statement verifying that you have at least $\$ 11,180$ 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 nonimmigrant students.

## Money Mattiers

## Tuition

| 1 | credit hour |
| ---: | :--- |
| 2 | credit hours |
| 3 | credit hours |
| 4 | credit hours |
| 5 | credit hours |
| 6 | credit hours |
| 7 | credit hours |
| 8 | credit hours |
| 9 | credit hours |
| 10 | credit hours |
| 11 | credit hours |
| 12 | credit hours |
| 13 | credit hours |
| 14 | credit hours |
| 15 | credit hours |
| $15+$ | credit hours |

2002-2003
In-state* Out-of-State

| $\$ 46$ | $\$ 100$ |
| :--- | :--- |
| $\$ 92$ | $\$ 200$ |
| $\$ 138$ | $\$ 300$ |
| $\$ 184$ | $\$ 400$ |
| $\$ 230$ | $\$ 500$ |
| $\$ 276$ | $\$ 600$ |
| $\$ 322$ | $\$ 700$ |
| $\$ 368$ | $\$ 800$ |
| $\$ 414$ | $\$ 900$ |
| $\$ 460$ | $\$ 1,000$ |
| $\$ 506$ | $\$ 1,100$ |
| $\$ 552$ | $\$ 1,200$ |
| $\$ 598$ | $\$ 1,300$ |
| $\$ 644$ | $\$ 1,400$ |
| $\$ 690$ | $\$ 1,500$ |
| $\$ 690$ | $\$ 1,500$ |

## Late Registration Fee

A late registration fee of $\$ 10$ will be charged to you if you enroll after the first week of the term for regular termlength 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:

> 2002-2003

Official transcripts ...................................................... $\$ 5$ each
Unofficial transcripts ................................................... $\$ 1$ each
Faxed transcripts ........................................................... $\$ 6$ each
Schedule change form (after the 2nd week of term) ... $\$ 5$ each
Late registration fee ...................................................... \$10
Late payment fee .......................................................... $\$ 25$
GED testing fee ............................................................. $\$ 80$
GED retake fee ............................................................ $\$ 10$ 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 ................................................. $\$ 20$
Graduation Cap \& Gown Fee ...................................... \$20
Technology Fee ............................................................ $\$ 2$ per credit*
(pro-rated for non-credit classes)
Computer Lab Fee ....................................................... $\$ 10$ per term**

[^0]Gold
Card

> Payment Obligations

Payment Options

## 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 out-of-state tuition rate.


## Gold Card Status

Each term, Clatsop Community College students 62 or older are entitled to a $50 \%$ tuition discount (discount is not applicable to fees). Free admission is also granted to all College-sponsored performances and activities (unless advertised otherwise). Examples of such activities are cultural events, lectures, dramatic presentations, films, etc.

The first time Gold Card Status is requested, proof of age must be presented. Thereafter, proof of age is not required.

Gold Card Status, which is valid for one term, must be renewed through enrollment in at least one class per term.

## 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 or scholarship award letter reflects your acceptance of this funding source. A copy must be presented to the Business Office as proof of 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 out standing 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 $\$ 100$, or 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 to financial aid students in the first term of their first year at the College will be pro-rated in accordance with federal regulations. 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.

## 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 firstcome, first-served basis.

## Refunds

## Financial

Aid

Financial Aid
(continued)

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 Programs*

| Program | Brief Description |
| :--- | :--- |
| Federal Pell Grant | A federal grant program for undergraduate <br> Students who demonstrate need. |
| Federal Supplemen- <br> tal Educational <br> Opportunity Grant | A Federal grant program for undergradu- <br> ate students who demonstrate need. |
| Oregon State Need <br> Grant | A state grant program for undergraduate <br> students who demonstrate need. |

Award Amounts
\$400 to \$4,000
Enrolled in 1-12 credits
$\$ 100$ to $\$ 1,800$. Limited funding - apply early. Must be enrolled in at least 6 credits.
\$1,044. Limited funding apply early . Must be enrolled in at least 12 credits. Must be an Oregon State Resident.

Up to $\$ 2,310$ per yar. Wage rate $\$ 7.00$ - $\$ 8.02$ per hour. Limited funding - apply early. Must be enrolled in at least 6 credits.

Up to $\$ 2,625$ for freshman and $\$ 3,500$ for sophomores. Must be enrolled in at least 6 credits.

Up to $\$ 4,000$, depending on cost of education. Must be enrolled in at least 6 credits.

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William D. Ford
Federal Direct PLUS Loan
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William D. Ford
Federal Direct
Subsidized Loan

William D. Ford
Federal Direct
Unsubsidized Loan

A federal loan program with interest and repayment deferred until student leaves school. Interest is variable, currently $8.25 \%$. Student must demonstrate need.

A non-need based federal loan program with principle repayment deferred until student leaves school. Interest is variable, currently $8.25 \%$, and must be paid while student is attending school, or added into loan amout.

A non-need based federal loan program for parents of undergraduate dependent studetns. Repayment begins within 60 days of receipt of funds. Interest is variable, currently $8.25 \%$. Parent must pass a credit check.

A federal and college funded program that provides employment opportunities for students who demonstrate need. Jobs may be on or off campus.

[^1] with the Financial Aid Office for information on the 2003-2004 award amounts.

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 Application in the mail in early January. The Renewal application will allow you to update the information you submitted last year.

Internet filing-If you have Internet access, you can file a FAFSA (or a Renewal Application, if you are eligible and still live at the address you last listed) 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).

> Cost of education
> -Expected Family Contribution
> $=$ Financial need

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 prorated 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 State Need 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 expenses, may be required if a student completely withdraws from all classes before completing at least $60 \%$ of the term or receives zero credits. Any refunds for tuition and fees and any financial 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,

## Money Matters

Financial Aid
(continued)

## 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 or the Direct Loan Program) 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 date indicated by the student as the last date of attendance on the Schedule Change Form 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:

| Credit Hours Funded | Cumulative GPA | Percent of Credits |
| :---: | :---: | :---: |
| $1-44$ | 1.80 | Complete 75\% of your funded credits each term |
| 45 or more credits | 2.00 | Complete $75 \%$ of your funded 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 that apply toward his/her current program 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 spring 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 Academic Issues Committee for a review of your situation. Petitions are available at the Financial Aid office.

## Scholarships <br> 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: Board Scholarships, Rochester Scholarships, Arthur Fertig Memorial Scholarships, and Talent Grants.

Board Scholarships. The Clatsop Community College Board of Directors gives two scholarships to students graduating from high school programs in Clatsop County. Merit scholarships are awarded annually to students chosen by the high schools. At least one per high school is awarded. Applications are available from high school counselors. This scholarship will fund up to 96 credits.

In addition, 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 Scholarship Director.

ThomasM. Rochester TrustScholarship: This merit based scholarship is awarded to full-time students majoring in math/science related areas. $\$ 3,000$, number of awards vary.

Thomas M. Rochester Millennium Scholarship: Two awards at $\$ 5,000$, graduating high school students majoring in Math or Sciences.

Arthur Fertig Memorial Scholarship. Established by friends and relatives of Arthur Fertig, a member of the first Clatsop Board of Directors, this scholarship varies in amount and is available most years to seniors graduating from high schools within the College district. Applications are available from high school counselors.

Talent Grants A limited number of tuition Talent grants are available for area (Astoria, Seaside, Warrenton, Knappa, Jewell, Ilwaco, Naselle, and Clatskanie) high school seniors who show talent or special promise in a specific area. This scholarship will fund up to 96 credits.

## Scholarships

## for Clatsop Students

If you are in a degree program at Clatsop, you may apply for a number of scholarships, and it is possible to be awarded more than one. Most are awarded on the basis of your college academic record, your activities, need, and/or the merit of your goals and plans as shown by the application. The scholarship office publishes the scholarship handbook each year and scholarships are listed on the college electronic mail service (email) available through your academic advisor. Examples of some of the scholarships are:

AAUW American Association of University Women: Astoria and Seaside branches offer scholarships each year.

Astoria Senior Center: $\$ 1,000$ for CCC graduates.
Alpha Iota Sorority Scholarship: This sorority provides one $\$ 300$ scholarship each year to a student majoring in a business program.

Amelia H. Kuitert Memorial Scholarship: This $\$ 500$ scholarship is limited to full-time students majoring in the sciences.

Ollie Andrews Memorial Scholarship: For Lives in Transition Program completers. $\$ 400$.

ASH Housing Fund: This is available to help eligible students with housing costs. Awards range from $\$ 100-\$ 300$ per month depending on student need and availability of funds.

Allan \& Marie Gann Maritime Science: $\$ 200$.
Hogan Memorial TeachingScholarship: A \$1000 award to a full-time student, interest in education or teaching, 2.5 GPA, preference for 2nd year student.

Coast Guard Officers Wives Scholarship: This organization recognizes a full-time student who is a Coast Guard dependent. Amount varies.

Columbia Memorial Auxiliary: \$600, two awards, need based. For CCC Nursing Student completing their first year.

Funland Entertainment Center: $\$ 2,000$. Sponsored by Tom Utti.

Foundation Scholarships: The Clatsop Community College Foundation raises money through projects and donations to award several scholarships available each term to full-time students.

Georgia Pacific Foundation: $\$ 1,500$.
(

Jan and Dr. John Swanson Scholarship: This is given to second-year students who are not necessarily at the top of their class nor in particular financial need. One $\$ 500$ scholarship is awarded each spring.

Judy Hogan Memorial Scholarship: This one-year scholarship is awarded to a student with a declared major in visual arts. $\$ 1,500$.

Margaret Howell Memorial: $\$ 1,000$, female students, full-time, 2.5 GPA, entering final year.

Sally Leino Memorial Scholarship: This is a \$300 scholarship in honor of Sally Leino, founding member of the College Foundation Board.

Lower Columbia Chapter TROA Scholarship: This provides one year tuition and is limited to students with a direct uniformed services relationship.

Lower Columbia Power Squadron: In memory of Alan Myers, \$400.

Oregon Chiefs of Police Scholarship: One \$1,000 scholarship is offered each year to second year criminal justice majors.

Oregon State Sheriffs’ Association Scholarships: One \$500 scholarship is offered each year to students majoring in criminal justice.

CCC Classified Employees Association: This is a scholarship for Clatsop Community College OSEA members and their dependents. $\$ 100$.

PEO Scholarships: Clatsop County chapters of this organization award special support in varying amounts to women furthering their education.

Plus Program: For Plus Program participants, amount varies.

Sarah Shawa: Awarded to students completing their first year at CCC. Full-time, minimum 2.0 GPA.

Seaport Masonc Lodge \#7: Two \$500 awards, to Nursing students completing their first year

Megan Samuel Memorial: \$2,000, number of awards vary.

Merriam Joan Shawa Memorial Scholarship: Awarded to a nursing student. $\$ 500$.

Rochester Trust Scholarship: One or two year awards to full-time students majoring in math/science related areas. $\$ 3,000$.

Sou'wester Garden Club of Seaside \& Gearhart. \$500.

WATEC (Waited Awhile to Enter College) Scholarship: This one-year scholarship is awarded annually to a female student over 21 years of age. The private scholarship is awarded by Clatsop Community College graduate, Mickey Bambrick. Up to $\$ 1,575$.

Warfield \& Elizabeth T. Martin Scholarship: One-year scholarship, full tuition. Education majors preferred, 2nd year student, 36 credits completed, 3.0 gpa, up to $\$ 1,755$.

Other Scholarships: Additional scholarships are awarded in amounts from $\$ 150$ to $\$ 500$. These scholarships are created through generous donations from our community. All scholarships are subject to availability of funds.

## Memorial Scholarship Fund

Clatsop Community College receives numerous scholarship donations, some of which may be named in honor of individuals when the contribution in their name exceeds $\$ 5,000$. The following one term tuition scholarships are awarded as available; at least one will be offered each term.

Carlyle "Butch"Mahnke Scholarship: Limited to full-time nursing students.

Dorothy Mickelson Scholarship: Available to all full-time students.

Eben H. Carruthers Memorial Scholarship: Awarded to a student with a declared major in Integrated Technology.

Ellen Shannon Scholarship: Limited to English majors.

Lisette Haglund Scholarship: Awarded to students majoring in art.
M. Chenevert Scholarship: Available to all fulltime students.
O.J. McGunigal Scholarship: Available to all full-time students.

Alberta McKenna Scholarship: Available to all full-time students.

Phillip Lynch Scholarship: Available to all students

## Information

The calendar in the back 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.

## 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.

A fee is charged for any schedule changes made after the second week of the term (for regular term length courses). See the Money Matters section of this catalog for details.

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."

Degree
Seeking
Students

Non-Degree<br>Seeking<br>Students

Under Age
Students
Late
Registration
Changes
After
Registration

## 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" 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 $7^{\text {th }}$ 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 prerequi-

## 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 pages 25-26 of this catalog.

Grades may be picked up at the Registrar's office at the end of the term (or will be mailed to you if you are a degree-seeking student). For a copy of your transcript, complete a request form and drop it off, or mail it to the Registrar's Office with a check for \$1 (unofficial), \$5 (official), or we will fax it to an Oregon college for $\$ 6$.

## 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, 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, and a $\$ 1.00$ fee for unofficial transcripts. Transcripts may be faxed to other Oregon Colleges for a $\$ 6$ fee. Your transcript will not be issued if you have defaulted on a student loan or have financial obligations to the College including college owned equipment, supplies or library books or materials.

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

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

## Degrees \& Certificates

## Degrees

The College offers three degrees: the Associate in Arts - Oregon Transfer (AA - OT), the Associate in Applied Science, and the Associate in General Studies. Specific information may be found on the following pages: Associate in Arts - Oregon Transfer, page 27, Associate in Applied Science, page 32; and Associate in General Studies, page 31. 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 in 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/Student Services 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 shortterm certificates in specific areas of concentration. You must arrange through the Vice-President, Instructional Programs/Student Services and be preapproved 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/Student Services for details.

## Credit

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

## Transfer Credit

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

## Continuing Education Units

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

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

## Credit

Continuing
Education
Units
(CEUs)

## Course Numbering

Grading<br>Policies

## Course Numbering/Grading

1. Courses that are fully transferable to Oregon University System universities are listed on pages 113
\& 114. 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 $115 \& 116$. 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 Cooperative Field 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.

## 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 VicePresident, Instructional Programs/Student Services,

## Academic Information

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, if you 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 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/Student Services.
2. You must submit a formal application approved by the Administrative Assistant to the Vice President, Instructional Programs/Student Services, 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 preestablished 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.

Grading
Policies
(continued)

## Academic <br> Standards

## Credit by

Examination
7. Courses involving laboratory or shop experience may be challenged in the same method as any other course; however, you must supply written references fromqualified 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 yearlong 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.

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

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.

Additional information about College policies concerning credit by examination may be obtained by contacting the Instructional Services Office, Towler Hall, room 203, at 338-2440. These procedures are subject to modification by college action.

## 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/ Student Services on your behalf, detailing the proposed course. Independent study forms are available in the

Instructional Services Office, Towler Hall room 203. Call 338-2440 for additional information.

## Cooperative Education <br> (Work Experience)

Cooperative Education(WorkExperience) is a nationally recognized program granting academic credit for various supervised work experiences.

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 employer at the job site at least twice during the academic quarter to discuss your progress toward completing the learning objectives. Call (503) 338-2480 for more information.

## Companion Classes

A field experience seminar course is offered to augment the cooperative education experience. If you are enrolled in a cooperative education 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.

College jobs and local positions are posted on the Career Services Job Board in Fertig Hall, room 24, and the campus electronic mail system available through your advisor and the Student Government office.

## 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 online 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 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 online 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 circulation system, which is accessible from within the library, as well as from any computer that has Internet access. From on-campus locations, the Voyager system also provides a portal to full text articles and journals from the Lexis-Nexis, OCLC, ProQuest and Ebsco databases, among others. 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 online via http:// library.clatsopcc.edu. Students can search the catalog, 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 Records and Registration Office. Petitions must be submitted to the Records Office prior to the term you plan to graduate. 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 curriculum 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 $\$ 20$ graduation petition fee is payable to the business office, and payment is required prior to submitting your graduation petition to the Records and Registration office. A $\$ 20$ cap and gown fee must also be paid by all students attending commencement.

Learning
Resource
Center

## Graduation

Requirements

## Honors <br> and <br> Awards <br> Summer <br> Term

## 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 $\{\mathrm{GPA}\}$ )
-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
- ASBG and other scholarships
- College President's Cup
- Department awards
- Commencement Marshals (two degree seeking students with 45 or fewer credits with highest cumulative Clatsop GPA as of end of winter term)
- Phi Theta Kappa cords at graduation

Many of the above awards are conferred in a special Awards Convocation held each May to recognize

## 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 Community Education or to the Vice-President, Instructional Programs/Student Services 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. You may request 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.

## Academic Advising

When you are admitted to a certificate or degree program, the college provides you an academic advisor to assist with your exploration of career and educational goals; selection of a major and degree; 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.

## 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 each quarter in career planning (HD 110), individualized counseling with a qualified career counselor, personality and interest assessments, and assistance with using relevant career information web sites. The Career Center is located in the Student Educational Assistance (SEA) room, 24 Fertig Hall. For times and dates of service contact: (503) 338-9821.

## Counseling

Student Services staff are available to help and support you. Staff can set up admissions testing and an orientation session for you, discuss scholarships, financial aid and personal financial matters, help with unresolved issues with college faculty or staff, and answer general questions about college requirements, academic programs, advising, and various campus services and offices.

Confidential professional counseling is available free 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. 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) 338-2469 or stop by Student Services, 200 Towler Hall.

## Plus Program

The Plus Program, a federally funded TRIO project, is designed to help eligible first generation (neither parent completed a four year degree), low-income, or disabled students succeed at Clatsop and, when appropriate, transfer to a four year college or university. Services may include academic advising, career assessment, career information, college transfer assistance, personal counseling, classes, workshops, campus visits, and cultural events. Applications and program information are available in the Plus Program Office, Towler Hall, Room 212 or may be requested by phone at (503) 338-2346 or by e-mail at 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

Academic<br>Advising

## Career <br> Services

Counseling

## Plus Program

## Students With <br> Disabilities

SEA Services

Assessment Center

## Volunteer <br> Literacy

Veterans<br>Services

Maxine's

SEA Services Tutoring
Tutoring in almost all subject areas is provided in SEA (Student Educational Assistance) Services located in Fertig Hall room 24 for enrolled students. 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 ESOL students 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 College tutor coordinator at (503) 3382455.

