

2017-18  
**COLLEGE CATALOG**

[www.centralia.edu](http://www.centralia.edu) • 360-736-9391



# TABLE OF CONTENTS

<b>College Calendar</b> .....	<b>3</b>	<b>Student Transfer</b> .....	<b>40</b>
<b>Campus Information</b> .....	<b>4</b>	Transfer Degrees .....	41
<b>Admission/Enrollment</b> .....	<b>5</b>	<b>Degrees/Certificates</b> .....	<b>43</b>
Admission as a Priority Student .....	6	Educational Outcomes .....	44
Admission as a Drop-In Student .....	8	Program Outcomes .....	44
Admission as an International Student .....	9	General Transfer Degrees .....	45
Admission as a Running Start Student .....	10	Limited Transfer Degrees .....	48
Advising/Educational Planning .....	11	Workforce Degrees .....	49
Registration .....	12	Associate in General Studies Degree .....	50
<b>College Costs</b> .....	<b>14</b>	Certificates and Programs .....	51
Financial Aid .....	16	Distribution Area Outcomes and Courses .....	52
Services for Veterans .....	18	<b>Programs of Study</b> .....	<b>59</b>
Worker Retraining .....	19	<b>Course Descriptions</b> .....	<b>129</b>
<b>Academic Information</b> .....	<b>20</b>	<b>Bachelor of Applied Science Programs</b> .....	<b>181</b>
Grades .....	21	Bachelor of Applied Science in Applied Management (BAS-AM) .....	183
Student Records .....	23	Bachelor of Applied Science in Diesel Technology (BAS-DT) .....	187
Academic Standards Policy .....	26	Bachelor of Applied Science in Information Technology: Applications Development (BAS-IT: AD) .....	189
Graduation .....	27	Bachelor of Applied Science in Teacher Education: Elementary Education (BAS-TE) .....	191
<b>Services for Students</b> .....	<b>28</b>	Bachelor of Applied Science in Teacher Education: Elementary Education with a Special Education Endorsement (BAS-TE) .....	193
Bookstore .....	28	<b>Bachelor Course Descriptions</b> .....	<b>195</b>
Cafeteria .....	28	<b>Directory</b> .....	<b>198</b>
Children's Lab School .....	28		
Advising/Counseling Center .....	29		
Honors and Recognition .....	29		
International Students Programs .....	30		
Transitional Education/Testing .....	30		
Instructional Support .....	30		
Parking .....	31		
Sports Programs .....	31		
Student Job Center .....	32		
Disability Services .....	32		
Student Life and Involvement Center (SLIC) .....	33		
Student Rights and Responsibilities .....	34		
TRIO Programs .....	35		
Technology Resources .....	35		
Email .....	35		
Online Courses .....	36		
Continuing Education .....	36		
Academic and Credit Information .....	37		
Centralia College East .....	38		
Garrett Heyns and Cedar Creek Corrections Education Centers .....	39		
Cooperative Education .....	39		
Externships/Internships, Clinical/Practicum .....	39		
Teaching Sites .....	39		

# CENTRALIA COLLEGE CALENDAR

## 2017-18



### FALL QUARTER 2017

Labor Day Holiday.....	Sept. 4
Faculty Days.....	Sept. 5-15
First Day of Class.....	Sept. 18
All Campus Meeting (no classes).....	Oct. 13
Assessment Day (no classes).....	Oct. 27
Advising Day (no classes)*.....	Nov. 7
Veterans Day Holiday (no classes).....	Nov. 10
Thanksgiving Holiday (no classes).....	Nov. 23-24
Last Class Day.....	Dec. 4
Final Examinations.....	Dec. 5-7
Faculty Day.....	Dec. 8
Winter Holiday.....	Dec. 25
Quarter Break.....	Dec. 8-Jan. 1

### WINTER QUARTER 2018

New Year's Day Holiday.....	Jan. 1
Faculty Day.....	Jan. 2
First Day of Class.....	Jan. 3
Martin Luther King Holiday (no classes).....	Jan. 15
Advising Day (no classes)*.....	Feb. 15
President's Day Holiday (no classes).....	Feb. 19
Last Class Day.....	March 16
Assessment Day (no classes).....	March 19
Final Examinations.....	March 20-22
Faculty Day.....	March 23
Quarter Break.....	March 22-April 1

### SPRING QUARTER 2018

First Day of Class.....	April 2
Advising Day (all classes in session).....	May 15
Memorial Day Holiday (no classes).....	May 28
Last Class Day.....	June 11
Assessment Day (no classes).....	June 12
Final Examinations.....	June 13-15
Commencement.....	June 15
Quarter Break.....	June 16-July 1

### SUMMER QUARTER 2018

First Day of Class.....	July 2
Fourth of July Holiday.....	July 4
Last Class Day (6 week session).....	Aug. 10
Last Class Day (8 week session).....	Aug. 24

*\*BAS-AM and BAS-TE classes will meet on Advising (non-class) Days.  
Calendars subject to change.*

Centralia College does not discriminate against any person on the basis of race, color, national origin, disability, sex, genetic information, or age in admission, treatment, or participation in its programs, services and activities, or in employment. All inquiries regarding compliance with access, equal opportunity and/or grievance procedures should be directed to the Vice President of Human Resources and Legal Affairs, Centralia College, 600 Centralia College Blvd, Centralia, WA 98531, or call 360-623-8943.

# CAMPUS INFORMATION

## CAMPUS HOURS

Regular Hours (Labor Day - early June)

8 a.m. - 5 p.m. Monday-Friday

Summer Hours

7:30 a.m. - 5 p.m. Monday-Thursday

7:30 - 11:30 a.m. Fridays

As the oldest continuously operating two-year public college in the state of Washington (founded in 1925), Centralia College has a rich heritage of transfer, workforce & basic skills programs serving the community. We also offer bachelor degree programs.

A community college in the truest sense, we are in the center of Centralia, WA, on a tree-lined, 30+ acre campus. The college serves Lewis and south Thurston counties with a population over 75,000.

Our enrollment averages 10,444 total annual students with 2,300 full-time equivalent (FTEs).

Student-faculty ratio: 16:1

Average Class Size: 32

## ACCREDITATION

Centralia College is accredited by the Northwest Commission on Colleges and Universities.

# ADMISSION/ENROLLMENT

## ENROLLMENT SERVICES OFFICE

TransAlta Commons Building

360-623-8976 Main Campus • 360-496-5022 Centralia College East

admissions@centralia.edu • [www.centralia.edu/admissions](http://www.centralia.edu/admissions)

### Applying to Centralia College is easy.

There is no application fee. Applications are accepted throughout the year for entrance into any quarter and most programs. Students must be 18 years of age or older or have a high school diploma or GED certificate. There are exceptions to these standards, which are described later.

Some programs have special admission requirements. These programs are Nursing, Medical Assisting, Running Start, GED, and bachelor's degrees. Some programs, such as Nursing and the bachelor's degree programs, require a fee to apply.

Admission to the college does not guarantee entry into all classes or programs. Centralia College has a priority registration system that makes it easier for students to get the classes they want. The more credits a student earns, the earlier

they can register, giving them better choices for classes and times. This is important for those wishing to earn a degree or certificate. It is also helpful for students who plan to register for the most popular classes. Priority students will be assigned a faculty advisor.

For more information about class registration and becoming a priority student, please see the Registration section.

**NOTE:** *Persons with a disability who would like accommodations with any of the programs and services of the college, including admission, can contact the Disability Services Office at 360-623-8966. Students are encouraged to do this as early as possible.*

# Admission as a Priority Student

To become a priority student, follow these steps:

## I. New Student

Students who are beginning college for the first time and have graduated from high school or will soon graduate, have a GED, or have reached the age of 18, follow these steps:

- A. Apply for admission online on the college website.
- B. Complete placement. There are two options:
  1. Take an ACCUPLACER placement test on campus. For test times, fees, and instructions, contact the Odegaard Phoenix Center at 360-623-8957.
  2. If a student has completed placement someplace else, they can submit their scores to the Enrollment Services Office. ACCUPLACER, COMPASS, ASSET, applicable AP scores, SAT/ACT, and Smarter Balanced are some of the scores that will be accepted. Check with Enrollment Services to determine how long your score is valid.

## II. Transfer Student

Students who have attended another college or university can follow these steps:

- A. Apply for admission online on the college website.
- B. Complete placement. There are three options:
  1. Take an ACCUPLACER placement test on campus. For test times, fees, and instructions, contact the Odegaard Phoenix Center at 360-623-8957.
  2. Students who have completed testing someplace else must submit their test scores to the Enrollment Services Office. Test scores must be no older than two years.
  3. Students who have taken an English and math class can use their official and unofficial transcripts to waive the placement test. Submit transcripts to the Enrollment Services Office.

## III. Returning Student

Students who have attended Centralia College in the past can follow these steps:

- A. If a student has taken off between 1-3 quarters, the student will need to fill out the Returning Student Update form that is found online.
- B. Students who have been out for a year or more will need to reapply for admission on the college website.
- C. Students who have attended another college or university since they last took classes at Centralia College must forward an official transcript(s) to the Enrollment Services Office and submit a Credit Evaluation Application if they want their credits considered for their degree.

**IMPORTANT NOTE:** All admission and enrollment information is sent via email and letter. To avoid complications and delays, applicants must include their correct address on their admission application. Otherwise, the admission and enrollment process may be delayed. Students can change their address online via Student Web Services or at the Enrollment Services Office.

## EVALUATION OF TRANSFER CREDITS

The Enrollment Services Office determines which credits transfer and how they apply to a degree or program. Transfer of credits and the application of transfer credits to a degree or program are two separate but related processes. Not all transfer credits apply to every degree or certificate. Semester credits convert to quarter credits by multiplying the semester credits by 1.5.

**NOTE:** Credits earned at regionally accredited colleges or universities are eligible to transfer to Centralia College.

## APPLICATION FOR CREDIT EVALUATION

Centralia College uses a two-step process to determine which transfer credits apply to Centralia College degrees or certificates. Students must:

1. Have an official copy of their transcripts mailed directly or submit a sealed official transcript to the Enrollment Services Office.
2. Submit an Application for Credit Evaluation to the Enrollment Services Office for official evaluation. This form is available online and in the Enrollment Services Office. Centralia College does not evaluate transcripts without an official Credit Evaluation Application from the student.

**NOTE:** Students are encouraged to request a credit evaluation as early as possible. Registration appointments are calculated on a credit-earned basis. The more credits a student has, the earlier they may register. Appointments are based on cumulative credits earned at Centralia College and the other transfer institution(s). Students should allow a minimum of four weeks for processing after their transcript arrives.

Transcripts become the property of Washington State and become part of a student's official file. They cannot be returned or sent to another school or college. Centralia College does not issue or certify copies of transcripts from other institutions.

## NON-TRADITIONAL CREDITS

In addition to taking classes from Centralia College or transferring credits from other colleges, there are other ways students may be able to apply credits towards their program. These are called non-traditional credits. Non-traditional credits are granted on a case-by-case basis consistent with non-traditional credit requirements established by NWCCU. Students receiving non-traditional credit must meet Centralia College's degree requirements. Centralia College will recognize four categories of Credit for Non-Traditional Learning, as follows (descriptions are taken from the State Board for Community and Technical Colleges):

1. **Credit by Testing:** Commonly accepted higher education equivalency exams that are documented via transcripts or other official record.
2. **Prior Experiential Learning:** Knowledge and skills acquired through experience alone, evaluated by a faculty member via evaluation of a compilation of work.
3. **Extra-Institutional Learning:** Knowledge and skills acquired outside the institution and verified through third-party certifications, industry-recognized testing/training, or crosswalks. Refer to Policy 4.121 for the Military Credit Acceptance Policy.
4. **Course Challenges:** Challenge examinations are sufficiently comprehensive to determine that the student has the same knowledge and skills as those students who enroll in, and successfully complete, the course. A student should have previous training, private study, work experience, or other bona fide qualifications indicating the student has the knowledge or abilities equivalent to course completers.

# Admission as a Drop-In Student

Students interested in taking classes, workshops, non-degree programs, or learning assistance programs for personal enrichment can register as drop-in students. Drop-in students register after priority students. Drop-in students can register for remaining classes on a first-come, first-served, space-available basis. The period of registration in which drop-in students register is called open enrollment or open registration.

## I. High School Graduates or Students 18 years or Older

To enroll in a course for personal enrichment, improving job skills, or for a workshop or a special program, students can register at the Enrollment Services Office during open enrollment by filling out a registration form and paying the appropriate fees. The Centralia College website lists the open enrollment dates and times. Individuals seeking entrance into a special program may have to meet additional requirements for admission.

## II. Students Between 16 and 18 years of Age

When a student is younger than 18, their high school class has not graduated, and they do not have a GED, they need the permission of their high school district to enroll at Centralia College. High school juniors and seniors may be eligible to enter Centralia College as Running Start students. Students wishing to enter Centralia College should contact the Advising/Counseling Center for more information.

## III. Students Under 16 years of Age

The minimum age for admission into credit classes is 16, unless a student already has a high school diploma or GED. Exceptions are rarely granted. Students wishing to seek an exception should contact the Enrollment Services Office for the appropriate forms and procedures.

## IV. Senior Citizens

Adults at least 50 years old may enroll in college classes for a reduced fee, provided there is space available. Adults may enroll for no more than two courses per quarter at these rates. Contact the Enrollment Services Office for more information.



# Admission as an International Student

## International Student Programs Office

222 S. Rock St., Centralia College

8 a.m.-5 p.m. Monday-Friday (summer hours may vary)

360-623-8965

intl@centralia.edu • [www.centralia.edu/international](http://www.centralia.edu/international)

**Centralia College encourages and welcomes students from other countries who want to pursue a quality education.** Centralia College offers academic and technical programs and an Intensive English Program (IEP). For immigration and tuition purposes, international students are classified as nonimmigrant (F-1 or M-1 visa), non-U.S. citizens, and non-residents. Application forms are available online at [www.centralia.edu/international](http://www.centralia.edu/international).

## ADMISSION REQUIREMENTS

To be considered for admission to Centralia College, including the Intensive English Program (IEP), the following items must be submitted to the International Student Programs office via email to [intl@centralia.edu](mailto:intl@centralia.edu) or via postal mail to International Student Programs, 600 Centralia College Boulevard, Centralia, WA 98531:

1. Completed and signed International Student Application
2. Application fee (USD \$50 via money order, cashier's check, or credit card: Visa, Mastercard, or Discover)
3. Proof of adequate financial support for all expenses for one academic year, e.g., official bank statement, notarized affidavit of support, embassy, agency or government letter of support. Expenses for tuition, fees, insurance, and living expenses for a year at Centralia College are available at [www.centralia.edu/international/tuition.html](http://www.centralia.edu/international/tuition.html). International students are not eligible for financial aid. Continued enrollment will require a more current statement of financial support.
4. Official transcripts from high school and all colleges attended (including all language schools, universities, etc.)
5. Copy of current passport
6. Proof of proficiency in the English language is NOT required for admission.
  - a. Students without an official TOEFL score or with an official TOEFL score below 500 (paper-based)/173 (computer-based)/61 (Internet-based) or an IELTS score below 5.5 will be admitted only to the Intensive English Program (IEP).
  - b. Students with a TOEFL score higher than 500 (paper-based)/173 (computer-based)/61 (Internet-based) or an IELTS score higher than 5.5 may enroll in college-level courses after an assessment of readiness has been completed at Centralia College.
7. International students transferring within the U.S. must also submit a Transfer-In Form (provided after the initial application has been received and evaluated).

**NOTE:** All international students are **REQUIRED** to purchase student health insurance each quarter through the International Programs Office.

# Admission as a Running Start Student

## Running Start Program

Advising/Counseling Center • TransAlta Commons Building

8 a.m. – 5 p.m. Monday-Friday (summer hours may vary)

360-623-8967 Main Campus • 360-496-5022 Centralia College East • 360-330-7102 Fax

runningstart@centralia.edu • [www.centralia.edu/academics/runningstart](http://www.centralia.edu/academics/runningstart)

For high school juniors and seniors who are academically ready for college-level work, Running Start provides a valuable opportunity to earn up to two years of college tuition-free while finishing their high school requirements. Running Start students may enroll in academic/transfer or professional/technical courses. Through an agreement with the high school, Running Start students do not pay college tuition. Students pay for fees and books; these fees may be waived for low-income students.

Students can contact their high school counselor or visit the Advising/Counseling Center for more information.

**To apply for Running Start, students must return the following to the Enrollment Services Office:**

- A. Running Start Application
- B. Placement test results
- C. High school transcript

Program acceptance letters will be sent after the application and test scores are received.

# Advising/Educational Planning

## Advising/Counseling Center

TransAlta Commons Building

8 a.m.-5 p.m. Monday-Friday (summer hours may vary)

360-623-8967 Main Campus • 360-496-5022 Centralia College East

360-330-7102 Fax • [advising@centralia.edu](mailto:advising@centralia.edu)

[www.centralia.edu/students/advising](http://www.centralia.edu/students/advising)

## Assessing one's readiness for college coursework is the first step toward success as a college student.

This includes answering questions, such as:

*What classes are appropriate for my skill level? How many courses and credits should I take?*

Only by considering one's academic readiness and life situation can one choose courses that offer the right amount of challenge and workload. An advisor will assist with these choices.

## ADVISING

### Priority Students

Students will be assigned a faculty advisor who will assist with planning a program of study.

### New Students

After applying for admission and taking a placement test, new students can call or visit the Advising/Counseling Center for advising/registration dates and times. (See above for contact information.) New students should expect to discuss their plans, review their assessment of academic readiness, select and schedule classes, register, and pay tuition and fees.

### Continuing Students

Once enrolled, students must meet with their assigned advisor each quarter to discuss their progress and plan their schedule for the following quarter. Students must meet with their advisor before they can register.

Students may request to change their advisor at any time. To do this, students must obtain the signature of the new advisor on a Change of Advisor form and submit the form to the Enrollment Services Office.

**NOTE:** It is the student's responsibility to meet all graduation and transfer requirements (if applicable). The advisor only assists and is not responsible for a student's total planning.

For students who need help choosing college programs, information is available in the Advising/Counseling Center. Students can also schedule an appointment with a counselor.

# Registration

Enrollment Services Office • TransAlta Commons Building  
360-736-8976 Main Campus • 360-496-5022 Centralia College East  
admissions@centralia.edu • [www.centralia.edu/admissions/register.html](http://www.centralia.edu/admissions/register.html)

**Registration is the process of enrolling in classes. Registration depends on the type of student and their educational plans.**

## HOW TO QUALIFY FOR PRIORITY REGISTRATION

In order to qualify for Priority Registration, students must complete the following steps:

- Apply for admission
- Intend on earning a degree or certificate
- Complete placement by submitting test scores no more than two years old or unofficial transcripts demonstrating qualifying grades in English and math.
- Make an appointment with an advisor in the Advising/Counseling Center.

## PRIORITY REGISTRATION

Students with priority registration status have the advantage of choosing and registering for classes before students without priority status. Students can earn priority registration status by completing these important steps:

- New and transfer students must go to the Advising/Counseling Center.
- Current and returning students must meet with their assigned advisor on Advising Day or during Advising Week.
- Students without priority registration status can gain priority status after earning 35 college-level credits at Centralia College. Students must contact Enrollment Services at 360-623-8976, or [admissions@centralia.edu](mailto:admissions@centralia.edu) to request this change. Eligible students will be assigned an advisor and changed to priority status. Students need applicable placement scores for courses with prerequisites.

## CURRENT STUDENTS

Students must meet with their advisor on Advising Day or during Advising Week to plan their classes and receive a registration PIN. Students are expected to contact their advisor BEFORE Advising Day to set up an advising appointment. After meeting with their advisor, students can visit Student Web Services to access their registration time and register for classes.

## NEW AND TRANSFER STUDENTS

After taking a placement test or submitting test scores or academic transcripts, students must contact the Advising/Counseling Center to meet with an advisor and register for classes.

## RETURNING STUDENTS

After submitting a Returning Student Update Form (available online), students will be sent an email that includes their registration time. Before registering, returning students must see the advisor they were assigned when they last attended Centralia College. After meeting with the advisor, students need to come to the Enrollment Services Office to register for classes during their registration time. Students who do not remember their advisor or who need a different advisor can contact the Advising/Counseling Center at 360-623-8967 or [advising@centralia.edu](mailto:advising@centralia.edu).

## ONLINE STUDENTS

After applying for admission, new and returning students who plan to register only for online classes should contact Enrollment Services at 360-623-8967 or [admissions@centralia.edu](mailto:admissions@centralia.edu).

## DROP-IN STUDENTS

Students who want to take a class or two for personal enrichment do not need to apply for admission. Once the class schedule is available, drop-in students can register for Continuing and Community Education classes. For all other courses, drop-in students can register starting on the first day of open registration. A Class Registration Form can be downloaded online or picked up in the Enrollment Services Office. Completed forms, along with a check, money order, or credit card number, can be sent to the address listed on the top of the form (no cash please). Mail-in registrations will be processed on a first-come, first-served basis. If the class is filled, payment will be returned.

## LATE REGISTRATION

Students may add classes by completing and submitting a registration form to the Enrollment Services Office. Forms are available on the college's website and in the Enrollment Services Office. To add classes that are filled, students must ask for instructor permissions and, if authorized, obtain the instructor's signature. To add any class after the second day, whether it is filled or not, students must obtain the instructor's signature. The form must be taken to the Enrollment Services Office for processing. Students will not be allowed to add a class after the first 10 days of the quarter (eighth day of summer) except in continuous enrollment classes. For continuous enrollment or late starting courses, registration may continue after the second week of the quarter.

## CHANGE OF SCHEDULE/WITHDRAWAL FROM CLASSES

Students can add and drop classes for a limited time at the beginning of each quarter. To add or withdraw officially from a class, students must submit a Schedule Change form to the Enrollment Services Office. Forms are available on the college's website and in the Enrollment Services Office.

### IMPORTANT:

- Students are strongly encouraged to consult with their advisor before adding or dropping classes. Students who are receiving financial aid and/or scholarships should consult with the Financial Aid Office to avoid jeopardizing their aid. Student who are receiving VA Educational Benefits must check in with the School Certifying Official to avoid jeopardizing their aid.
- Students who stop attending class will NOT be dropped or withdrawn automatically. Official withdrawal is required. To withdraw from a class, students must submit a Schedule Change Form to the Enrollment Services Office. Failing to withdraw officially may result in a failing grade in the class.
- Students are required to pay for any classes for which they register. Refunds are available for a limited time at the beginning of each quarter.

## STUDENT WITHDRAWAL

If a student withdraws from a course *during the first 10 calendar class days (8 calendar days for summer quarter)*, their name will be removed from the class list. They must return the Schedule Change Form to the Enrollment Services office by the 10th class day. An instructor's signature is not required. No record of the class will appear on the student's transcript.

If a student withdraws from a class *after the 10th class day (8th class day for summer quarter)*, but on or before the 35th class day, they must return the Schedule Change Form to the Enrollment Services Office by the 35th class day. An instructor's signature is not required. The student will receive a "W" grade on their transcript.

If a student withdraws from a class *after the 35th class day (20th class day for summer quarter)*, but before the last class day, they must contact their instructor by 5 p.m. on the last class day of the quarter to ask for a withdrawal. An instructor's signature is required. The student will receive a "WP" grade (Withdrawal Passing) or a "WF" grade (Withdrawal Failing) on their transcript. The instructor will determine this grade based upon whether the student was passing or failing the course at the time of their withdrawal.

## INSTRUCTOR INITIATED WITHDRAWAL

Students are expected to attend all classes for which they enroll. Students who do not attend during the first week of class will be dropped from their classes unless they have received prior approval from the instructor. Students must receive prior approval from the instructor for any absences during the first week of the term.

Note: The instructor must notify the Enrollment Services Office of this withdrawal by noon of the sixth business day since the start of the class. If a student has attended before the first day that an instructor can drop the student for non-attendance, the student cannot be dropped from the class for non-attendance.