## 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 for Speakers of Other Languages (ESOL). 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) 3382336.

## Veterans Services

The Veterans Coordinator is located in the Financial Aid Office and provides assistance to veteran students and eligible dependents regarding collegerelated matters. The coordinator will help veterans and eligible dependents with VA educational paper-
work 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 succcessful term.

## "'Maxine's" 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. "Maxine's" is open when classes are in session and serves breakfast, lunch 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 nonprofit 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, a six-member Senate, and Representatives who serve as volunteers to Student Government.

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 decisionmaking.

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.

## 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, dances, 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. Activities could include city league sports, swim parties, bowling tournaments, and golfing days.

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.

## 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 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 Servies or on the College website.

## STUDENTCONSUMERINFORMATION

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, 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 and Scholarship Handbooks. 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) 3382322 oremail 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 scholarship button. Several student computers are available in Student Services, Towler Hall, Room 200 for use in accessing this information.

## Student Services

## Student Consumer Information <br> (continued)

## 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 by email at registrar@clatsopcc.edu

Family Education Rights and Privacy Act (FERPA) 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 handout entitled "Your Student Records." You may request a copy by phone at $338-2437$ or by email at registrar@clatsopcc.edu

## 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.

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 in 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, which classes transfer as electives, and which classes it will not accept. In any case, it is your responsibility to 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

Oral Communication
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.

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

## Social Science

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

ANT 110
ANT 150
ANT 170
ANT 232
CJ 100
CJ 101
CJ 110
CJ 114
CJ 120
CJ 130
EC 115
EC 201,202
GEO 100
GEO 110
GEO 120
GEO 130
HFS 226
HS 101
HS 102
HS 154

| General Anthropology: Cultural | 3 |
| :--- | :--- |
| General Anthropology: Archeological | 3 |
| General Anthropology: Physical | 3 |
| Native North Americans | 3 |
| Survey of Criminal Justice | 3 |
| Introduction to Criminology | 3 |
| Introduction to Law Enforcement | 3 |
| Gender, Race, Class \& Crime | 3 |
| Introduction to the Judicial Process | 3 |
| Introduction to Corrections | 3 |
| Introduction to Economics | 3 |
| Principles of Economics | 4 ea |
| Introduction to Physical Geography | 3 |
| Intro to Cultural \& Human Geography 3 |  |
| World/Regional Geography | 3 |
| Economic/Resource Geography | 3 |
| Growing Years | 3 |
| Alcohol Use, Misuse and Addiction | 3 |
| Drug Use, Misuse and Addiction | 3 |
| Community Resources | 3 |


| HS 201 | Family Alcoholism/Addiction | 3 |
| :--- | :--- | :--- |
| HS 205 | Youth Addiction | 3 |
| HST 101,102,103 | History of Western Civilization | 3 ea |
| HST 201,202,203 | History of the United States | 3 ea |
| PS 201, 202 | American Government | 3 ea |
| PS 203 | State and Local Government | 3 |
| PS 205 | International Politics | 3 |
| PSY 101 | Psychology of Human Relations | 3 |
| PSY 201,202,203 | General Psychology | 3 ea |
| PSY 215 | Intro. to Developmental Psychology | 3 |
| PSY 216 | Social Psychology | 3 |
| PSY 219 | Introduction to Abnormal Psychology 3 |  |
| PSY 231 | Introduction to Human Sexuality | 3 |
| SOC 204 | General Sociology: Introduction | 3 |
| SOC 205 | General Sociology: Social Issues | 3 |
| SOC 225 | General Sociology: Social Problems | 3 |
| SOC 210 | Marriage, Family \& Intimate Relations | 3 |
| SOC 213 | Minorities: Dealing with Diversity | 3 |
| SOC 221 | Juvenile Delinquency | 3 |
| SOC 223 | Sociology of Aging | 3 |

## Science/Mathematics

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


## Electives Limitations on electives:

Electives must be from the approved list.
Professional/Technical courses - A total of 12 credits of courses numbered 100 or higher from the list on pages 115 and 116.

Physical Education - A maximum of six hours.
Individual Music Lessons (MUP) - A maximum of 12 credits on a major instrument and six credits on a secondary instrument may be applied to an associate degree.
Cooperative Work Experience - no more than 18 credits of combined worksite and seminar courses.

## Institutional Requirements

Complete a minimum of 90 credits of approved lower division collegiate courses listed on pages 113 and 114.

Earn a cumulative grade point average of 2.00 or above for all college work which includes applicable credits earned at other accredited colleges and universities.

Earn a grade point average of 2.00 or above for all Clatsop Community College coursework.
Attend at least two terms, including the last term, and 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).

## Associate of Arts - Oregon Transfer Degree Worksheet

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

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

| Writing <br> WR 121 English Composition | Credit 3 Term |  |
| :--- | :--- | :--- |
| WR 122 English Composition | Credit 3 Term | MTH 105 or higher number math |

## Distribution Requirements

## Arts and Letters - 12 Credits

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

| Term | Credit | Term |
| :---: | :---: | :---: |
| Term | Credit | Term |

## Social Science - 15 Credits

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


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## Electives

Complete electives to bring the total credits to 90 . All elective credit must be from the approved transfer list, appendix A, pages 113-114. A total of 12 credits of Professional/Technical courses numbered 100 or higher from the list on pages 115-116 may be applied. Students are limited to a maximum of 6 hours of physical education, no more than 18 credits of combined worksite and seminar Cooperative Work Experience courses, and in individual music lessons (MUP), a maximum of 12 credits on a major instrument and 6 credits on a secondary instrument.

|  | Credit | Term | Credit | Term |
| :---: | :---: | :---: | :---: | :---: |
| Credit |  | Term | Credit | Term |
|  | Credit | Term | Credit | Term |
|  | Credit | Term | Credit | Term |
|  | Credit | Term | Credit | Term |
|  | Credit | Term | Credit | Term |

## Academic Programs <br> Associate in General Studies

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 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 Interme-

 diate 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 113-114.

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 113-114.

## Institutional Requirements

Complete a minimum of 90 credits of approved coursework.
Earn a cumulative grade point average of 2.00 or above for all college work which includes applicable credits earned at other accredited colleges and universities.
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.
Attend at least two terms, including the last term, and complete at least 24 credits at Clatsop Community College.

## Applied Science Programs <br> Associate in Applied Science

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 entrylevel 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.

## General Requirements

## Writing <br> Six credits (two classes) with a C or better in each class from the following:

Mathematics

## Humanities and/

or Social Sciences
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.

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.

Six credits of Humanities and/or Social Science courses from the Arts and Letters and Social Science lists on pages 113-114.

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.
Earn a cumulative grade point average of 2.00 or above for all college work which includes applicable credits earned at other accredited colleges and universities.
Earn a grade point average of 2.00 or above for all Clatsop Community College coursework.
Apply no more than a maximum of 24 credits of pass grades toward and Associate Degree.
Attend at least two terms, including the last term, at Clatsop Community College.

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## 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

| Course |  | Credits |  |  | Course |  | Credits |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Course Title | F | W | S | Number | Course Title | F | W | S |
| MTH 65 | Math for Applied Sciences * or | 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 |  |  |  |
| BA 131,132,133 | Accounting Procedures I,II,III + | 3 | 3 | 3 |  | Accounting *** |  | 3 |  |
| BA 101 | Introduction to Business |  | 3 |  | BA 214 | Business Communications*** |  | 3 |  |
| BA 104 | Business Math/Electronic Calculators |  | 4 |  | BA 250 | Small Business Management |  | 3 |  |
| CSL 107 | Spreadsheets |  | 3 |  | BA 228 | Computer Accounting Applications |  |  | 3 |
| BA 285 | Human Relations in Business |  |  | 3 | BA 222 | Financial Management *** |  |  | 3 |
| OA 121 | Keyboarding I** |  |  | 3 | EC 115 | Introduction to Economics |  |  | 3 |
| SP 111 | Fundamentals of Public Speaking or |  |  | 3 | BA 280 | Coop Work Experience - Accounting |  |  | 2 |
| SP 219 | Small Group Discussion |  |  | (3) | BA 281 | Coop Work Experience Seminar ++ |  |  | 1 |
| WR 40 | English Fundamentals*** or |  |  | 3 |  | Technical Options**** |  | 3 |  |
| WR 121 | English Composition*** |  |  | (3) |  | Electives | 4 |  |  |

* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted
.** Students must attain a typing proficiency equivalent to OA 121 Keyboarding. Those who meet this requirement 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 41.
$+\quad$ C grade or better required in preceding course to take next level.
$+\quad$ 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 $\$ 14,000$ per year and, depending on experience; maximum may go to $\$ 40,000$ or more per year.
Second Year

| Course <br> Number | First YearCourse Title | Credits |  |  | Second Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Course Title | F | Credits |  |
|  |  |  |  |  | Course |  |  |  |  |
|  |  | F | W | S | Number |  |  | W | S |
| CS 131 | Introduction to Computer |  |  |  | CSD 122 | Beginning Database Program |  |  |  |
|  | Information Systems | 4 |  |  |  | Development | 3 |  |  |
| MTH 65 | Math for Applied Sciences * or | 4 |  |  | BA 206 | Management Fundamentals | 3 |  |  |
| MTH 95 | Intermediate Algebra* | (5) |  |  | BA 226 | Introduction to Business Law I | 4 |  |  |
| OA 104 | English for Business | 4 |  |  | BA 223 | Principles of Marketing |  | 3 |  |
| BA 211, 212 | Principles of Acct. I,II or ${ }^{* * *}$ | 4 | 4 |  | BA 224 | Human Resource Management |  | 3 |  |
| BA 131, 132, | Accounting Procedures I,II,III *** | (3) | (3) | (3) | BA 227 | Introduction to Business Law II |  | 3 |  |
| 133 | (see "note") |  |  |  | BA 250 | Small Business Management |  | 3 |  |
| BA 101 | Introduction to Business |  | 3 |  | BA 230 | Management Info. Systems |  |  | 3 |
| BA 104 | Business Math/Electronic Calculators |  | 4 |  | EC 115 | Introduction to Economics |  |  | 3 |
| CSL 107 | Spreadsheets |  | 3 |  | BA 285 | Human Relations in Business |  |  | 3 |
| MIC 207 | Presentation Software |  | 3 |  | BA 280 | Coop Work Experience - |  |  |  |
| BA 214 | Business Communications** |  |  | 3 |  | Business Administration |  |  | 2 |
| WR 121 | English Composition** |  |  | 3 | BA 281 | Coop Work Experience Seminar: |  |  |  |
| SP 111 | Fundamentals of Public Speaking |  |  | 3 |  | Business Administration + |  |  | 1 |
| OA 201 | Word Processing I |  |  | 3 |  | Technical Options \# (see "note") | 3 |  | 3 |
|  |  |  |  |  |  | Electives | 2 | 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.
$+\quad$ 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 41.
Note: Students who select Principles of Accounting sequence must complete two terms (BA 211, 212) and will need to complete an additional elective credit. Students who select Accounting Procedures sequence must complete three terms (BA 131, 132, 133).


## Microcomputer Business Applications <br> 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.


## Business Programs

## Microcomputer Programming \& Networking Associate Degree

## Job Description:

The Microcomputer Programming \& Networking program prepares students for careers that involve technology in roles of technical support, network operations and administration, applications development, and World Wide Web site development and maintenance. The two-year AAS degree in Microcomputer Programming and Networking could lead to employment opportunities as network technicians, network administrators, programmers, database developers, web site developers/designers, or customer/user technical support.

## Employment Opportunities:

Microcomputer programming and networking skills are needed in a variety of business, industrial, educational, and agency settings. This program prepares students to provide hardware and software solutions for a variety of business and technical problems.

## Potential Earnings:

Salary ranges for individuals completing the two-year AAS Degree may range from $\$ 20,000$ to $\$ 34,000$ per year. Salary potential and job availability in this field have expanded in the last five years. This expansion is projected to continue over the next five years, especially for employees holding degrees.

| First Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Course |  | Credits |  |  |
| Number | Course Title | F | W | S |
| CS 131 | Intro to Computer Info Systems * | 4 |  |  |
| CS 161 | Computer Science I | 4 |  |  |
| WR 121 | English Composition ** | 3 |  |  |
| PE 185 | Physical Education | 1 |  |  |
| CS 162 | Computer Science II |  | 4 |  |
| MIC 178 | Using Internet for Comm. \& Research |  | 3 |  |
| BA 285 | Human Relations in Business or |  | 3 |  |
| PSY 101 | Psychology of Human Relations |  | (3) |  |
| MTH 111 | College Algebra** |  | 4 |  |
| CSD 122 | Beginning Database Program Devel. |  | 3 |  |
| CSD 275 | Advanced Database Program Devel. |  |  | 3 |
| CS 163 | Computer Science III |  |  | 4 |
| ART 225 | Computer Graphics I |  |  | 3 |
| WR 227 | Technical Writing |  |  | 3 |
| HPE 295 | Health and Fitness for Life |  |  | 3 |


|  |  | Credits |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Course <br> Number | Course Title | F | W | S |
| CS 125H | Beginning Web Site Design/Devel. | 3 |  |  |
| CS 278 | Data Communications \& Networking | 3 |  |  |
| CS 260 | Data Structures | 4 |  |  |
| CS 135H | Advanced Web Site Design/Devel. or |  | 3 |  |
| CS 171 | Principles of Computer Organization |  | (4) |  |
| SP 111 | Fundamentals of Public Speaking or |  | 3 |  |
| SP 219 | Small Group Discussion |  | (3) |  |
| MIC 295 | Microcomputer Directed Project |  |  | 4 |
| CS 280 | CWE- Microcomputer Applications |  |  | 2 |
| CS 281 | CWE Seminar - Microcomputer |  |  |  |
|  | Applications + |  |  | 1 |
|  | Social Science/Humanities **** | 3 |  | 3 |
|  | Technical Options *** |  | 2 |  |
| And, eithe | for Programming concentration) |  |  |  |
| MTH 112 | Elementary Functions-Trig. and | 4 |  |  |
| CS 133S | Scripting Languages and |  | 3 |  |
|  | Technical Options*** |  |  | 3 |
| Or (for N | orking concentration) |  |  |  |
| CS 279M | Network Management - LAN NT and |  | (3) |  |
| CS 279N | Network Management - LAN Novell and |  |  | (3) |
|  | Technical Options*** | (4) |  |  |

* This course must be taken first, plus proof of keyboarding skills.
** Minimum grade C or higher.
*** Students must complete technical options chosen from either the Science/Mathematics List on page 114, or the Business Technical Options List on page 41.
**** Selected from Arts and Letters, and Social Science Lists on pages $113 \& 114$.
$+\quad$ 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 ~ Certificates

## 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 | Credits |  |  |  | Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Course Title F | W | S |  |  |
| OA 104 | English for Business 4 |  |  |  |  |
| CS 131 | Introduction to Computer Information Systems 4 |  |  |  |  |
| MTH 65 | Math for Applied Sciences * or 4 |  |  |  |  |
| MTH 95 | Intermediate Algebra * (5) |  |  |  | Minimum grade C or higher. |
| OA 201 | Word Processing I 3 |  |  | *** | Students must complete technical options chosen from either the |
| OA 202 | Word Processing II | 3 |  |  | Science/Mathematics List on page 114, or the Business Technical |
| CSL 107 | Spreadsheets | 3 |  |  | Options List on page 41. |
| CSD 122 | Beginning Database Program Development | 3 |  |  |  |
| MIC 178 | Using the Internet for Communication and Research | 3 |  |  |  |
| MIC 207 | Presentation Software | 3 |  |  |  |
| CSD 275 | Advanced Database Program Development |  | 3 |  |  |
| CS 278 | Data Communications and Networking |  | 3 |  |  |
| BA 285 | Human Relations in Business |  | 3 |  |  |
| WR 40 | English Fundamentals ** or |  | 3 |  |  |
| WR 121 | English Composition ** |  | (3) |  |  |
|  | Technical Options *** |  | 3 |  |  |

## 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 <br> Number | Course Title | Credits |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F |  | S |  |  |
| BA 104 | Business Math/Electronic Calculators |  | 4 |  |  |  |
| BA 131 | Accounting Procedures I | 3 |  |  | * | Minimum grade C or higher. Math courses numbered higher than MTH 95 may |
| BA 214 | Business Communications** |  |  | 3 |  | be substituted. |
| MTH 65 | Math for Applied Sciences * or | 4 |  |  | ** | Minimum grade C or higher. |
| MTH 95 | Intermediate Algebra* | (5) |  |  |  | Students must complete 4 credits of technical options to be selected from the |
| OA 116 | Office Procedures + | 4 |  |  | *** | Students must complete 4 credits of technical options to be selected from the |
| OA 201 | Word Processing Procedures I |  | 3 |  |  | list on page 41. Another 3 credits of technical options must be chosen from |
| OA 240 | Filing and Records Management |  | 3 |  |  | the following courses: |
| WR 40 | English Fundamentals** or |  | 3 |  |  | CSL 107 Spreadsheets, 3 credits |
| WR 121 | English Composition** |  | (3) |  |  | BA 132 Accounting Procedures II, 3 credits |
| OA 104 | English for Business | 4 |  |  |  | CSD 122 Beginning Database, 3 credits |
| MIC 145 | Intro to Integrated Software |  | 3 |  |  | CSD 122 Beginning Database, 3 credits |
| CS 101 | Computer Fundamentals | 1 |  |  |  |  |
| OA 280 | Cooperative Work Experience- |  |  |  | + | Contains human relations components |
|  | Office Administration |  |  | 2 | ++ | The Cooperative Work Experience seminar requirement for any Business |
| OA 281 | Coop Work Experience Seminar +/++ |  |  | 1 |  | degree can be met by completing one of the following courses: BA 281, CS |
|  | Technical Options*** |  |  | 7 |  | 281 , or OA 281. |