## ADMINISTRATIVE INITIATED WITHDRAWAL

The most common reason for administrative withdrawal is class cancellation. Administration may withdraw students for non-grade related reasons such as, but not limited to, medical, disciplinary, error, or military assignment. Students withdrawn after the 35th class day shall receive a "WF" or "WP" as assigned by the instructor. Administration will notify the instructor.

# COLLEGE COSTS

## ENROLLMENT SERVICES OFFICE

TransAlta Commons Building

360-623-8976 Main Campus • 360-496-5022, Centralia College East

admissions@centralia.edu • www.centralia.edu/admissions

**Centralia College provides an excellent value. Many students choose to attend Centralia College because it offers high-quality, cost-effective education.**

When estimating college costs, students are reminded to include amounts for tuition and fees, special fees, books, supplies, transportation, and living expenses. The college accepts most major credit cards for payment of tuition, fees, books, and supplies. Check with the cashier for details.

### TUITION AND FEES

Tuition rates for Centralia college are set annually by the state legislature and the State Board for Community and Technical Colleges.

Tuition rates and fees are posted on the Centralia College website. The most up-to-date rates can be found on the college website.

ASCC student fee of \$30 per quarter will be charged in addition to tuition and fees. Student Use Fee of \$4 per credit (up to 10 credits/maximum \$40 per quarter). Student Project Fee of 5 percent per credit (up to 18 credits). Lab/course fees may apply.

- ABE/ESL - \$25 per student/per quarter
- Parent Education (Home & Family Life) - \$16 per credit
- Senior Citizen Courses (SNRC) - \$20 per credit + fees
- Vocational 18+ credits - No charge
- EMT - \$31 per credit
- Apprentice - \$51 per credit
- Veterans, child and spouse of totally disabled POW/MIA - 100 percent or deceased eligible veterans or National Guard members tuition waiver

### RESIDENCY REQUIREMENT

Students who are residents of Washington pay less for tuition than nonresident students. This is because Washington taxpayers pay the difference in cost for Washington residents.

Washington law determines residency status for tuition purposes. This is what the law says:

“To qualify for resident tuition, you must be a U.S. citizen, a person who has permanent resident status, or has “refugee-parolee” or “conditional entrant” status and (1) has established residence in the State of Washington primarily for purposes other than educational for one year immediately prior to the start of the quarter, and was financially independent from parents or legal guardians for the calendar year prior to the year in which application was made; or (2) is a financially dependent student, one or both of whose parents or legal guardians have lived in the State of Washington for at least one year immediately prior to the start of the quarter.”

DREAMers may qualify for resident tuition rates if the following requirements are met: (1) Student has resided in Washington for the three years immediately prior to receiving a high school diploma and completed the full senior year in a Washington high school or student will have completed the equivalent of a high school diploma and resided in Washington for three years immediately prior to receiving the equivalent diploma. (2) The student has continually resided in Washington since earning a high school diploma or its equivalent. (3) The student has a permanent resident card or DACA status.

Nonresident tuition is required of students whose legal residence is outside of Washington. There are some limited exceptions to this rule. The Enrollment Services Office can explain these exceptions. Nonresidents of Washington pay a slightly higher rate.

International students attending Centralia College are classified as nonresidents regardless of length of residency in Washington. International students pay the highest rate.

To apply to change residency classification, students must complete the Residency Questionnaire form and provide documentation within 30 calendar days of the beginning of the quarter for which they have registered. Residency forms and regulations are available in the Enrollment Services Office or on the website.

## REFUND POLICY

The state determines the limits of Centralia College's refund policy. Refund requests must be made to the Enrollment Services Office.

Students who officially withdraw from a class or from the college through the Enrollment Services Office may be entitled to a refund. Refunds may not be arranged by telephone.

Refund policies are available on the Centralia College website.

For classes beginning after the first week of the quarter, refunds are calculated according to policies listed on the college website. Centralia College can issue a refund only after the student has paid outstanding debts. Financial aid is refunded directly to the financial aid agency. The Financial Aid Handbook has detailed information about how this is done. Centralia College distributes refunds by check. Allow 12 business days for processing. Refunds are credited for payments made with a credit card to that credit card account. If a class is canceled, students will automatically be refunded 100 percent.

Students who are called to active duty military service are eligible for a 100 percent refund of tuition and fees. Proof of active duty status must be provided. Students must request their refund during the academic quarter they are called to active duty. Exceptions may be made for emergency call-ups.

Centralia College does not refund special fees after the first class day. Centralia College does not refund lab fees after the 10th class day. Before those deadlines, Centralia College will refund the fees in full provided the student has not used the supplies. If supplies are used, the refund will be prorated.

The cashier may require verification by the instructor before refunds are made.

Students who experience extensive or severe medical conditions may be eligible for a refund of tuition and fees. The student must provide sufficient documentation from their physician indicating they are unable to attend courses for the quarter. The student must request a medical withdrawal within the next quarter of the academic year (i.e., spring quarter medical withdrawal requests must be submitted before the end of summer quarter).

## NON-SUFFICIENT FUNDS CHECK POLICY

Centralia College charges \$25 for each NSF (non-sufficient funds) check. This charge may be subject to change. Centralia College will place a hold on registration, grades, transcripts, etc., until students settle the NSF check and associated fees. All NSF checks will be sent to a collection agency in 15 days. The collection agency may charge an additional collection fee and interest. A student's registration may be canceled if the NSF check is for tuition (including lab and other fees).

## APPEALS

If a student fails to meet their financial obligations to the college, the college may withhold their grades, degree, or transcript and may block registration for future quarters. Students have the right to make a written appeal regarding fees, refunds, fines, charges, debts, or other financial obligations to the college. Appeals can be addressed to the Director of Enrollment Services. A second level of appeal is available. This can be addressed in writing to the Vice President of Student Services. The decision of the vice president is final.

# Financial Aid

Financial Aid Office • TransAlta Commons Building  
8 a.m.-5 p.m. Monday-Friday (summer hours vary)  
360-623-8975 • 360-330-7105 Fax  
financialaid@centralia.edu • [www.centralia.edu/admissions/finaid](http://www.centralia.edu/admissions/finaid)

**More than 80 percent of Centralia College students receive some form of financial aid. Financial aid awards are made on a first-come, first-served basis; early application is recommended.**

Centralia College has a financial aid priority deadline of April 14. Students must complete a financial aid file by this date to be considered for maximum funding. If the priority deadline is not met, the student's financial aid file will still be reviewed but, if the student qualifies, funding may not be ready by the first day of classes. In that case, students need to pay their own tuition by the posted deadline.

Students are encouraged to check the online Financial Aid Portal to check the status of their financial aid. There, students can confirm what documents are needed and received.

## ELIGIBILITY

In general, to be eligible for financial aid students must:

1. Be a U.S. citizen or eligible non-citizen
2. Not owe a refund or repayment on prior financial aid and not have a student loan in default
3. Have a high school diploma or GED
4. Register with Selective Service, if required
5. Enroll in financial aid eligible degree or certificate program at Centralia College
6. Meet satisfactory academic progress standards

## APPLYING FOR AID

**To apply for financial aid, students must submit the following:**

1. Free Application for Federal Student Aid (FAFSA) – This form can be filled out online at [www.fafsa.gov](http://www.fafsa.gov). Centralia College's school code is 003772.
2. Centralia College Application for Admission – To be eligible for funding, students must be admitted to the college for the quarters they wish to receive funds.
3. Centralia College Financial Aid Form
4. Verification or Other Required Forms – The Financial Aid Office may need additional forms. Students will be notified by email if this occurs.
5. Academic transcripts from all schools attended within the last five years



## FUNDING

Financial aid helps offset the cost of college. The primary responsibility for paying for education rests on the student and their family. However, if the combined financial resources are not enough to cover expenses, students may qualify for funding from these various sources:

- Grants (federal, state or institutional funds): Federal Pell Grant, State Need Grant, Opportunity Grant, or Centralia College Grant
- Workstudy (federal, state or institutional funds): Federal or State Workstudy, Student Employment
- Scholarships (institutional): Centralia College (separate process for applying)

## LOANS

Centralia College does not participate in the Federal Direct Loan program, but the following options are available:

- Centralia College Short Term Loan
- Alternative loans through outside lending agencies

## OTHER

Additional funding may be available for students who:

- Are receiving or have received unemployment benefits within the past 48 months,
- Have exhausted their unemployment benefits;
- Are working parents with a small household income or receiving DSHS/WorkFirst cash assistance
- Are homemakers who now need to financially support their family.

### For additional information:

Worker Retraining, 360-623-8946  
WorkFirst, 360-623-8410

## OUTSIDE AGENCIES

Students who expect to be funded by an outside agency (such as a tribe, L&I, or DVR, for example) need to ensure the payments reach the Cashier's Office by the posted quarterly deadline. Failing to do so may result in being dropped from classes.

## PAYMENT PLAN

Centralia College offers a payment plan to help students spread the cost of tuition and fees throughout the quarter.

Contact the Business Office, 360-623-8646, for details.

## STANDARDS OF ACADEMIC PROGRESS (SAP)

To be awarded and continue to receive financial aid funds, students must meet Centralia Colleges SAP standards. Students who do not meet the SAP standards or whose financial aid has been canceled have the option of submitting an appeal. The Financial Aid Office can provide additional information.

If a student is receiving financial aid and they completely withdraw from or stop attending their classes, the student may be required to repay a portion of the funds they received.

## SCHOLARSHIPS

### Scholarship Coordinator

[scholarships@centralia.edu](mailto:scholarships@centralia.edu)

[www.centralia.edu/admissions/finaid/scholarships.html](http://www.centralia.edu/admissions/finaid/scholarships.html)

Centralia College, through its foundation, has an array of scholarships available to new and continuing students. Scholarship applications are available on the college's and foundation's websites beginning in December and are typically due on March 1. Recipients are selected based on academic excellence, community service/ work experience/school activities, a personal essay, writing sample, and potential for success. A single application applies to all scholarships to be awarded. The Scholarship Committee will notify recipients during spring quarter. Eligibility criteria for the scholarships vary.

# Services for Veterans

[www.centralia.edu/admissions/veterans.html](http://www.centralia.edu/admissions/veterans.html)  
TransAlta Commons Building, second floor  
[veterans@centralia.edu](mailto:veterans@centralia.edu)

**Centralia College is approved to provide educational benefits to veterans, active-duty service members, National Guard, and eligible spouses/dependents who receive benefits.**

## SCHOOL CERTIFYING OFFICIAL

### Enrollment Services Office

Kelly Worthey  
360-623-8664  
[kelly.worthey@centralia.edu](mailto:kelly.worthey@centralia.edu)

The School Certifying Official can provide the following: assistance through the education benefit application process; notification of enrollment and enrollment changes to the VA; help in interpreting, explaining, and implementing VA policies and college regulations.

Any changes to a student's schedule or program must be immediately communicated to the School Certifying Official.

## VETERANS CENTER

### Kemp Hall, Room 103

360-623-8958

The Centralia College Veterans Center is a dedicated safe zone on campus for all veterans and their family members. The Veterans Center connects students to local veterans' resources. A computer lab and free printing are available to students who are veterans or active duty personnel, and spouses/dependents who are receiving benefits.

## MILITARY CREDIT ACCEPTANCE

In response to RCW 28B.10.057, Centralia College will evaluate and grant credit hours for military education based on the recommendations from the American Council on Education's (ACE) Guide to the Evaluation of Educational Experiences in the Armed Services. This is in accordance with transfer credit policies at CC and the State Board for Community and Technical Colleges. Students are required to supply Enrollment Services with an official copy of their Joint Services Transcript (JST) or a transcript from the Community College of the Air Force, as well as previous academic transcripts.

## EARLY REGISTRATION

Centralia College allows early registration (as defined by RCW 28B.15.624 and HB 1052) to all eligible veterans (with qualifying DD214), National Guard members, and spouses/dependents who are receiving benefits. Refer to the Academic Calendar for registration dates.

## ADDITIONAL INFORMATION

Selected programs of study at Centralia College are approved by the Workforce Training and Education Coordinating Board's State Approving Agency (WTEECB/SAA) for enrollment of those eligible to receive benefits under Title 38 and Title 10. USC.

Centralia College does not and will not provide any commission, bonus, or other incentive payment based directly or indirectly on success in securing enrollment or financial aid to any persons or entities engaged in any student recruiting or admissions activities or in making decisions regarding the award of student financial assistance.

Centralia College is recommended by the VA to limit student enrollment to 85 percent veteran enrollment per cohort. In the event a veteran wishes to enroll in a class that has already reached the 85 percent cap, he or she may do that but will not be eligible for VA funding. Chapter 35 and 31 students may still enroll even if the 85 percent has been realized. Note: This applies per USC 3680A(d)(1) for each program/concentration/track offered at the school.

# Worker Retraining

Kemp Hall • Room 120  
8 a.m. – 5 p.m. Monday-Friday  
360-623-8946

**The Worker Retraining program can retrain students in an in-demand professional/technical program. The program provides in-demand training to eligible members of Washington’s workforce who have drawn Unemployment Insurance within the last 48 months. Veterans, displaced homemakers (those who have lost the supporting income of a main breadwinner), and those formerly self-employed may qualify, along with those in Stop-Gap employment.**

Worker Retraining funds may be awarded for tuition, fees, books, childcare, tools, or Training Completion Aid. Eligible students must apply for state and federal financial aid and other grants.

College staff may assist with career exploration, education planning, financial aid applications, Employment Security Department applications and forms, resource referrals, and job search assistance.

# ACADEMIC INFORMATION

## ENROLLMENT SERVICES OFFICE

TransAlta Commons Building

360-623-8976 Main Campus • 360-496-5022 Centralia College East

admissions@centralia.edu • [www.centralia.edu/admissions](http://www.centralia.edu/admissions)

### CREDIT SYSTEM

Centralia College divides the academic year into four quarters. Fall, winter and spring quarters are approximately 11 weeks each. Summer quarter is six to eight weeks.

In general, a class that meets one hour per week for one quarter earns one credit; a class that meets five hours per week for one quarter earns five credits. Laboratory and certain other courses vary. The credit hours for each course are listed after the course titles in the Course Description section of this catalog. Some classes, particularly those offered through Transitional Education, offer variable credit (generally from 1 to 5 credits). With assistance from an advisor and/or the course instructor, students decide how many credits they can reasonably carry in one quarter and register for that amount.

To earn credit, students must officially register for a course and successfully complete it with a passing grade.

### CREDIT HOUR POLICY

In compliance with U.S. Department of Education regulation and Northwest Commission on Colleges and Universities policy, college level courses at Centralia College, regardless of modality, shall be at a level of rigor such that the average adequately prepared student will invest approximately 30 hours of effort for each quarter credit earned.

Credits represent time. Each quarter, students must realistically assess their time commitments. Students are encouraged to take a credit load that can be managed successfully. To estimate the time needed to commit to college, students can figure three hours per week for each credit (combined class and study time). For example, a 15-credit load represents approximately 45 hours per week. Some students want to complete their associate degree in two school years. They register for an average of 15 to 18 credits each quarter. Other students take fewer credits each quarter, graduating when their requirements are satisfied.

# Grades

Centralia College uses a numerical grading system. Instructors report passing grades from 4.0 to 1.0 in 0.1 increments. Instructors assign the number 0.0 for failing work and must assign a date of last attendance. Numerical grades are equivalent to letter grades as follows:

**4.0-3.9 • A • Superior achievement**

**3.8-3.5 • A-**

**3.4-3.2 • B+**

**3.1-2.9 • B • High achievement**

**2.8-2.5 • B-**

**2.4-2.2 • C+**

**2.1-1.9 • C • Average achievement**

*Note: 1.9 is below the 2.0 minimum requirement for program entrance or completion*

**1.8-1.5 • C-**

**1.4-1.2 • D+**

**1.1-1.0 • D • Minimum achievement**

**0.0 • F • Failure to meet minimum course requirements.**

## **W • Withdrawal**

May be awarded only on or before the 35th class day. **May only be student-initiated.** Requires dated signature of student. Not calculated in the grade point average. The college encourages students to speak with their instructor(s) before withdrawal.

## **WP • Passing withdrawal**

Indicates student had completed enough work to pass the course (1.0 or above) at the time of withdrawal. May be awarded only after the 35th class day, but before the first day of finals. **May only be student initiated.** Requires dated signature of the student. Requires dated signature and "WP" grade of the instructor. Not calculated in the grade point average.

## **WF • Failing withdrawal**

Indicates student was doing failing work (below 1.0) at the time of withdrawal. May be awarded only after the 35th class day, but before the first day of finals. **May only be student initiated.** Requires dated signature of the student. Requires dated signature and "WF" grade of the instructor. Not calculated in the grade point average. Receiving institutions may treat this grade as a 0.0.

## **I • Incomplete**

No grade points calculated. The student must have finished a substantial portion of the work, attended past the 35th class day, be passing the course (1.0 or above), and because of circumstances not ordinarily controllable by the student, was not able to finish the course prior to grading. The instructor and student must complete a detailed contract that specifies what work is remaining, and when it is due. The contract must specify the default grade, if the additional work is not accomplished by the time limit. The grade shall revert to the default grade, if no new grade is turned in by the instructor by the time limit. The instructor, student, and the Enrollment Services Office receive copies of the contract. If there is no contract, or an incomplete contract when an "I" has been requested by the instructor, the grade shall be recorded as an \*, until a complete contract is on file in the Enrollment Services Office. Incompletes must be completed by the end of the next quarter, except that spring quarter incompletes must be completed by the end of the following fall quarter.

## **N • Audit**

No credit. Not calculated in grade point average.

## **S • Passing with credit**

Not calculated in grade point average. Used only by approved departments. Degrees and certificates may limit the use of S credits.

## **U • Unsatisfactory progress**

Not calculated in grade point average. Used only by approved departments.

## **Y • In progress**

No grade point calculated. Used in courses, such as correspondence, that do not begin or end with the regular quarter calendar. Not calculated in grade point average. A student has two quarters to complete the class (an extension for a third quarter is available for an additional fee). The instructor will submit a change of grade form to the Enrollment Services Office at the completion of the coursework within the time limit. If no new grade is turned in by the instructor a grade of 0.0 will be issued.

## TIME LIMITATION TO CHANGE A GRADE

Instructor may authorize a grade change within the next quarter of the academic year. For example, spring quarter grade changes must be made by end of fall quarter. Summer quarter changes must be made by end of fall quarter.

## COURSE AUDIT

Students may attend a class but not receive credit. To do this, students must register as an "auditor." Auditors pay regular credit hour and lab fees. An auditor does not take examinations or receive credit for the course. The student's transcript will show an "N" for an audited course.

## GRADE FORGIVENESS

The Centralia College grade forgiveness policy may allow students to repair their Centralia College grade point average by not counting poor grades that have been earned. This can be done only under certain circumstances:

- A. Only grades below a 2.0 may be forgiven.
- B. The grades must be at least two years old.
- C. Students must demonstrate improvement by earning a cumulative GPA of 2.5 or higher in all courses taken after the most recent course for which they are requesting forgiveness. Students must have completed a minimum of 24 credits to demonstrate improvement since that last date.

Students can apply for grade forgiveness by submitting a completed Grade Forgiveness Request Form (available from the Enrollment Services Office). Enrollment Services staff will review the student's academic record and determine which grades, if any, may be forgiven. Enrollment Services staff will notify students of the results. Their decision may be appealed in writing to the Director of Enrollment Services. The Director of Enrollment Services will notify students by mail of the results of their appeal.

Forgiven grades and credits will remain on the student's transcript but will not be calculated in their GPA at Centralia College. Forgiven grades cannot be used as credits towards any degree, certificate, program, or course requirement at Centralia College. Forgiven grades cannot be reinstated later.

**ADVISING NOTE:** Forgiven grades may not be recognized by other colleges. This means that staff at another college could recalculate a transfer student's GPA, counting all their grades for admission and transfer purposes.

## REPEATING A COURSE

Students who repeat a class will receive credit for taking it once with a few exceptions. To have a higher grade in a repeated class count toward their GPA, students must submit a Repeat Grade Form for each class to the Enrollment Services Office. Both grades will remain on the student's permanent record.

**ADVISING TIP:** Transfer colleges may choose either grade or the average of two grades.

## TRANSCRIPTS

An official transcript is a copy of a student's academic record signed by the Director of Enrollment Services. There is a small processing fee for each official or unofficial transcript. Official transcripts may be withheld if students do not fulfill their obligations, financial or otherwise, to the college. Centralia College works with the National Student Clearinghouse to provide online transcript ordering. More information is available on the college's website.

# Student Records

Enrollment Services Office • TransAlta Commons Building  
360-623-8976  
admissions@centralia.edu

## STUDENT IDENTIFICATION NUMBER

**All students will be assigned a Student Identification Number (SID) when they apply for admission to Centralia College. This number provides access to a number of services at the college.**

If a student has transferred from another college in the Washington State community and technical college system, that number may be transferred.

## CONFIDENTIALITY OF STUDENT RECORDS

**FERPA affords eligible students certain rights with respect to their education records. (An “eligible student” under FERPA is a student who is 18 years of age or older or who attends a postsecondary institution.) These rights include:**

- ***The right to inspect and review the student’s education records within 45 days after the day Centralia College receives a request for access.***

A student should submit to the registrar a written request that identifies the record(s) the student wishes to inspect. The registrar will make arrangements for access and notify the student of the time and place where the records may be inspected.

- ***The right to request the amendment of the student’s education records that the student believes is inaccurate, misleading, or otherwise in violation of the student’s privacy rights under FERPA.***

A student who wishes to ask Centralia College to amend a record should write the registrar, clearly identify the part of the record the student wants changed, and specify why it should be changed.

If Centralia College decides not to amend the record as requested, the College will notify the student in writing of the decision and the student’s right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

- ***The right to provide written consent before Centralia College discloses personally identifiable information (PII) from the student’s education records, except to the extent that FERPA authorizes disclosure without consent.***

Centralia College discloses education records without a student’s prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by Centralia College in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of Centralia College who performs an institutional service or function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the Centralia College. Please see below for the full list of the disclosures that Centralia College may make without consent.

- ***The right to prevent disclosure of directory information.***

Centralia College routinely publishes and discloses directory information about students to various requestors. At Centralia College, directory information consists of the following: name, address, telephone listing, e-mail address, date and place of birth, photographs, advisor, field of study, participation in officially recognized sports and activities, weight and height of athletes, dates of attendance, grade level, full- or part-time status, honor roll, degrees, awards and scholarships received, most recent previous school attended, and dates of employment. Also, prior military experience and level of education may be provided to representatives of the Department of Defense for recruiting purposes.

Students who choose to have Centralia College not release their directory information, must complete and submit an official form to the Enrollment Services Office. Students should be aware that requesting Centralia College to withhold directory information may prevent other colleges and employers from receiving information that may benefit the student.

- ***The right to file a complaint with the U.S. Department of Education concerning alleged failures by Centralia College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:***

Family Policy Compliance Office  
U.S. Department of Education  
400 Maryland Avenue, SW, Washington, DC 20202

For the full confidentiality information, see the The Family Educational Rights and Privacy Act (FERPA).

## PHOTO CONSENT STATEMENT

All students are advised that Centralia College, through the College Relations Office, takes photographs and shoots videos throughout the year, which may include images (as well as audio/video recordings of voices) of members of the student body and reserves the right to use them for publicity, promotional and marketing purposes.

The College also reserves the right to take photographs of campus facilities and scenes, events, faculty, staff and students

for promotional purposes in any areas on campus or at any Centralia College-sponsored event off campus where subjects do not have a normal and reasonable expectation of privacy. All such photographs and videos are defined as "Directory Information" and are the property of Centralia College and may be used for Centralia College promotional purposes (e.g. electronic and printed publications, websites, classroom use, college ads, etc.) without prior permission of the subjects.

As a general practice, there is no attempt to collect individual photo release forms from students. Instead, College Relations makes the assumption that Centralia College students welcome involvement in these activities. However, students who do not wish to have their images/voices used for this purpose must stipulate this in writing to the College Relations Office at the beginning of the quarter. It is also expected

that such students will excuse themselves from photo/video sessions and inform the Centralia College photographer/videographer that they do not wish to be included.