## 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 |  | Credits |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Number | Course Title | F | W | S |
| OA 104 | English for Business | 4 |  |  |
| OA 116 | Office Procedures + | 4 |  |  |
| OA 122 | Keyboarding II | 3 |  |  |
| CS 101 | Fundamentals of Computing | 1 |  |  |
| MTH 65 | Math for Applied Sciences * or | 4 |  |  |
| MTH 95 | Intermediate Algebra* | (5) |  |  |
| OA 201,202 | Word Processing Procedures I,II |  | 3 | 3 |
| WR 40 | English Fundamentals** or |  | 3 |  |
| WR 121 | English Composition** |  | (3) |  |
| BA 104 | Business Math/Electronic Calculators |  | 4 |  |
| BA 285 | Human Relations in Business |  | 3 |  |
| OA 240 | Filing and Records Management |  | 3 |  |
| BA 214 | Business Communications** |  |  | 3 |
| SP 111 | Fundamentals of Public Speaking or |  |  | 3 |
| SP 219 | Small Group Discussion |  |  | (3) |
|  | Social Science/Humanities ++ |  |  | 3 |
|  | Electives |  |  | 1 |

* Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.
** Minimum grade C or higher.
+ Contains human relations component
++ Selected from Arts and Letters and Social Science lists, pages 113 \& 114
Successful completion of program requires following competencies be demonstrated:

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

## Second Year Option

## 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.

| Course |  |  | edit |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Course Title | F | W | S |  |  |
| BA 226,227 | Intro to Business Law I,II | 4 | 3 |  | * | Selected from Arts and Letters and Social Science |
| BA 131, 132 | Accounting Procedures I,II *** | 3 | 3 |  |  | 114. |
| CSD 122 | Beginning Database Program Development | 3 |  |  | ** | Strongly recommend WR 227, Technical Report Spanish Conversation: Business |
| CSL 107 | Spreadsheets | 3 |  |  | *** |  |
| OA 135 | Legal Terminology |  | 3 |  |  | The Cooperative Work Experience seminar r |
| OA 139 | Legal Transcription |  |  | 3 | $+$ | Business degree can be met by completing one |
| OA 225 | Machine Transcription |  | 3 |  |  | courses: BA 281, CS 281, or OA 281. |
| MIC 210 | Microcomputer Integrated Applications |  | 4 |  |  |  |
| OA 295 | Office systems Directed Project |  |  | 4 |  |  |
| OA 280 | Coop. Work ExperienceOffice Administration |  |  | 2 |  |  |
| OA 281 | Coop. Work Experience Seminar Office Administration + Social Science/Humanities * Electives** | 3 |  | 1 3 |  | See next page for Medical Word Processing and Office Management Options |

## Business Programs ~ Office Systems

## Second Year Option

## Medical Word Processing Option - Office Systems

## Second Year

| Course |  | Credits |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Number | Course Title | F | W | S |
| BA 131, 132 | Accounting Procedures I, II *** | 3 | 3 |  |
| CSD 122 | Beginning Database Program |  |  |  |
|  | Development | 3 |  |  |
| CSL 107 | Spreadsheets | 3 |  |  |
| OA 140, 141 | Medical Terminology I, II | 3 | 3 |  |
| OA 142 | Medical Transcription |  |  | 3 |
| OA 225 | Machine Transcription |  | 3 |  |
| MIC 210 | Microcomputer Integrated Applications |  | 4 |  |
| OA 295 | Office Systems Directed Project |  |  | 4 |
| OA 280 | Coop. Work Experience Office Administration |  |  | 2 |
| OA 281 | Coop. Work Experience Seminar Office Administration + |  |  | 1 |
|  | Social Science/Humanities * | 3 |  |  |
|  | Technical Options |  |  | 3 |
|  | Electives ** |  | 3 | 1 |

[^2]
## Second Year Option

## Office Management Option - Office Systems

## Second Year

| Course |  | Credits |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Course Title | F | W | S |  |  |
| CSL 107 | Spreadsheets | 3 |  |  |  |  |
| BA 131, 132 | Accounting Procedures I,II *** | 3 | 3 |  |  | Selected from Arts and Letters and Social Science lists, pages |
| BA 177 | Payroll | 3 |  |  |  | 113 \& 114. |
| CSD 122 | Beginning Database Program Development | 3 |  |  | ** | Strongly recommend WR 227, Technical Report Writing; SPN9752, Spanish Conversation: Business |
| OA 225 | Machine Transcription |  | 3 |  | *** | C grade or better in preceding course to take next level |
| BA 250 | Small Business Management |  | 3 |  | + | The Cooperative Work Experience seminar requirement for any |
| MIC 210 | Microcomputer Integrated Applications |  | 4 |  |  | Business degree can be met by completing one of the following courses: BA 281, CS 281, or OA 281. |
| 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 3 |  |  |
|  | Technical Options | 3 |  | 3 |  |  |
|  | Electives ** |  |  | 1 |  |  |

## Business Programs

## Business Technical Options

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

| Course <br> Number | Course Title C | Credits |
| :---: | :---: | :---: |
| BA 101 | Introduction to Business | 3 |
| BA 104 | Business Math with Electronic Calculators | 4 |
| BA 131,132,133 | Accounting Procedures I, II, III | 3 ea |
| BA 177 | Payroll and Business Tax Accounting | 3 |
| BA 206 | Management Fundamentals | 3 |
| BA 211,212,213 | Principles of Accounting I,II,III | 4 ea |
| BA 214 | Business Communications | 3 |
| BA 222 | Financial Management | 3 |
| BA 223 | Principles of Marketing | 3 |
| BA 224 | Human Resource Management | 3 |
| BA 226 | Introduction to Business Law I | 4 |
| BA 227 | Introduction to Business Law II | 3 |
| BA 228 | Computer Accounting Applications | 3 |
| BA 230 | Management Information Systems | 3 |
| BA 250 | Small Business Management | 3 |
| BA 256 | Income Tax | 3 |
| BA 280 | Cooperative Work Experience: <br> Accounting | 2-6 |
| BA 280 | Cooperative Work Experience: <br> Business Administration | 2-6 |
| BA 281 | CWE Seminar: Bus. Mgmt./Accounting | 1 |
| BA 285 | Human Relations in Business | 3 |
| CS 101 | Fundamentals of Computing | 1 |
| CS 125GR | Computer Graphics | 3 |
| CS 125H | Begin. Web Site Design \& Devel. | 3 |
| CS 131 | Introduction to Computer Information Systems | 4 |
| CS 133S | Scripting Languages | 3 |
| CS 135H | Adv. Web Site Design \& Development | 3 |
| CS 161 | Computer Science I | 4 |
| CS 162 | Computer Science II | 4 |
| CS 163 | Computer Science III | 4 |
| CS 171 | Principles of Computer Organization | 4 |
| CS 260 | Data Structures | 4 |
| CS 271 | Computer Architecture | 4 |
| CS 278 | Data Communication \& Networking | 3 |
| CS 279M | Network Management - LAN NT | 3 |
| CS 279N | Network Management - LAN Novell | 3 |
| CS 280 | Cooperative Work Experience: <br> Microcomputer Bus. Applications | 2-6 |
| CS 280 | Cooperative Work Experience: Microcomputer Prog. \& Netwrkg. | 2-6 |
| CS 281 | CWE Seminar: Microcmptr Business Apps/Prog. \& Ntwrkg. | 1 |
| CSB 133 | Beginning Visual Basic Programming | 3 |
| CSB 233 | Advanced Visual Basic Programming | 3 |
| CSB 234 | Visual Basic III | 4 |
| CSD 122 | Beginning Database Program Development | 3 |
| CSD 275 | Advanced Database Program Development | 3 |
| CSL 107 | Spreadsheets | 3 |


| Course Number | Course Title | Credits |
| :---: | :---: | :---: |
| DRF 139 | Technical Print Interpretation | 3 |
| DRF 185 | Computers in Design | 3 |
| DRF 213 | AutoCAD - Beginning | 4 |
| DRF 214 | AutoCAD - Intermediate | 4 |
| DRF 215 | AutoCAD - Advanced | 4 |
| DRF 217 | AutoCAD Upgrade | 1 |
| EC 115 | Introduction to Economics | 3 |
| EC 201,202 | Principles of Economics | 4 ea |
| EC 280 | Cooperative Work Experience: Economics | 2-6 |
| HD 110 | Career Planning | 2 |
| MIC 145 | Introduction to Integrated Software | 3 |
| MIC 171 | Intermediate Spreadsheets | 3 |
| MIC 178 | Using INTERNET for Communications and Research | 3 |
| MIC 207 | Presentation Software | 3 |
| MIC 210 | Microcomputer Integrated Applications | 4 |
| MIC 295 | Microcomputer Directed Project | 4 |
| OA 104 | English for Business | 4 |
| OA 116 | Office Procedures | 4 |
| OA 120 | Computer Keyboarding | 1 |
| OA 121,122 | Keyboarding I,II | 3 ea |
| OA 124 | Keyboarding Skill Building | 3 |
| OA 135 | Legal Terminology | 3 |
| OA 139 | Legal Transcription | 3 |
| OA 140,141 | Medical Terminology I, II | 3 ea |
| OA 142 | Medical Transcription | 3 |
| OA 201,202 | Word Processing Procedures I,II | 3 ea |
| OA 205 | Desktop Publishing | 3 |
| OA 225 | Machine Transcription | 3 |
| OA 240 | Filing and Records Management | 3 |
| OA 280 | Cooperative Work Experience: Office Administration | 2-6 |
| OA 281 | CWE Seminar: Office Systems | 1 |
| OA 295 | Office Systems Directed Project | 4 |
| SP 130 | Business \& Professional Speaking | 3 |
| WR 227 | Technical Report Writing | 3 |

## 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;
3. Journeymen who have not completed a registered program, but are recognized as Journeymen by a current State license and/or a Joint Apprenticeship Advisory Committee.

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

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

[^3]
## Criminal Justice

## Associate Degree

## 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 |  | Credits |  |  |
| Number | Course Title | 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 or |  | 3 |  |
| SP 219 | Small Group Discussion |  | (3) |  |
| CS 131 | Introduction to Computer |  |  |  |
|  | $\quad$ Information Systems or |  |  | 4 |
| CS 101 | Fundamentals of Computing and |  |  | $(1)$ |
| MIC 145 | Intro to Integrated Software |  | 3 |  |
| WR 121 | English Composition * |  |  |  |
| WR 122 | English Composition * or |  |  | 3 |
| WR 227 | Technical Report Writing |  |  | $(3)$ |
|  | Social Science/Humanities ** | 3 | 3 | 3 |

[^4]Second Year

| Course |  | Credits |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Number | Course Title | F | W | S |
| SOC 221 | Juvenile Delinquency |  | 3 |  |
| CJ 107 | Criminal Justice Workshop |  |  | 3 |
| CJ 203 | Crisis Intervention + |  | 3 |  |
| CJ 210 | Criminal Investigation | 3 |  |  |
| CJ 215 | Issues in Criminal Justice |  |  |  |
|  | Supervision and Administration |  |  | 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 **** or |  |  | 4 |
| MTH 95 | Intermediate Algebra **** |  |  | (5) |
|  | Social Science/Humanities ** | 3 |  |  |
|  | Technical Options | 3 | 3 |  |
|  | Electives | , | 3 |  |

## Technical Options

Students must complete six 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 114 | Gender, Race, Class \& Crime | 3 |
| CJ 230 | Intro. to Juvenile Corrections | 3 |
| CJ 232 | Intro. to Corrections Casework or | 3 |
| HS 155 | Interviewing for Social Services | $(3)$ |
| CJ 244 | Sexual Exploitation of Children | 3 |
| CJ 280 | Cooperative Work Experience - Criminal Justice | 3 |
| HS 101 | Alcohol Use, Misuse and Addiction | 3 |
| HS 102 | Drug Use, Misuse and Addiction | 3 |
| HS 154 | Community Resources | 3 |
| HS 201 | Family Alcoholism/Addiction | 3 |
| HS 205 | Youth Addiction | 3 |
| PHL 102 | Ethics | 3 |
| PSY 101 | Psychology of Human Relations | 3 |
| PSY 219 | Introduction to Abnormal Psychology | 3 |
| SPAN 101,102,103 First Year Spanish $\boldsymbol{o r}$ | 4 ea |  |
| SPAN 111,112,113 | Conversational Spanish | $(3 \mathrm{ea}$ |

## 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 in 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 <br> Number | Course Title |
| :--- | :--- | :---: | Credits

## 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 <br> Number | Course Title | Credits |
| :--- | :--- | :---: |
| MTH 65 | Math for Applied Sciences * or | 4 |
| MTH 95 | Intermediate Algebra* | $(5)$ |
| GS 104 | Physical Science $\boldsymbol{o r}$ | 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 | 3 |
|  | $\quad$ Systems or | 4 |
| OA 201 | Word Processing Procedures I $\boldsymbol{o r}$ | $(3)$ |
| MIC 145 | Intro to Integrated Software | $(3)$ |
| PSY 101 | Psychology of Human Relations | 3 |
|  | Social Science/Humanities *** | 3 |
|  | Technical Options | 8 |
|  | Electives | 5 |

Course

| Number | Course Title | Credits |
| :--- | :---: | :---: |
| EM 101 | Intro to Emergency Services |  |

FRP $151 \quad$ Firefighter Skills ++ 3
FRP 156 Firefighter Law 1
FRP $157 \quad$ Firefighter Safety 1
FRP $158 \quad$ Pump Construction and Hydraulics 3
FRP 164 Hazardous Materials 3
FRP $166 \quad$ Building Construction $+\quad 3$
FRP $169 \quad$ Fire Department Leadership + 3
FRP $170 \quad$ Firefighting Strategy and Tactics + 3

FRP 171 Fire Protection Systems \&
Extinguishers $+\quad 3$
FRP $172 \quad$ Fire Codes \& Ordinances $+\quad 3$

| EMT 151 | Emergency Medical Technician Basic-Part I | 5 |
| :--- | :--- | :--- |
| EMT 152 | Emergency Medical Technician Basic-Part 2 | 5 |
| EMT 169 | Emergency Medical Technician Rescue | 3 |
| EMT 170 | Emergency Communication and |  |
|  | $\quad$ Patient Transportation | 3 |

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

The FRP courses will be offered on a rotating basis every two years.
$+\quad$ 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 113-114.


## Emergency Medical Technician One-Year Certificate Program

You can become an Emergency Medical Technician-Basic (EMT-B) or EMT-Intermediate (EMT-I) and work as an EMT in the community by simply enrolling in those classes. The EMT-B class is two terms in length (EMT 151 and EMT 152). When you finish, you may take the National Registry and Oregon tests to be certified as an EMT-B. If you wish to become an EMT-I, you need to complete two additional quarters of the EMT-I class (EMT 165 and EMT 166).

If you want to become an EMT-Paramedic (EMT-P), you can complete the first year of the EMT-P associate degree program at Clatsop Community College. You can then apply for admission to the second year of the program at a college offering the EMTParamedic degree, for example, Chemeketa, Lane, or Central Oregon Community Colleges. Several other colleges in Oregon also offer this degree.

If you plan to enroll in EMT classes, you need to complete an EMT program/class application form and show how you meet the following Oregon Health Division requirements: At least 18 years old; college placement tests; valid drivers license; hepatitis and measles immunizations, and negative tuberculosis screening test. On your application, you will be asked to self-verify that you meet OHD standards for physical and mental fitness, and that you do not use mind-altering substances or have a disease that could affect your ability to respond in an emergency.

## Job Description:

EMTs give immediate care to ill or injured people, and may transport them to the emergency department or between care facilities. EMTs examine patients, take vital signs, and obtain medical histories. They give emergency care to patients, including splinting fractures, controlling bleeding, treating acute allergic reactions, and maintaining breathing and the heart beat.

## Employment Opportunities:

Employment for EMTs is stable at this time, but long-range projections predict growth. EMTs work in volunteer and paid positions with ambulance services and fire departments. They are also moving into positions of providing patient care in hospital emergency rooms and industrial settings.

## Potential Earnings:

EMTs earn an average of $\$ 11$ per hour. Experienced paramedics earn up to $\$ 15$ per hour, with supervisors and managers earning higher salaries.

| Course |  | Credits |  |  |
| :--- | :--- | :---: | :---: | :---: |
| Number | Course Title | F | W | S |
| BI 231, 232, 233 | Human Anatomy and Physiology | 4 | 4 | 4 |
| EM 101 | Introduction to Emergency Services | 4 |  |  |
| EMT 151 | Emergency Medical Technician |  |  |  |
|  | $\quad$ Basic, Pt 1 | 5 |  |  |
| OA 140 | Medical Terminology I | 3 |  |  |
| EMT 152 | Emergency Medical Technician |  | 5 |  |
|  | $\quad$ Basic, Pt 2 |  | 3 |  |
| CJ 203 | Crisis Intervention | 3 |  |  |
| WR 121 | English Composition** |  | 3 |  |
| EMT 169 | Emergency Medical Technician Rescue |  |  |  |
| EMT 170 | Emergency Communication and Patient |  | 3 |  |
|  | $\quad$ Transportation |  | 4 |  |
| MTH 65 | Math for Applied Sciences* or |  |  |  |
| MTH 95 | Intermediate Algebra* |  |  |  |
| PSY 101 | Psychology of Human Relations |  | 3 |  |

[^5]
# Medical Assistant <br> 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 $\$ 25,180$ 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 |  | Credits |  |  |
| :--- | :--- | :---: | :---: | :---: |
| Number | Course Title | 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 | 3 |
| WR 40 | English Fundamentals* or |  |  | 3 |
| WR 121 | English Composition* |  | 3 |  |
| BI 122 | Basic Human Anatomy \& Physiology II |  |  | 2 |
| MA 115 | Pharmacology for Medical Assistants I |  |  | 5 |
| MA 231 | Medical Assistant Practicum II |  |  | 3 |
| PSY 101 | Psychology of Human Relations |  |  |  |

[^6]
# Automotive Technician 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 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. Students completing this program may transfer into the One-Year Toyota T-Ten program through an articulation agreement with Umpqua Community College.

## 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.


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.

# CADD Technician (Computer-Aided Design \& Drafting) 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. These entry level CADD Technicians tasks involve computer skills and limited theoretical knowledge and are performed under close 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.

## Employment Opportunities:

The job outlook for CADD Technicians are 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.