## CHANGE OF ADDRESS

When their address changes, students must notify the Enrollment Services Office by completing the Student Update Form or updating online via Student Login/Web Services.

## NAME CHANGE

It is important that students' names are accurately reflected on their records. It is the student's responsibility to notify the Enrollment Services Office of any name change.

## EMERGENCY MESSAGES

Centralia College has no way to relay messages into classrooms or buildings. Only messages relating to accident, illness of a child, or death will be relayed to students. Contact the Enrollment Services Office. Please disclose the nature of the emergency and the college will attempt to locate a student. However, there is no guarantee of success.

## E2CAMPUS (EMERGENCY NOTIFICATION)

The possibility of an emergency exists on the Centralia College campus. There are natural and human-caused situations that require all students, employees, and others to be notified. The college subscribes to e2Campus as the primary means of mass notification when emergency and selected other events and situations arise that impact the normal operation of the college.

To receive emergency alerts, students can sign up online at [www.centralia.edu/news/emergency.html](http://www.centralia.edu/news/emergency.html). Subscribers will receive emergency, crisis, severe weather, priority, or other important messages via text, email, voice mail, twitter, etc. Subscribing to e2Campus includes subscription to the Lewis County Code Red Emergency messaging system, which provides messages from county emergency personnel.

The college will test its emergency response and evacuation procedures on at least an annual basis, including publishing its procedures in conjunction with at least one test per calendar year, and documenting a description of the exercise.

## RIGHT TO KNOW

### **Annual Security Report**

The annual security report has numbers for the previous three years about crimes reported on or near the college. The report also outlines college policies about campus security, alcohol and drug use, crime prevention, sexual assault and crime reporting. A copy of this report is available online at [www.centralia.edu/students/srtk/cleryact.html](http://www.centralia.edu/students/srtk/cleryact.html).

### **Graduation and Transfer Rate Report**

The annual graduation and transfer rate report has the percentage of Centralia College students who graduate or transfer to other colleges. A copy of this report is available by contacting the Office of the Vice President of Student Services, or by accessing it online at [www.centralia.edu/students/srtk/ccsgradcomm.html](http://www.centralia.edu/students/srtk/ccsgradcomm.html).

# Academic Standards Policy

Centralia College is a state supported public institution. Tuition covers about 34 percent of the cost of education. Tax dollars provide the rest. The college expects students to be serious about their education and to plan for their success. The college provides many ways to help; one is by setting standards for academic success.

**Students must earn a cumulative grade point average (GPA) of at least 2.0 or show satisfactory progress as measured by an alternative approved method to be in good academic standing. If a student does not meet these criteria, the college will place the student on warning, probation, or suspension.**

## WARNING

The first quarter a student's cumulative GPA falls below 2.0, the college will place the student on Academic Warning. There is no appeal.

## PROBATION

The second quarter a student's cumulative GPA falls below 2.0, the college will place the student on Academic Probation. This is the final warning prior to suspension.

## ONE-QUARTER SUSPENSION

The third quarter a student's cumulative GPA remains below 2.0, the college will suspend the student for one quarter. During the suspension, the student may not register for any course and may not participate in events or activities reserved for students.

### **Suspended students have two options:**

1. Separate from the college for one term. After the one-term separation, the student may return, but is required to raise their cumulative GPA to 2.0 or higher at the end of the quarter in which they return. If the student does not reach the minimum required cumulative GPA, the student will be suspended again for another quarter.
2. Appeal the suspension to the Vice President of Student Services. In a successful appeal, the student must show proof of circumstances over which they had no control and/or show proof of making measurable and substantial progress toward raising their GPA. The Vice President reviews appeals on a case-by-case basis. The Vice President may: grant the appeal, allow the student to continue under certain conditions, or deny the student's appeal. The decision of the Vice President is final.

## CONDITIONAL PROBATION

Suspended students who return from one-term or one-year suspension or were granted an appeal will be placed on conditional probation status. Students on conditional probation status must increase their cumulative GPA to above 2.0 or meet the conditions outlined in their approved appeal.

The college will remove all warning, probation, suspension or conditional probation status from students increasing their cumulative GPA to above 2.0. Students who meet the conditions of the appeal but do not raise their cumulative GPA to above a 2.0 will remain on conditional probation status. Students who fail to increase their cumulative GPA to above 2.0 or fail to meet the conditions of their appeal will be suspended for one year.

During the suspension, the student may not register for any course, and may not participate in events or activities reserved for students.

## APPEALS

Suspended students can submit an appeal to the Vice President of Student Services as long as they have not filed any previous appeals or have received above a 2.0 GPA in every course.

In an approved appeal, the student must show proof of circumstances over which the student had no control and/or show proof of making measurable and substantial progress toward raising their GPA. The Vice President reviews appeals on a case-by-case basis. The Vice President may take the following actions on an appeal:

- Grant the appeal and move the student to conditional probation status
- Grant the appeal under certain conditions and move the student to conditional probation status
- Deny the appeal

The decision of the Vice President is final.

# Graduation

Students planning to graduate at the end of winter or spring quarter need to submit an Application for Graduation form by Nov. 30 for priority credit evaluation. For graduation in summer or fall quarter, application forms are due by April 30. The application form is available at the Enrollment Services Office. A \$15 fee is paid when the Application for Graduation is submitted. There is also a fee for a graduation cap and gown.

## TIME RESTRICTION FOR GRADUATION

Students may graduate under provisions of any official catalog in effect over the last five years, counting backwards from when they applied for graduation. Substitutions for courses that have changed or are no longer offered must be approved by the program head. Arrangements will be made for students enrolled in a program that is discontinued to complete their degree in a timely manner.

## COMPLETION OF CREDITS FOR DEGREE

To be eligible for a degree from Centralia College, students must complete their final 15 credits, or 35 of the last 45 credits at Centralia College. To be eligible for a certificate from Centralia College, students must complete their final 10 credits, or 15 of the last 25 credits at Centralia College.

Students may earn a second degree or certificate if they satisfy all requirements of both degrees.

A commencement ceremony is held at the end of the academic year. Student who applied for graduation during that year may take part in the ceremony.

Centralia College will mail diplomas or certificates approximately 60 days after the end of the quarter. Students may order a replacement diploma for an additional cost.

## ACADEMIC HONORS

### Quarterly Honors

Any student who completes 12 or more credits in a quarter is eligible for quarterly honors. Students with a quarterly GPA of 3.9 to 4.0 will be on the President's List and will be awarded a Gold Seal Certificate. Students with a quarterly GPA of 3.75 to 3.89 will be on the Vice President's List and will be awarded a Silver Seal Certificate. Students with a quarterly GPA of 3.50 to 3.74 will be on the Dean's List.

### Graduation Honors

This applies to any student who earns a degree or certificate of proficiency. Students with a GPA of 3.90 to 4.0 will graduate with HIGHEST HONORS. They will receive a gold medallion and may wear a gold cord. Students with a cumulative GPA of 3.75 to 3.89 will graduate with HIGH HONORS. They may wear a gold cord. Students with a cumulative GPA of 3.50 to 3.74 will graduate with HONORS. They may wear a silver cord.

Individuals receiving the honors listed above will be recognized in the commencement program and have the honor stated when his or her name is announced at commencement. Honor grades are calculated through winter quarter for the commencement program and ceremony.

# SERVICES FOR STUDENTS

## Bookstore

**TransAlta Commons Building**  
**7:30 a.m. - 4 p.m. Monday – Friday (summer hours vary)**  
**360-623-8964**  
**bookstore@centralia.edu**  
**www.centraliabookstore.com**

The Centralia College Bookstore serves students, faculty, staff, and community members. The bookstore offers new and used textbooks, reference materials, study aids, art supplies, computer supplies and software, stationery, gifts, insignia items, clothing, and snacks.

Extended hours are offered at the beginning of each quarter. Summer quarter hours may differ slightly. The bookstore buy-back takes place during the three days of final exams. The summer quarter schedule may differ slightly.

## Blazer Bite Cafeteria

**TransAlta Commons Building**  
**Hours may vary by quarter**

Food Services offers a full line of fast foods, sandwiches, soups, salads, buffet, beverages, and a variety of snack items for breakfast and lunch.

## Children's Lab School

**412 S. Oak St., Centralia**  
**7:30 a.m.-5:30 p.m. (summer hours may vary)**  
**360-623-8949**

Childcare services are available on campus for children ages one month through five years.

Parents participate in the children's classrooms and receive college credit for their involvement.

The childcare program participates in the Washington State Early Achievers Program. Areas of specialization are in interactions, environments, and overall quality. Parents participate in the children's classrooms and parenting classes and receive college credit for their involvement.

The childcare center is utilized by the Early Childhood Education programs on campus for training and observation purposes.

# Advising/Counseling Center

**TransAlta Commons Building**  
**8 a.m.-5 p.m. Monday-Friday (summer hours may vary)**  
**360-623-8967**  
**advising@centralia.edu**

The Advising/Counseling Center offers a variety of services. Appointments are recommended, however, drop-in service may be available.

## CAREER SERVICES

Career counseling provides assistance with career exploration and decision-making. Counselors review a student's aptitude, interests, values, and skills, and provide career inventories and tests to help identify suitable career paths.

Interactive computer programs are available. These include Washington Occupational Information System (WOIS), and other career guidance programs. These computer systems help students assess their interests, values, and skills, and suggest matching career fields and occupations. These systems can be used to search for specific information concerning training, skill needs, rate of pay, job prospects, etc.

## PERSONAL COUNSELING

Personal individual counseling provides assistance with various problems that may interfere with a student's education. Examples include stress, family and relationship problems, interpersonal conflicts, parenting difficulties, sexuality issues, anxiety, depression, or grief.

Workshops are designed to assist students with a variety of topics. They are offered periodically. Watch for announcements about specific topics, dates, and times.

## EDUCATIONAL SERVICES

### Pre-admissions Counseling

Pre-admissions counseling can provide information about programs, courses, and services to match student interest.

### Educational Counseling

Educational counseling can help with study skills, academic deficiencies, test anxiety, setting realistic goals, transfer information, program planning, and class scheduling questions.

## Test Interpretation

Test interpretation is provided for the ASSET and COMPASS placement tests and career inventories (COPS, Strong Interest Inventory, CAI, etc.).

## Transfer advising

Subject area faculty advisors are the primary source for assisting students in transferring to a four-year college. However, faculty counselors can assist with additional information. Transfer information for two- and four-year colleges in Washington are available in the Advising/Counseling Center.

## Scholarship information

The Advising/Counseling Center maintains a file of scholarships offered at Washington four-year colleges and universities, private organizations and businesses, and a variety of government agencies. Eligibility criteria for each scholarship may vary. A staff person can assist in research.

## High School Completion

Adult High School Completion may provide options for those who have not yet graduated from high school. Counselors can explain the options and procedures, and assist in setting a goal that best meets the student's needs.

# Honors and Recognition

## PHI THETA KAPPA

Phi Theta Kappa, the honor society of the two-year college, accepts students with a 3.4 or higher GPA. Contact a Centralia College advisor for information.

## OUTSTANDING STUDENT AWARD

Any member of the college community may nominate a student for the Outstanding Student Award. Students may also nominate themselves. The Outstanding Student Awards are presented at commencement. The Office of the Vice President of Student Services has nomination forms and information about eligibility and criteria for the award.

## ALL-WASHINGTON ACADEMIC TEAM

The Centralia College president names one or two students annually to the All-Washington Academic Team. These students are also nominated for the All-USA Today Academic Team, a national student recognition program. To be eligible for nomination, students must demonstrate academic achievement, community activities, and service to the college while attending Centralia College. Nominations are made during fall quarter.

# International Student Programs

## International Student Programs Office

222 S. Rock St., Ste. B  
360-623-8965  
intl@centralia.edu  
www.centralia.edu/international

The International Student Programs Office helps international students with academic, immigration, career, and personal concerns. Staff also assist by locating host families, placing students in campus apartments, and distributing an apartment locator guide.

An active international student club/network organizes social events, educational activities, and service projects. All international students are automatically members of the International Student Club/Network.

International students must follow immigration regulations. With an F-1 student visa, students must enroll in and maintain a minimum of 12 credits per term (18 IEP credits), make satisfactory progress toward a degree, and maintain a cumulative grade point average (GPA) of 2.0 (C) or better. Instructors, advisors, and the staff of International Student Programs can provide assistance.

# Transitional Education/Testing

## Odegaard Phoenix Center

### Kirk Library Building

7:30 a.m.-9 p.m. Monday & Tuesday  
7:30 a.m.-7 p.m. Wednesday & Thursday  
7:30 a.m. - 4 p.m. Friday (summer hours may vary)  
360-623-8957  
www.centralia.edu/academics/basic

www.centralia.edu/students/testing.html

The Odegaard Phoenix Center offers Transitional Education and Testing Services.

Coursework includes Basic Education for Adults (BEDA) in reading, language arts, and math, English Language Acquisition (ELA), Intensive English Program (IEP). pre-college reading, writing, and math, and Student Success courses.

Proctored testing for BEDA, ELA, eLearning, Pearson Vue, and other Centralia College academic classes is offered on a drop-in basis. Current photo ID is required.

## TESTS OFFERED

- ACCUPLACER (college placement)
- GED equivalency test
- Emergency Medical Technician (EMT) certification
- American Medical Technologist (AMT) exam
- Test of Essential Academic Skills (TEAS) for nursing admission
- Washington Educator Skills Tests (WEST)
- Proctored testing for other educational institutions

## TESTING ACCOMMODATIONS

Students with documented disabilities can request accommodations and apply for services through Centralia College Disability Services at 360-623-8968. For accommodation requests for GED testing, contact Pearson Vue at www.ged.com.

# Instructional Support

## WRITING CENTER

### TransAlta Commons Building, Room 301

Hours vary by quarter  
360-623-8841  
writingcenter@centralia.edu  
www.centralia.edu/academics/writingcenter

The Writing Center is a drop-in center with computer stations, resources, and staff to assist students with the writing process. The Writing Center also provides appointment-based tutoring, hands-on workshops, and supplemental instruction.

Students can receive assistance online through the Online Writing Lab at www.owl.centralia.edu. Students can access self-help resources and submit their drafts for review by a writing consultant.

## PROS (PRESENTATION RELIEF SQUAD)

### TransAlta Commons Building, Room 337

10 a.m.-1 p.m. Monday-Friday (closed in the summer)  
360-623-8494

This drop-in center provides help to any student with an upcoming presentation or speech.

## TUTORING CENTER

### Walton Science Center, Room 309

360-623-8952  
www.centralia.edu/students/tutoring.html

The Tutoring Center is a venue for students to study collaboratively and receive help and guidance from faculty members and peer tutors. The drop-in center provides free tutoring, computer workstations, and a group work area for science, technology, engineering, and math students.

## PEER TUTORING

### **Walton Science Center, Room 309**

Hours vary by quarter

360-623-8652

[www.centralia.edu/students/tutoring.html](http://www.centralia.edu/students/tutoring.html)

Peer tutoring is an instructional support technique used successfully with students at all levels. Peer tutors help students master a subject area. Tutoring can strengthen and improve students' academic abilities and achievement. Upon request, tutoring is available for most classes taught at Centralia College.

Peer tutoring is free to registered Centralia College students. To apply to be a peer tutor, students need to complete an application form and obtain approval from their instructor.

## LIBRARY

360-623-8956

[librarian@centralia.edu](mailto:librarian@centralia.edu)

[library.centralia.edu](http://library.centralia.edu)

The Kirk Library provides a broad array of print and digital information resources. Additionally, the library provides access to computers with the full Microsoft Office suite. The Kirk Library website is the gateway to information resources and academic research tools. Access to the library catalog of books and multimedia materials, high-quality databases, and research aids are available 24/7.

Currently enrolled students may borrow materials by showing student photo identification. Librarians and staff are available to assist library users in locating information and conducting research. Librarians are available in person or online 24/7 through the library's live chat reference service.

## eLEARNING

### **Kirk Library, Room 127**

360-623-8955

[elearning@centralia.edu](mailto:elearning@centralia.edu)

[www.centralia.edu/elearning](http://www.centralia.edu/elearning)

eLearning can help students with face to face, hybrid and online classes that use Canvas, WebAssign, MyMathLab, iLrn, Connect and other online websites and publishers. This includes signing in, resetting passwords, learning how to use, troubleshooting when things go wrong, etc.

eLearning can also help students who need to record or edit a video project for class with our media pod services. This includes recording a presentation with a PowerPoint, Prezi or Google Slides.

eLearning can help students troubleshoot their technology, including their mobile devices, student email, and downloading the FREE Microsoft Office 365 suite for students (Word, Excel, PowerPoint, OneNote).

Walk-ins welcome.

## Parking

All vehicles parking in Centralia College parking lots must have a valid Centralia College decal. Decals for students are available at the Information Desk in the Student Center. Decals for staff are available in the facilities office. The decal for the first vehicle is available at no charge.

Provisions can be made for physically disabled employees, visitors, and students.

A Guest Permit is required for visitors requiring parking for longer than 30 minutes. Guest Permits are available at the Information Desk (first floor, TransAlta Commons Building) and are valid in any undesignated on-campus parking spaces.

Racks are provided for bicycles. Bicycles are not permitted inside buildings and may not be secured to college facilities (other than designated bike racks).

Violation of parking and traffic rules may result in fines or other penalties. Centralia College may withhold students' official transcripts until fines are paid.

## Sports Programs

### INTERCOLLEGIATE ATHLETICS

#### **Health and Wellness Center, Room 117**

8 a.m.-5 p.m. Monday-Friday (summer hours may vary)

360-623-8926

[www.centralia.edu/athletics](http://www.centralia.edu/athletics)

Centralia College is a member of the Northwest Athletic Conference (NWAC). The teams are known as the Trailblazers. The comprehensive intercollegiate athletic program provides competition for both men and women students and is gaining an enviable record in all league competition.

The athletic program offers opportunities to participate in the following varsity team sports:

- Baseball – Men
- Basketball – Men and Women
- Golf – Women
- Soccer – Women
- Softball (fast pitch) – Women
- Volleyball – Women

## Student Job Center

### TransAlta Commons Building

8 a.m.-4:30 p.m. (summer hours may vary)  
360-623-8974

The Student Job Center can help Centralia College students find part-time student employment on- and off-campus to supplement their educational costs. The office has an open door policy, various resources, and caring staff members to help students with their job search.

#### ***Student Employment Programs:***

- Federal Work-Study On-campus (must be eligible for financial aid)
- Non-need-based On-campus Employment
- Federal Work Study Community Service (on and off-campus, must be eligible for financial aid)
- State Work Study On-campus (must be eligible for financial aid)
- State Work Study Off-campus (must be eligible for financial aid)
- Federal Work Study Reading/Math Tutor (must be eligible for financial aid)
- Cooperative Work Experience (students earn credits for on the job learning related to their area of study)

## Disability Services

### TransAlta Commons Building

360-623-8966  
[www.centralia.edu/students/disabilities](http://www.centralia.edu/students/disabilities)

Centralia College complies with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and all other applicable state and federal regulations that prohibit discrimination on the basis of disability.

Students with disabilities, who wish to receive assistance, should contact the Disability Services Office as soon as possible, preferably at least six weeks before the start of the quarter. Disability Services staff members will determine accommodations on an individual case-by-case basis. Current (usually not older than three years) documentation of the disability by a qualified professional is required.

Requests for accommodations for special events or activities must be submitted early enough for Disability Services staff to review documentation and arrange accommodations.



# Student Life and Involvement Center (SLIC)

## TransAlta Commons Building

360-623-8972

activities@centralia.edu

www.centralia.edu/slic

## HOW TO GET INVOLVED

The Student Life and Involvement Center is the headquarters for student leadership and campus involvement. SLIC oversees student government; budgets for all student-funded programs, clubs, and organizations; and programs campus activities and support services to all student-funded programs. SLIC holds leadership training throughout the year for all student leaders and any student that is interested. SLIC also provides student identification cards, maintains a campus lost and found, and posts on campus bulletin boards.

## STUDENT GOVERNMENT ASSOCIATION (SGA)

Centralia College recognizes the ASCC Student Government as part of the college's governance structure. The ASCC Student Government serves as the recognized representative of Centralia College students. The ASCC Student Government holds weekly meetings that are open to all students. Members of the Student Government are elected each spring and receive compensation for their time. The Student Government appoints students to be part of the governance process by serving on college committees.

## STUDENT ACTIVITIES TEAM (SAT)

The Student Activities Team is a student team selected and hired in conjunction with the ASCC Student Government and college staff. SAT plans cultural, social, educational, and recreational events for students on campus. They develop a well-rounded balanced calendar of activities and events that include speakers, musicians, comedians, films, outings, and recreational tournaments. These are paid positions.

## CLUBS AND ORGANIZATIONS

Student clubs and organizations offer opportunities for students to meet friends, satisfy special interests, and contribute to campus life. Students can organize and join associations to promote their special interests.

Currently recognized student groups include but are not limited to:

- Gender Sexuality Alliance
- Outdoor Club
- Psychology Club
- International Network
- Multicultural Club
- Phi Theta Kappa
- Latinos Unidos
- Centralia College East Organization of Students
- TRiO Club
- Science Club
- Art Club
- Speech Club
- Forensics Accounting
- Diesel Tech Club
- Applied Physics and Engineering
- and many more.

Students are encouraged to start clubs through the recognition process. For a complete list of currently recognized clubs and organizations, visit [www.centralia.edu/slic](http://www.centralia.edu/slic).

# Student Rights and Responsibilities

**The college has established policies providing for the rights and responsibilities of students. Copies of this code (WAC 132L-350) are available from the SLIC or the Vice President of Student Services Office.**

1. This is a summary of the Student Rights and Responsibilities Code. It is not a complete summary and does not replace the actual code. Refer to the code itself for a complete understanding of its content.
2. Centralia College has this code to help fulfill its mission. See WAC 132L-350-010.
3. If you violate this code, Centralia College can discipline you. See WAC 132L-350-090.
4. Some words in the code have technical or special meanings. These are defined. See WAC 132L-350-020.
5. You are accountable for your behavior both on and off campus. See WAC 132L-350-030.
6. You have constitutional rights. See WAC 132L-350-070.
7. You have these freedoms: access, association, press, speech, assembly, due process, and other rights. You are also protected from unlawful discrimination, sexual harassment, and unreasonable search. See WAC 132L-350-070.
8. You should take an active role in your learning, obey the law, and follow college rules. See WAC 132L-350-080.
9. Do not hurt, intimidate, or bother people. See WAC 132L-350-080.
10. Be honest and tell the truth. See WAC 132L-350-080.
11. Do not cheat. See WAC 132L-350-080.
12. Do not steal or cause damage to other people's property. See WAC 132L-350-080.
13. Do not go where you are not supposed to. See WAC 132L-350-080.
14. Do not abuse computers, telephones or other electronic equipment; do not use them to break the law or to bother people. See WAC 132L-350-080.
15. The use of tobacco, alcohol, and drugs is strictly controlled. See WAC 132L-350-080.
16. Hazing is prohibited. See WAC 132L-350-080.
17. If you disrupt the classroom, the faculty member may remove you for that day. The same thing could happen if you disrupt an office. You can also be disciplined further. See WAC 132L-350-090.
18. If you violate the code, you can receive anything from a warning to dismissal. You can also be fined or have other restrictions placed on you. See WAC 132L-350-100.
19. If you are a threat to people, you will be suspended immediately. You will get a hearing later. See WAC 132L-350-200.
20. If you are accused of violating this code, you will be summoned to an initial hearing. See WAC 132L-350-110.
21. You can appeal decisions to the judicial board, then to the president. See WAC 132L-350-120.
22. There are rules about how the judicial board conducts its process and handles records. See WAC 132L-350-170.
23. There are rules about how the judicial board considers evidence. The college has to prove its case by a preponderance of evidence. See WAC 132L-350-160.
24. There are rules about what the judicial board can do, and how it communicates its results. See WAC 132L-350-170.
25. There are rules about how and when to appeal. See WAC 132L-350-190.
26. There are rules about how this code is changed. WAC 132L-350-240.