## Program Requirements:

The department recommends that students enter the program at the beginning of fall term, based upon space availability. 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: 35 or higher for writing and 38 or higher for math.

| Course |  | Credits |  |  |
| :--- | :--- | :---: | :---: | :---: |
| Number | Course Title | F | W | S |
| DRF 139 | Technical Print Interpretation | 3 |  |  |
| DRF 213 | AutoCAD - Beginning | 4 |  |  |
| ART 115 | Basic Design | 3 |  |  |
| MIC 145 | Introduction To Integrated Software or | 3 |  |  |
| CS 131 | Intro to Computer Info. Systems | $(4)$ |  |  |
|  | Technical Options | 3 |  |  |
| DFR 214 | AutoCAD - Intermediate | 4 |  |  |
| ART 116 | Basic Design | 3 |  |  |
| MTH 65 | Mathematics For Applied Sciences* or | 4 |  |  |
| MTH 95 | Intermediate Algebra* | $(5)$ |  |  |
| WR 40 | English Fundamentals** or | 3 |  |  |
| WR 121 | English Composition** | $(3)$ |  |  |
| DRF 185 | Computers in Design | 3 |  |  |
| DRF 215 | AutoCAD - Advanced |  | 4 |  |
| PSY 101 | Psychology of Human Relations or |  | 3 |  |
| BA 285 | Human Relations in Business |  | $(3)$ |  |
| DRF 295 | Directed Projects |  | 3 |  |
| DRF 228 | CADD Exam Preparation |  | 2 |  |


| Technical Options |  |  |
| :--- | :--- | :--- |
| 3 Credits chosen from the following list: |  |  |
| 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 |
| CSC 9733 | Desktop Publishing w/Pagemaker | 1 |
| CSC 9752 | 3D Modeling w/FormZ | 1 |
| CSC 9752 | Digital Imaging w/Photoshop | 1 |

[^7]
## 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.


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

## TECHNICAL OPTIONS

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

## Course

| Number | Course Title | Credits |
| :--- | :--- | :---: |
| MAS 100 | Maritime Occupations | 2 |
| MAS 110 | Limited Operator Uninspected Passenger <br> Vessel Certification | 3 |
| MAS 111 | Limited Operator Uninspected Passenger <br>  <br>  <br> 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 (if not already taken as | 3 |
|  | a degree requirement) | 1 |
| MAS 136 | STCW Bridge Resource Management | 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 |  |


| 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 <br> (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 | $\begin{aligned} & 4 \\ & 3 \end{aligned}$ |
| Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted. |  |  |
| ** Minim | Minimum grade C or higher. |  |
| Course is offered in an individualized format. |  |  |
| $+\quad$ 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 <br> 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.

| First Year |  |  | Second Year |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course | Course Title | Credits | Course <br> Number | Course Title | Credits |
| MTH 65 | Math for Applied Sciences * or | 4 | BA 214 | Business Communications * | 3 |
| MTH 95 | Intermediate Algebra * |  |  | (or WR 121 if not taken in first year, or course higher | han WR 121) |
|  | (or a course higher than MTH 95) | (5) | HS 101 | Alcohol use, Misuse, and Addiction | $3$ |
| WR 40 | English Fundamentals * <br> (or WR 121 or course higher than WR 121) | 3 |  | (or HS 102, Drug Use, Misuse, and Addiction; or acceptable three credit Humanities or Social Scien | ny <br> ce course) |
| PSY 101 | Psychology of Human Relations | 3 | CS 101 | Fundamentals of Computing | 1 |
| IT 140 | Industrial Safety | 1 | IT 105 | (Or computer course higher than CS 101) | 4 |
| MAS 181 | Seamanship I | 2 | IT 106 | Principles of Technology II | 4 |
| MAS 182 | Seamanship II | 2 | IT 107 | Principles of Technology III | 3 |
| MAS 183 | Seamanship III | 2 | MAS 186 | Small Vessel Operations I | 2 |
| MAS 184 | Galley Cooking | 2 | MAS 187 | Small Vessel Operations II | 2 |
| MAS 150 | Crewmember Training Marine Safety, or | 2 | MAS 188 | Small Vessel Operations III | 2 |
| MAS 135 | STCW Basic Safety Training | (3) | MAS 171 | Coastal Navigation \& Voyage Planning | 3 |
| MAS 155 | Introduction to Watchkeeping | 2 | MAS 180 | Marine Electronics | 2 |
| MAS 164 | Introduction to Navigation | 3 | HM 120 | Hazardous Materials \& Emergency Response Train | ing 1 |
| MAS 165 | Practical Navigation | 2 | MAS 190 | Vessel Practicum | $\mathrm{S} \quad 2$ |
| MAS 168 | Charts, Aids to Navigation, \& Marine Compasses | 3 | MAS 148 | Vessel Stability | S 3 |
| MAS 175 | Rules of the Road | 3 | MAS 147 | Rules and Regulations | S 3 |
| MAS 190 | Vessel Practicum | S 1 | MAS 185 | FCC GMDSS Training | S 3 |
| MAS 100 | Maritime Occupations | S 2 | MAS 130 | Radar Observer: Original Endorsement, Unlimited | $\mathrm{S} \quad 2$ |
| MAS 141 | Trawling and Trawl Safety | S 2 | IT 110 | Applied Technology Project | $\mathrm{S} \quad 2$ |
| MAS 142 | Fishing Gear Safety | S 2 |  |  |  |
| MAS 170 | Marine Weather, Tides, Currents, and Waves | S 3 |  | Technical Options Course List |  |
| WLD | Welding | S 1 | The follow | g technical options may be substituted for any sugg | sted elective |
|  |  |  | MAS 190 | Vessel Practicum | 1-3 |
| S = Sugg | ed Elective |  | MAS 191 | Deckhand Practicum | 1-4 |
|  | elective |  | 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 |

# Specialized Training Programs <br> 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

$$
\text { gross tons. (Minimum of } 60 \text {-hours required for licenses of } 500 \text { gross tons or greater)* }
$$

The College's License Training Program is approved to satisfy CFR requirements. The approval allows students to complete the Training Program in leu 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:
5. Marine Safety (24-hours), CFR requirements
6. Basic Safety Training (40-hours), IMO and CFR requirements
7. HAZWOPER ( 24 and 40 hour), CFR requirements
8. FCC examination, Element 1 (Marine Radio Operator Permit) and Element 1 and 7
9. Global Marine Distress Safety System (GMDSS) Radio Operator, 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.
For additional information on Marine Safety Training, Radar Observer Program, ARPA Training and STCW GMDSS Training, see page 60 of this catalog.

## 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 are 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, CNA certification, 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 at any point up to the beginning of the second year, 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:

1. A high school diploma with a C average (a GPA of 2.0) or higher, or a GED certificate with an average score of 45 , or 24 credits of college level courses with a cumulative GPA of 2.0 or higher.
2. a. One year of high school chemistry with lab within the past 5 years, or CH 104 and CH 105 Introductory Chemistry, or equivalent with a grade of C or above.
b. MTH 65 Math for Applied Sciences completed with a grade of C or above, or readiness for MTH 95 Intermediate Algebra or higher demonstrated by placement test scores.
c. Readiness for WR 121 English Composition demonstrated by placement test scores; or completing WR 40 English Fundamentals or equivalent or higher with a grade of C or above.
3. 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.

## 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 $\$ 23$ per hour depending where the nurse works. Nurse practitioners and nurse managers earn salaries at a range of \$45-60,000 per year.

| First Year |  |  |  |  |  |  | Second Year |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course |  | Credits |  |  |  | Course <br> Number | Course Title | Credits |  |  |
| Number | Course Title | F | W | S | Su |  |  | F | W | S |
| BI 231,232,233 | Human Anatomy \& Physiology | 4 | 4 | 4 |  | NFM 225 | Human Nutrition |  | 4 |  |
| BI 234 | Microbiology | 4 |  |  |  | NUR 201 | Nsg: Clients in Crisis+ | 7 |  |  |
| NUR 101 | Nsg: Found. of Care+ | 8 |  |  |  | NUR 202 | Nsg: Families in Crisis+ |  | 8 |  |
| NUR 102 | Nsg: Focus on Indiv.+ |  | 8 |  |  | NUR 208 | Nsg: Transit. to Practice+ |  |  | 7 |
| NUR 103 | Nsg: Focus on Fam.+ |  |  | 8 |  | 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 or |  |  | 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 ${ }^{* *}$ Arts \& Letters elective*** | 3 |  | 3 |
|  | CS or MIC elective | 1 |  |  |  |  |  |  |  |  |
|  | Hlth, PE, or Dance elect.* |  |  | 1-3 |  |  |  |  |  |  |

+ 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 113 \& 114.
*** Selected from Arts and Letters list on page 113.
\#\# 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.


## 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 $\$ 15.60$ per hour in Oregon.

| Course |  | Credits |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Number | Course Title | 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.+ |  | 8 |  |  |
| NUR 103 | Nsg: Focus on Fam.+ |  |  | 8 |  |
| NUR 109 | Nsg: Mental Health + |  |  | 4 |  |
| NUR 112 | Collab. Practice I | 2 |  |  |  |
| NUR 113 | Collab. Practice II |  | 3 | 1 |  |
| PSY 215 | Devl. Psychology |  |  | 3 |  |
| WR 121 | English Composition | 1 |  | $1-3$ |  |

* 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.
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.


## Lifelong Learning

The College considers education to be a lifelong process; therefore, courses are taught for all ages and interests. Community 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.

The Community Education Division 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 community 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. There are more than 250 such courses 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.

Off Campus Classes

## Registration For Community Education

Registrationtimes and locations for community education courses are provided in the term schedule published prior to each term. Student registrations are processed on a first-come, firstserved 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.

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 Arch Cape, 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 Ranier. Call the Community 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.

College courses and workshops 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 oncampus.

Satellite courses and workshops are also available through Oregon's Data and Video Services (DVS) System. Interactive two-way audio/visual communication is provided on campus for classes not offered in the College's regular schedule. Business, industry, and government agencies also use the system. Contact the Learning Resource Center (Library) for details, (503) 338-2341.

## Community 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 <br> Development Center (BizCenter)

The Small Business Development Center provides 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) 325-2405 for further information.

## Apprenticeship Training

Related classroom training for registered apprentices is also coordinated through the Community Education 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.

## 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 capital resources. 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 503-738-8535 for information and to make an appointment with a counselor.

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 (Community Education office).

## Speclal 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 Division. 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 selfsufficient 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, local school districts, and Clatsop Behavioral Healthcare to provide services. The program is funded through the Family Support Act of 1983 and the State of Oregon.

## 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 both presenters and audiences in a setting of artistry and education. Events presented at the Performing Arts Center include music, theater, lectures, and films with occasional art shows in the lobby. In addition, the College's North Coast Symphonic Band, conducted by James R. Smith, is showcased in several concerts a year. Monthly art exhibitions at the Art Center Gallery include opening receptions with refreshments and talks by the gallery curator and/or guest artists.

The Arts \& Ideas program is funded by Clatsop Community College and through our supporting memberships and sponsors. Season pass 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 to grow towards economic self-sufficiency through personal development and career exploration.

Lives in Transition provides:

- Classes in life and transition planning
- Classroom activities include: developing self esteem, assertiveness, communication skills, decision making, and goal setting
- Information on non-traditional and vocational technical careers
- Six tuition free, transferable college credits
- On-going support, information and referral to College and community resources

The program is located in Towler Hall, room 209. For more information call (503) 338-2377.

## Dispute Resolutions

Dispute Resolutions offers help resolving conflicts, including neighbor-to-neighbor; family; landlord/tenant; employer/employee; and consumer/merchant disputes. We'll help you explore your options and discover how creative conflict resolution can work for you.

Our trained local mediators help people involved in disputes express their concerns and work together to resolve the issues. Mediation is a shared problem-solving process. Our mediators listen to both sides of the story, gather information by asking questions, and help people reach their own agreements.
Dispute Resolutions' mediators are trained volunteers from the community. We offer Basic Mediation Training every year or two, as well as on-going special trainings for certified mediators.
In Basic Mediation Training, students learn strategies and practice techniques for assisting parties in conflict to move toward resolution of their dispute based on the principle of selfdetermination. The training format combines theory and practice and includes demonstrations; lectures and skills practice including 6 hours of role-playing. This 32-hour course meets the Oregon Dispute Resolution Commission standards for mediation certification.

For more information about peaceful conflict resolution, call 338-2509.

## Speclal Programs

## 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.

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,
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.


For more information about these programs, contact the Maritime Science Center, 6540 Liberty Lane Astoria, OR 97103 (503) 325-7962
(503) 325-7962.

## STCW GMDSS Training

The U.S. Coast Guard approved 70hour 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. The five-day original endorsement class is required if you will be 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.

For more information on Customized Training and Maritime Science degree and certificate programs, see pages 51-53 of this catalog.

## 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.

Lower division courses are provided by Clatsop; upper division courses are brought to the Clatsop campus through arrangements with Linfield College's Division of Continuing Education.

The program features computer-mediated, weekend and evening on-site classes and credit for prior learning. Contact the Clatsop/ Linfield Advisor for further information. Phone: (503) 8832447 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 1-800-4515767,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 you succeed in school, make plans for the future and enter postsecondary education. These grants, Educational Talent Search (ETS) and Upward Bound (UB), are long term grants which are renewable; the services from these grants should continue for many years. The requirements for eligibility are similar for both grants with an emphasis on students who come from families which qualify based on income and educational levels. If you want more information, you should contact the ETS or UB office at (503) 338-2370.

## Educational Talent Search

Educational Talent Search (ETS) is a $100 \%$ federally funded grant which helps eligible 6 th grade through 12th grade students be successful in school, graduate from high school, and enter an appropriate post-secondary program. ETS provides a wide range of services to participants in the 8 schools in the program. Classroom presentations, small group work, large multi-school activities, individual counseling, and special group tours are a few of the approaches used. Individuals who are eligible and are past high school age can also participate in the program. If you have questions, you should contact the ETS Office at (503) 338-2370.

## Upward Bound

Upward Bound (UB) provides an intense, yearlong program for eligible students which includes a tutorial program during the year and a five to six week summer program. You have a variety of cultural and educational experiences as well as opportunities to explore career and school options. The summer program will emphasize hands-on experiences in math and science. Upward Bound is $100 \%$ federally funded. If you are interested in more information, you should contact the Upward Bound office at (503) 338-2370.

## Trio Grant Programs

## Educational Talent

 Search (ETS)Upward Bound (UB)

Student Support Services (Plus Program)

## Postsecondary Grant

## Student Support Services

Another strategy of the TRIO Program is Student Support Services (SSS). This program serves the academic and personal needs of first-generation college students, students with disabilities and low-income students. The Plus Program is Student Support Services at Clatsop and is $100 \%$ federally funded. Individuals interested in more information should see the description of the Plus Program on page 23 .

## Carl D. Perkins Vocational and Technical Education Act of 1998

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

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

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

Business \& Management
Health Occupations
Industrial \& Manufacturing Technologies
Funding is available for staff training and curriculum development, including inservice training of both professional technical and academic instructors working with professional technical students for integrating academic and professional technical education.

# Special Programs Adult Education and Family Literacy 

## 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 and labs, college preparation, GED, and English for Speakers of Other Languages (ESOL). 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 through tutoring, study groups and career counseling opportunities. All services in the SEA are free.

## College Preparation Courses for Transfer and Vocational 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 test and meeting with your assigned advisor, you will register for the appropriate courses.

## General Educational <br> Development (GED)

The GED program offers classes for you to complete the GED equivalency certificate. This certificate is accepted as a substitute for a high school diploma by 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. Classes are free and you may begin throughout the term.

## English for Speakers of Other Languages

English for Speakers of Other Languages (ESOL) 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 Seaside. The ESOL classes are free, and you may register at any time.

## Literacy Program

Tutors are available to assist basic skills and ESOL students with reading, writing, math, citizenship and workforce skills. Free trainings are offered semiannually for tutors. 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.

## 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 SignLanguage (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 <br> 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.

## 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.

ANT 232

## NATIVE NORTH AMERICANS

(3.00 Lecture Hrs./Wk.)

## 3 Credits

Students gain ability to describe and discuss the native populations of the New World, from simple food collecting bands to advanced civilizations, including life and customs prior to euro-american contact, and the impact of westernization on native cultures.

## ART

## ART 104 <br> ART APPRECIATION: ITALY

(2.00 Lecture Hrs./Wk.)

2 Credits
Students will study the visual arts of Italy from Etruscan times through the Baroque style of the $17^{\text {th }}$ Century.

## 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 <br> 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 <br> 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 the art movements of the 20th Century. Students learn how to independently make use of creative thought processes and visual problem solving. Prerequisite: ART 116 or instructor approval.

## ART 118 <br> 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 will be introduced to camera obscura including the use of pin-hole photography. They will gain fundamental skills in photographic technique and conceptual content, and examine camera operation, composition, processing, printing and presentation. Recommended prerequisite: Art 115.

## ART 162 <br> INTRODUCTION TO PHOTOGRAPHY

(6.00 Lecture/Lab Hrs./Wk.) 3 Credits

Students will develop a personally creative approach to photography through field and darkroom work, class critique and study of other photographers and their images. The class will focus on traditional photography and issues of exposure, framing, etc. Recommended prerequisite: Art 161.

## ART 163

## INTRODUCTION TO PHOTOGRAPHY

## (6.00 Lecture/Lab Hrs./Wk.)

3 Credits
Students will be introduced to the concepts of digital photography and questions of art versus journalism, ethics, and modified realities. Skills learned include scanning, editing, manipulation, and outputting of digital photographic images. Recommended 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 <br> 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 <br> 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 Romanesque 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 Gothic through the Baroque periods. Note: Need not be taken in sequence.

## ART 206 <br> HISTORY OF WESTERN ART <br> (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 20 ${ }^{\text {TH }}$ CENTURY (3.00 Lecture Hrs./Wk.) 3 Credits
Through the study of $20^{\text {th }}$ 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 <br> SURVEY VISUAL ARTS OF THE 20 ${ }^{\text {TH }}$ CENTURY (3.00 Lecture Hrs./Wk.) 3 Credits

Through the study of $20^{\text {th }}$ 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 $20^{\text {TH }}$ CENTURY

 (3.00 Lecture Hrs./Wk.) 3 CreditsThrough the study of $20^{\text {th }}$ 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.) <br> 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 <br> CALLIGRAPHY - INTERMEDIATE <br> (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. Prerequisite: Art 115 and CS 131 or instructor approval.

## 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.


#### Abstract

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 <br> 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.) <br> 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.


#### Abstract

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 <br> 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 <br> INTRO TO MIXED MEDIA AND HYBRID FORMS: MULTIDISCIPLINARY <br> (6.00 Lecture/Lab Hrs./Wk. <br> 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 <br> INTRODUCTION TO PAINTING

(6.00 Lecture/Lab Hrs./Wk.)

3 Credits
Students complete projects addressing compositional and technical problems, 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, and philosophy of painting. 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. 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 <br> PAINTING - INTERMEDIATE

(6.00 Lecture/Lab Hrs./Wk.)

3 Credits
Students complete projects which demonstrate applied knowledge of methods, materials, composition, and technique. 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.

## 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

GENERALBIOLOGY-EMPHASISONHUMANBIOLOGY (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 <br> 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 and field 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

(3.0 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, 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 101

BOTANY
(3.00 Lecture, 3.00 Lab. Hrs./Wk.)

4 Credits
Introductory study of plants. Students demonstrate the application of 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.

## BUSINESS ADMINISTRATION

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 <br> BUSINESSMATH 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. They will become familiar with asset management, capital budgeting, and long-term financing procedures. Prerequisites: MTH 65 and BA 211 with a C grade or better, 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 <br> 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, microfiche and alternative paper-oriented systems.

## 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 EXPERIENCESEMINAR-BUSI-

 NESS 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.

## CHEMISTRY

## CH 104

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

## CH 105

## INTRODUCTORY CHEMISTRY

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

## CH 106

## INTRODUCTORY CHEMISTRY - BIOCHEMISTRY

(3.00 Lecture, 2.00 Lecture/Lab, \& 1.00 Lab Hrs./Wk.) 4 Credits

Students master basic knowledge of the fundamental principles of biochemistry including organic chemistry and the four important classes of biomolecules: carbohydrates, lipids (fats and oils), proteins, and nucleic acids. Prerequisite: CH $104 \& 105$ or equivalent with a "C" grade or higher.

## CH 221

## GENERAL CHEMISTRY

## (4.00 Lecture, 3.00 Lab Hrs./Wk.)

## 5 Credits

This three-term series is designed for all science and engineering majors. The first term students master knowledge and concepts of stoichiometry, energy in chemical reactions, quantum mechanics, atomic and molecular structure, periodicity, and chemical bonding. Prerequisites: Two years of high school algebra or MTH 95, one year of high school chemistry or CH 105, and instructor approval.

## CH 222

GENERAL CHEMISTRY
(4.00 Lecture, 3.00 Lab Hrs./Wk.)

## 5 Credits

Second term of the general chemistry series for all science and engineering majors. Students master knowledge and concepts including gas laws, liquids and solids, intermolecular forces, colligative properties, solutions, chemical kinetics, acids and bases, and aqueous equilibria. Involves extensive algebraic prob-lem-solving. Prerequisites: CH 221; MTH 111 is highly recommended.

CH 223
GENERAL CHEMISTRY
(4.00 Lecture, 3.00 Lab Hrs./Wk.)

5 Credits
Third term of the general chemistry series for all science and engineering majors. Students master knowledge and concepts including chemical thermodynamics, electrochemistry, atmospheric chemistry, lava chemistry, nuclear chemistry, and an introduction to organic chemistry. Involves extensive algebraic problem-solving. Prerequisites: CH 222; MTH 111 is highly recommended.

## 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 Manager.

## 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 <br> 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 <br> SCRIPTING LANGUAGE

(2.00 Lecture and 3.00 Lab Hrs./Wk.) 3 Credits

Many specialized areas of computing employ light-duty programming languages; frequently they are variants of a fullfeatured language. In this course, students will explore three such scripting languages much used in web site construction: VBScript, JavaScript, and Perl. Prerequisite: CS 161.

[^8]
## CS 161 <br> 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.

## CS 162

## COMPUTER SCIENCE II

## (3.00 Lecture, 3.00 Lab Hrs./Wk.)

4 Credits
Students develop a more advanced understanding of problem solving, algorithm design, and structured programming using a high-level language. Students solve problems using a variety of data structures and algorithms for storing and manipulating data including searching and sorting techniques, implementation of stacks, queues, linked lists and algorithm analysis. Prerequisite: CS 161.

## CS 163

## COMPUTER SCIENCE III

## (3.00 Lecture, 3.00 Lab Hrs./Wk.)

4 Credits
This third course in programming, students will finish developing the important techniques of modern software development, and then leverage these skills to explore a specialized topic in Computer Science. These topics may include network programming, Animation/3D graphics, component construction (ActiveX/ JavaBeans), or server-side web programming (ASP/JSP). Prerequisite: CS 162.

## CS 171 <br> PRINCIPLES OF COMPUTER ORGANIZATION

 (3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 CreditsStudents 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.

CS 260

## DATA STRUCTURES

(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits

Students achieve and demonstrate their knowledge of the implementation and analysis of iterative and recursive algorithms to solve complex problems by completing programming exercises using scalar variables, arrays, linked lists, stacks, queues, trees, graphs, and table structures. Prerequisite: CS 161, 162.

CS 271

## COMPUTER ARCHITECTURE

(3.00 Lecture, 3.00 Lab Hrs./Wk.)

4 Credits
Building on the knowledge and skills gained in CS 171, students gain a more sophisticated knowledge of microprogramming, machine language instructions, interrupts, operating system interface, and virtual memory. They gain and apply knowledge of assembly language programming, macros, linking and loading. Prerequisite: CS 171.

## CS 278

## DATA COMMUNICATIONS AND NETWORKING

 (6.00 Lecture/Lab Hrs./Wk.) 3 CreditsStudents 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: MIC 178 or instructor approval.

## CS 279M

NETWORK MANAGEMENT - LAN NT
(2.00 Lecture, 3.00 Lab Hrs./Wk.) 3 Credits

Students achieve and demonstrate knowledge of the implementation, installation, and management of local area networks. They install and configure hardware and software to support clientserver computing and services using Microsoft Network Operating System (NOS) software. Prerequisite: CS 278

## CS 279N

NETWORK MANAGEMENT - LAN NOVELL
(2.00 Lecture, 3.00 Lab Hrs./Wk.)

3 Credits
Students achieve and demonstrate knowledge of the implementation, installation, and management of local area networks. They install and configure hardware and software to support clientserver computing and services using Novell Network Operating System (NOS) software. Prerequisite: CS 278.

## CS 281 <br> COOPERATIVE WORK EXPERIENCE SEMINAR MICROCOMPUTER APPLICATIONS

## (1.00 Lecture Hr./Wk.) <br> 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.

## CS 281 <br> COOPERATIVE WORK EXPERIENCE SEMINAR MICROCOMPUTER PROGRAMMING \& NETWORKING

## (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.

## CSB 133

## BEGINNING VISUAL BASIC PROGRAMMING

(3.00 Lecture and 3.00 Lab Hrs./Wk.) 4 Credits

This is the first of three courses in programming Visual BASIC applications. Students use visual BASIC to write GUI applications. Prerequisite: CS 131 recommended.

CSB 233

## ADVANCED VISUAL BASIC PROGRAMMING

(3.00 Lecture and 3.00 Lab Hrs./Wk.)

4 Credits
Students build on the skills gained in CSB 133 and learn advanced features of visual programming including customizing applications, interfacing with other applications, and using a visual programming professional edition with its advanced features. Prerequisite: CSB 133.

CSB 234
VISUAL BASIC III
(3.00 Lecture and 3.00 Lab Hrs./Wk.)

4 Credits
This is the third course in application development using the Visual Basic programming language. Students explore advanced topics in Visual Basic programming which may include: Internet and Intranet programming, animation, BackOffice© solutions, API programming, and advanced algorithms and data structures. Prerequisites: CSB133 and CSB233.

## 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 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.

## CREDIT FOR PRIOR LEARNING

## CPL 120 <br> 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.

## 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 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 <br> INTRODUCTION TO CORRECTIONS <br> (3.00 Lecture Hrs./Wk.)

3 Credits
Students gain knowledge of the historical development and current processes in corrections including incarceration, probation, parole, treatment theories, and the human relations aspects of criminal justice careers.

CJ 132

## INTRODUCTION TO PAROLE AND PROBATION

(3.00 Lecture Hrs./Wk.)

3 Credits
Students demonstrate knowledge and critical analysis of the principles and techniques used in parole and probation in the administration of criminal justice.

CJ 203
CRISIS INTERVENTION
(3.00 Lecture Hrs./Wk.)

3 Credits
Students demonstrate knowledge of crisis intervention techniques used in domestic disputes, in suicide attempts, and in dealing with sexual assault victims and/or persons experiencing the trauma of a crisis.

## CJ 210

CRIMINAL INVESTIGATION
(3.00 Lecture Hrs./Wk.)

3 Credits
Students develop knowledge of the history, theory, and principles of criminal investigation; strategies and procedures; forensic science and the crime lab; and crime lab techniques, capabilities and limitations.

CJ 215

## ISSUES IN CRIMINAL JUSTICE SUPERVISION AND 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 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 nonoffending 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.

## DANCE

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

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

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

## D 192

DANCE - BEGINNING MODERN
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits

Students of professional and recreational dance develop skill in modern dance techniques.

D 192

## DANCE - BEGINNING TAP

(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits

Students of professional and recreational dance develop skill in the basic vocabulary, body movement, footwork, rhythm, and coordination necessary to execute tap dance steps and routines.

D 260
DANCE PERFORMANCE
(3.00 Lab Hrs./Wk./Cr.)

1-3 Credits
Students develop their skills in dance and gain experience performing dance as a theatre art through dealing with production problems in choreographing, staging, lighting, and costuming for dance. Prerequisite: None; some dance experience helpful.

## D 292 <br> DANCE - INTERMEDIATE BALLET <br> (1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits

Ballet, emphasizing a complete foundation for all types of body movement. Stresses clarity, precision, body mechanics. Enchainments giving emphasis to epaulment. Prerequisite: D 192 Beginning Ballet.

D 292
DANCE - INTERMEDIATE JAZZ
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits

Students of professional and recreational dance apply movement theory in jazz dance. Prerequisite: D 192 Beginning Jazz.

D 292

## DANCE - INTERMEDIATE MODERN

(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits

Students of professional and recreational dance apply movement theory in modern dance. Prerequisite: D 192 Beginning Modern.

## D 292

DANCE - INTERMEDIATE TAP
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits

Students expand their skills in the basic vocabulary, body movement, rhythm, and coordination necessary to perform combinations of footwork steps and routines. Prerequisite: D 192 Beginning Tap.

## D 294

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

D 294
DANCE - ADVANCED JAZZ
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits

Students develop skills in advanced movement and theory, and complete an apprenticeship in teaching jazz dance. Prerequisite: D 292 Intermediate Jazz.

## D 294

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

D 294
DANCE - ADVANCED TAP
(1.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 2 Credits

Students develop skill in fast-paced barre with emphasis on increasing complexity of tap rhythms and sounds. They also improve balance, endurance, and style. Prerequisite: D 292 Intermediate Tap.

## 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 2730 or instructor approval. Concurrent enrollment in HD 50 recommended.

## 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 <br> ENGLISH FOR SPEAKERS OF OTHER LANGUAGES ADVANCED <br> (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.

## 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.

## 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 BASIS score of 215-235 or instructor approval.

## DGED 49 <br> 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 BASIS score of 236-242(Math/Reading) or score of 4 or 5 on writing test or instructor approval.

## 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.

## 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

## DRD 30

READING EFFECTIVENESS II
(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.

## DRD 40

READING EFFECTIVENESS III
(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 DRD 30. Concurrent enrollment in HD 50 recommended.

## 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.

## 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 cooperative 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.

EARLY CHILDHOOD EDUCATION

## ECE 101 <br> LANGUAGE ARTS ACTIVITIESFOR 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 \& SAFETYFOR YOUNGCHILDREN (10 Lecture Hrs.)

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 <br> SELF-CONCEPT, GUIDANCE, AND SELF-DISCIPLINE OF YOUNG CHILDREN <br> (10 Lecture Hrs.) <br> 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 <br> PHYSICAL FITNESS ACTIVITIES FOR YOUNG CHILDREN <br> (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 <br> CREATIVE ACTIVITIESFOR YOUNG CHILDREN: ART (10 Lecture Hrs.) <br> 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 AND 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 AND 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.) <br> 2 Credits

Students demonstrate knowledge of child development theories as they relate to young children, prenatal through nine years.

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 ageappropriate 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, fol-low-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./Cr.) 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.

## ED 281 <br> COOPERATIVE WORK EXPERIENCE SEMINAR EDUCATION <br> (1.00 Lecture Hr./Wk./Cr.) 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.

## 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.

## EMERGENCY MEDICAL TECHNICIAN

## EM 101

## INTRODUCTION TO EMERGENCY SERVICES <br> (4.00 Lecture Hrs./Wk.) <br> 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 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 EMTBasic and prepares the student to provide basic pre-hospital emergency medical care and transportation of the sick and injured. On successful completion of EMT 52, 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 EMTBasic. Prerequisite: Successful completion of EMT 151.

## EMT 165 <br> 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 <br> 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 EMTIntermediate. 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 <br> 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.

## ENGINEERING

## EGR 101 <br> 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.

## 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 201

## SHAKESPEARE

(3.00 Lecture Hrs./Wk.)

## 3 Credits

Students learn to read and respond to plays from Shakespeare's early period with an emphasis on dramatic technique and poetic devices. Course will examine critical approaches to Shakespeare's early comedies and tragedies. Note: need not be taken in sequence.

ENG 202
SHAKESPEARE
(3.00 Lecture Hrs./Wk.)

3 Credits
Students read and respond to representative comedies, tragedies, and problem plays from Shakespeare's middle period. Course will emphasize dramatic technique, tragedy and comedy genres.
Note: need not be taken in sequence.

## ENG 203

SHAKESPEARE
(3.00 Lecture Hrs./Wk.)

## 3 Credits

Students will read, analyze and explore Shakespeare's later tragedies and romances. Course will emphasize dramatic and poetic technique and plays' political and historical contexts.
Note: need not be taken in sequence.
ENG 204
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.

## 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.

## 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.

## 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 <br> (3.00 Lecture Hrs./Wk.) <br> 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.

## 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 <br> TECHNIQUES IN ENVIRONMENTAL INFORMATION ANALYSIS

(3.00 Lecture, 3.00 Lab. Hrs./Wk.)

4 Credits
Students gain an overview of environmental measurement, instrumentation, and data analysis. They develop mapping, modeling, and group problem solving skills. This class involved field work and uses computers. Prerequisites: ES 150 and MTH 243 or instructor permission.

## FIRE PROTECTION

## FRP 151

FIREFIGHTER SKILLS
(9 Lab Hrs./Wk.)
3 Credits
Provides the beginning firefighter with the knowledge and skills required to work under direct supervision. Prerequisite: Current CPR certificate.

## 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.

## 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.

## GENERAL SCIENCE

## GS104

## 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.

## GS105

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: heat, cloud formation, buoyancy and pressure. Need not be taken in sequence. Prerequisite: MTH 70.

## GS106

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 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.

## GEOGRAPHY

## GEO 100 <br> INTRODUCTION TO PHYSICAL GEOGRAPHY

## (3.00 Lecture Hrs./Wk.) <br> 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 <br> 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 <br> 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.

## GEOLOGY

G 201

## PHYSICAL GEOLOGY

## (3.00 Lecture and 3.00 Lab Hrs./Wk.) 4 Credits

First of a two-part sequence; students demonstrate knowledge of formation and physical evolution of the Earth and mountain ranges through time; a general understanding of igneous, sedimentary, and metamorphic rocks and minerals; and an appreciation of earthquakes, volcanology, and the development of plate tectonic theory. Note: There will be one or two Saturday field trips per term.

## G 202

PHYSICAL GEOLOGY

## (3.00 Lecture and 3.00 Lab Hrs./Wk.) 4 Credits

Second of a two-part sequence; students demonstrate knowledge of various processes by which mountain ranges are worn down and carried to the sea; the types of landforms and deposits associated with these processes; and a general understanding of natural resources in the Earth's crust. Note: There will be one or two Saturday field trips per term. Prerequisite: G 201.

G 203

## HISTORICAL GEOLOGY

(3.00 Lecture and 3.00 Lab Hrs./Wk.) 4 Credits Students apply principles of physical geology to understand how tectonism and chemical/physical process in Earth, oceans, and atmosphere over enormous spans of time have influenced the evolution of life, caused localized and mass extinctions, and ultimately resulted in the planet as we know it. Note: Field trips will include a Saturday field trip to Mt. St. Helens and the G 145 field trip to central Oregon on Memorial Day weekend. Prerequisite: G 202 or instructor approval.

## GERMAN

## GER 101

FIRST YEAR GERMAN
(4.00 Lecture Hrs./Wk.) 4 Credits

Students develop skill in hearing, speaking, reading, and writing contemporary German through the immersion method target language spoken in the classroom.

## GER 102

## FIRST YEAR GERMAN

(4.00 Lecture Hrs./Wk.)

4 Credits
Students continue to develop skill in hearing, speaking, reading, and writing contemporary German through the immersion method - target language spoken in the classroom. Prerequisite: GER 101.

## GER 103

FIRST YEAR GERMAN
(4.00 Lecture Hrs./Wk.) 4 Credits

Students continue to develop skill in hearing, speaking, reading, and writing contemporary German through the immersion method - target language spoken in the classroom. Prerequisite: GER 102.

## GER 111

CONVERSATIONAL GERMAN
(3.00 Lecture Hrs./Wk.)

## 3 Credits

Students develop skill in basic German 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.

## GER 112

CONVERSATIONAL GERMAN
(3.00 Lecture Hrs./Wk.)

3 Credits
Students improve their skill in German conversation including the use of past tense, more complex grammatical structures, and vocabulary related to traveling, jobs and shopping. Prerequisite: GER 111 or instructor approval.

## GER 113 <br> CONVERSATIONAL GERMAN

(3.00 Lecture Hrs./Wk.)

3 Credits
Students become more proficient in German conversation through using past and future tense and learning vocabulary related to sports, health sciences and everyday situations. Prerequisite: GER 112 or instructor approval.

## HEALTH

HE 112

## STANDARD FIRST AID AND EMERGENCY CARE (1.00 Lecture Hr./Wk.) <br> 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.

## HEALTH \& FAMILY STUDIES

HFS 226

## EARLY CHILD 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 age eight.

## HEALTH \& PHYSICAL EDUCA-

TION
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.

## 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 AD500. 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 the 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 <br> 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.

## HUMAN DEVELOPMENT

HD 50
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 DRD 30, or WR 40 and DRD 40 recommended.

## HD 100

COLLEGE SURVIVAL \& SUCCESS
(3.00 Lecture Hrs./Wk.)

## 3 Credits

Students develop attitudes, skills, and strategies known to promote college success, including goal setting, time management and other personal skills; critical/creative thinking, personal learning style; note taking, study techniques, test taking; and use of college resources. Reading and writing levels at DRD 40 and WR 40 and above. Work is set at university level.