## TRiO Programs

### **TransAlta Commons Building**

8 a.m.-5 p.m. Monday-Friday (summer hours may vary)  
[www.centralia.edu/students/trio/](http://www.centralia.edu/students/trio/)

Three federally funded TRiO programs – TRiO TS, Upward Bound, and Student Support Services – provide support services to help underrepresented college-bound students who meet federal eligibility requirements. The programs assist students as they prepare for college, attend college, and transfer to a four-year college or university.

### TRiO TS

[triotst@centralia.edu](mailto:triotst@centralia.edu)

360-623-8969

This program helps young people in grades 7-12 as they explore their career and educational options beyond high school.

### UPWARD BOUND

[upwardbound@centralia.edu](mailto:upwardbound@centralia.edu)

360-623-8968

This program provides academic assistance for those in grades 9-12 as they prepare for success in college.

### STUDENT SUPPORT SERVICES

[sss@centralia.edu](mailto:sss@centralia.edu)

360-623-8970

This program provides a variety of levels of support to help students stay in college, graduate, and/or transfer to a four-year college.

### **TRiO programs offer these services**

- Academic and career planning assistance
- Assistance in completing college admission, scholarship, and financial aid applications
- Assistance in preparing for college entrance examinations
- Transfer information, planning, and college visits
- Mentoring and tutoring
- Cultural enrichment activities
- Workshops/conferences and campus tours
- Information to improve financial literacy

## Technology Resources

The college provides a wide range of computing resources and internet services to students, faculty, and staff. There are general-purpose computer labs with Windows-based PCs equipped with a variety of software applications. There are specialty labs supporting various programs including computer graphics, music, electronics, robotics, computer science, and civil engineering.

## Email

Registered students will be issued a Centralia College email account. The college will send all official communication to this student email account. Students are responsible for activating and checking this account regularly.

Students may choose to forward messages to a different email account; however, they are still responsible for all information sent to their student account.

## Online Courses

### Kirk Library

360-623-8955

elearning@centralia.edu

www.centralia.edu/elearning

Centralia College offers a variety of course formats for students unable to attend regularly scheduled classes on campus.

### ONLINE COURSES

Online courses are dynamic and interactive virtual classrooms where students can login any time, day or night. Students have the flexibility of working in an online classroom when it's convenient, but there are assignments, class start and end dates, and due dates. Students in online courses should plan on logging in regularly to interact with the instructor and other students.

### HYBRID COURSES

Hybrid courses replace in-class time with online time. For example, a five-credit class may meet on campus two hours a week and conduct the rest of the week's learning activities online.

### WEB-ENHANCED COURSES

Web-enhanced courses meet 100 percent of the class time on campus, but include resources or other activities online. For example, students may take a five-credit class that meets five hours a week on campus, but they can access multimedia materials, practice quizzes, or get extra help online. Many of the classes at Centralia College are web-enhanced.

### FLEX COURSES

In flex courses, students can decide whether to attend face to face or online, and can switch between those modes during the quarter.

Admission/Enrollment/Registration for these types of courses follows the same process as any other course. For more information about class registration and becoming a priority student, please see the Registration section. For questions about specific courses being offered, please contact the instructor of the course or the Instruction Office at 360-623-8929.

*Note: Persons with a disability who would like accommodations with any of the programs and services of the college can contact the Disability Services Office at 360-623-8966. Students are encouraged to do this as early as possible.*

## Continuing Education

### Office of Continuing Education

Technology Building

360-623-8940

### CONTINUING EDUCATION

A variety of non-credit classes and workshops are offered throughout the year. These classes are self-supporting and are offered at various times and places. The classes are designed for personal enrichment and/or job advancement. The Office of Continuing Education also develops and coordinates training for business and industry in the local community. Consult the quarterly schedule of classes or contact the Office of Continuing Education for current offerings or training needs. For information on Continuing Education classes, call 360-623-8940.

### APPRENTICESHIP PROGRAMS

Apprenticeship courses are offered in cooperation with local joint training commissions or with approval of L&I. Apprentices must be in an approved training program.

### CERTIFICATE PROGRAMS

Centralia College offers several vocational certificate programs. Contact Centralia College Workforce Education Office for details.

### SENIOR COLLEGE/LIFELONG LEARNING

These classes enrich life and cultivate the love of lifelong learning. Classes are small, ungraded, affordable, and geared to the interests and lifestyles of older adults.

### NIGHT, WEEKEND AND ONLINE CLASSES

Commitments to a job or other obligations can prevent students from completing a college degree or certificate program, or from attending classes for professional development or personal enrichment. Centralia College evening, weekend and online classes can help. These classes allows many students to stay with their jobs while taking classes during their free time.

Admission/Enrollment/Registration for these types of courses follows the same process as any other course. For more information about class registration and becoming a priority student, please see the Registration section. For questions about specific courses being offered, please contact the instructor of the course or the Instruction Office at 360-623-8929.

# Academic and Credit Information

## FULL-TIME DESIGNATION

How many hours does a student need to be considered full-time?

For standard terms:

Full-time: 12 or more credits per quarter

$\frac{3}{4}$ -time: 9-11 credits per quarter

$\frac{1}{2}$ -time: 6-8 credits per quarter

## CREDITS BY CLASS TYPE

Less than  $\frac{1}{2}$ -time: 1-5 credits per quarter

Lecture – 1 contact hour per week per credit; 2 hour per week outside work per credit

Lab – 2 contact hours per week per credit; 1 hour per week outside work per credit

Clinical/Practicum/Externship – 3 contact hours per credit per week; no outside work

## CLASS BREAKS

### POLICY 3.040

The normal class schedule is 50 minutes, with 10 minutes between classes. Labs and block classes operate on extended class periods of two or more hours. In those cases, it is appropriate for faculty to provide students with break periods. However, the cumulative time for breaks should not exceed the total of 10 minutes per hour. Students should be back in class and fully productive at the end of the break period. Breaks should be scheduled regularly throughout the class period and class periods may not be shortened by elimination of the break periods.

## CLASS DISMISSALS

### POLICY 3.050

Holding classes in accordance with adopted schedules has high priority in the educational program. However, the class periods can, on occasion, be superseded by other educational opportunities.

## CLASS AND OFFICE DISRUPTIONS AND STUDENT DISCIPLINE

### POLICY 3.060

Centralia College exists to provide educational programs for its students and activities that disrupt the educational process will not be tolerated. All members of the faculty and staff have a responsibility to ensure the orderly conduct of the educational process.

# Centralia College East

701 Airport Way • P.O. Box 147 • Morton, WA 98356  
360-496-5022  
www.centralia.edu/cce

## **Centralia College East (CCEast) represents Centralia College's dedication to meeting educational needs of the residents of central and eastern Lewis County.**

CCEast provides educational advising, college level placement testing, registration services, Running Start testing and advising, tutoring, financial aid assistance, GED testing and classes, and online access to Centralia College's library resources. In addition, a variety of classes connect students to the Centralia campus via interactive video. The CCEast Organization of Students offers opportunities for leadership development as well as activities for the students.

*The mission of CCEast is to provide an environment that nurtures learning by providing:*

- Associate degree programs
- Local access to resources for technical training
- Basic skill development
- Lifelong learning opportunities to help students attain personal, family, and career goals
- Student-centered support services
- Cultural activities for the community

## ASSOCIATE IN ARTS DEGREE PROGRAM

Academic classes offered at CCEast enable students to complete a Centralia College Associate in Arts degree in two years. A combination of day and evening classes are available.

## ASSOCIATE IN TECHNICAL ARTS COURSEWORK

Coursework toward Business Technology certificates and Associate in Technical Arts (ATA) degrees is offered at CCEast for a variety of programs, including administrative assistant, medical administrative assistant, and accounting. For students planning on entering other professional/technical programs, such as nursing, civil engineering technology, or diesel technology, CCEast offers many of the prerequisite and support courses.

## BUSINESS OFFICE TECHNOLOGY

Develop computer-based skills in CCEast's computer lab. Classes such as Microsoft Office, Excel, Word, digital photography, and computer graphics are offered regularly. Community Business classes offer an opportunity to gain skills that may be applied to the business setting or for professional development. These courses are non-transcripted and are offered at a reduced rate.

## SKILL DEVELOPMENT PROGRAM

GED and Adult Basic Education (ABE) classes prepare students for the GED and for college preparation courses. Self-paced ABE classes are offered in math, writing, and reading. GED testing is offered at CCEast one day each week.

## OTHER OFFERINGS

CCEast offers personal enrichment opportunities for credit and non-credit, including an array of adult special interest and community education classes, including the summer theater performed at the Roxy Theater in Morton.

## Garrett Heyns and Cedar Creek Corrections Education Centers

Centralia College operates the Garrett Heyns Education Center at the Washington Corrections Center and provides educational opportunities at the Cedar Creek Corrections Center under agreement with the State Board for Community and Technical Colleges and the Washington State Department of Corrections.

The alliance with Garrett Heyns Education Center at the Washington State Corrections Center in Shelton began in 1975. Educational offerings include basic education for adults, GED prep courses, GED testing, basic computer and college readiness classes, and industrial sanitation and building trades programs.

In 2011, Centralia College assumed oversight of the education center at the Cedar Creek Corrections Center in Littlerock. Courses administered include basic education for adults, GED prep classes, GED testing, basic computer and college readiness classes, and programs in building trades, drywall, roofing, siding, and horticulture.

## Cooperative Education

### **Student Job Center TransAlta Commons Building**

360-623-8974  
[www.centralia.edu/jobresources](http://www.centralia.edu/jobresources)

Cooperative Education is a partnership involving Centralia College, students, and employers from the community working together to extend classroom learning to the workplace. Students can be placed in a job relating to their field of study or career plan and are able to earn college credit for the learning that takes place on the job site.

Cooperative Education personnel will interview students and assist them in locating an appropriate co-op experience. Students who are already employed may be interviewed to determine eligibility for Cooperative Education.

After securing an appropriate placement, students will meet with a faculty co-op coordinator, who will enroll them in a Cooperative Work Experience course. In addition, enrollment in a Work Experience Seminar is required either prior to or concurrent with all cooperative work experiences.

## Externships/Internships, Clinical/Practicum

Placement sites change quarterly. Names and addresses of the sites can be provided on request by the Workforce Education department at 360-623-8963.

## Teaching Sites

Garret Heyns Education Center  
2321 W. Dayton Airport Road  
Shelton WA 98584

Cedar Creek Education Center  
1220 Bordeaux Road  
Littlerock, WA 98556

Chehalis Tribal Center  
461 Secena Road  
Oakville, WA 98568

# STUDENT TRANSFER

Centralia College has transfer agreements with most of the four-year colleges and universities in Washington.

Only the Associate in Arts (AA), Associate in Liberal Arts (ALA), and Associate in Science (AS) degrees are designed specifically to transfer. These degrees are covered by Statewide Transfer Agreements.

Depending on the college to which a student transfers and their major, they may need to select specific courses within a degree to ensure full transferability. These transfer degrees assure the transfer of credit, but not automatic or guaranteed admission, since each institution has separate admission criteria based on grades, test scores, and other considerations.

The Associate in Applied Science–Transfer (AAS–T) degree is designed for transfer to specific four-year colleges and

universities for students pursuing specific professional/technical programs. The AAS-T degree is not designed for general transfer.

The Associate in Technical Arts (ATA) and Associate in General Studies (AGS) are NOT generally designed for transfer. There are a few very specific exceptions to this. The ATA degree can sometimes be used to transfer, but only to a few colleges under very special circumstances. These circumstances are called Alternatives for Transfer of Occupational Programs (ATOPS) degrees. The most common are “Upside Down Degree Programs” or “Articulation Agreement Programs.” Unless a student has absolutely confirmed that one of these special and very limited exceptions applies to their plans, they are advised

not to use the ATA degree for transfer purposes. The AGS degree may contain some courses that transfer, but the AGS degree does not transfer anywhere as a package.

- AA Associate in Arts**  
General Transfer include courses required for the student’s major.
- ALA Associate in Liberal Arts**  
General Transfer include courses required for the student’s major.
- AS Associate In Science – Technical and Science**  
Transfer select courses based on the four-year college and the student’s major.
- AAS-T Associate in Applied Science-Transfer**  
Specific/Restricted Transfer include courses required for the student’s major.
- AAS Associate in Applied Science**  
Not designed for general transfer.  
  
Ask about “Upside Down Degree” or special articulation agreements.
- ATA Associate in Technical Arts**  
Not designed for general transfer.  
  
Ask about “Upside Down Degree” or special articulation agreements.
- AGS Associate in General Studies**  
Not designed for any transfer. No exceptions.

---

## STUDENT RIGHTS IN THE TRANSFER PROCESS

The Washington State Board for Community and Technical Colleges has published a Policy on InterCollege Transfer and Articulation Among Washington Public Colleges and Universities. This policy spells out student rights in the transfer process.

This policy states, in part, “Students have the right to expect fair and equitable treatment from the public colleges and universities

in Washington, both sending and receiving institutions. They have, in turn, the responsibility of seeking out current information pertaining to their educational objectives and for acquiring appropriate information when they change their academic plans. When a student changes a major or degree program, the student shall assume full responsibility for meeting the new requirements. Colleges shall make every effort to help students make transitions as smoothly as is feasible.”



# Transfer Degrees

## ASSOCIATE IN ARTS (AA)

## ASSOCIATE IN LIBERAL ARTS (ALA)

Centralia College's Associate in Arts (AA) degree and other degrees based on the Direct Transfer Agreement (DTA) conform to rules established by the Inter College Relations Committee (ICRC) and are maintained by the Joint Transfer Council (JTC). This means that if a student successfully completes one of these degrees, they will have met most, if not all, of the general university requirements at many baccalaureate colleges in Washington.

This is the first step in preparing for entry with junior standing. The second step is including courses required by the student's major. As of the printing of this catalog, the following baccalaureate colleges and universities will accept either of these degrees from Centralia College in accordance with the Direct Transfer Agreement under the ICRC guidelines.

Colleges or universities marked with an \* have some special requirements which must be satisfied at Centralia College and/or at the baccalaureate institution in order to complete all the general undergraduate requirements. These additional requirements are called provisos.

- Bastyr University\*
- Central Washington University
- City University
- Cornish College of the Arts\*
- Eastern Washington University\*
- Gonzaga University\*
- Heritage University\*
- Northwest University\*
- Pacific Lutheran University\*
- Saint Martin's University\*
- Seattle Pacific University\*
- Seattle University\*
- The Evergreen State College
- Trinity Lutheran College
- University of Washington\*
- University of Washington-Tacoma
- Washington State University
- Western Washington University
- Whitworth College\*

Students are encouraged to meet frequently with their advisor, review the catalog and transfer guide of the institution to which they are planning to transfer, and consult with representatives of the baccalaureate institution. They should do this planning very early. This is especially important if the student plans to transfer to an institution that has provisos as indicated by the "\*".

Meeting general undergraduate requirements is important but not sufficient. It is also important that students meet the specific requirements required by their college major. Most college majors require students to take certain courses to prepare for entry as a junior in their major.

These requirements vary from major to major and from college to college. Usually these requirements can fit within the Associate in Arts or other degrees based on the Direct Transfer Agreement Degrees. If a student does not fold these courses into their degree at Centralia College, they may have to extend their college program by taking additional courses either at Centralia College or at the baccalaureate institution. Early selection of a college major is very important in planning a transfer program. Also, early planning with an advisor is imperative. Early decision making and early planning can save additional coursework.

## ASSOCIATE IN SCIENCE (AS)

Centralia College's Associate in Science (AS) degrees conform to rules established by the Inter College Relations Committee (ICRC) and are maintained by the Joint Transfer Council (JTC). This specialized degree program is designed for students pursuing science, technical, engineering, and pre-professional degrees. The Associate in Science degree places more emphasis on completion of mathematics and pre-major science, computer science, or engineering classes before transfer to enable students to begin upper-division coursework immediately.

The Associate in Science degree is divided into two tracks, depending upon academic major interest:

### **Associate in Science Degree Track 1**

Biological Sciences, Environmental/Resource Sciences, Chemistry, Geology, Earth Science, Chemistry, Biology and General Science Education.

### **Associate in Science Degree Track 2**

Engineering, Computer Science, Physics, Atmospheric Sciences and Physics Education.

Students who successfully complete either degree will have met most, if not all, of the lower-division science and mathematics major requirements at many baccalaureate colleges in Washington. This is the first step in preparing for entry with junior standing. The second step is including courses required by the student's major.

As of the printing of this catalog, the following four-year colleges and universities will accept either of the degree tracks from Centralia College in accordance with statewide agreements under the ICRC guidelines.

- Central Washington University
- Eastern Washington University
- Gonzaga University
- Pacific Lutheran University
- Seattle Pacific University
- Seattle University
- The Evergreen State College
- University of Washington
- Washington State University
- Western Washington University
- Whitworth College

Meeting all general undergraduate requirements is not as important for the AS program. Students will finish the

requirements at the four-year college. It is more important that students meet the specific requirements required by their intended college major. Most science and technical majors require students to take many courses to prepare for entry as a junior in their major. These requirements vary from major to major and from college to college. Usually these requirements can fit within the Associate in Science degree. Students who

do not fold these courses into their degree at Centralia College may have to extend their college program by taking additional courses either at Centralia College or at the baccalaureate institution. Early selection of a college major is paramount in planning an AS transfer program. Also early planning with an advisor is imperative. Early decision making and early planning can save additional coursework.

## ASSOCIATE IN APPLIED SCIENCE-TRANSFER (AAS-T)

Centralia College's Associate in Applied Science-Transfer (AAS-T) degree is designed to meet the requirements of specific four-year colleges and universities. This specialized degree program is for students pursuing professional-technical degrees. In general, technical degree programs are not designed for transfer. However, several four-year colleges and universities have specific degree programs that accept the AAS-T degree. Institutions and majors outside the specifically designed degrees will accept very few of the credits in the AAS-T degree.

Students should meet frequently with their advisor, review the catalog and transfer guide of the institution to which they are planning to transfer, and consult with representatives of the baccalaureate institution. This planning should be done very early.

# DEGREES AND CERTIFICATES

Centralia College offers different degrees to meet varied student needs. All associate degrees require a minimum of 90 credits. Students must complete the last 15 credits or 35 of the final 45 credits at Centralia College to be eligible for a degree from Centralia College. It is possible to earn a second degree if a student satisfies all the requirements of both degrees.

## BACHELOR OF APPLIED SCIENCE DEGREES

A traditional bachelor degree requires general education classes from many disciplines and is designed to provide students a wide base of knowledge, allowing them to concentrate their education in the third or fourth year of their education. A BAS degree gives students the chance to focus their education on their specific educational and career goals early within their education and incorporates more practical and concentrated hands-on learning in a specific industry or the career of their choice.

## GENERAL TRANSFER DEGREES

General transfer degrees are accepted by all state colleges and universities in Washington through formal agreements, including the Direct Transfer Agreement (DTA), between the universities and the community college system. Students who complete a General Transfer degree will, upon acceptance to a Washington public or signatory private college or university, generally be granted 90 transfer credit. Students may still need to complete more than 90 quarterly credits to graduate in their major. Centralia College General Transfer degrees include:

- Associate in Arts and derivative degrees
- Associate in Science and derivative degrees

## LIMITED TRANSFER DEGREES

Limited Transfer degrees may be accepted by select baccalaureate institutions, but there is no statewide agreement guaranteeing 90 credits will be accepted in transfer. Depending upon the institution, students may have their credits evaluated on a course by course basis. Centralia College Limited Transfer degrees include:

## ASSOCIATE IN APPLIED SCIENCE – TRANSFER

Workforce Education degrees are designed to provide detailed skills related to a profession and are not primarily intended for transfer.

Some institutions accept these degrees under an “upside down” model that allows the student to complete content-specific work in the first two years and round out his or her education by completing general university requirements (GURs) in the second two years of the baccalaureate. Centralia College Workforce Education degrees include:

- Associate in Applied Science
- Associate in Technical Arts

## GENERAL STUDIES DEGREE

The General Studies degree allows the student more latitude in designing a degree based upon personal interests, but does not necessarily meet the requirements for direct transfer. As with all degrees not designated as General Transfer, there is no guarantee all 90 credits required for the degree will transfer or that general university requirements will be satisfied.

## CERTIFICATES OF PROFICIENCY

Certificates of Proficiency are Workforce Education programs that require at least 45 credits and which provide job specific skills.

## CERTIFICATES OF COMPLETION

Certificates of Completion are similar to Certificates of Proficiency except requiring less than 45 credits.

## HIGH SCHOOL DIPLOMA AND GED

High School Diplomas and GEDs can be obtained by meeting all requirements for the Centralia College High School Diploma or by passing the GED tests, respectively.

## Educational Outcomes

### **Student learning is central to the college's mission.**

All degrees offered by Centralia College are designed to provide experiences that lead to the attainment of general education outcomes as embodied in the following Learning Themes:

#### REASONING

The ability to extract information from data, develop ideas and solutions, establish logical progression in thinking, and problem solve using such procedures as literary analysis or the scientific method.

#### WRITTEN, ORAL AND VISUAL COMMUNICATION

The ability to make oneself understood in public, interpersonal, professional, artistic, and technical arenas.

#### EXPLORATION – SELF AND OTHERS

An awareness of the values, beliefs, customs, and contributions from one's own and other traditions, ethnicities, classes and genders.

#### RESOURCEFULNESS

The ability to adapt to change, such as technological innovations or environmental conditions.

#### RESPONSIBILITY

The ability to be accountable to self, society, and the natural world.

To support the attainment of these general educational outcomes, instruction in major areas of inquiry is required for all degrees. The transfer degrees include courses in the Distribution Areas of communication, quantitative skills, humanities, social sciences, natural sciences, diversity, and health and fitness. Workforce Education degrees and certificates of proficiency achieve this end through the inclusion of related instruction in communication, computation, human relations, and health and fitness.

## Program Outcomes

Distribution Area Outcomes, found at the end of this section, define the program outcomes for degrees based on the Direct Transfer Agreement (DTA) and Associate in Science. In addition to the general outcomes, individual transfer programs have content designed to prepare students for success in that field.

Each Workforce Education degree or certificate includes courses that enable students to achieve profession-specific learning outcomes. These program outcomes are listed on the program pages on the college website.

# General Transfer Degrees

## ASSOCIATE IN ARTS DEGREE

In addition to the general requirements listed below, derivative programs may have additional requirements as listed in the programs of study in the next section. The Associate in Arts degree represents the broad knowledge generally acquired in the first two years of a four-year program leading to a Bachelor of Arts degree. When students earn the AA, they may transfer to a baccalaureate institution within the state of Washington with assurance that they have satisfied all or most of the basic requirements (General University Requirements/ Distribution Requirements). This means, generally, that AA transfer students can begin work on their specialized, major-area course work as soon as they transfer.

### Degree requirements:

To qualify for an Associate in Arts degree, students must complete a minimum of 90 credits in courses numbered 100 or above, with a cumulative grade point average (GPA) of at least 2.0 ("C" average).

*The 90 credits must include the following:*

**Core Skills..... 15 credits**

- a. Communication Skills ..... 10 credits  
ENGL& 101, ENGL& 102, ENGL& 235
- b. Quantitative Skills..... 5 credits

**Humanities..... 15 credits**

Select from at least three of the disciplines listed on the distribution list. No more than 5 credits in foreign language at the 100 level may apply.

**Social Sciences ..... 15 credits**

Select from at least three disciplines listed on the distribution list.

**Natural Sciences ..... 15 credits**

Select from at least two disciplines on the distribution list.  
Include at least one laboratory course.

**Health and Fitness.....3 credits**

Selected from either discipline listed on the distribution list.

**Diversity .....3 credits**

A 3 to 5 credit course listed as a Diversity (D) course. Diversity courses may also meet other Distribution Requirements.