## HD 110

CAREER PLANNING
(2.00 Lecture Hrs./Wk.)

## 2 Credits

Students prepare to make informed career choices by clarifying their personality, values, and general abilities; exploring present and future career opportunities; setting career and educational goals; and developing a career action plan.

## HD 202 <br> LIFE TRANSITIONS

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

Students focus on self-exploration and development of lifeplanning 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 roleplaying 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 <br> COOPERATIVE WORK EXPERIENCE SEMINAR HUMAN DEVELOPMENT

 (3.00 Lecture Hrs./Wk.)
## 3 Credits

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.

## 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.

## 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 preapplicant 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. Note: May be repeated one time toward the Integrated Technologies degree. 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

## VEHICLE ELECTRICITY I

(3.00 Lecture, 3 Lab Hrs./Wk.)

## 4 Credits

Basic theory of D.C. electricity; electrical measurement and meter use; and application to chassis wiring. Lab assignments to reinforce theory through applications on simulations or live projects. Prerequisite: IT 105.

## IT 207

## VEHICLE ELECTRICITY II

(3.00 Lecture, 6 Lab Hrs./Wk.)

## 5 Credits

Theory and applications for servicing batteries, starting systems, charging systems and maintenance of automotive electrical circuits and components. Practical applications made on bench components and live projects. Prerequisite: IT 206, or instructor approval.

## IT 208 <br> MECHANICAL DRIVES AND TRANSMISSION OF POWER <br> (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 <br> 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 <br> VEHICLE HEATING AND AIR CONDITIONING SYSTEMS

(80 Lecture/Lab Hrs. Total)
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 281 <br> COOPERATIVE WORK EXPERIENCE SEMINAR INTEGRATED TECHNOLOGIES (1.00 Lecture Hr./Wk.) <br> 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.

## LIBRARY

## LIB 127 <br> INFORMATION RESEARCH SKILLS <br> (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.

## MANUFACTURING TECHNOL-

## QGV

## MFG 180 <br> MACHINE TOOLS I

(20.00 Lecture/Lab Hrs./Cr.)

## 1-6 Credits

Students demonstrate and apply an understanding of safe use, care, and basic maintenance of machine tools including measuring instruments, metal-cutting lathes, pedestal tool grinders, and hand tools. Students interpret mechanical drawings to fabricate parts. Prerequisite: MTH 60 or instructor approval.

## MFG 181 <br> MACHINE TOOLS II

(20.00 Lecture/Lab Hrs./Cr.)

## 1-6 Credits

Students demonstrate and apply safe use, care, and basic maintenance in advanced lathe operations with new measuring instruments. They turn grooves and machine external and internal ACME threads on the lathe. Prerequisite: MFG 180 or instructor approval.

MFG 282
MACHINE TOOLS III
(20.00 Lecture/Lab Hrs./Cr.)

## 1-6 Credits

Students demonstrate knowledge of technical information and practice safe operation, care and maintenance of drill presses and vertical milling machines. Students utilize various measuring devices and interpret mechanical drawings of parts layout. Prerequisite: MFG 181 or instructor approval.

## 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 <br> 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 <br> LIMITED OPERATOR UNINSPECTED PASSENGER VESSEL ENDORSEMENT <br> (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<br>RADAR OBSERVER: ORIGINALENDORSEMENT, 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
ARPATRAINING(AUTOMATICRADARPLOTTINGAIDS) (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 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 <br> INTRODUCTION TO NAVIGATION

(20 Lecture, 20 Lecture/Lab Hrs.; 40 Hrs. Total) 3Credits 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 <br> 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, preplotting 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) <br> 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 <br> 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 <br> INTRODUCTION TO DECK MACHINERY AND SAFETY 

(40 Lecture/Lab Hrs. Total)<br>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 <br> INTRODUCTION TO ENGINE ROOMMAINTENANCE AND SAFETY

(40 Lecture/Lab Hrs. Total)<br>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.

## 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: DMTH07 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: MTH 10, or ASSET score 33-35, 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 input/ output tables, solve, and graph 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 or COMPASS 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, and an introduction to linear inequalities and 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 or COMPASS mathematics placements tests.

## MTH 105

## INTRODUCTION TO CONTEMPORARY MATHEMATICS

## (4.00 Lecture Hrs./Wk.)

4 Credits
A survey of mathematical concepts and techniques for nonscience 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 or COMPASS mathematics placements tests.

## MTH 111

COLLEGE ALGEBRA

## (4.00 Lecture Hrs./Wk.) <br> 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 or COMPASS mathematics placement tests.

## MTH 112

## ELEMENTARY FUNCTIONS - TRIGONOMETRY

 (4.00 Lecture Hrs./Wk.) 4 CreditsFor students planning to take MTH 251 Calculus I and who have little or no background in trigonometry. Students demonstrate an understanding and are able to apply the following concepts to various situations: circular functions, trigonometric functions, inverse functions, vectors, graphs, complex numbers, and DeMoivre's theorem. Prerequisite: MTH 111 or instructor approval.

## MTH 211 <br> FUNDAMENTALS OF ELEMENTARY MATHEMATICS I

(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 gain knowledge of concepts and teaching techniques used in elementary school mathematics including problem solving strategies; sets; numeration; whole number operations; number theory; and mental, electronic, and written computation. Prerequisite: MTH 95 or instructor approval.

## MTH 212

FUNDAMENTALS OF ELEMENTARY MATHEMATICS II
(3.00 Lecture, 1.00 Lab Hrs./Wk.) 3 Credits

For prospective elementary teachers. Does not satisfy the general education mathematics requirement for the AA degree. Students learn concepts and teaching techniques used in elementary school mathematics including fractions and rational number operations; decimals, ratio and proportion; percent; introduction to algebra; and descriptive statistics. Prerequisite: MTH 95 or instructor approval.

MTH 213

## FUNDAMENTS OF ELEMENTARY MATHEMATICS III

(3.00 Lecture, 1.00 Lab Hrs./Wk.) 3 Credits

For prospective elementary teachers. Does not satisfy the general education mathematics requirement for the AA degree. Students demonstrate knowledge of concepts and teaching techniques used in elementary school mathematics including the metric system, informal geometry of measurement, graphing, and basic probability theory. Prerequisite: MTH 95 or instructor approval.

## MTH 241 <br> 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 <br> 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 <br> INTRODUCTION TO PROBABILITY AND STATISTICS (4.00 Lecture Hrs./Wk.)

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.

## MTH 254

VECTOR CALCULUS I
(4.00 Lecture Hrs./Wk.)

## 4 Credits

Fourth course in the standard calculus sequence. Students demonstrate an understanding of vectors in space, partial differentiation, multiple integrals, and vector analysis. Students utilize graphing programmable calculator and computer technology to enhance the learning experience. Prerequisite: MTH 253.

## MTH 255

VECTOR CALCULUS II
(4.00 Lecture Hrs./Wk.)

## 4 Credits

Fifth course in the standard calculus sequence. Students demonstrate an understanding of integration of functions of many variables; descriptions in parametric, polar, cylindrical, spherical, and vector forms; motion in space; introduction to vector fields; line and surface integrals. Prerequisite: C grade or higher in MTH 254.

MTH 256
DIFFERENTIAL EQUATIONS
(4.00 Lecture Hrs./Wk.)

## 4 Credits

Students will demonstrate an understanding of ordinary differential equations, including first order linear differential equations, second order differential equations, series solutions, and systems of equations. Prerequisite: MTH 253 or instructor approval.

## 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 123
MEDICAL INSURANCE \& BILLING (3.00 Lecture Hrs./Wk.)

3 Credits
Students learn and apply principles, skills, and techniques to manage selected financial aspects of a medical practice. Prerequisite: completion of OA 116 with a C grade or higher.

## MA 124 <br> MEDICAL ASSISTANT: CLINICAL PROCEDURES III (2.00 Lecture Hrs./Wk.) <br> 2 Credits

Students demonstrate advanced knowledge and skills necessary to provide care to clients and work in medical office or clinic settings, including: scheduling admissions and procedures; serving as a liaison with other agencies; complying with risk management and safety procedures; and office management. Prerequisite: completion of MA 113 and BI 122 with a C grade or higher.

## MA 125

PHARMACOLOGY FOR MEDICAL ASSISTANTS II (2.00 Lecture Hrs./Wk.) 2 Credits
Students increase their knowledge and understanding 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 115 and MA 133 with a C grade or higher.

MA 126
MEDICAL LAW AND ETHICS
(3.00 Lecture Hrs./Wk.)

3 Credits
Students learn and apply legal and ethical principles to their practice as medical assistants.

MA 133

## MEDICAL ASSISTANT CLINICAL PRACTICUM I

 (12.00 Lab Hrs./Wk.) 4 CreditsStudents 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 233
MEDICAL ASSISTANT CLINICAL PRACTICUM III
(24.00 Lab Hrs./Wk.) 8 Credits
Students apply advanced knowledge and skills in a medical office setting. Students demonstrate independent practice while providing direct care for patients and supporting office functions. Prerequisite: completion of MA 124, MA 125, and MA 231 with a C grade or higher.

## MA 281 <br> 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 cooperative work experience job and instructor approval.

## MICROCOMPUTER APPLICATIONS

## MIC 145

## INTRODUCTION TO INTEGRATED SOFTWARE

 (3.00 Lecture Hrs./Wk.) 3 CreditsStudents learn to use an integrated software package which includes word processing, database, spreadsheet, graphics, and communications operations. Prerequisite: Keyboarding skill required.

## MIC 171

INTERMEDIATE SPREADSHEETS
(3.00 Lecture Hrs./Wk.) 3 Credits

Students use advanced features and functions of an electronic spreadsheet program which will include the creation of database tables, analysis of data, and development of complex graphs and advanced macros. Prerequisite: CSL 107.

MIC 178

## USING THE INTERNET FOR COMMUNICATION AND RESEARCH

## (3.00 Lecture Hrs./Wk.)

3 Credits
Students get overview information and hands-on experience in accessing and using the resources of the INTERNET. Students learn the basics of networked communications and have the opportunity to use their knowledge of a networked environment. Prerequisite: CS 131.

MIC 207
PRESENTATION SOFTWARE
(3.00 Lecture Hrs./Wk.)

## 3 Credits

Students use software packages and creative design principles to create professional quality presentations which may include onscreen, 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 <br> MICROCOMPUTER DIRECTED PROJECT <br> (2.00 Lecture, 6.00 Lab Hrs./Wk.) 4 Credits

The capstone course for the Microcomputer Business Applications and Microcomputer Programming and Networking 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

## MUSIC

## MUP 180 <br> INDIVIDUAL LESSONS - GUITAR <br> (.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.

## MUP 174 <br> INDIVIDUAL LESSONS - VOICE

 (.50 Lecture, 6.00 Lab Hrs./Wk.)
## 2 Credits

Individual instruction in voice or instruments. Recitals may be required. 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.

## NURSING

## NUR 60 <br> 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

## (4.00 Lecture, 12.00 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 immunizations and CPR training, current CNA certification or satisfactory completion of a CNA course within the past year.

## NUR 102

## NURSING: FOCUS ON INDIVIDUALS

(4.00 Lecture, 12.00 Lab Hrs./Wk.)

8 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

## (4.00 Lecture, 12.00 Lab Hrs./Wk.) <br> 8 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.


#### Abstract

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 <br> COLLABORATIVE PRACTICE I: PHARMACOLOGY (2.00 Lecture Hrs./Wk.) <br> 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

(3.00 Lecture, 12.00 Lab Hrs./Wk.)

7 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
(4.00 Lecture, 12.00 Lab Hrs./Wk.)

8 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

(2.00 Lecture/ 15 Lab Hrs./Wk.) 7 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.

## 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.

## OFFICE ADMINISTRATION

## OA 104

## ENGLISH FOR BUSINESS

## (4.00 Lecture Hrs./Wk.) <br> 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: 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 and OA 135 or instructor approval.

OA 140
MEDICAL TERMINOLOGY I
(3.00 Lecture Hrs./Wk.) 3 Credits

Students master basic medical terminology.

OA 141
MEDICAL TERMINOLOGY II
(3.00 Lecture Hrs./Wk.)

3 Credits
Students master medical terminology dealing with specific body systems.

## OA 142 <br> 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 and OA 121 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.

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.

OA 205
DESKTOP PUBLISHING
(2.00 Lecture, 2.00 Lecture/Lab Hrs./Wk.) 3 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 <br> 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 cooperative 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

## PHARMACOLOGY

PHC 211
PHARMACOLOGY
(3.00 Lecture Hrs./Wk.)

## 3 Credits

Students demonstrate knowledge of basic pharmacological principles as they relate to specific drug groups, usage, means of drug administration, and precautions. Prerequisite: None. Chemistry and human anatomy and physiology strongly recommended.

## PHILOSOPHY

## PHL 101

## PHILOSOPHICAL PROBLEMS

## (3.00 Lecture Hrs./Wk.)

3 Credits
Students learn to view philosophy as a discipline integrating the sum of human knowledge to "see it whole," develop a concept of self in relation to the world, and understand the dilemmas of contemporary life as well as the great historical ideals of East and West.

## PHL 102

ETHICS

## (3.00 Lecture Hrs./Wk.)

3Credits
Within a multi-cultural perspective, students develop an understanding of the main ethical problems that have confronted mankind in all cultures throughout all time.

## PHL 103

## CRITICAL REASONING

(3.00 Lecture Hrs./Wk.)

3Credits
Students develop a practical understanding of creative thinking, critical analysis, the devices and ploys that undercut the rational process, and the fallacious argumentation pervasive in our society sequence.

## 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 185

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 185

## 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 185

## 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 185

## 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 185

BICYCLING - BEGINNING
(3.00 Lab Hrs./Wk.)

## 1 Credit

Students develop knowledge and skills and engage in bicycling and bicycle maintenance. They develop cycling skills as a means of aerobic conditioning, transportation and recreation.

## PE 185 <br> BICYCLING - INTERMEDIATE

(3.00 Lab Hrs./Wk.) 1 Credit

Bicycle enthusiast students will engage in longer day rides and develop the skills necessary for bicycle maintenance, planning a bicycle tour, or preparing for club racing. Prerequisite: PE 185 Bicycling - Beginning.

## PE 185

## CROSS TRAINING FOR FITNESS - BEGINNING (3.00 Lab Hrs./Wk.) <br> 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 185

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 185

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 185

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 185

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 185

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 185

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 185
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 185

## 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 185
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 185

SOFTBALL - BEGINNING
(3.00 Lab Hrs./Wk.)

1 Credit
Students practice the fundamental skills of slow-pitch softball emphasizing game strategy, tactics, rules, and playing each position.

## PE 185

SOFTBALL - INTERMEDIATE
(3.00 Lab Hrs./Wk.)

1 Credit
Students practice advanced skills of slow pitch softball emphasizing the development of team play, umpiring, and coaching. Prerequisite: PE 185 Softball-Beginning.

PE 185
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 185

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 185 <br> VOLLEYBALL - BEGINNING

(3.00 Lab Hrs./Wk.)

1 Credit
Students develop and apply the fundamental skills, strategies, rules, and etiquette of volleyball.

PE 185
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 185
WEIGHT TRAINING - BEGINNING
(3.00 Lab Hrs./Wk.)

1 Credit
Students engage in various methods of weight training which emphasize personal lifetime fitness.

## PE 185

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.

## PHYSICS

PH 201
GENERAL PHYSICS
(4.00 Lecture, 3.00 Lab Hrs./Wk.)

5 Credits
Students develop a general knowledge of physics from mechanics to nuclear physics, particularly the law of conservation of energy and how it relates to humans in everyday life. Prerequisite: MTH 95, concurrent or prior.

## PH 202

GENERAL PHYSICS
(4.00 Lecture, 3.00 Lab Hrs./Wk.)

5 Credits
Students utilize direct inquiry, discussion with peers, and a microcomputer to take the role of a physicist. Students develop mathematical descriptions of mechanical motion.
Prerequisite: MTH 111, concurrent or prior.

## PH 203

GENERAL PHYSICS
(4.00 Lecture, 3.00 Lab Hrs./Wk.)

5 Credits
Students utilize direct inquiry, discussion with peers, and a microcomputer to take the role of a physicist. Students develop mathematical descriptions of thermodynamics, electrical current, and nuclear radiation. Prerequisite: PH 202.

## PH 211

GENERAL PHYSICS WITH CALCULUS
(4.00 Lecture, 3.00 Lab Hrs./Wk.)

5 Credits
This sequence is for students planning further study in science or engineering. Students utilize direct inquiry, discussion with peers, and a microcomputer to take the role of a physicist: observing, taking data, and analyzing results rapidly and accurately. Students develop mathematical descriptions of mechanical motion. Prerequisite: MTH 251 or MTH 241, concurrent or prior.

## PH212

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: PH211; and MTH252 or MTH241, concurrent or prior.

## PH213

## 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: PH212; and MTH252 or MTH241, concurrent or prior.

## POLITICAL SCIENCE

PS 101
AMERICAN POLITICS
(4.00 Lecture Hrs./Wk.)

4 Credits
Students acquire and demonstrate knowledge of the American political system through analysis and description of the American Constitution, problems of federalism, political behavior, political parties, interest groups civil rights and liberties, elections, and the role of the media.

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.

## 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, and learning. Recommend $12^{\text {th }}$ to $13^{\text {th }}$ grade reading and writing skills.

PSY 202
GENERAL PSYCHOLOGY
(3.00 Lecture Hrs./Wk.)

3 Credits
Students gain knowledge of memory, cognition, language, psychological development, motivation, personality, and emotion. Note: strong reading and writing skills required. Recommend courses be taken in sequence, but not required.

PSY 203
GENERAL PSYCHOLOGY
(3.00 Lecture Hrs./Wk.) 3 Credits

Students develop an understanding of psychological development, assessment, disorders and their treatment, social cognition and behavior, and psychological aspects of physical health. Note: strong reading and writing skills required. Recommend courses be taken in sequence, but not required.

## PSY 215 <br> INTRODUCTION TO DEVELOPMENTAL PSYCHOLOGY

(3.00 Lecture Hrs./Wk.)

3 Credits
Students develop knowledge of human development from conception to old age and death, with emphasis on the physical, social, personality, 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: At least two terms of PSY 201, 202, 203 strongly recommended.

## PSY 231

## INTRODUCTION TO HUMAN SEXUALITY

(3.00 Lecture Hrs./Wk.) 3 Credits

Students demonstrate knowledge of the psychological, social, and biological aspects of human sexual functioning, with emphasis on sexual response patterns, sexual attitudes, sexual myths, and cultural, value aspects of human sexuality. PSY 201 strongly recommended.

## 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, of the philosophy of religion, and of Zoroastrianism, Judaism, Greek mystery religions, Christianity, the spiritual dimension of Arthurian romances, and Islam

## 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.

## 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 communica-tion-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.

## 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 <br> 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, selfconfidence, 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.

## THEATER ARTS

TA 101
INTRODUCTION TO THEATRE ARTS (3.00 Lecture Hrs./Wk.)

3 Credits
Students explore the various arts and skills involved in theatre including dramatic literature, acting, scenic design, directing, lighting, costuming, stagecraft. Students gain the skills to critique theatrical performances.

TA 121
FUNDAMENTALS OF ACTING
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits

Students explore the craft of acting through vocal and physical exercises to heighten awareness, creativity, and imagination. The class emphasizes improvisation, character analysis, and characterization.

TA 122
FUNDAMENTALS OF ACTING
(3.00 Lecture, 3.00 Lab Hrs./Wk.)

4 Credits
Students develop audition and improvisational skills while enhancing physical and vocal techniques, including dialects. Prerequisite: TA 121 or instructor approval.

TA 123
FUNDAMENTALS OF ACTING
(3.00 Lecture, 3.00 Lab Hrs./Wk.) 4 Credits Students complete acting exercises emphasizing duet acting and character analysis in roles which include dialects, Shakespeare, and other classical period styles. Prerequisite: TA 122 or instructor approval.

TA 129
DANCE FOR MUSICAL THEATRE
(2.00 Lecture, 3.00 Lab Hrs./Wk.)

3 Credits
Students develop dance technique and movement vocabulary necessary to stage and choreograph for musical theatre. Prerequisite: None. Previous experience in dance, music, and/or acting is helpful.

TA 144
IMPROVISATIONAL THEATER I
(3.00 Lecture Hrs./Wk.)

3 Credits
Students will be introduced to the theories and techniques of improvisational acting through exercises, theater games and impromptu scenes.

## TA 145

IMPROVISATIONAL THEATER II
(3.00 Lecture Hrs./Wk.)

3 Credits
Students continue to develop the theories and techniques of improvisational acting through exercises, theater games and impromptu scenes. Prerequisite: TA 144 or instructor approval.

TA 146
IMPROVISATIONAL THEATER III (3.00 Lecture Hrs./Wk.)

3 Credits
Students learn advanced theories and techniques of improvisational acting through exercises, theater games and impromptu scenes. Prerequisite: TA 145 or instructor approval

TA 161
FUNDAMENTALS OF TECHNICAL THEATRE I COSTUME DESIGN AND MAKEUP
(3.00 Lecture Hrs./Wk.) 3 Credits

Students investigate theory and practice of designing costumes and makeup for the theatre including design for dance, children's theatre, film, and stage production. Prerequisite: TA 101 or instructor approval.

TA 162
FUNDAMENTALS OF TECHNICAL THEATRE II SET DESIGN AND STAGE LIGHTING
(3.00 Lecture Hrs./Wk.)

3 Credits
Students complete scenic design and stage lighting projects for CCC Theatre and Dance productions. Prerequisite: TA 101, TA 161, or instructor approval.

TA 165

## TECHNICAL THEATRE WORKSHOP

(3.00 Lab Hrs./Wk./Cr.)

1-3 Credits
Students prepare the physical background for theatre productions including construction of sets and costumes, painting, lighting, and stage for CCC Theatre and Dance productions. Note: A maximum of six credits of TA 165 may be applied to an associate degree.

TA 227

## STAGE MAKEUP

(3.00 Lecture Hrs./Wk.)

3 Credits
Students learn and apply the basic theories and techniques of theatrical stage makeup.

## TA 254

FUNDAMENTALS OF DIRECTING (3.00 Lecture Hrs./Wk.) 3 Credits

Students will be able to demonstrate knowledge and skill in preparation and rehearsal of a play from concept through performance. Students develop research, interpretation, rehearsal, and staging techniques for a public performance of a scene or a short play. Prerequisite: TA 101, TA 121, or TA 122.

TA 265

## TECHNICAL THEATRE WORKSHOP

(3.00 Lab Hrs./Wk./Cr.)

1-3 Credits
Students prepare the physical background for theatre productions including construction, painting, lighting, and stage management for CCC Theatre and Dance productions. Note: A maximum of six credits of TA 265 may be applied to an associate degree.

TA 282

## THEATRE REHEARSAL \& PERFORMANCE

 (3.00 Lab Hrs./Wk./Cr.)1-3 Credits
Students explore the principles of acting and dramatic production through participation in auditions, rehearsal, and performance of a theatrical production.

## TA 285 <br> THEATRE PRODUCTION WORKSHOP

(3.00 Lab Hrs./Wk./Cr.)

## 1-3 Credits

Through the participation in a CCC production, students explore the principles of acting and dramatic production from auditions through rehearsal and performance. Prerequisite: instructor approval.

## WELDING

## WLD 100 <br> 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.

## 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 <br> 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 a 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
DCO 10
ABE Reading \& Writing
$\downarrow$
DCO 22
Practical
Communication




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, AGS, and AAS degrees. For courses which fulfill the distribution requirements of the AA degree, see the Distribution Requirements list on pages $25 \& 26$. 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 $20^{\text {th }}$ Century ART 218,219,220 ..................................... Calligraphy - Intermediate ART 225 .......................................................... Computer Graphics I 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 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 GER 101,102,103 .................................................. First Year German GER 201,202,203 ............................................Second Year German 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 TA 101 .................................................. Introduction to Theatre Arts TA 121,122,123 ............................................ Fundamentals of Acting WR 115 ............................................ Introduction to College Writing WR 121,122,123 ............................................... English Composition WR 227 ...................................................... Technical Report Writing WR 241,242,243 $\qquad$ Creative Writing

WR 249 .Writing Children's Books
WR 270 .

Business


## Social Science

ANT 110 ......................................... General Anthropology: Cultural ANT 150 ................................ General Anthropology: Archeological ANT 170 ......................................... General Anthropology: Physical ANT 232 ...................................................... Native North Americans
CJ 100 ...................................................... Careers in Criminal Justice
CJ 101 ................................................... Introduction to Criminology
CJ 107 ..................................................... Criminal Justice Workshop CJ 110 ........................................... Introduction to Law Enforcement CJ 120 .........................................Introduction to the Judicial Process CJ 121 .......................................................Concepts of Criminal Law CJ 130 ...................................................... Introduction to Corrections CJ 132 ...................................... Introduction to Parole and Probation CJ 203 ................................................................. Crisis Intervention CJ 210 ............................................................ Criminal Investigation CJ 215 ..............................Issues in Criminal Justice Supv. \& Admin. CJ 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 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 $\qquad$ Alcohol Use, Misuse \& Addiction


## Science/Mathematics/Microcomputers

BI 101,102,103
BI 121, 122 ............................. Basic Human Anatomy \& Physiology BI 211, 212, 213 .............................................. Principles of Biology
BI 222
................. $\qquad$ 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 125GR ...........................................................Computer Graphics

CS 125H ....................... Beginning Web Site Design \& Development
CS 133S ........................................................... Scripting Languages
CS 135H ....................... Advanced Web Site Design \& Development
CS 131 .................................Intro. to Computer Information Systems
CS 161 ............................................................... Computer Science I
CS 162 .............................................................. Computer Science II
CS 171 ..................................... Principles of Computer Organization
CS 260 ...................................................................... Data Structures
CS 271 ........................................................... Computer Architecture
CS 278 .................................... Data Communications \& Networking
CS 279M........................................ Network Management-LAN NT
CS 279N .................................... Network Management-LAN Novell
CSB 133 .......................................... Beg. Visual Basic Programming
CSB 233 ......................................... Adv. Visual Basic Programming
CSB 234 .................................................................. Visual Basic III
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
Techniques in Environmental........................................... Anysical 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 $\qquad$ Calculus I, II \& III

MTH 254 Vector Calculus I
MTH 255 Vector Calculus II
MTH 256 Differential Equations
PH 201,202,203 General Physics
PH 211,212,213 $\qquad$ 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 | ng/Intermediate Activity Class |

## Performing Arts

| D 260 | Dance Performance |
| :---: | :---: |
| MUP 171-192 | Individual Lessons |
| MUP 271-292. | Individual Lessons |
| TA 129 | Dance for Musical Theatre |
| TA 144,145,146 | .Improvisational Theater I, II, III |
| TA 161,162 | Fundamentals of Technical Theatre I \& II |
| TA 165 | Technical Theatre Workshop |
| TA 227 | .... Stage Makeup |
| TA 254 | Fundamentals of Directing |
| TA 265 | Technical Theatre Workshop |
| TA 282 | Theatre Rehearsal \& Performance |
| TA 285 | ........ Theatre Production Workshop |
| Other |  |
| B 127 | Infor |

Cooperative Work Experience (all 280 numbers)

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

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 BA 281 ..... CWE Seminar: Accounting \& Business Mgmt. CS 163 Computer Science III CS 281 ........ CWE Seminar: Programming \& Networking DRF 139 $\qquad$ Blueprint Reading \& Sketching
DRF 185 $\qquad$ . Computers in Design DRF 213 ....................................... AutoCAD - Beginning DRF 214 ..................................... AutoCAD - Intermediate DRF 215 ......................................... AutoCAD - Advanced DRF 228 ............................. AutoCAD Exam Preparation DRF 280 .................................. CWE - CADD Technician DRF 281 ........................................ CWE Seminar: CADD DRF 295 ..................................... CADD Directed Projects
ECE 101 ..... Language Arts Activities for Young Children ECE 103 ................. Math and Science for Young Children ECE 105 ... Nutrition, Health \& Safety for Young Children ECE 109............................ Early Childhood Environments ECE 119....... Self-concept, Guidance \& Self-discipline of Young Children
ECE 124... Physical Fitness Activities for Young Children ECE 125........ Creative Activities for Young Children: Art
ECE 128 .................. Program Planning and Evaluation for Young Children
ECE 129............ Observation \& Developmental Screening of Young Children
ECE 131 ..... Child Development for the Day Care Worker
ECE $134 \ldots$...Statutes, Liability \& Licensure Considerations for Childcare Facilities
ECE 137 . Child Abuse and the Law
ECE 139 Infant and Toddler Programs
ECE 145 Toys and Games for Learning ECE 146...... Handicapping Conditions in Young Children ECE 149......................... Disease Control in ECE Settings ECE 175 ...........Infant/Toddler Learning \& Social Growth in a Group Setting
ECE 281 ......... CWE Seminar: Early Childhood Education ELT 150 ..............Intro. to Direct Current Circuit Analysis ELT 155 ..... Intro. to Alternating Current Circuit Analysis ELT 206 ........................................ Semiconductor Devices ELT 207 ................................... Industrial Process Controls ELT 208 ....................... Programmable Logical Controllers ELT 219 ............................... Digital Computer Electronics ELT 220 ....................................... Introduction to Robotics ELT 231 ..................................................... Digital Circuits EM 101 ..................... Introduction to Emergency Services EMT 151 ............. Emergency Medical Tech. Basic, Part 1 EMT 152 ............. Emergency Medical Tech. Basic, Part 2 EMT $165 \ldots . .$. Emergency Med. Tech. Intermediate, Part 1 EMT 166 .......Emergency Med. Tech. Intermediate, Part 2 EMT 169 ...................... Emergency Medical Tech. Rescue EMT 170 ... Emergency Communication \& Transportation

EMT 175
EMT 280 $\qquad$
$\qquad$ . Intro. to Emergency Medical Services EMT 281 CWE

FRP 150

$\qquad$ CWE Seminar: Emergency Med. Tech. FRP 151 .................. FRP 154 ................................. Water Distribution Systems FRP 155 ................................... Instructional Methodology
FRP 156 $\qquad$ Firefighter Law
FRP 157 ................................................ Firefighter Safety
FRP 158 ........................ Pump Construction \& Hydraulics
FRP 160 ........................... Fundamentals of Fire Protection
FRP 164 ..............................................Hazardous Materials
FRP 166 ........................................... Building Construction
FRP 169 .................................Fire Department Leadership
FRP 170 .............................Firefighting Strategy \& Tactics
FRP 171 ............ Fire Protection Systems \& Extinguishers
FRP 172 ..................................... Fire Codes \& Ordinances
FRP 181 ............................... Fire Prevention \& Inspection
FRP 280 ............................................... CWE: Fire Science
FRP 281 .................................CWE Seminar: Fire Science
HD 50 .......................................................... College Skills
HD 281 ................... CWE Seminar: Human Development
IT 101 ................................. Engine Rebuilding - Gasoline
IT 102 ..................................... Engine Rebuilding - Diesel
IT 105,106,107 ............ Principles of Technology I,II \& III
IT 108 $\qquad$ Engine Principles IT 110 .................................. Applied Technology Projects IT 206, 207 ..................................... Vehicle Electricity I, II IT 208 .................... Mechanical Drives \& Trans. of Power IT 209 ................ Fluid Drives \& Hydraulic Transmissions IT 210 .................... Vehicle Tune Up and Instrumentation IT 218 .............. Vehicle Steering and Suspension Systems IT 219 ........................................... Vehicle Brake Systems IT 225 .................................................................... HVAC IT 226 ........................................... Industrial Refrigeration IT 230 ........ Vehicle Heating \& Air Conditioning Systems IT 280 ............................... CWE: Integrated Technologies IT 281 ................. CWE Seminar: Integrated Technologies MA 112 ............... Medical Assistant: Clinical Procedures I MA 113 .............. Medical Assistant: Clinical Procedures II MA 115 ............... Pharmacology For Medical Assistants I MA 123 ................................. Medical Insurance \& Billing MA 124 ........... Medical Assistant: Clinical Procedures III MA 125 .............. Pharmacology For Medical Assistants II MA $126 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ M e d i c a l ~ L a w ~ A n d ~ E t h i c s ~$ MA 133 .................. Medical Assistant Clinical Practicum I MA 231 ................ Medical Assistant Clinical Practicum II MA 233 .............. Medical Assistant Clinical Practicum III MA 280 ....................................... CWE: Medical Assistant

MA 281 $\qquad$ CWE Seminar: Medical Assistant MAS 100 .

## MAS 110

MAS 111

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


MAS 134 STCW GMDSS Training
MAS 135 ............................ STCW Basic Safety Training
MAS 136 ............... STCW Bridge Resource Management
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 $\qquad$ 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 $\qquad$ CWE Seminar: Maritime Science
MFG 150 ........... Hazardous Materials \& Industrial Safety
MFG 179
.. ................. Orientation to Machine Tools
MFG 180,181 $\qquad$ Machine Tools I \& II
MFG 250,251 .................. Manufacturing Processes I \& II
MFG 282 Manufacturing Processes I \& II
MIC 145 . Introduction to Integrated Software

MIC 171 $\qquad$ Internet for Communication \& Research
MIC 178
MIC 207 $\qquad$ Presentation Software
MIC 210 .............. Microcomputer Integrated Applications
MIC 280. $\qquad$ 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 $\qquad$ Nursing IV ,V \& VI
NUR 206,208,209 .................... Clinical Nursing of Adults \& Children I, II, III
NUR 207 $\qquad$ .Advanced Nursing: Mental Health
NUR 215 ......................... Physical Assessment for Nurses
NUR 280 $\qquad$ CWE: Nursing
NUR 281 ...................................... CWE Seminar: Nursing
PHC 211 $\qquad$ Pharmacology
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
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

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## APPENDIX C

## 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

## Emphasis in 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 Integrated Technology

DRF 213 - AutoCAD-Beginning
ELT 150 - Intro to Direct Circuit Analysis
IT 101 - Engine Rebuilding - Gasoline, or (4 cr)
IT 102 - Engine Rebuilding - Diesel (4 cr)
IT 140 - Industrial Safety ( 1 cr )
IT 141 - Tool and Shop Basics (1 cr)
MFG 180 - Machine Tools I (3 cr)
WLD 150 - Beginning Welding (3 cr)
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 Microcomputer Programming and Networking

CS 161 - Computer Science I (4 cr)
CS 162 - Computer Science II (4 cr)
CS 260 - Data Structures (4 cr) -or-
CSB 133 and CSB 233 ( 6 cr total)
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

## Contact Information

GENERAL INFORMATION (503) 325-0910 REGISTRATION

| Admissions ............ 338-2411 or 1-866 CLATSOP (toll free) | admissions@clatsopcc.edu |
| :---: | :---: |
| Arts \& Ideas ........................................................338-2443 |  |
| A.S.B.G. OfFice ................................. 338-2495 or 338-2359 |  |
| Assessment Center ................................................338-2426 |  |
| Cafeteria .............................................................338-2446 |  |
| Carl Perkins Program ..........................................338-7675 |  |
| College Services ...................................................338-2422 |  |
| Community Education ...........................................338-2408 |  |
| Computer Lab, Fertig ...........................................338-2429 |  |
| Computer Lab, Towler ..........................................338-2493 |  |
| Co-op Work Experience ........................................338-2468 | ...........cwe@clatsopcc.edu |
| Copy Center .........................................................338-2304 |  |
| Counseling Center ................................................338-2411 |  |
| Developmental Education .....................................338-2347 |  |
| Disabilities Specialist ............................................338-2474 |  |
| Educational Talent Search ...................................338-2370 | .....etsub@clatsopcc.edu |
| Financial Aid ......................................................338-2322 | financial_aid@clatsopcc.edu |
| Foundation ....................................... 338-2323 or 338-2477 |  |
| G.E.D. Program ..................................................338-2475 |  |
| G.E.D. Testing ....................................................338-2426 |  |
| Human Resources ..................................................338-2406 |  |
| Integrated Marine Tech Center ............................338-7670 |  |
| J.O.B.S. Direct Line ..............................................338-2349 |  |
| Learning Skills Center ........................................338-2347 |  |
| Linfield Program .................................................338-2308 |  |
| Literacy Coordinator ..........................................338-2557 |  |
| Lives in Transition ................................................338-2377 |  |
| Maritime Science Center .......................................325-7962 |  |
| Payroll...............................................................338-2439 |  |
| Personnel ............................................................338-2406 |  |
| Phi Theta Kappa ....................................................338-2319 |  |
| Plus Program ......................................................338-2346 | ... plusprogram@clatsopcc.edu |
| President's Office ..................................................338-2425 |  |
| Public Information ........................... 338-2503 or 338-2350 |  |
| Records/Registration ...........................................338-2437 | .......... registrar@clatsopcc.edu |
| S.B.D.C .................................... 738-3347 OR 1-800-206-7352 |  |
| S.C.C. .............................................. 738-3346 or 338-2405 |  |
| Scholarships .........................................................338-2468 | ... scholarships@clatsopcc.edu |
| Student Services ...................................................338-2411 |  |
| Tutoring Lab .........................................................338-2455 |  |
| UpWard Bound ......................................................338-2370 | ..............etsub@clatsopcc.edu |
| Veteran's Services ................................................338-2414 |  |
| Western Oregon University ...................................338-2310 | .................extend@wou.edu |
| Work Experience ...................................................338-2480 | ..............cwe@clatsopcc.edu |

# Clatsop Community College Faculty 

ADCOCK, SUSAN K.
INSTRUCTOR, NURSING
B.S.N. Nursing, Oregon Health Science University, 1970; MS Nursing, University of Portland, 1990. Home health and hospital staff nurse experience; at Clatsop Community College since 1987.