**Academic Electives..... 27 credits**

A minimum of 27 elective credits are required. Elective courses may be selected to satisfy major emphasis requirements (see program summaries section), or to satisfy department requirements of the college/university chosen for transfer. If desired, students may include up to a maximum of 12 credits from courses numbered 100 and above that are not included on the ICRC approved electives list. A maximum of three (3) PE credits may be included in the AA degree.

## ASSOCIATE IN SCIENCE DEGREE

The Associate in Science degree represents attainments generally required by four-year colleges and universities for pre-professional programs in scientific disciplines. The need for early concentration on coursework in the chosen scientific major diminishes the general educational experience demonstrated by the Associate in Arts degree.

By working with an advisor in the completion of one of the two Associate in Science tracks, students can transfer to one of the Washington baccalaureate institutions with reasonable assurance they have completed all or most of the prerequisite courses for the targeted science major.

### Degree requirements:

1. A minimum of 90 credits is required for the degree.
2. A minimum grade point average (GPA) of 2.0 ("C" average) is required for the degree.
3. Students completing this Associate in Science degree will receive the same priority consideration for admission to most Washington state baccalaureate institutions as they would for completing the direct transfer Associate in Arts degree and will be given junior status by the receiving institution.
4. Additional general education requirements, cultural diversity requirements, and foreign language requirements, as required by the transfer institution, must be met prior to the completion of a baccalaureate degree.
5. Students are responsible for checking specific major requirements of baccalaureate institutions in the year prior to transferring.

Courses for programs of study fall into two tracks that are listed in the program section of this catalog. These programs are designed to match specific major requirements and also to meet the general distribution requirements listed below:

### Core Skills ..... 15 credits

- a. Communication Skills ..... 5 credits  
ENGL& 101
- b. Quantitative Skills ..... 10 credits  
MATH& 151, MATH& 152

### Humanities & Social Sciences ..... 15 credits

Select from at least three disciplines listed on the distribution list with at least 5 credits from humanities (H) and 5 credits from social sciences (SS). The remaining 5 credits can be from either category.

### Health and Fitness ..... 3 credits

Select three (3) credits from the list of courses approved for health and fitness (HF) distribution.

### Diversity ..... 3-5 credits

A 3 to 5 credit course listed as a Diversity (D) course. Diversity courses may carry another distribution designation that can be counted toward both distribution requirements.

### Track I – Biological Sciences, Environmental/Resource Sciences, Chemistry, Geology, Earth Science

#### Core Requirements: ..... 46-54 credits

- a. CHEM& 161, 162, 163
- b. MATH& 146 or MATH& 163
- c. BIOL& 221, 222, 223 or PHYS& 221, 222, 223
- d. Additional requirements: 10 – 18 science credits from courses normally taken by science majors, preferably in a 2 or 3 quarter sequence (biology majors should select physics or organic chemistry).

#### Remaining Credits: ..... 3-11 credits

### Track II – Atmospheric Science, Computer Science, Engineering, Physics

#### Core Requirements: ..... 30 credits

- a. PHYS& 221, 222, 223
- b. CHEM& 161
- c. Computer programming (4 credits minimum)
- d. MATH& 163 or MATH& 146

#### Remaining Credits: ..... 27 credits

Electives up to a maximum of 15 credits from courses numbered 100 or above that are not included on the ICRC approved electives list should be planned with the help of an advisor, based on the requirements of the specific discipline at the baccalaureate institution and using the programs listed later in this catalog.

## ASSOCIATE IN LIBERAL ARTS DEGREE

The Associate in Liberal Arts degree provides a broad background of knowledge rather than a course of study narrowly focused on preparation for a specific field of employment or profession. This degree develops reasoning, judgment, and expression abilities. Students who earn the ALA degree may transfer to a baccalaureate institution within the state of Washington with assurance that they have satisfied all or most of the basic requirements (General University Requirements). This means, generally, that the ALA transfer student can begin work on their specialized, major course work as soon as they transfer.

### **Degree requirements:**

To qualify for this degree, students must complete a minimum of 90 credits in courses numbered 100 or above, with a cumulative grade point average (GPA) of at least 3.0

("B" average).

*The 90 credits must include the following:*

#### **Core Skills..... 15 credits**

- a. Communication Skills ..... 10 credits
  - ENGL& 101
  - ENGL& 102
  - ENGL& 235
- b. Quantitative Skills ..... 5 credits
  - Any (M) designated math course numbered 107 or higher.

#### **Foreign Languages..... 15 credits**

Fifteen (15) credits in one foreign language, five (5) of which count toward Humanities Distribution.

#### **Health and Fitness.....3 credits**

Three (3) credits from the list of courses approved for Health and Fitness distribution.

#### **Humanities..... 20 credits**

A minimum of twenty (20) credits in humanities, including one course from at least three of these subjects: Art, Drama, Literature, Music, Philosophy. No more than five (5) credits from performance/skill courses. Five (5) credits of Foreign Language count toward Humanities. Select courses from the distribution list.

#### **Natural Science ..... 20 credits**

At least twenty (20) credits in Math/Science, including at least ten (10) credits in laboratory science or one course each from at least two of the following subjects: Astronomy, Biology, Botany, Chemistry, Forensic Science, Geography, Geology, Mathematics, Oceanography, Philosophy, Physics.

#### **Social Sciences ..... 20 credits**

At least twenty (20) credits in social sciences, including one course from at least three of these subjects: Anthropology, Sociology, Psychology, History, Economics, Political Science.

#### **Diversity .....3-5 credits**

A 3 to 5 credit course listed as a Diversity (D) course. Diversity courses may carry another distribution designation that can be counted toward both distribution requirements.

## MAJOR RELATED PROGRAMS

In addition to the transfer degrees listed above, the college offers degrees derived from both the Associate in Arts degree (AA) and the Associate in Science degree (AS). These degrees have been developed through collaboration between the State Board for Community and Technical Colleges (SBCTC) and the public colleges and universities in Washington.

These degrees may have specific requirements beyond those required by the AA or AS as listed in the program plan.

# Limited Transfer Degrees

## ASSOCIATE IN APPLIED SCIENCE-TRANSFER

The Associate in Applied Science-Transfer degree is for transfer to schools offering baccalaureates in applied science. This degree combines the technical focus of the Associate in Technical Arts with a minimum of 20 credits of transferable academic courses.

This degree is not generally transferable. Students intending to transfer should work with an advisor to make sure this is the right degree.

### Degree Requirements:

To qualify for the degree, students must complete a minimum of 90 credits in subjects numbered 100 or above. Students must also achieve a grade point average (GPA) of at least a 2.0 ("C" average).

Courses must be selected in accordance with a college programs of study. Check with an advisor for a current list of programs. These programs are designed to incorporate specific and major requirements as well as meet general education and related instruction requirements.

*The program must include:*

- a. **English Communications**  
ENGL& 101..... 5 credits
- b. **Quantitative Reasoning**  
(see distribution list)..... 5 credits
- c. **Humanities & Social Science**  
(see distribution list)..... 10 credits
- d. **Health & Fitness**  
(see distribution list)..... 3 credits

# Workforce Degrees

## ASSOCIATE IN TECHNICAL ARTS DEGREE & ASSOCIATE IN APPLIED SCIENCE DEGREE

Students whose plan is to prepare to compete for employment in an occupational field may choose to earn an Associate in Technical Arts or an Associate in Applied Science degree. Since this degree concentrates on a particular trade or skill, it does not have broad general education requirements.

Whether a technical course will transfer or count as a degree requirement for a baccalaureate degree is at the discretion of the transfer college or university.

*The 90 credits must include the following related instruction minimum requirements:*

- a. **Written Communication Skills**.....5 credits
- b. **Health and Fitness** .....3 credits  
from list of approved health or PE courses in Health and Fitness distribution (HF)
- c. **Computation Skills** .....5 credits
- d. **Human Relations**.....5 credits

### Occupational Major

Programs vary in total credits necessary to obtain a degree, although the minimum requirement is 90 credits. Core program credits are designed to meet occupational skills standards.



## Associate in General Studies Degree

The Associate in General Studies degree is designed for students who do not plan to transfer to a four-year college or pursue an Associate in Technical Arts degree in a specific occupational area. It is a terminal degree with emphasis on improvement of basic skills, general knowledge in the areas of humanities, natural science and social science, and some specialty of choice. This degree is designed to prepare the student to lead a full and useful life.

To qualify for the Associate in General Studies degree, students must complete 90 credits in courses numbered 100 or above, with a cumulative grade point average of at least a 2.0 ("C" average).

*The 90 credits must include the following:*

**Forty-three (43) credits taken in communication skills, humanities, math/natural sciences, social sciences, and health and fitness consisting of the following:**

- a. A minimum of ten (10) credits in communication skills ENGL& 101, ENGL& 102, or ENGL& 235.
- b. A minimum of ten (10) credits in each of the three general areas of knowledge (humanities, math/natural sciences, and social sciences). See the AA distribution list.
- c. Three (3) credits from the list of courses approved for Health and Fitness distribution.

An additional 47 credits of the student's choosing to satisfy their own educational plans or interests. Choices can be occupational, personal enjoyment, physical education, or academic courses.

# Certificates and Programs

## CERTIFICATES OF COMPLETION

Students may be awarded a certificate of completion by successfully completing a set group of courses from a professional/technical program. These certificates require significantly fewer credits than a certificate of proficiency. The courses tend to concentrate on one set of skills.

The U.S. Education Department's Gainful Employment regulations require disclosure of certain program information to students and prospective students. For additional information and updates, please visit [www.centralia.edu/academics/GE-disclosure.html](http://www.centralia.edu/academics/GE-disclosure.html).

## CERTIFICATES OF PROFICIENCY

Students may earn a Certificate of Proficiency by completing a professional/technical program which requires a minimum of 45 credits, includes related instruction, and a grade point average (GPA) of at least 2.0 ("C"). Certificates of Proficiency are awarded in these programs:

- Accounting Clerk
- Child Care Specialist
- Crime Scene Investigation
- Medical Office Assistant  
Office Assistant
- Phlebotomy
- Practical Nursing
- Welding

## HIGH SCHOOL COMPLETION PROGRAM

The High School Completion program is offered to students 21 and older enrolled in the HS21 Program, or to teenagers enrolled in the TEEN Program.

The TEEN Program is designed to provide support services for high-school aged students to be successful in high school graduation and parenting. Participants are able to attend classes, obtain high school graduation and gain parenting skills. This program will assist students in creating a network of other resources and expose them to opportunities academically and vocationally. For more information contact the TEEN Program Office at 360-736-9391, ext. 341.

To earn a high school diploma in the HS21 Program, students must be 21 at time of completion. Students must bring a high school transcript and photo identification to one of the daily orientations (M-F) at noon in the Kirk Library Building. All students enroll in reading, writing, and math courses in addition to a study skills lab where students work on completing courses that are not reflected on their transcripts. The quarterly tuition is \$25 (waivers are available). Classes are flexible with schedules for morning, afternoon, or evening courses. For more information call 360-736-9391, ext. 216.

## GED HIGH SCHOOL EQUIVALENCY

The new GED 2014 program is open to students age 16 and above. Any student under the age of 19 must also provide a high school release to enroll. Program orientation is held daily (M-F) at noon in the Kirk Library Building. All students enroll in reading, writing, and math courses in addition to a study skills lab, where students work on social studies and science courses modeled on the new GED tests. Classes are \$25 per quarter (waivers are available). Classes are flexible with schedules for morning, afternoon, or evening courses. For additional information regarding age limits, fees, testing times and preparation, contact the Phoenix Center 360-736-9391, ext. 216 or Centralia College East ext. 380.

## BILINGUAL (ENGLISH-SPANISH) GED PREPARATION

Taking the GED test in Spanish allows Spanish-speaking adults with limited English skills to advance more quickly toward their educational and professional goals. Obtaining a GED allows Spanish-speaking students to enroll in higher education courses, attend English language classes and/or obtain a more secure job. Students may register any time during the quarter. Prerequisite: co-enrollment in ESL classes.

## **English Language Acquisition (ELA)**

Students will develop listening, speaking, reading, writing, math, and technology skills in an integrated manner that fosters cognitive English language acquisition and participation in native English communication in English-speaking environments. Students will also receive instruction in soft skills and technology skills needed for a career pathway and to transition into higher level BEDA programs, where they can earn a high school degree, GED high school equivalency, or complete a certificate program. The ELA program is focused on career pathways that can lead to sustainable, living wages. Students may register until the 35th day of class each quarter. Students must complete CASAS assessments as a prerequisite.

### **Conversation**

Students will improve their English skills in listening and speaking, with an emphasis on health, business, academic, and industry pathways, careers, and the workplace. We will use a variety of interactive activities using a whole-language model to provide comprehensible input for English language acquisition. Students may register until the 35th day of class each quarter. Students must complete CASAS assessments as a prerequisite.

### **Bilingual (English-Spanish) GED Preparation**

Taking the GED test in Spanish allows Spanish-speaking adults with limited English skills to advance more rapidly toward their educational and professional goals. Obtaining a GED allows Spanish-speaking students to enroll in higher education courses, attend English language classes, and/or obtain a more secure job. Students may register until the 35th day of class each quarter. Students must complete CASAS assessments as a prerequisite.

## **Basic Skills Improvement**

Students with a high school diploma or GED coming back to college later in life, or entering college from the workforce, can brush-up on their academic skills in reading, writing, and math. Courses are offered daily. Classes are \$25 per quarter (waivers are available), and students can co-enroll in basic courses and college courses. Call 360-623-8957 or come to the Odegaard Phoenix Center in the Kirk Library Building for referral to one of the program advisors for enrollment.

### **Reading for Civics**

Reading for Civics is a Citizenship preparation class. Students will learn to complete the N-400 (Citizenship) application, prepare for the naturalization interview with USCIS, learn interviewing strategies, increase students' confidence with the interview process, and practice reading, writing, speaking, listening and pronunciation in English as they become informed, active community members. Students may register until the 35th day of class each quarter. Students must complete CASAS assessments as a prerequisite.

# Distribution Area Outcomes & Courses

**In this catalog, courses that satisfy distribution requirements are identified by a capital letter at the end of the course title. Use the following guide to identify the distribution categories:**

- C – Communication
- H – Humanities
- M – Mathematics/Quantitative Skills
- SS – Social Science
- S – Science
- HF – Health and Fitness
- D – Diversity

Distribution Requirements (also known as General University Requirements or GURs) are part of each transfer degree. Courses that fulfill Distribution Requirements meet specific criteria listed below:

## CORE REQUIREMENTS

### Communication Skills (C)

1. The course carries three or more credits.
2. The course objectives address three or more of the following outcomes. Upon successful completion of designated courses, students will have demonstrated the ability to:
  - Recognize structures and modes of development that are used to inform, persuade, or entertain (Themes: Communication & Responsibility).
  - Apply analytical thinking to reading, writing, revising, and discussion activities (Themes: Reasoning, Communication and Responsibility).
  - Prepare clearly organized and well-supported written works, including specific documentation formats, which meet the conventions of assignments (Themes: Communication & Reasoning).
  - Collaborate with others respectfully and with attention to guidelines given for various projects (Themes: Responsibility & Exploration of Self and Others).
  - Discuss and respond to writings drawn from diverse traditions, ethnicities, cultures, classes, and genders (Themes: Exploration of Self and Others).
  - Access and utilize appropriate technologies and library resources in the preparation of written and oral projects (Themes: Resourcefulness, Responsibility, and Communication).

### English

ENGL& 101	English Composition I .....	5
ENGL& 102	Composition II .....	5
ENGL& 235	Technical Writing .....	5

### Quantitative Skills (M)

1. The prerequisite for the course is Algebra II (MATH 099 or equivalent).
2. The course objectives address the following outcomes. Upon successful completion of designated courses, students will have demonstrated the ability to:
  - Recognize and then apply mathematical concepts to personal, professional and scientific situations. (Theme: Reasoning)
  - Communicate ideas through mathematics graphically, symbolically, numerically and verbally with clarity and accuracy. (Theme: Written, Oral, and Visual Communication)
  - Utilize technology as a tool in the application of mathematical concepts. (Theme: Resourcefulness)

### Math

MATH& 107	Math in Society.....	5
MATH 118	Linear Algebra .....	5
MATH& 131	Math for Elementary Ed I .....	5
MATH& 132	Math for Elementary Ed II .....	5
MATH 135	Precalculus Refresher .....	5
MATH& 141	Precalculus I.....	5
MATH& 142	Precalculus II.....	5
MATH& 146	Introduction to Stats .....	5
MATH 147	Finite Math for Business .....	5
MATH& 148	Business Calculus.....	5
MATH& 151	Calculus I .....	5
MATH& 152	Calculus II .....	5
MATH 228	Discrete Mathematics .....	5

## OTHER REQUIREMENTS

### Humanities (H)

- The course carries three or more credits.
- The course objectives address three or more of the following outcomes:

*Students should be able to:*

- Articulate the roles, purposes, and functions of the Humanities using discipline-specific vocabulary. (Themes: Communication and Reasoning)
- Recognize and apply the discipline-specific structures used to communicate critically and/or creatively. (Themes: Communication and Reasoning)
- Access and utilize appropriate technologies to research, experience, and respond to the Humanities. (Themes: Resourcefulness, Communication and Reasoning)
- Explore and assess how language, philosophy, and/or the arts represent and record individuals' and communities' engagement with social issues. (Themes: Exploration and Responsibility)
- Demonstrate an understanding of, and appreciation for, how these humanities influence, and are influenced by, their cultural contexts. (Themes: Reasoning and Exploration)

#### Art

ART&	100	Art Appreciation	5
ART	102*	Drawing I	5
ART	110*	2D Design	5
ART	130*	Computer Graphics	5
ART	135*	Graphic Design Layout	5
ART	160*	Intro to Fibers	5
ART	174*	Digital Photography	4
ART	200	Art History : Ancient	5
ART	201	Art History: 15th-17th C	5
ART	202	Art History: 18th-20th C	5
ART	203	History of American Art	5

#### Chinese

CHIN&	121**	Chinese I	5
CHIN&	122**	Chinese II	5
CHIN&	123**	Chinese III	5
CHIN&	221**	Chinese IV	5
CHIN&	222**	Chinese V	5
CHIN&	223**	Chinese VI	5

#### Communication Studies

CMST&	102	Intro to Mass Media	5
CMST	104	Racism, Sexism & Media	3
CMST&	220	Public Speaking	5
CMST	250	Intercultural Communication	5

#### Drama

DRMA&	101	Intro to Theater	5
DRMA	105	Theater History	3
DRMA	107*	Beginning Acting	5
DRMA	108*	Intermediate Acting	5
DRMA	115*	Dramatic Performance	3
DRMA	120	Introduction to Play writing	5
DRMA	201*	Advanced Acting	5

#### English

ENGL&	111	Introduction to Literature	5
ENGL&	113	Introduction to Poetry	5
ENGL&	114	Intro to Dramatic Literature	5
ENGL	160	Women's Literature	5
ENGL	180	Short Fiction	5
ENGL	204	Introduction to Shakespeare	5
ENGL	208	Intro to Creative Writing	5
ENGL	209	Hero's Quest: Survey of English Literature, 7th Century-1616	5
ENGL	210	Crisis of Faith: Survey of English Literature, 1616-1798	5
ENGL	211	Romance and Revolution: Survey of English Literature, 1798-Present	5
ENGL	220	American Drama	3
ENGL	233	Literature for Children & Adolescents	5
ENGL&	244	American Literature	5
ENGL	249	The Great American Novel	5
ENGL	251	Science Fiction	5
ENGL	260	Non-Western World Literature	5

#### French

FRCH&	121**	French I	5
FRCH&	122**	French II	5
FRCH&	123**	French III	5

#### Humanities

HUM	110	Ethics and Cultural Values	5
HUM&	116	Intro to Humanities I	5
HUM&	117	Intro to Humanities II	5
HUM&	118	Intro to Humanities III	5
HUM	270	Survey of Films Studies	5

#### Music

MUSC	105	Music Appreciation	5
MUSC&	121	Ear Training I	2
MUSC	130	History of Western Music	5
MUSC&	141	Music Theory I	5
MUSC	139	Music of the World	5
MUSC	140	History of American Music	5
MUSC	250*	Musical Theatre Production	5

#### Philosophy

PHIL&	101	Introduction to Philosophy	5
PHIL	103	Introduction to Ethics	5

#### Spanish

SPAN&	121**	Spanish I	5
SPAN&	122**	Spanish II	5
SPAN&	123**	Spanish III	5
SPAN&	221	Spanish IV	5
SPAN&	222	Spanish V	5
SPAN&	223	Spanish VI	5

\* No more than five credits allowed for distribution in performance/skills courses.

\*\* No more than five credits in a foreign language at the 100 level allowed for distribution.

## Social Science (SS)

1. The course carries three or more credits.
2. The course objectives address all of the following outcomes. Upon successful completion of designated courses, students will have demonstrated the ability to:
  - Describe social, political, economic, linguistic, cultural, historical, and religious factors that explain human behavior and mental processes at individual and group levels (Theme: Communications & Exploration).
  - Identify and apply terminology, concepts, theories, data, and principles used by the various social science disciplines (Theme: Reasoning & Exploration).
  - Develop an informed sense of self that demonstrates tolerance and respect for diverse perspectives (Themes: Exploration, Resourcefulness & Responsibility).
  - Demonstrate critical thinking skills through formulating questions, analyzing data, and distinguishing between objective fact and subjective interpretation (Theme: Reasoning).

### **Anthropology**

ANTH& 100	Survey of Anthropology.....	5
ANTH& 206	Cultural Anthropology.....	5
ANTH& 210	Indians of North America .....	5
ANTH 225	Cultural & Ethnic Pluralism.....	5
ANTH 235	Myth, Ritual, and Magic.....	5

### **Economics**

ECON& 201	Microeconomics .....	5
ECON& 202	Macroeconomics .....	5

### **Geography**

GEOG& 200	Human Geography .....	5
-----------	-----------------------	---

### **History**

HIST& 116	Western Civilization I.....	5
HIST& 117	Western Civilization II.....	5
HIST& 118	Western Civilization III.....	5
HIST& 146	U.S. History I.....	5
HIST& 147	U.S. History II .....	5
HIST& 148	U.S. History III .....	5
HIST& 214	Pacific NW History .....	5

### **Political Science**

POLS& 101	Intro to Political Science.....	5
POLS& 202	American Government.....	5
POLS& 204	Comparative Government .....	5

### **Psychology**

PSYC& 100	General Psychology .....	5
-----------	--------------------------	---

### **Sociology**

SOC& 101	Intro to Sociology.....	5
SOC 125	Sociology of the Family .....	5
SOC& 201	Social Problems .....	5
SOC 225	Cultural & Ethnic Pluralism.....	5

## Natural Science (S)

- The course is broad in scope, covering major concepts.
- The course objectives address all of the following outcomes. Upon successful completion of designated courses, students will have demonstrated the ability to:
  - Communicate key scientific concepts in oral, written, and/or visual format using the language of science. (Theme: Communication)
  - Apply the scientific method to solve problems, conduct experiments, evaluate data, and test hypotheses. (Themes: Reasoning, Resourcefulness & Communication)
  - Critically evaluate scientific information and its sources. (Themes: Exploration, Responsibility & Reasoning)

### Astronomy

ASTR	125	The Solar System .....	3
ASTR	126	Stars & Galaxies .....	3
ASTR	127	The Solar System & Universe .....	5
ASTR	128	Observational Astronomy w/lab.....	2

### Biology

BIOL&	100	Survey of Biology w/lab .....	5
BIOL&	170	Human Biology.....	5
BIOL&	221	Majors Ecology/Evolution w/lab.....	5
BIOL&	222	Majors Cell/Molecular w/lab .....	5
BIOL&	223	Majors Organismal Phys w/lab .....	5
BIOL&	241	Human A & P 1 w/lab .....	5
BIOL&	242	Human A & P 2 w/lab .....	5
BIOL	243	Adv Topics Human A & P w/lab .....	5
BIOL	250	Intro to Marine Biology w/lab .....	5
BIOL&	260	Microbiology w/lab .....	5

### Botany

BOTA	110	Survey of Botany (lab).....	5
BOTA	113	Plant Identification w/lab .....	5
BOTA	150	Dendrology-Trees in Our Env w/lab.....	5

### Chemistry

CHEM&	121	Intro to Chemistry w/lab.....	5
CHEM&	131	Intro to Organic/Biochemistry w/lab .....	5
CHEM&	161	General Chemistry w/lab I.....	6
CHEM&	162	General Chemistry w/lab II.....	6
CHEM&	163	General Chemistry w/lab III .....	6
CHEM&	261	Organic Chemistry w/lab I.....	6

### Environmental Science

ENVS&	100	Survey of Env Science .....	5
ENVS	100L	Survey of Environmental Science Lab.....	1
ENVS&	101	Intro to Env Science .....	5
ENVS	120	Watersheds: Connecting Mountains to the Sea .....	5
ENVS	170	Intro to Natural Resources.....	3

### Geography

GEOG	201	Physical Geography w/lab.....	5
------	-----	-------------------------------	---

### Geology

GEOL	100	Geology for Engineers and Environmental Science w/lab .....	3
GEOL&	101	Intro to Physical Geology w/lab .....	5
GEOL	102	Earth Evolution and Global Change w/lab.....	5
GEOL	108	Natural Hazards & Catastrophe .....	5
GEOL	180	Cascade & Plateau Geology .....	3
GEOL&	208	Geology of the Pacific NW w/lab .....	5

### Nutrition

NUTR&	101	Nutrition .....	5
NUTR	203	Issues in Nutrition.....	5

### Oceanography

OCEA&	101	Intro to Oceanography w/lab .....	5
-------	-----	-----------------------------------	---

### Physics

PHYS&	110	Phys: Non-Science Majors w/lab.....	5
PHYS&	114	General Physics I w/lab.....	5
PHYS&	115	General Physics II w/lab.....	5
PHYS&	116	General Physics III w/lab .....	5
PHYS&	221	Engineering Physics I w/lab .....	5
PHYS&	222	Engineering Physics II w/lab .....	5
PHYS&	223	Engineering Physics III w/lab.....	5

### Science

SCIE	104	Intro to Physical Science .....	5
SCIE	115	Weather and Climate w/lab .....	5

## Health and Fitness (HF)

The course provides the student with knowledge and skills that enable them to achieve and maintain optimal health over a lifetime.

### Health

HLTH	120	Women's Health Issues .....	3
HLTH	130	Health and Wellness .....	3
HLTH	135	Eating & Weight Control.....	2
HLTH	140	Exercise and Nutrition .....	3
HLTH	145	Safety and Fitness.....	3

### Physical Education

*(No more than 3 credits may be taken as academic electives)*

PE	107	Cycling Basics .....	2
PE	110	Physical Fitness .....	1
PE	120	Lifestyle Management & Exercise.....	2
PE	123	Weight Training .....	1
PE	125	Free Weights.....	1
PE	140	Boot Camp Basics .....	1
PE	142	Cardio Combo.....	1
PE	150	Yoga.....	1
PE	151	Aerobic Fitness .....	1
PE	152	Pilates.....	1
PE	153	Tai Chi Basics .....	1
PE	158	Beginning Tae Kwon Do.....	2
PE	163	Step Aerobics .....	1
PE	168	Lifetime Fitness .....	2
PE	169	Cardio Kick boxing .....	1
PE	210	Advanced Physical Fitness .....	1
PE	223	Advanced Weight Training.....	1
PE	229	Physical Fitness Concepts.....	3
PE	251	Advanced Aerobic Fitness .....	1
PE	263	Advanced Step Aerobics .....	1
PE	269	Advanced Cardio Kick boxing.....	1



## Diversity (D)

1. The course carries three or more credits.
2. Diversity courses may also meet other Distribution Requirements.
3. The course focus should address human diversity by examining the experiences and contributions of underrepresented groups. This can include but is not limited to culture, race, ethnicity, gender, sexual orientation, gender identity, socioeconomic class, physical disability, mental disability, religion, age, immigration status and/or geopolitical power.
4. The course objectives address the following outcomes: Students should be able to:
  - Demonstrate knowledge of the contributions made by individuals from diverse and/or underrepresented groups. (1, 3, 4, 5)
  - Analyze the multiple identities, histories, cultures, perspectives, contributions, knowledge, struggles, and/or strategies of historically excluded groups. (1, 3, 4, 5)
  - Explain the value of diversity in the classroom, workplace, community, country, and the world. (1, 2, 3, 4, 5)
  - Explain personal views, values, and prejudices and their impact on the ability to identify and benefit from the contributions of others. (1, 2, 3, 4, 5)

### **Anthropology**

ANTH&	100	Survey of Anthropology.....	5
ANTH&	206	Cultural Anthropology.....	5
ANTH&	210	Indians of North America .....	5
ANTH	225	Cultural & Ethnic Pluralism .....	5
ANTH	235	Myth, Ritual, and Magic.....	5

### **Art**

ART	200	Art History : Ancient .....	5
ART	201	Art History: 15th-17th C .....	5
ART	202	Art History: 18th-20th C .....	5

### **Chinese**

CHIN&	121	Chinese I .....	5
-------	-----	-----------------	---

### **Communication Studies**

CMST&	104	Racism, Sexism & Media.....	3
CMST&	250	Intercultural Communication .....	5

### **English**

ENGL	255	Women’s Literature.....	5
ENGL	260	Non-Western World Literature.....	5

### **Geography**

GEOG&	200	Human Geography .....	5
-------	-----	-----------------------	---

### **Health**

HLTH	120	Women’s Health Issues .....	3
------	-----	-----------------------------	---

### **Humanities**

HUM	110	Ethics and Cultural Values .....	5
-----	-----	----------------------------------	---

### **Music**

MUSC	139	Music of the World .....	5
MUSC	140	History of American Popular Music .....	5
MUSC	264	Music History I .....	5

### **Political Science**

POLS&	204	Comparative Government .....	5
-------	-----	------------------------------	---

### **Sociology**

SOC	225	Cultural & Ethnic Pluralism.....	5
-----	-----	----------------------------------	---

## InterCollege Relations Commission (ICRC) Approved Academic Electives

<b>Accounting</b> .....	201, 202, 203	<b>Geography</b> .....	all courses numbered 100 and above
<b>Anthropology</b> .....	all courses numbered 100 and above	<b>Geology</b> .....	all courses numbered 100 and above
<b>American Sign Language</b> .....	121, 122, 123	<b>Health</b> .....	120, 130, 140, 145
<b>Art</b> .....	100, 102, 111, 130, 160, 170, 174, 200, 201, 202, 203, 210, 211	<b>History</b> .....	all courses numbered 100 and above
<b>Astronomy</b> .....	125, 126, 127, 128	<b>Humanities</b> .....	all courses numbered 100 and above
<b>Biology</b> .....	all courses numbered 100 and above	<b>Journalism</b> .....	180
<b>Botany</b> .....	all courses numbered 100 and above	<b>Mathematics</b> .....	all courses numbered 107 and above (except 110 and 116)
<b>Business Administration</b> .....	101, 201	<b>Media Studies</b> .....	125, 220, 225, 230, 260
<b>Chemistry</b> .....	all courses numbered 100 and above	<b>Music</b> .....	all courses numbered 100 and above
<b>Chinese</b> .....	all courses numbered 100 and above	<b>Nutrition</b> .....	101, 202, 203
<b>Computer Science Technology</b> .....	100, 215, 224	<b>Oceanography</b> .....	101
<b>Communication Studies</b> .....	all courses numbered 100 and above	<b>Philosophy</b> .....	all courses numbered 100 and above
<b>Criminal Justice</b> .....	101, 104, 105, 106, 110, 240	<b>Physical Education</b> .....	all courses numbered 100 and above (3 credits maximum on P E activity courses)
<b>Drama</b> .....	all courses numbered 101 and above	<b>Physics</b> .....	all courses numbered 100 and above
<b>Early Childhood Education</b> .....	105	<b>Political Science</b> .....	all courses numbered 100 and above
<b>Economics</b> .....	201, 202	<b>Psychology</b> .....	all courses numbered 100 and above
<b>Education</b> .....	115, 201	<b>Science</b> .....	103, 104, 115
<b>English</b> .....	all courses numbered 101 and above	<b>Sociology</b> .....	all courses numbered 100 and above
<b>Environmental Science</b> .....	all courses numbered 100 and above	<b>Spanish</b> .....	all courses numbered 100 and above
<b>French</b> .....	all courses numbered 100 and above	<b>Speech</b> .....	all courses numbered 100 and above
<b>General Engineering</b> .....	all courses numbered 111 and above		

# PROGRAMS OF STUDY

These Educational Plans are intended as a guide for students who wish to emphasize a specific area of study. It is not a guarantee that the courses listed in the plan will be available in the sequence suggested. In some instances, due to low enrollment, some courses may not be offered at all.

Students should consult with their advisor for recommended electives. It is strongly recommended that students intending to transfer to a four-year college or university consult with the intended transfer institution for any prerequisites or additional requirements.

## ACCOUNTING

**Emphasis:** Accounting/Tax

**Degree:** Associate in Technical Arts

**Total Credits:** 93

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** The ATA program in Accounting provides students with necessary skills to compete for entry-level accounting positions in private industry, state, and local government, and public accounting firms.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Perform bookkeeping tasks in the service of the business public.
- Assist in the production of financial reporting in accordance with generally accepted accounting principles (GAAP).
- Assist in the conduct of audits in accordance with generally accepted audit standards (GAAS).
- Demonstrate familiarity with the application of computer accounting information systems software (AIS).
- Assist in the determination and disposition of tax liability as it applies to individuals and business entities.
- Prepare industry standard written and oral communications to include the use of Microsoft Word and Excel.
- Successfully complete qualification examinations for either Certified Professional Bookkeeper (CPB

### Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ACCT& 201	Principles of Accounting I .....	5
BTEC 214	Excel I .....	5
BUS 121	Business Math .....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ACCT& 202	Principles of Accounting II.....	5
BTEC 210	Word I.....	5
HR 110	Human Relations-Workplace.....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ACCT& 203	Principles of Accounting III .....	5
ENGL& 101	English Composition I.....OR	
BTEC 221	Business Communications .....	5
ECON& 202	Macroeconomics (SS).....OR	
ECON& 201	Microeconomics (SS) .....	5
Health Distribution .....		3
		<b>18</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
ACCT 260	Individual Income Tax.....	5
ACCT 270	Payroll Accounting.....	5
BUS 215	Principles of Finance.....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ACCT 220	Accounting Information.....	5
ACCT 240	Business Entity Tax .....	5
BUS 225	Money and Banking.....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
ACCT 210	Intro to Audit.....	5
ACCT 285	Bookkeeper Cert. Course .....	5
BUS& 201	Business Law .....	5
		<b>15</b>

# ACCOUNTING

**Emphasis:** Accounting Clerk

**Degree:** Certificate of Proficiency

**Total Credits:** 53

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** The Accounting Clerk program prepares students for an entry level accounting position. Some advancement is possible with this background, but students may wish to acquire additional training in accounting to allow broader advancement opportunities. Prerequisite: demonstrate proficiency in math, reading, and English.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Perform basic bookkeeping and accounting tasks both manually and on the computer.
- Outline the relationships among the various business functions such as accounting, finance, marketing, purchasing, operations, and human resources.
- Illustrate computer proficiency on the computer keyboard and ten-key calculator as well as Quick Books Pro.
- Prepare written and oral business communications.
- Recognize business law concepts such as contract law and the Uniform Commercial Code.

## Suggested Order of Classes

<i>Fall Quarter</i>		<i>Credits</i>
ACCT& 201	Principles of Accounting I.....	5
ACCT 270	Payroll Accounting.....	3
BUS& 201	Business Law .....	5
BUS 121	Business Math.....	5
		<b>18</b>

<i>Winter Quarter</i>		<i>Credits</i>
ACCT& 202	Principles of Accounting II.....	5
BTEC 210	Word I.....	5
BTEC 214	Excel I .....	5
ACCT 220	Accounting Information Systems .....	5
		<b>20</b>

<i>Spring Quarter</i>		<i>Credits</i>
ACCT& 203	Principles of Accounting III .....	5
BTEC 221	Business Communications .....	5
H R 110	Human Relations-Workplace .....	5
		<b>15</b>

# ACTING

**See Dramatic Arts**

# ANTHROPOLOGY

**Emphasis:** Anthropology

**Degree:** Associate in Arts

**PURPOSE:** The Associate of Arts Degree with an emphasis in anthropology is for students wishing to transfer to a four-year college or university. A student acquiring the Associate in Arts degree in anthropology will achieve an understanding of the diversity of humans and human cultures past and present around our globe.

While preparing the student for further study and eventual employment in the field of anthropology, this educational plan also is relevant for students preparing for a broad range of jobs in both government and international agencies that focus on cross-cultural issues and involve working with people from different cultural backgrounds. These jobs, in addition to work in international and government agencies, might include working in agricultural development and educational reform or as a consultant, planner, market analyst, survey researcher, forensic scientist, or refugee coordinator.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ANTH& 100	Survey of Anthropology .....	5
ENGL& 101	English Composition I .....	5
	Humanities Distribution* .....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ANTH& 210	Indians of North America .....	5
ENGL& 102	Composition II .....	5
	Humanities Distribution* .....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ANTH 235	Myth, Ritual and Magic.....	5
	Quantitative Skills Distribution** .....	5
	Science Distribution .....	5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
ANTH& 206	Cultural Anthropology.....	5
	Science Distribution .....	5
	Social Science Distribution*** .....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
	Electives.....	7-10
	Health & Fitness Distribution .....	3
	Social Science Distribution*** .....	5
		<b>15-18</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
ANTH 225	Cultural and Ethnic Pluralism in Contemporary Society.....	5
	Humanities Distribution .....	5
	Elective.....	5
		<b>15</b>

ANTH 260 or ANTH 290 the Anthropology Field trip is strongly recommended.

\* A language is strongly recommended.

\*\* MATH& 146 Introduction to Stats is recommended.

\*\*\* HIST& 116 Western Civilization I is recommended for Anthropology students desiring to specialize in Archaeology.

Anthropology majors are encouraged to develop a broad base in the social sciences to include SOC& 101 Intro to Sociology, PSYC& 100 General Psychology or HIST& 116 Western Civilization I.

# ART

See Fine Arts or Graphic Design

# ASTRONOMY

See Earth Science

# BIOLOGY

**Emphasis:** Biology, Botany, Ecology, Zoology

**Degree:** Associate in Biology-DTA/MRP

**PURPOSE:** This program is for students who wish to complete a bachelor's degree in such disciplines as general or molecular biology, zoology, microbiology, genetics, entomology, botany, horticulture, soil science, phycology, ecology, marine biology, fisheries biology, or wildlife management. This program assumes that a student is prepared to start college-level math and English courses.

Students who are not prepared to begin at this level may require additional quarters.

To ensure optimal course selection, plan your program of study with your advisor and with the specific requirements of your likely transfer institution.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
CHEM& 161	General Chemistry w/lab I.....	6
ENGL& 101	English Composition I .....	5
MATH& 141	Pre-Calculus I.....OR	
	Humanities Distribution .....	5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
CHEM& 162	General Chemistry w/lab II.....	6
ENGL& 102	Composition II .....	OR
ENGL& 235	Technical Writing .....	5
MATH& 142	Pre-Calculus II.....OR	
	Social Science Distribution .....	5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CHEM& 163	General Chemistry w/lab III.....	6
MATH& 151	Calculus I.....	5
	Humanities Distribution .....	5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
BIOL& 221	Majors Ecology/Evolution .....	5
	Humanities Distribution*** .....	5
	Elective** or Social Science Distribution .....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
BIOL& 222	Majors Cell/Molecular .....	5
	Social Science Distribution*** .....	5
	Elective** or Humanities Distribution*.....	5
	Health & Fitness Distribution .....	3
		<b>18</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
BIOL& 223	Majors Organismal Phys.....	5
	Social Science Distribution*** .....	5
	Elective .....	5
		<b>15</b>

\* Students requiring Pre-Calculus I (MATH& 141) or Pre-Calculus II (MATH& 142) should complete these now. These students would use one of the second year electives for a third Social Science and another second year elective for a third Humanities distribution course. Other students should satisfy a Social Science or Humanities elective.

\*\* Recommended electives include a full year sequence of Organic Chemistry, or additional math classes, such as statistics or additional Calculus.

# BIOLOGY

**Emphasis:** Animal Biology (Zoology), Plant Biology (Botany)

**Degree:** Associate in Science

**PURPOSE:** This program is for students who wish to complete a bachelor's degree in such disciplines as general or molecular biology, zoology, microbiology, genetics, entomology, botany, horticulture, soil science, phycology, ecology, marine science, fisheries or wildlife management.

If you are not well prepared in high school mathematics and science, you should plan, with your advisor, a three-year program at Centralia College in preparation for transfer to a four-year college or university.

The main emphasis in the first year at Centralia should be on strengthening your mathematics, basic sciences, communications, and reading skills. To ensure optimal course selection, plan your program of study with your advisor.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
BIOL& 221	Majors Ecology/Evolution .....	5
CHEM& 161	General Chemistry w/lab I.....	6
ENGL& 101	English Composition I .....	5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
BIOL& 222	Majors Cell/Molecular .....	5
CHEM& 162	General Chemistry w/lab II.....	6
MATH& 151	Calculus I.....	5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
BIOL& 223	Majors Organismal Phys.....	5
CHEM& 163	General Chemistry w/lab III.....	6
MATH& 152	Calculus II.....	5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
Biology/Chemistry/Physics sequence*.....		5-6
Social Science Distribution .....		5
Health & Fitness Distribution .....		3
		<b>13-14</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
Biology/Chemistry/Physics sequence*.....		5-6
MATH& 146	Introduction to Stats .....	OR
MATH& 163	Calculus III .....	5
Humanities Distribution .....		5
		<b>15-16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
Biology/Chemistry/Physics sequence*.....		5-6
Social Science Distribution .....		OR
Humanities Distribution .....		5
Elective.....		5
		<b>15-16</b>

### *Science electives:*

BIOL& 241, 242, 243 Human A & P w/lab series I-III  
 CHEM& 261, 262, 263 Organic Chemistry w/lab I-III;  
 PHYS& 221, 222, 223; Engineering Physics I-III

\* Biology majors should select organic chemistry or physics for second year sequence.

# BUSINESS

**Emphasis:** Business Administration

**Degree:** Associate in Business-DTA/MRP

**PURPOSE:** The Associate in Business is designed for students who plan to transfer to a four-year college or university to complete a bachelor's degree in business.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ECON& 202	Macroeconomics .....	5
ENGL& 101	English Composition I .....	5
	Humanities Distribution** .....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ECON& 201	Microeconomics.....	5
ENGL& 102	Composition II .....	5
	Science Distribution*** .....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
MATH& 146	Introduction to Stats .....	5
CMST& 220	Public Speaking.....	5
MATH& 141	Precalculus I (if needed) .....	OR
	Elective credits .....	2-5
	Health & Fitness Distribution .....	3
		<b>15-18</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
ACCT& 201	Principles of Accounting I.....	5
BUS& 201	Business Law .....	5
MATH& 142	Precalculus II (if needed) .....	5
	Social Science Distribution** .....	5
		<b>15-20</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ACCT& 202	Principles of Accounting II.....	5
MATH& 151	Calculus I*.....	5
	Science Distribution*** .....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
ACCT& 203	Principles of Accounting III .....	5
MATH& 152	Calculus II*.....	5
	Humanities Distribution** .....	5
		<b>15</b>

Students should confer with an advisor at their baccalaureate institution regarding the course choices in each area where options are listed: Humanities, Social Sciences, Natural Sciences and electives.

- \* Five of the 10 Quantitative credits required may include the pre-requisite for Calculus (MATH& 141 and/or MATH& 142) and can be substituted for MATH& 152.
- \*\* At least 10 credits in physical, biological and/or earth sciences including at least one lab course.
- \*\*\* At least 10 credits in physical, biological and/or earth sciences including at least one lab course.



# BUSINESS ADMINISTRATION

**Degree:** Associate in Applied Science

**Total Credits:** 91

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** The Associate in Applied Science with a Business Administration emphasis, provides students with a broad exposure to the principles and philosophies of business and management. Successful completion of the two-year program will help facilitate the process of graduates pursuing meaningful careers in a dynamic, changing business environment. It will also satisfy the requirements necessary for students to pursue additional advanced degrees.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Prepare statements to monitor, evaluate, and assess financial performance of a business.
- Evaluate the performance of a business by using tools of pricing, promotion, product development, and distribution.
- Recognize and analyze how economic forces shape the environment of business and aid in decision making.
- Apply acquired skills to workplace scenarios.
- Develop human relations skills and professional behavior necessary for successful job performance.
- Apply rules of grammar, punctuation, and spelling to written communications.
- Define and compare and contrast characteristics and traits of leadership and management.
- Explain the importance and challenges of diversity, employee motivation, and employee engagement in the workplace.
- Identify and describe various forms of business ownership.
- Summarize basic laws in regards to business ownership, recruitment and hiring practices, OSHA, and liability.
- Explain communication, social responsibility, ethics, morals, and values as they relate to the workplace.
- Create a personal code of ethics and explain how it relates and impacts the workplace.
- Identify the impact of international business and explain various methods for a business to enter the global market.
- Describe the activities involved in each function of management and at various levels of management in the workplace.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ACCT 200	Financial Reporting.....	5
BTEC 210	Word I.....	5
BUS& 101	Intro to Business.....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ACCT& 203	Principles of Accounting III .....	5
BTEC 214	Excel I .....	5
Business Elective .....		5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ACCT 130	Basic Computer Accounting.....	3
BTEC 221	Business Communications .....	OR
ENGL& 101	English Composition I.....	5
BUS 121	Business Math.....	5
Business Elective .....		5
		<b>18</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
CMST& 220	Public Speaking.....	5
HR 110	Human Relations-Workplace.....	5
Business Elective .....		5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ECON& 201	Microeconomics.....	OR
ECON& 202	Macroeconomics .....	5
Business Elective .....		5
Business Elective .....		5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
Health & Fitness Distribution .....		3
Business Elective .....		5
Business Elective .....		5
		<b>13</b>

Business Electives: Students should work with their advisor to select appropriate electives for career goals. BUS 220, BUS 240, BUS 215, BUS 201, BUS 275, BUS 190, BUS 203, BUS 232, PSYC& 100, MATH& 146, natural science w/lab.