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.

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, HumboldtState 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.

## DEGNER, DENNIS

INSTRUCTOR, MARITIME SCIENCE
Experience in commercial fishing; licensing through U.S. Coast Guard; at Clatsop Community College since 1994.

ELLSBERG, ROBERT A. INSTRUCTOR, CRIMINAL JUSTICE B.A. Political Science, University of California, 1969; M.A. Criminal Justice, California State University-Sacramento, 1976. Experience as police officer; criminal justice specialist; elementary special education instructor; at Clatsop Community College since 1977.

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.

GAEUMAN, WILLIAM
INSTRUCTOR, MATHEMATICS
B.A., Philosophy, Colorado College, 1982; M.S., Mathematics, Ohio State University, 1988; at Clatsop Community College since 2001.

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.

INSTRUCTOR,
GUNDERSON, LUANN
OFFICE/MICROCOMPUTERS
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.

INSTRUCTOR, HISTORY,
HAUSER, JOHN D.
PHILOSOPHY \& WORLD RELIGION
B.A. Economics, Miami University, 1965; Ph.D. History, Washington State University, 1973; at Clatsop Community College since 1972.

## INSTRUCTOR,

HOFFMAN, NANCY
ENGLISH \& LITERATURE
B.A. Political Science, University of California, Davis, 1970; M.A. English, California State University, Sacramento, 1992. Experience in management and analysis, state of California; political columnist; at Clatsop Community College since 1993.

HYLTON, ELIZABETH
INSTRUCTOR, MATHEMATICS
B.S., Mathematics, Portland State University, 1994; M.Ed., Mathematics, Portland State University, 1998; at Clatsop Community College since 2001.

## INSTRUCTOR, BUSINESS ADMINISTRATION JACKSON, MICHAEL R. <br> \& DATA PROCESSING

B.A. Biological Science, Stanford University, 1965; M.B.A. Business Administration, Brigham Young University, 1967. Experience in U.S. Government, Department of State; at Clatsop Community College since 1986.

## INSTRUCTOR,

KASPAR, DEBBIE E.
DEVELOPMENTAL PROGRAMS
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.

KNIPPA, AUDREY E.
INSTRUCTOR, NURSING
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.

## KNUTSON-HAWES, CAROL

INSTRUCTOR, WRITING
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, AELF

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

## INSTRUCTOR, AUTOMOTIVE TECHNOLOGY

## LEUCK, JAY

A.S. Automotive Technology, Southwestern Oregon Community College, 1986; B.S. Diesel Power Technology, with Industrial Education Option Oregon Institute of Technology, 1989; ASE Master Technician Certified; Toyota Master Diagnostic Technician Certified; 13 years automotive technician experience; at Clatsop Community College since 2002.

## LOMBAER, JILL

INSTRUCTOR, MATHEMATICS
B.S., Mathematics, B.A., International Studies, Oregon State University, 1999; M.A., Mathematics, Oregon State University, 2001; at CCC since 2001.

MOHA, CARLA
INSTRUCTOR, ACCOUNTING
B.A. Accounting, Western State College, Colorado; M.B.A. at Regis University; at Clatsop Community College since 2000

INSTRUCTOR,
MORRISSEY, PATRICIA FOREIGN LANGUAGES/SPANISH
M.A. in Marine Affairs, University of Rhode Island, 1991; M.S Marine Biology, ITESM, Mexico, 1983; five years adjunct Spanish instructor at CCC; at Clatsop Community College full-time since 1997.

NEBEKER, ROYAL G.
INSTRUCTOR, ART
B.A. Art, 1970, M.F.A. Design, 1971, Brigham Young University. Experience in graphic design, motion picture art direction, and interior design; at Clatsop Community College since 1974

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.

INSTRUCTOR
SAGE, FLORENCE E.
SOCIAL SCIENCE/COUNSELOR
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.

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

## INSTRUCTOR, COMPUTER

INFORMATION SYSTEMS
SWERDLOFF, LUCIEN
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,

TYSON, MARIAN COLLEGE PREP/BASIC SKILLS/ESL/GED B.A. Spanish, George Fox College, 1973; M.A. TESOL, Portland State University, 1989; at Clatsop Community College since 1998.

WILLIAMS, THOMAS INSTRUCTOR, MARITIME SCIENCE
A.A.-MLT, Shoreline Community College, 1977, Seattle, WA. Tow boating and oil spill response experience; licensing through U.S. Coast Guard; at Clatsop Community College since 2000.

| Board of Directors |  |
| :--- | :---: |
|  | Term Expires in June |
|  | 2005 |
| Karen Mellin | 2005 |
| Dr. Frank Satterwhite | 2003 |
| Jan Danforth | 2003 |
| Paul Gillum | 2003 |
| Dr. Russel Hunter | 2003 |
| Dr. Marilyn Lane |  |
| Dr. John Wubben, President and Clerk of the District |  |
|  |  |

## Administrative \& Supervisory Staff

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
COMMUNITY EDUCATION
B.S. Liberal Studies, Eastern Oregon University, 2000; at Clatsop Community College since 1996.

ANDERSON, KAREN
GUIDANCE COORDINATOR
EDUCATIONAL TALENT SEARCH
B.A. Psychology and Experimental Education, Goddard College, Vermont, 1969; M.A. Marriage, Family, Child Counseling, University of La Verne, San Diego, 1978. Experience in counseling, education, management, and staff development in human service programs, and organizational consulating; at Clatsop Community College since 1994.

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

BEATTY, LAURIE
PROGRAMMER/ANALYST
A.S. Data Processing, Clatsop Community College, 1973. Computer experience; at Clatsop Community College since 1973.

DIRECTOR, EDUCATIONAL
BOHART, B. EDWARD TALENT SEARCH, UPWARD BOUND
B.A. Social Sciences, Michigan State University, 1967; M.A. Counseling and Guidance, University of Montana, 1974; postsecondary and secondary counseling; administration and part-time teaching in higher education; at Clatsop Community College since 1991.

BORING, SHARON
FINANCIAL AID SPECIALIST
Legal and financial aid experience; at Clatsop Community College since 1990.

## EDUCATION COORDINATOR

BREWER, JOY
PUBLIC SAFETY
Administrative Assistant in Law Enforcement 1978-1996. At Clatsop Community College since 1998 (part-time); 2000 (full-time).

GUIDANCE COORDINATOR,

## BRICE, BOBBI

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.

## BURKE, KAREN

DIRECTOR, HEALTH OCCUPATIONS
Diploma, Nursing, Emanuel Hospital School of Nursing, 1967; B.S. Nursing, Oregon Health Sciences University, 1981; M.S. Nursing, University of Portland, 1983. Registered Nurse; staff nurse; college nursing instructor; at Clatsop Community College since 1983.

CLARRY, EVERETT
FOOD SERVICE MANAGER
B.A. English, Portland State University, 1972. A.A. Human Services, Clatsop Community College, 1993; at Clatsop Community College since 1999.

DIRECTOR, STUDENT SUPPORT SERVICES (PLUS PROGRAM)
$\begin{array}{ll}\text { DEWITT, CHARLOTTE } & \text { SERVICES (PLUS PROGRAM) } \\ \text { B.A. Sociology, Boston University, 1977; M.A., Counseling and Educational }\end{array}$ 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.

FOSTER, MICHAEL DIRECTOR, COLLEGE FOUNDATION
B.A. History, Willamette University, 1962; M.A. History, University of Oregon, 1965; Post graduate work Southern Oregon State College, 1976; at Clatsop Community College since 1999.

DIRECTOR OF ENROLLMENT
FRIESEN, ROGER SERVICES \& INSTITUTIONAL RESEARCH 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.

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.

COORDINATOR,
GYDÉ, ANN COMMUNICATIONS AND COPY CENTER
B.F.A. Graphic 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.

HECK, ELAINE
DIRECTOR, LIVES IN TRANSITION
B.A. Business Management, Linfield College, 1991. Experience as coordinator of Adult Education; at Clatsop Community College since 1992.

## 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.

IVERSON, SUZANNE
EDUCATION COORDINATOR
Small business owner; at Clatsop Community College since 1987.
JAQUES, AL CONSTRUCTION PROJECTMANAGER
Experience in project management/supervision; at Clatsop Community College since 1995.

JENKINS, MARGARET DIRECTOR, ACCOUNTING SERVICES A.A.S. Accounting, College of the Albemarle, NC; at Clatsop Community College since 1995.

JOHNSON, GERALD (GARY) DIRECTOR, COMPUTER SERVICES B.S. Computer Science, University of Michigan, 1984; B.A. Chinese Language and Literature, University of Michigan, 1984; 20 years experience in information technologies; at Clatsop Community College since 2002

SPECIAL PROGRAM MANAGER
LEE-GORDON, KRISTIN
(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.

## DIRECTOR, ADULT EDUCATION

## LENHART, LAURA

\& FAMILY LITERACY
B.A. Philosophy and Education, Portland State University, 1977; B.A. English Literature, Portland State University, 1986; M.A. English Literature, Portland State University, 1988; at Clatsop Community College since 1998.

## COMPUTER SUPPORT

MCCLELLAND, RANDY
COORDINATOR AND WEBMASTER
A.A.S., Microcomputer Programming and Networking, Clatsop Community College, 2001; at Clatsop Community College since 2001.

WALSH, KARI EXECUTIVE ASSISTANT TO THE PRESIDENT Experience in office/secretarial field; at Clatsop Community College since 1999.

MERRILL, MARY J. DIRECTOR, COOPERATIVE EDUCATION
B.S. Management Technology, Lewis-Clark State College, Lewiston, Idaho, 1987. Experience State of Oregon Employment Department and Job Training and Partnership Act, Clatsop County. Experience, North Idaho College Office Occupations instructor; at Clatsop Community College since 1990.

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

GUIDANCE COORDINATOR,
MORRISSON, PATRICK S. 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.

OVERTON, 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, COMMUNITY 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.

DIRECTOR, SMALL BUSINESS
PANICHELLO, GREG
DEVELOPMENT CENTER (SBDC)
B.A. Business, Portland State University, 1975; licensed as a securities agent; at Clatsop Community College since 1999.

VICE PRESIDENT, INSTRUCTIONAL
PHILLIPS, DAVID W.
PROGRAMS/STUDENT SERVICES
B.S. Forest Management, Humboldt State University, 1965; M.F. Forest Management, Oregon State University, 1969; Graduate U.S. Army Command and General Staff College, 1980. U.S. Coast Guard License - Operator Passenger Carrying Vessels (Ocean); three years private, state and federal forest experience; two years college forestry instructor; at Clatsop Community College since 1972.

PIERIE, TERRI
STUDENT SERVICES SPECIALIST
Student services and financial aid experience. At Clatsop Community College since 1989.

SAMUEL, CONNIE
DATABASE ADMINISTRATOR
A.A. Business/Liberal Arts, Clatsop Community College, 1978. Secretarial office management and programmer/analyst experience; at Clatsop Community College since 1978.

GUIDANCE COORDINATOR, SAWYERS, REBECCA J. STUDENT SUPPORT SERVICES (Plus) B.A. Speech Communication, University of Utah, 1993; M.S. Counseling, Portland State University, 1999; at Clatsop Community College since 1999.

GUIDANCE COORDINATOR,
SEELEY, ESTELLE 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. Certified Mental Health Counselor; National Certified Counselor; Trauma and Critical Incident Response Team Member; at Clatsop Community College since 1993.

SWENSON, JOANN ADMISSIONS COORDINATOR/REGISTRAR B.S. Manageial 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.

WHITMAN, JENNIFER DISABILITY SPECIALIST
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.

WUBBEN, JOHN W.
PRESIDENT
A.A. Liberal Arts, Mesa College, 1959; B.A. Social Sciences, Adams State College, 1961; M.A. Education, Adams State College, 1961; Ed.D. Higher Education Administration, University of Northern Colorado, 1984. Higher education administrative experience in Colorado, Alaska, Wyoming, and Oregon; at Clatsop Community College since 1993.

## 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.


## EMT

- A majority of program graduates will report overall satisfaction with the EMT education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the EMT program coursework prepared them well for tasks they must perform on the job.
- $80 \%$ of EMT graduates will be employed as EMT's or serving as volunteer EMT's within six months of completing certification requirements or be continuing in an associate degree paramedic program.


## 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.


## 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.


## Microcomputer Programming and Networking

- A majority of program graduates will report overall satisfaction with the Programming and Networking education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Microcomputer Programming and Networking program coursework prepared them well for tasks they must perform on the job.
- $80 \%$ of students receiving a Microcomputer Programming and Networking 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 Microcomputer Programming and Networking graduates will have completed the AAS requirements within nine terms.


## Nursing-LPN

- A majority of program graduates will report overall satisfaction with the Practical Nursing education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Practical Nursing program coursework prepared them well for tasks they must perform on the job.
- $80 \%$ or more of Practical Nursing program graduates who become licensed and are seeking employment (no pursuing the RN degree) will be employed as LPN's within six months of licensure.
- $80 \%$ or more of Practical Nursing graduates will have completed the program within six terms.


## Nursing-RN

- A majority of program graduates will report overall satisfaction with the Registered Nursing education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Registered Nursing program coursework prepared them well for tasks they must perform on the job.
- $80 \%$ of Registered Nursing program graduates who become licensed as RN's will be employed as RN's within six months of licensure.
- $80 \%$ or more of graduates of the RN program, after being admitted to the program, will complete the program within ten terms.


## Office Systems

- A majority of program graduates will report overall satisfaction with the Office Systems education received at Clatsop.
- A majority of program graduates will indicate that the professional-technical education they received in the Office Systems program coursework prepared them well for tasks they must perform on the job.
- $80 \%$ of students receiving an Office Systems certificate or degree will be employed in a related field within six months of completing certificate or degree requirements or be continuing in a four-year degree program or other post-secondary program (or continuing on for an associates degree if a certificate was earned).
- A majority of the Office Systems' graduates will have completed the certificate requirements within four terms or the AAS requirements within nine terms.


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## ACADEMIC CALENDAR 2002-2003

|  | $\begin{gathered} \text { SUMMER } \\ 2002 \end{gathered}$ | $\begin{gathered} \text { FALL } \\ 2002 \end{gathered}$ | $\begin{gathered} \text { WINTER } \\ 2003 \end{gathered}$ | $\begin{aligned} & \text { SPRING } \\ & 2003 \end{aligned}$ | $\begin{gathered} \text { SUMMER } \\ 2003 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| REGISTRATION | May 28 June 28 | May 28 - <br> October 4 | November 25 January 10 | March 3 April 4 | May 27 June 27 |
| CLASSES BEGIN | June 24 | September 30 | January 6 | March 31 | June 23 |
| LATE REGISTRATION | July 1-3 | October 7-11 | January 13-17 | April 7-11 | June 30 - <br> July 2 |
| $\begin{aligned} & \text { HOLIDAYS \& } \\ & \text { COLLEGE } \\ & \text { CLOSURES } \end{aligned}$ | July 4, <br> August 29, Sept. 2 \& 20, all fridays in July \& Aug. | November 11, <br> Nov 28 \& 29 <br> December 24 January 1 | January 20, <br> February 17 | May 26 | July 3, August 28, Sept. 2, all fridays in July \& Aug. |
| FINAL EXAMS | Aug. 12-15 | Dec. 16-20 | March 18-21 | June 9-13 | Aug. 11-14 |
| VACATIONS | Aug. 16 - <br> Sept. 29 | Dec 21-Jan 5 | March 22-30 | June 14-22 | August 15Sept. 28 |
| END OF TERM | August 15 | December 20 | March 21 | June 13 | August 14 |
| GRADUATION |  |  |  | June 13 |  |



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[^0]:    *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 computer lab fee 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.

[^1]:    * The above award amounts are for the 2002-2003 academic year and are subject to change for 2003-2004. Please check

[^2]:    * Selected from Arts and Letters and Social Science lists, pages $113 \& 114$.
    ** Strongly recommend WR 227, Technical Report Writing; SPN9752, Spanish Conversation: Business
    *** C grade or better in preceding course to take next level
    + The Cooperative Work Experience seminar requirement for any Business degree can be met by completing one of the following courses: BA 281, CS 281, or OA 281.

[^3]:    * 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 113 \& 114.
    $+\quad$ Awarded upon completion of general education requirements and advancement to or attainment of Journeyman status.
    $++\quad$ 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.

[^4]:    * Minimum grade C or higher.
    ** Selected from Arts and Letters and Social Science lists, pages $113 \& 114$; 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.
    $+\quad$ Contains human relations components.

[^5]:    * Minimum grade C or higher. Math courses numbered higher than MTH 95 may be substituted.
    ** Minimum grade C or higher.

[^6]:    * Minimum grade of "C" or higher.
    ** Minimum grade of "C" or higher. May substitute MTH 95 or higher.

[^7]:    Legend Notes:

    * Minimum Grade C or higher Math courses numbered higher than MTH 95 may be substituted
    ** Minimum Grade C or higher
    Program Requirements: The department recommends that students enter the program at the beginning of fall term, based upon space availability. 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: 35 or higher for writing and 38 or higher for math

    Notes: Students will be prepared to take a national certification exam (to be administered by College staff) thereby demonstrating their competency and proficiencies in CADD.

[^8]:    CS 135H
    ADVANCED WEB SITE DESIGN AND DEVELOPMENT (2.00 Lecture and 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, CS161, and CS162 or instructor approval.