# BUSINESS OFFICE TECHNOLOGY

**Emphasis:** Administrative Assistant

**Degree:** Associate in Technical Arts

**Total Credits:** 91

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** These degree programs prepare students with a broad business background, as well as provide specialized training in office skills. While students are accepted into the program each quarter, those who start in September find it easier to schedule their courses in the suggested sequences. Prerequisites include: demonstrated proficiency in math, reading, English, and basic keyboarding skills. After completing the selected program, students will be prepared for entry level employment as office assistants and receptionists, in general offices, legal offices, or medical offices.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Keyboard with speed and accuracy.
- File correctly using alphabetic, numeric, geographic, and subject filing systems.
- Apply rules of grammar, punctuation, and spelling in written and oral communications.
- Prepare documents using advanced features in word processing software.
- Format basic business letters, memos, reports, tables, and newsletters to office standards.
- Compose business letters, memos, resumes, and letters of application.
- Organize data using business math and practical accounting.
- Analyze and calculate data using spreadsheet software.
- Enter and organize data using database software.
- Obtain a first aid and CPR certificate.
- Operate a 10-key electronic calculator by touch.
- Relate effectively with others in the classroom.
- Develop human relations skills and professional behavior necessary for successful job performance.
- Apply acquired skills in the workplace.
- Transcribe from recorded dictation.
- Enter accounting transactions and generate reports using Quick Books.
- Analyze data and report information using database software.
- Possess a basic understanding of receiving office visitors, using the telephone, scheduling appointments, customer service, and confidentiality skills in an office.
- Develop effective presentations using presentation software.
- Develop effective communications skills using electronic software.
- Prerequisites include: demonstrated proficiency in math, reading, English, and basic keyboarding skills.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>			<i>Credits</i>
BTEC	102	Skillbuilding I.....	3
BTEC	110	Business English.....	5
BTEC	220	Ten Key Calculator.....	1
H R	110	Human Relations-Workplace.....	5
			<b>14</b>

<i>Winter Quarter, First Year</i>			<i>Credits</i>
BUS&	201	Business Law .....	5
BTEC	210	Word I.....	5
BTEC	221	Business Communications .....	5
BTEC	233	Files Management .....	3
			<b>18</b>

<i>Spring Quarter, First Year</i>			<i>Credits</i>
BTEC	120	Applied Business Math .....	5
BTEC	219	Word II .....	4
ENGL&	101	English Composition I.....	5
SPEE	101	Fund. of Public Speaking .....	3
			<b>17</b>

<i>Fall Quarter, Second Year</i>			<i>Credits</i>
ACCT	110	Practical Accounting I .....	3
BTEC	191	Work Experience Seminar.....	1
BTEC	214	Excel I .....	5
BUS&	101	Intro to Business.....	5
HLTH	145	Safety & Fitness .....	3
			<b>17</b>

<i>Winter Quarter, Second Year</i>			<i>Credits</i>
ACCT	120	Practical Accounting II .....	3
BTEC	190	Cooperative Work Experience.....	5
BTEC	205	Outlook .....	1
BTEC	212	Access I.....	3
BTEC	222	Power Point Module .....	1
			<b>13</b>

<i>Spring Quarter, Second Year</i>			<i>Credits</i>
ACCT	130	Basic Computer Accounting.....	3
BTEC	218	Desktop Publishing*.....	4
BTEC	224	Office Procedures .....	5
			<b>12</b>

# BUSINESS OFFICE TECHNOLOGY

**Emphasis:** Medical Administrative Assistant

**Degree:** Associate in Technical Arts

**Total Credits:** 91

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** These degree programs prepare students with a broad business background, as well as provide specialized training in office skills. While students are accepted into the program each quarter, those who start in September find it easier to schedule their courses in the suggested sequences. Prerequisites include: demonstrated proficiency in math, reading, English, and basic keyboarding skills.

After completing the selected program, students will be prepared for entry level employment as office assistants and receptionists, in general offices, legal offices, or medical offices.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Keyboard with speed and accuracy.
- File correctly using alphabetic, numeric, geographic, and subject filing systems.
- Apply rules of grammar, punctuation, and spelling in written and oral communications.
- Prepare documents using advanced features in word processing software.
- Format basic business letters, memos, reports, tables, and newsletters to office standards.
- Solve basic business math problems.
- Organize data using business math and practical accounting.
- Analyze and calculate data using spreadsheet software.
- Enter and organize data using database software.
- Obtain a first aid and CPR certificate.
- Operate a 10-key electronic calculator by touch.
- Relate effectively with others in the classroom.
- Develop human relations skills and professional behavior necessary for successful job performance.
- Apply acquired skills in the workplace.
- Use medical terms correctly.
- Compose business letters, memos, resumes, and letters of application.
- Understand human biology.
- Transcribe medical documents from recorded dictation.
- Enter patient record information using electronic software.
- Understand the Health Insurance Portability and Accounting Act.
- Possess a basic understanding of medical office procedures using medical charts and records, electronic medical records, receiving visitors, scheduling appointments, and confidentially in a medical office.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>			<i>Credits</i>
BTEC	102	Skillbuilding I.....	3
BTEC	110	Business English.....	5
BTEC	220	Ten Key Calculator.....	1
H R	110	Human Relations-Workplace.....	5
			<b>14</b>

<i>Winter Quarter, First Year</i>			<i>Credits</i>
BTEC	210	Word I.....	5
BTEC	221	Business Communications.....	5
BTEC	233	Files Management.....	3
HLTH	145	Safety & Fitness.....	3
			<b>16</b>

<i>Spring Quarter, First Year</i>			<i>Credits</i>
BTEC	120	Applied Business Math.....	5
BTEC	219	Word II.....	4
ENGL&	101	English Composition I.....	5
BTEC	266	Medical Law and Ethics.....	3
			<b>17</b>

<i>Fall Quarter, Second Year</i>			<i>Credits</i>
ACCT	110	Practical Accounting I.....	3
BTEC	107	Electronic Medical Records.....	3
BTEC	214	Excel I.....	5
BTEC	260	Medical Terminology.....	4
			<b>15</b>

<i>Winter Quarter, Second Year</i>			<i>Credits</i>
ACCT	120	Practical Accounting II.....	3
BIOL&	170	Human Biology.....	5
BTEC	191	Work Experience Seminar.....	1
BTEC	205	Outlook.....	1
BTEC	255	Insurance and Billing.....	5
			<b>15</b>

<i>Spring Quarter, Second Year</i>			<i>Credits</i>
BTEC	190	Cooperative Work Experience.....	5
BTEC	261	Medical Office Procedures.....	5
BTEC	263	Medical Transcription.....	4
			<b>14</b>

# BUSINESS OFFICE TECHNOLOGY

**Emphasis:** Medical Office Assistant

**Degree:** Certificate of Proficiency

**Total Credits:** 54

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** The Medical Office Assistant Certificate program combines general office skills with studies in medical terminology, human biology, medical office procedures, and medical machine transcription.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Keyboard with speed and accuracy.
- File correctly using alphabetic, numeric, geographic, and subject filing systems.
- Apply rules of grammar, punctuation, and spelling in written and oral communications.
- Prepare documents using word processing software.
- Format basic business letters, memos, reports, tables, and newsletters to office standards.
- Solve basic business math problems.
- Operate 10-key electronic calculator by touch.
- Analyze and calculate data using spreadsheet software.
- Apply acquired skills in the workplace.
- Relate effectively with others in the classroom.
- Develop human relations skills and professional behavior necessary for successful job performance.
- Use medical terms correctly.
- Obtain a first aid certificate.
- Understand human biology.
- Possess a basic understanding of medical office procedures using medical charts and records, electronic records, receiving visitors, scheduling appointments, and confidentiality in a medical office.

## ONE-YEAR PROGRAM

### Suggested Order of Classes

<i>Fall Quarter</i>		<i>Credits</i>
BTEC 102	Skillbuilding I.....	3
BTEC 107	Electronic Medical Records.....	3
BTEC 233	Files Management.....	3
H R 110	Human Relations-Workplace.....	5
MA 260	Medical Terminology.....	4
		<b>18</b>

<i>Winter Quarter</i>		<i>Credits</i>
BTEC 110	Business English.....	5
BTEC 210	Word I.....	5
BTEC 255	Insurance and Billing.....	5
HLTH 145	Safety & Fitness .....	3
		<b>18</b>

<i>Spring Quarter</i>		<i>Credits</i>
BIOL& 170	Human Biology.....	5
BTEC 120	Applied Business Math .....	5
BTEC 261	Medical Office Procedures .....	5
BTEC 266	Medical Law & Ethics .....	3
		<b>18</b>

# BUSINESS OFFICE TECHNOLOGY

**Emphasis:** Office Assistant

**Degree:** Certificate of Proficiency

**Total Credits:** 48

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** The Office Assistant certificate program prepares students for entry-level employment as office assistants.

Prerequisites include: demonstrated proficiency in math, reading, English, and basic keyboarding skills.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Keyboard with speed and accuracy.
- File correctly using alphabetic, numeric, geographic, and subject filing systems.
- Apply rules of grammar, punctuation, and spelling in written and oral communications.
- Prepare documents using advanced features in word processing software.
- Format basic business letters, memos, reports, tables, and newsletters to office standards.
- Solve basic business math problems.
- Operate a 10-key electronic calculator by touch.
- Analyze and calculate data using spreadsheet software.
- Apply acquired skills in the workplace.
- Relate effectively with others in the classroom.
- Develop human relations skills and professional behavior necessary for successful job performance.
- Develop effective presentations using presentation software.
- Analyze and organize business transactions applying bookkeeping theory and systems.
- Possess a basic understanding of receiving office visitors, using the telephone, scheduling appointments, customer service, and confidentiality skills in an office.
- Develop effective communications skills using electronic software.

## ONE-YEAR PROGRAM

### Suggested Order of Classes

<i>Fall Quarter</i>		<i>Credits</i>
ACCT	110	Practical Accounting I ..... 3
BTEC	102	Skillbuilding I ..... 3
BTEC	110	Business English ..... 5
BTEC	210	Word I ..... 5
		<b>16</b>

<i>Winter Quarter</i>		<i>Credits</i>
ACCT	120	Practical Accounting II ..... 3
BTEC	205	Outlook ..... 1
BTEC	214	Excel I ..... 5
BTEC	222	Power Point..... 1
BTEC	233	Filing..... 3
HLTH	145	Safety & Fitness ..... 3
		<b>16</b>

<i>Spring Quarter</i>		<i>Credits</i>
BTEC	120	Applied Business Math ..... 5
BTEC	220	Ten-Key Calculator ..... 1
BTEC	224	Office Procedures ..... 5
HR	110	Human Relations-Workplace..... 5
		<b>16</b>

# CHEMICAL DEPENDENCY

**Degree:** Associate in Applied Science

**Total Credits:** 93

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** Chemical Dependency is for students interested in focusing their studies on Chemical Dependency rehabilitation. This program prepares the student for work as a Chemical Dependency counselor in various settings from detoxification units to residential treatment programs. Students will fulfill the education requirements for certification as Chemical Dependency Professional Trainee through the Department of Health (DOH). Students take classes that directly fulfill Washington Administrative Code (WAC) requirements toward acquiring the Chemical Dependency Professional (CDP) certification.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Understand developmental psychology and psychopathology.
- Evaluate, assess, and treat addiction, substance abuse and chemical dependency in adolescents and adults.
- Recognize the pharmacological actions of alcohol and other drugs.
- Apply chemical dependency rules and regulations as well as professional and ethical responsibilities to patient care.
- Coordinate the use of services, referrals, and community resources.
- Recognize cultural diversity, including people with disabilities, and its implications for treatment.
- Plan and implement appropriate addiction placement, continuing care, and discharge criteria.
- Plan and provide effective counseling for chemical dependency, relapse prevention and continuing care for addicted individuals, their families or significant others in individual or group sessions.
- Apply skills necessary to perform clinical evaluations, HIV/AIDS risk interventions and case management functions.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
IT 117	Intro to Windows OS.....	3
CDP 100	Intro to Chem Dependency .....	5
ENGL& 101	English Composition I.....	OR
WRT 105	Writing in the Workplace .....	5
PSYC& 100	General Psychology .....	5
		<b>18</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
PSYC& 200	Lifespan Psychology .....	5
NUTR& 101	Nutrition.....	5
CDP 111	Counseling Techniques .....	4
Health and Fitness Distribution .....		3
		<b>17</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CDP 101	Drug & Alcohol Responses .....	5
MATH& 107	Math in Society*.....	5
SOC& 101	Intro to Sociology .....	5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
CDP 120	CDP Law and Ethics .....	4
CDP 140	Counseling Adolescents.....	3
CDP 230	CDP Cultural Diversity.....	3
CMST& 220	Public Speaking.....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
CDP 210	Groups within Treatment.....	4
CDP 220	Chem Dependency & Family .....	4
CDP 130	Assess & Treatment Plans.....	5
CDP 250	Community Prevention .....	3
		<b>16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
CDP 280	CDP Supervised Practicum.....	5
HR 110	Human Relations - Workplace.....	5
CDP 240	Relapse Prevention .....	2
		<b>12</b>

\* MATH& 146 and BUS 121 are optional math courses.

\*\* CMST& 220 Public Speaking recommended.

# CHEMISTRY

**Emphasis:** Chemistry

**Degree:** Associate in Science

**PURPOSE:** The Associate in Science with an emphasis in Chemistry is for students interested in transferring to a four-year college or university to complete a bachelor's degree. Students who complete this educational plan are reasonably assured of junior level standing at most four-year colleges and universities in Washington State.

You are urged to consult with your advisor to coordinate your program with the requirements at the institution to which you intend to transfer.

If you have successfully completed algebra, geometry, trigonometry, pre-calculus, chemistry and physics in high school you are prepared to enter Pre-Calculus Refresher (MATH& 135) and General Chemistry (CHEM& 161) and completion of your program in four years is possible.

If you are not well prepared in high school mathematics and science, you should plan, with your advisor, a three-year program at Centralia College in preparation for transfer to a four-year college or university. The main emphasis in the first year at Centralia should be on strengthening your mathematics, basic sciences, communications, and reading skills.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I.....	5
CHEM& 161	General Chem w/lab I.....	6
Humanities Distribution .....		OR
Social Science Distribution .....		5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
CHEM& 162	General Chem w/lab II .....	6
MATH& 151	Calculus I.....	5
CMST& 220	Public Speaking.....	5
Health & Fitness Distribution .....		1
		<b>17</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CHEM& 163	General Chem w/lab III .....	6
MATH& 152	Calculus II.....	5
Health & Fitness Distribution .....		1
Social Science Distribution .....		5
		<b>17</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
CHEM& 261	Organic Chemistry w/lab I.....	6
PHYS& 221	Engineering Physics I.....	5
MATH 118	Linear Algebra .....	5
		<b>16</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
CHEM& 262	Organic Chemistry w/lab II .....	6
MATH& 163	Calculus III .....	5
PHYS& 222	Engineering Physics II .....	5
Health & Fitness Distribution .....		1
		<b>17</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
CHEM& 263	Organic Chemistry w/lab III .....	6
MATH 212	Differential Equations .....	5
PHYS& 223	Engineering Physics III .....	5
		<b>16</b>

---

# CHIROPRACTIC

See Pre-Chiropractic, Pre-Physical Therapy

# COMPUTER SCIENCE

**Emphasis:** Computer Science

**Degree:** Associate in Arts

**PURPOSE:** The Associate in Arts degree with Computer Science emphasis is for students interested in transferring to a four-year college or university to complete a bachelor's degree in computer science.

If you are not well prepared in high school math at least through a second year algebra course (following geometry), you should plan, with your advisor, a three-year program to prepare you for transfer to a four-year college or university. The emphasis in the first year should be on strengthening your math, basic science, communication, and reading skills.

The given sequence begins with MATH& 141 Pre-Calculus I. If possible, start with MATH& 151 Calculus I.

It is extremely important that you, the student, identify the institution you intend to transfer to as soon as possible as some computer science programs have specific general education requirements and prerequisites.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Script static web pages.
- Code dynamic web pages.
- Install and operate simple web servers.
- Install and configure routers in small-scale networks using RIP, OSPF and/or IGRP.
- Install and configure security programs.
- Install and configure TCP/IP protocols.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I.....	5
MATH& 141	Precalculus I.....	5
	Health & Fitness Distribution .....	3
	Humanities Distribution .....	5
		<b>18</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II .....	5
MATH& 142	Precalculus II.....	5
	Science Distribution .....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
	Computer Science Elective .....	OR
MATH 228	Discrete Mathematics .....	5
MATH& 151	Calculus I.....	5
	Humanities Distribution .....	5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
	Computer Science Elective .....	5
	Science Distribution* .....	5
	Social Science Distribution .....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
	Computer Science Elective .....	5
	Science Distribution .....	5
	Social Science Distribution .....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
	Computer Science Elective .....	OR
MATH 228	Discrete Mathematics .....	5
	Humanities Distribution .....	5
	Social Science Distribution .....	5
		<b>15</b>

### *Recommended Electives:*

CS& 131	Computer Sci I C++ .....	5
CST 224	Java 1.....	5
CST 228	Java 2.....	5
CST 230	Java 3.....	5
MATH 118	Linear Algebra	
MATH& 152	Calculus II	

\* PHYS& 221 Engineering Physics I recommended



# COMPUTER SCIENCE

**Emphasis:** Information Technology  
**Degree:** Associate in Applied Science

**PURPOSE:** Provides students with training in the core IT and workplace competencies necessary to complete for entry-level employment in the Information Technology industries.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the objectives associated with the following:

- Creativity and innovation: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
- Communication and collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
- Research and information fluency: Students apply digital tools to gather, evaluate, and use information.
- Critical thinking, problem solving, and decision making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
- Digital citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
- Technology operations and concepts: Students demonstrate a sound understanding of technology concepts, systems, and operations.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>			<i>Credits</i>
IT	101	Intro to Programming .....	5
IT	123	Desktop OS 1 .....	5
WRT	105	Writing in the Workplace .....	OR
ENGL&	101	English Composition I .....	5
			<b>15</b>

<i>Winter Quarter, First Year</i>			<i>Credits</i>
IT	144	Microsoft Office for IT .....	5
IT	150	Relational Databases .....	5
Quantitative Skill Distribution .....			5
			<b>15</b>

<i>Spring Quarter, First Year</i>			<i>Credits</i>
IT	119	Web Scripting I .....	5
IT	201	Networking Fundamentals .....	5
HR	110	Human Relations-Workplace.....	5
			<b>15</b>

### *Second Year Credits*

Complete 45 elective credits from courses in the following:  
 Information Technology (IT).....Any 100 or 200 level course  
 Computer Science (CS&).....Any 100 or 200 level course  
 ART.....ART 110, 130, 135

**Total elective credits** **45**

Complete the following general education credits:

HLTH	145	Safety & Fitness .....	3
------	-----	------------------------	---

# COMPUTER SCIENCE

**Emphasis:** Computer and Network Systems

**Degree:** Associate in Applied Science

**Total Credits:** 93-99

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** Provides students with training in the core IT and workplace competencies necessary to complete for entry-level employment in the Information Technology industries.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the objectives associated with the following:

- Creativity and innovation: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
- Communication and collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
- Research and information fluency: Students apply digital tools to gather, evaluate, and use information.
- Critical thinking, problem solving, and decision making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
- Digital citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
- Technology operations and concepts: Students demonstrate a sound understanding of technology concepts, systems, and operations.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>			<i>Credits</i>
IT	101	Intro to Programming .....	5
IT	123	Desktop OS 1 .....	5
ENGL&	101	English Composition I .....	OR
WRT	105	Writing in the Workplace .....	5
			<b>15</b>

<i>Winter Quarter, First Year</i>			<i>Credits</i>
IT	144	Microsoft Office for IT .....	5
IT	150	Relational Databases .....	5
Quantitative Skill Distribution .....			5
			<b>15</b>

<i>Spring Quarter, First Year</i>			<i>Credits</i>
IT	119	Web Scripting 1 .....	5
IT	201	Networking Fundamentals .....	5
HR	110	Human Relations-Workplace.....	5
			<b>15</b>

<i>Fall Quarter, Second Year</i>			<i>Credits</i>
IT	124	Desktop OS 2 .....	4
IT	202	Advanced Networking .....	4
IT	218	Server OS 1 .....	5
IT Elective or CMST& 220 Public Speaking .....			3-5
			<b>16-18</b>

<i>Winter Quarter, Second Year</i>			<i>Credits</i>
IT	125	Desktop OS 3 .....	4
IT	219	Server OS 2 .....	5
IT	235	CISCO Networking.....	4
IT Elective or Social Science Distribution .....			3-5
			<b>16-18</b>

<i>Spring Quarter, Second Year</i>			<i>Credits</i>
HLTH	145	Safety & Fitness .....	3
IT	203	Network Security .....	5
IT	220	Server OS 3 .....	5
IT Elective or Natural Science Distribution w/lab .....			3-5
			<b>16-18</b>

# COMPUTER SCIENCE

**Emphasis:** Application Development

**Degree:** Associate in Applied Science

**Total Credits:** 93-99

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** Provides students with training in the core IT and workplace competencies necessary to complete for entry-level employment in the Information Technology industries.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the objectives associated with the following:

- Creativity and innovation: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
- Communication and collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
- Research and information fluency: Students apply digital tools to gather, evaluate, and use information.
- Critical thinking, problem solving, and decision making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
- Digital citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
- Technology operations and concepts: Students demonstrate a sound understanding of technology concepts, systems, and operations.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
IT 101	Intro to Programming .....	5
IT 123	Desktop OS 1 .....	5
ENGL& 101	English Composition I .....	OR
WRT 105	Writing in the Workplace .....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
IT 144	Microsoft Office for IT .....	5
IT 150	Relational Databases .....	5
Quantitative Skill Distribution .....		OR
MATH& 141	Pre-Calculus I .....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
IT 119	Web Scripting 1 .....	5
IT 201	Networking Fundamentals .....	5
HR 110	Human Relations-Workplace .....	5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
CS& 131	C++ .....	5
IT 121	Web Scripting 2 .....	4
IT 245	Object-Oriented Coding .....	4
IT Elective or CMST& 220 Public Speaking .....		3-5
		<b>16-18</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
CS& 141	Java 1 .....	5
IT 250	Discrete Structures .....	4
IT 255	Design Patterns .....	4
IT Elective or Social Science Distribution .....		3-5
		<b>16-18</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
HLTH 145	Safety & Fitness .....	3
IT 260	Advanced Web Development .....	5
IT 265	Mobile Applications .....	5
IT Elective or Natural Science Distribution w/lab .....		3-5
		<b>16-18</b>

IT Elective: Any course with an IT or CS& course number.

# COMPUTER SCIENCE

**Emphasis:** Web Design

**Degree:** Associate in Applied Science

**Total Credits:** 93-101

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** Provides students with training in the core IT and workplace competencies necessary to complete for entry-level employment in the Information Technology industries.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the objectives associated with the following:

- Creativity and innovation: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
- Communication and collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
- Research and information fluency: Students apply digital tools to gather, evaluate, and use information.
- Critical thinking, problem solving, and decision making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
- Digital citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
- Technology operations and concepts: Students demonstrate a sound understanding of technology concepts, systems, and operations.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>			<i>Credits</i>
IT	101	Intro to Programming .....	5
IT	123	Desktop OS 1 .....	5
WRT	105	Writing in the Workplace .....	OR
ENGL&	101	English Composition I .....	5
			<b>15</b>

<i>Winter Quarter, First Year</i>			<i>Credits</i>
IT	144	Microsoft Office for IT .....	5
IT	150	Relational Databases .....	5
Quantitative Skill Distribution .....			5
			<b>15</b>

<i>Spring Quarter, First Year</i>			<i>Credits</i>
IT	119	Web Scripting 1 .....	5
IT	201	Networking Fundamentals .....	5
HR	110	Human Relations-Workplace.....	5
			<b>15</b>

<i>Fall Quarter, Second Year</i>			<i>Credits</i>
ART	110	2D Design .....	5
IT	121	Web Scripting 2 .....	4
IT	270	Dreamweaver .....	4
IT Elective or CMST& 220 Public Speaking .....			3-5
			<b>16-18</b>

<i>Winter Quarter, Second Year</i>			<i>Credits</i>
ART	130	Computer Graphics.....	5
IT	275	CSS Frameworks & Grids .....	4
IT	280	Advanced CSS & HTML .....	4
IT Elective or Social Science Distribution.....			3-5
			<b>16-18</b>

<i>Spring Quarter, Second Year</i>			<i>Credits</i>
ART	135	Graphics Design .....	5
HLTH	145	Safety & Fitness .....	3
IT	285	WordPress Skinning .....	5
IT Elective or Natural Science Distribution w/lab .....			3-5
			<b>16-18</b>

IT Elective: Any course with an IT or CS& course number.

# CONSTRUCTION MANAGEMENT

**Emphasis:** Construction Management

**Degree:** Associate in Construction Management-DTA/MRP

**PURPOSE:** This degree is a Major Related Program designed for students planning to transfer and to prepare for American Council of Construction Education (ACCE) accredited majors in Construction Management at Central Washington University, Washington State University-Pullman, and University of Washington-Seattle; the degree also provides coursework for transfer into Eastern Washington University's Bachelor of Science in Technology-Construction Management.

This degree meets the requirements of the Statewide Construction Management DTA/MRP Agreement.

Elective credits should be planned with the help of an engineering advisor and be based on the requirements of the specific program at the baccalaureate institution that the student plans to attend. This two-year program requires students to be calculus ready by second quarter of the first year. Students not well prepared in high school mathematics and science should plan a three-year program at Centralia in preparation for transfer to a four-year school. The main emphasis in the first year should be to strengthen mathematics, basic sciences, communication, and reading skills.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ACCT& 201	Principles of Accounting I.....	5
ENGL& 101	English Composition I.....	5
MATH& 146	Introduction to Stats .....	5
Health & Fitness Distribution .....		1
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ACCT& 202	Principles of Accounting II.....	5
ENGL& 235	Technical Writing* .....	OR
ENGL& 102	Composition II* .....	5
ENGR& 111	Engineering Graphics .....	2
MATH& 151	Calculus I.....	5
		<b>17</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ACCT& 203	Principles of Accounting III .....	5
BUS& 201	Business Law .....	5
ENGR& 214	Statics*.....	5
MATH& 152	Calculus II.....	5
		<b>20</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
CHEM& 161	General Chem w/lab I* .....	6
PHYS& 221	Engineering Physics I.....	5
Humanities Distribution .....		5
		<b>16</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ECON& 201	Microeconomics.....	5
GEOL& 101	Intro to Physical Geology.....	5
PHYS& 222	Engineering Physics II .....	5
Health & Fitness Distribution .....		1
		<b>16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
ECON& 202	Macroeconomics* .....	OR
Social Science Distribution .....		5
CMST& 220	Public Speaking.....	5
Humanities Distribution .....		5
Health & Fitness Distribution .....		1
		<b>16</b>

\* Select course as appropriate for intended transfer institution.

# CRIMINAL JUSTICE

**Emphasis:** Criminal Justice

**Degree:** Associate in Technical Arts

**Total Credits:** 90-93

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** Designed to meet the education needs of both working professionals and those seeking new employment in a variety of law enforcement and correctional agencies. Cooperative education components will be designed with local or state law enforcement agencies, correctional institutions, or social service support agencies. Courses offered in a variety of formats to accommodate the schedules of traditional and non-traditional students.

Cooperative education components offered in partnership with regional law enforcement agencies, adult and juvenile correctional institutions.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Discuss basic procedures related to the fields of law enforcement and corrections.
- Utilize knowledge about state and federal laws that impact law enforcement and corrections in decision making.
- Understand and discuss the difference in relationships between law enforcement, the community and other legal entities.
- Understand and describe the relationships that exist between the various law enforcement, corrections, and the courts systems and at the local, state and federal levels of government.
- Discuss ethics as related to law enforcement and corrections.

## Suggested Order of Classes

<i>Fall Quarter, Every Year</i>			<i>Credits</i>
CJ&	101	Intro to Criminal Justice .....	5
CJ	103	Constitutional Case Law .....	5
WRT	105	Writing in the Workplace .....	OR
ENGL&	101	English Composition I.....	5
		Criminal Justice Elective .....	5
			<b>20</b>

<i>Winter Quarter, Every Year</i>			<i>Credits</i>
CJ	104	Intro to Law Enforcement .....	5
CJ	107	Criminal Procedures .....	5
		Criminal Justice Elective .....	5
			<b>15</b>

<i>Spring Quarter</i>			<i>Credits</i>
CJ	109	Community Policing .....	5
CJ&	110	Criminal Law .....	5
CJ	111	Criminal Justice Ethics .....	5
		Any college level math course.....	5
			<b>20</b>

<i>Summer Quarter</i>			<i>Credits</i>
CJ&	106	Juvenile Justice.....	5
CJ&	112	Criminology .....	5
CJ	204	Reports, Forms & Affidavits.....	5
		Criminal Justice Elective .....	5
			<b>20</b>

<i>Fall Quarter</i>			<i>Credits</i>
H R	110	Human Relations -Workplace.....	5
		Health & Fitness Distribution .....	3
		Criminal Justice Elective .....	6
		General Education Elective .....	3-5
			<b>16-18</b>

<i>Recommended Electives</i>			
SPAN&	121	Spanish I.....	5
PSYC&	100	General Psychology .....	5
SOC&	101	Intro to Sociology .....	5
BTEC	101	Keyboarding for Business .....	3
BTEC	221	Business Communications .....	5

# CRIMINAL JUSTICE

**Emphasis:** Criminal Justice

**Degree:** Associate in Arts

**Total Credits:** 90-93

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** This degree prepares students to transfer to a baccalaureate institution and major in criminal justice. A B.A. degree prepares students to work in criminal justice and government agencies (federal, state, or local) or the private sector. Graduates may enter careers in state and local law enforcement, community corrections, federal law enforcement, or in the private sector.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Discuss basic procedures related to the fields of law enforcement and corrections.
- Utilize knowledge about state and federal laws that impact law enforcement and corrections in decision making.
- Understand and discuss the difference in relationships between law enforcement in the community and other legal entities.
- Understand and describe the relationships that exist between the various law enforcement, corrections, and the courts systems and at the local, state, and federal levels of government.
- Discuss ethics as related to law enforcement and corrections.

## Suggested Order of Classes

<i>Fall Quarter, First year</i>		<i>Credits</i>
CJ& 101	Intro Criminal Justice.....	5
CJ 105	Intro to Corrections.....	5
ENGL& 101	English Composition I.....	5
		<b>15</b>

<i>Winter Quarter, First year</i>		<i>Credits</i>
CJ 104	Intro to Law Enforcement.....	5
ENGL& 102	Composition II .....	5
MATH& 107	Math in Society.....	OR
MATH& 146	Introduction to Stats .....	5
		<b>15</b>

<i>Spring Quarter, First year</i>		<i>Credits</i>
CJ& 110	Criminal Law.....	5
Humanities Distribution .....		5
Science Distribution .....		5
		<b>15</b>

<i>Summer or Spring Quarter</i>		<i>Credits</i>
CJ& 106	Juvenile Justice.....	5
CJ& 112	Criminology .....	5
Science Distribution .....		5
		<b>15</b>

<i>Fall Quarter, Second year</i>		<i>Credits</i>
Social Science Distribution .....		5
Humanities Distribution .....		5
POLS& 202	American Government.....	5
		<b>15</b>

<i>Winter Quarter, Second year</i>		<i>Credits</i>
PHIL 103	Intro to Ethics .....	5
Science Distribution .....		5
Social Science Distribution .....		5
Health & Fitness Distribution .....		3
		<b>18</b>

The Criminal Justice emphasis can be tailored to meet both the career path objectives of the individual and coordinate planning to a four year school. An advisor can provide additional information on this.

# CRIMINAL JUSTICE

**Emphasis:** Crime Scene Investigation

**Degree:** Certificate of Proficiency

**Total Credits:** 55

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** To provide individuals with information and techniques used in forensic investigations.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Understand basic concepts of criminal and forensic investigation and the functions of a forensic specialist.
- Identify crime scene considerations of investigators for a variety of different crime scenes.
- Employ proper and appropriate evidence collection, preservation, documentation and transport techniques of all evidence identified at the crime scene.

## Suggested Order of Classes

<i>Fall Quarter</i>		<i>Credits</i>
BTEC	120	Applied Business Math ..... 5
CJ&	240	Intro to Forensic Science..... 5
		<b>10</b>

<i>Winter Quarter</i>		<i>Credits</i>
CJ	129	Intro to Victimology ..... 5
CJ	224	Criminal Interviews & Interrogations ..... 5
WRT	105	Writing in the Workplace ..... 5
		<b>15</b>

<i>Spring Quarter</i>		<i>Credits</i>
CJ	126	Homicide Investigation ..... 5
CJ	225	Crime Scene Technology ..... 5
HR	110	Human Relations-Workplace..... 5
		<b>15</b>

<i>Summer Quarter</i>		<i>Credits</i>
CJ	130	Domestic Violence & Abuse ..... 5
CJ	223	Felony Investigations ..... 5
CJ	228	Crime Scene Photography ..... 5
		<b>15</b>

---

# DENTAL HYGIENE

See Pre-Medicine, Pre-Dentistry

---

# DENTISTRY

Pre-Medicine, Pre-Dentistry

---



# DIESEL EQUIPMENT TECHNOLOGY

**Emphasis:** Diesel Equipment Technology

**Degree:** Associate in Applied Science

**Total Credits:** 105

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** This Diesel Equipment Technology program is designed to prepare students for immediate employment as a technician in the maintenance, repair, or overhaul of heavy equipment (i.e., logging, construction, and mining), agricultural equipment, or trucking.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Perform repair procedures using proper tools while abiding by safety and environmental regulations.
- Identify, diagnose and repair electrical and hydraulic circuits.
- Maintain proper workplace documentation in a professional manner.
- Conduct behavior that is consistent with the professionalism standards of the industry.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>			<i>Credits</i>
DET	100	Shop Skills .....	7
DET	102	Forklift* .....	1
DET	125	Power Transmissions I .....	7
HR	110	Human Relations-Workplace.....	5
IT	117	Windows Workstation OS .....	3
			<b>23</b>

<i>Winter Quarter, First Year</i>			<i>Credits</i>
DET	110	Electrical Systems I .....	7
DET	130	Mobile Hydraulics .....	7
TMATH	116	Industrial Mathematics.....	OR
College Level Math .....			5
			<b>19</b>

<i>Spring Quarter, First Year</i>			<i>Credits</i>
WRT	105	Writing in the Workplace .....	OR
ENGL&	101	Composition I.....	5
DET	120	Engines I.....	7
WELD	151	Welding for Mechanics.....	5
			<b>17</b>

<i>Fall Quarter, Second Year</i>			<i>Credits</i>
DET	200	Electrical Systems II .....	7
DET	220	Engine II .....	7
HLTH	145	Safety & Fitness .....	3
			<b>17</b>

<i>Winter Quarter, Second Year</i>			<i>Credits</i>
BTEC	191	Work Experience Seminar**.....	1
DET	210	Power Transmissions II.....	7
DET	225	Heavy Duty Chassis .....	7
			<b>15</b>

<i>Spring Quarter, Second Year</i>			<i>Credits</i>
DET	230	Practical Applications***.....	OR
DET	190	Cooperative Work Experience*** .....	7
DET	235	Mobile HVAC .....	7
			<b>14</b>

\* DET 102 must be completed during the first year.

\*\* BTEC 191 can be taken any quarter prior to or in the same quarter as DET 190.

\*\*\* Students must take either DET 230 OR DET 190.

STUDENTS WILL NEED TO PURCHASE TOOLS FOR CLASS. PLEASE SEE A DIESEL INSTRUCTOR FOR TOOL LIST.

# DRAMATIC ARTS

**Emphasis:** Dramatic Arts

**Degree:** Associate in Arts

**PURPOSE:** The Associate of Arts degree with an emphasis in Dramatic Arts meets the needs of students interested in acting or technical theater work who intend either to complete a two-year program or to transfer to a four-year institution.

Course work can provide an important supplement to the work of those who plan to major in the humanities and social sciences. Dramatic experience brings insight into the complex motivation for human behavior.

For students who plan to become educators, particularly those interested in elementary and secondary school teaching, courses in drama can provide insight into methods of teaching and learning through "language arts."

If you intend to transfer to a four-year program at a college or university in Washington State, you should see the drama advisor for information on special requirements, if any, of that school. This information may have a bearing on courses you choose to satisfy distribution requirements.

A maximum of 15 credits in DRMA 100 level courses may be credited toward an Associate in Arts Degree. Up to 5 credits in Drama may be used as Humanities distribution credits.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
DRMA& 101	Introduction to Theatre .....	5
ENGL& 101	English Composition I .....	5
Social Science Distribution .....		5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
DRMA 107	Beginning Acting .....	5
ENGL& 102	Composition II .....	5
Social Science Distribution .....		5
Health & Fitness Distribution .....		1
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
DRMA 108	Intermediate Acting .....	5
DRMA 205	Contemporary World Theatre .....	3
Elective .....		3-5
Science Distribution .....		5
		<b>16-18</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
ENGL& 114	Intro to Dramatic Lit .....	5
Health & Fitness Distribution .....		1
Quantitative Skills Distribution .....		5
Social Science Distribution .....		5
		<b>16</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
DRMA 120	Intro to Playwriting .....	5
Elective* .....		3-5
Health & Fitness Distribution .....		1
Social Science Distribution .....		5
		<b>14-16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
ENGL 204	Intro to Shakespeare .....	5
Humanities Distribution .....		3-5
Science Distribution .....		5
		<b>13-15</b>

\* Recommended offerings include DRMA 115 and DRMA 120.

# EARLY CHILDHOOD EDUCATION

**Emphasis:** Early Childhood Education

**Degree:** Associate in Arts

**PURPOSE:** This AA degree transfers to a four-year school to complete work for a bachelor's degree. Course work can apply to the Early Childhood endorsement for Washington State teaching certification.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ECED& 105	Intro Early Child Ed.....	5
EDUC& 130	Guiding Behavior.....	3
EDUC& 150	Child/Family/Community.....	3
ENGL& 101	English Composition I.....	5
		<b>18</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II.....	5
EDUC& 115	Child Development.....	5
Science Distribution.....		5
Health & Fitness Distribution.....		1
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
EDEC& 160	Curriculum Development.....	5
SOC& 101	Intro to Sociology.....	5
Humanities Distribution.....		5
Health & Fitness Distribution.....		1
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
PSYC& 100	General Psychology.....	5
Science Distribution.....		5
Quantitative Distribution.....		5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
EDEC& 190	Observation, Assessment.....	3
CMST& 220	Public Speaking.....	5
Science Distribution.....		5
Health and Fitness.....		1
		<b>14</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
EDEC 181	Language and Literacy.....	5
Humanities Distribution.....		5
Social Science Distribution.....		5
		<b>15</b>

# EARLY CHILDHOOD EDUCATION

**Emphasis:** Early Childhood Education

**Degree:** Associate in Applied Science

**Total Credits:** 91

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** The Early Childhood Education, AAS degree program provides students with the critical early childhood and child development content necessary to compete for employment in early childhood education or in a school system as a teacher's aide.

The Children's Lab School provides a lab environment for observation and practice. Classes are offered on a two-year rotation. Students may enter the program during any quarter and participate part-time. Completion of the ATA program prepares graduates to compete for employment in child care centers, family day care homes, cooperative and private preschools, ECEAP, or Head Start. The curriculum provides instruction for parents, foster parents, day care parents, and persons working with children.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Understand how children differ in their development and approaches to learning and to use this knowledge to provide opportunities that support the physical, social, emotional, and cognitive development of all young children from birth through age eight.
- Use theory, research and foundations of education when planning and implementing Early Child Education programs.
- Plan and implement developmentally appropriate curriculum and teaching practices based on knowledge of individual children, the community and the curriculum goals and content.
- Use individual and group guidance and problem-solving techniques to develop positive and supportive relationships with children and develop personal self-control, self-motivation and positive self-esteem.
- Establish and maintain positive, collaborative relationships with families.
- Articulate a philosophy and rationale for decisions while continually assessing and evaluating the effects of their choices and actions on others.
- Serve as an advocate on behalf of young children and their families, programs for young children and the working environment for early childhood educators.
- Understand the early childhood profession and the commitment to professionalism.

- Manage human, fiscal, and spatial resources while meeting the health and safety needs of children and adults.
- Model global awareness and respect for the cultural diversity of children.
- Examine, discuss, evaluate and critique various issues and trends in Early Childhood Education.
- Identify and explain the major historic events and theoretical perspectives of Early Childhood Education.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ECED& 105	Intro Early Child Ed.....	5
ECED& 107	Health, Safety, Nutrition.....	5
ENGL& 101	English Composition I .....	5
	Health and Fitness Distribution .....	1
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ECED& 120	ECE Practicum I.....	2
EDUC& 115	Child Development.....	5
EDUC& 130	Guiding Behavior.....	3
BUS 121	Business Mathematics .....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ECED& 180	Language and Literacy .....	3
ECED 181	Language/Lit Practicum.....	2
SOC& 101	Intro to Sociology .....	5
	Humanities Distribution .....	5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
ECED& 132	Infant and Toddler .....	3
EDUC& 134	Family Child Care .....	OR
ECED& 139	Admin of ECE Programs .....	3
EDUC& 150	Child/Family/Community .....	3
H R 110	Human Relations-Workplace.....	5
	Health and Fitness Distribution .....	1
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
EDUC& 136	School Age Care.....	3
ECED& 170	Environments.....	3
ECED& 190	Observation/Assessment.....	3
	Health and Fitness Distribution .....	1
	Science Distribution.....	5
		<b>16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
ECED& 160	Curriculum Development.....	5
EDEC 233	ECE Practicum II.....	5
PSYC& 100	General Psychology .....	5
		<b>16</b>

# EARLY CHILDHOOD EDUCATION

**Emphasis:** Early Childhood Education

**Degree:** Associate in Applied Science – Transfer

**Total Credits:** 92

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** The Early Childhood AAS-T degree provides both the necessary critical content to compete for immediate employability in early care and education and the general education coursework necessary for transfer to a bachelor's degree program. Coursework can apply to the Early Childhood endorsement for Washington State teaching certification.

These courses acquaint the student with terms, vocabulary, and activities pertinent to a quality experience within the early childhood education field.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Understand how children differ in their development and approaches to learning and to use this knowledge to provide opportunities that support the physical, social, emotional, and cognitive development of all young children from birth through age eight.
- Use theory, research and foundations of education when planning and implementing Early Child Education programs.
- Plan and implement developmentally appropriate curriculum and teaching practices based on knowledge of individual children, the community and the curriculum goals and content.
- Use individual and group guidance and problem-solving techniques to develop positive and supportive relationships with children and develop personal self-control, self-motivation and positive self-esteem.
- Establish and maintain positive, collaborative relationships with families.
- Articulate a philosophy and rationale for decisions while continually assessing and evaluating the effects of their choices and actions on others.
- Serve as an advocate on behalf of young children and their families, programs for young children and the working environment for early childhood educators.
- Understand the early childhood profession and the commitment to professionalism.
- Manage human, fiscal, and spatial resources while meeting the health and safety needs of children and adults.
- Model global awareness and respect for the cultural diversity of children.
- Examine, discuss, evaluate and critique various issues and trends in Early Childhood Education.
- Identify and explain the major historic events and theoretical perspectives of Early Childhood Education.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ECED& 105	Intro Early Child Ed.....	5
ECED& 107	Health, Safety, Nutrition.....	5
ENGL& 101	English Composition I .....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ECED& 120	ECE Practicum I.....	2
ECED& 130	Guiding Behavior.....	3
ENGL& 102	Composition II .....	5
EDUC& 115	Child Development.....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ECED& 180	Language and Literacy .....	3
ECED& 181	Language/Lit Practicum.....	2
SOC& 101	Intro to Sociology .....	5
CMST& 220	Public Speaking.....	5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
EDUC& 150	Child/Family/Community .....	3
H R 110	Human Relations-Workplace.....	5
Quantitative Skill Distribution .....		5
Health and Fitness Distribution .....		3
		<b>16</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ECED& 170	Environments.....	3
ECED& 190	Observation/Assessment.....	3
Humanities Distribution .....		5
Science Distribution .....		5
		<b>16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
ECED& 160	Curriculum Development.....	5
ECED 233	ECE Practicum II.....	5
PSYC& 100	General Psychology .....	5
		<b>15</b>

## EARLY CHILDHOOD EDUCATION

**Emphasis:** Early Childhood Education

**Degree:** Initial State Certificate-ECE

**Total Credits:** 92

**Class Type:** Lecture, Lab, Hybrid, Online

<i>Courses</i>		<i>Credits</i>
ECED& 105	Intro Early Child Education.....	5
ECED& 107	Health/Safety/Nutrition .....	5
ECED& 120	ECE Practicum I.....	2
		<b>12</b>

## EARLY CHILDHOOD EDUCATION

**Emphasis:** Early Childhood Education

**Degree:** Short State Certificate of Specialization-ECE

**Total Credits:** 20

**Class Type:** Lecture, Lab, Hybrid, Online

<i>Courses</i>		<i>Credits</i>
ECED& 105	Intro Early Child Education.....	5
ECED& 107	Health/Safety/Nutrition .....	5
ECED& 120	ECE Practicum I.....	2
AND		
Early Childhood Education (General)		
EDUC& 115	Child Development.....	5
EDUC& 130	Guiding Behavior.....	3
OR		
Infant and Toddler Care		
EDUC& 115	Child Development.....	5
EDUC& 132	Infants/Toddlers Care .....	3
OR		
School-Age Care		
EDUC& 115	Child Development.....	5
EDUC& 136	School Age Care.....	3
OR		
Family Child Care		
EDUC& 115	Child Development.....	5
ECED& 134	Family Child Care .....	3
OR		
Administration		
EDUC& 115	Child Development.....	5
ECED& 139	Admin of Early Learning Prog .....	3
		<b>20</b>

# EARLY CHILDHOOD EDUCATION

**Emphasis:** Early Childhood Education

**Degree:** State Early Childhood Education Certificate

**Total Credits:** 54

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** The Early Childhood Education State Certificate builds on the Short Certificate of Specialization as the final “stackable certificate”. It further prepares students for employment in the field and feeds into completing an Associate Degree.

## Recommended course schedule

<i>Fall Quarter</i>		<i>Credits</i>
ECED& 105	Intro Early Child Ed.....	5
ECED& 107	Health/Safety/Nutrition .....	5
ECED& 120	Practicum-Nurturing Rel .....	2
EDUC& 130	Guiding Behavior .....	OR
ECED& 132	Infants/Toddlers Care .....	OR
ECED& 134	Family Child Care .....	OR
ECED& 139	Admin of Early Lrng Prog.....	OR
EDUC& 136	School Age Care.....	3

**15**

<i>Winter Quarter</i>		<i>Credits</i>
ECED& 190	Observation/Assessment.....	3
EDUC& 115	Child Development.....	5
EDUC& 150	Child/Family/Community .....	3
ECED& 170	Environments-Young Child .....	3

**14**

<i>Spring Quarter</i>		<i>Credits</i>
BUS 121	Business Math* .....	OR
BTEC 120	Applied Business Math .....	5
ECED& 160	Curriculum Development.....	5
ECED 181	Language and Literacy .....	5

**15**

<i>Summer or Fall Quarter</i>		<i>Credits</i>
WRT 105	Writing in the Workplace .....	OR
ENGL& 101	English Composition I** .....	5
HR 110	Human Relations-Workplace.....	5

**10**

\* ECE State Credential requires 5 credits of MATH above 100 level.

\*\* ECE State Credential requires ENGL& 101.

# EARTH SCIENCES

**Emphasis:** Geology, Geography, Oceanography, Astronomy, Meteorology

**Degree:** Associate in Science

**PURPOSE:** The degree program in Earth Sciences transfers to four-year colleges and universities. Completion of the program qualifies a student for junior standing at most four-year colleges and universities in Washington except in astronomy at the University of Washington, and reasonably assures qualification outside of the state.

The program will not qualify students for junior standing in astronomy at the University of Washington because only one year of physics with calculus is offered at Centralia College.

Students not prepared to enter MATH& 131 and CHEM& 121 should plan on more than four years to complete a bachelor's degree in one of the earth sciences. For those students, a three-year program of study at Centralia College, carefully planned with an advisor, is recommended.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
CHEM& 161	General Chemistry w/lab I.....	6
ENGL& 101	English Composition I.....	5
GEOL& 101	Intro to Physical Geology.....	5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
CHEM& 162	General Chemistry w/lab II.....	6
MATH& 151	Calculus I.....	5
CMST& 220	Public Speaking.....	5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CHEM& 163	General Chemistry w/lab III.....	6
MATH& 152	Calculus II.....	5
Health & Fitness Distribution .....		3
		<b>14</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
Biology (for science majors) sequence .....		OR
Physics (calculus or non-calculus based) sequence* .....		5
OCEA& 101	Intro to Oceanography .....	5
Humanities Distribution .....		OR
Social Science Distribution .....		5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
Biology (for science majors) sequence .....		OR
Physics (calculus or non-calculus based) sequence* .....		5
GEOG 201	Physical Geography .....	5
MATH& 146	Introduction to Stats .....	OR
MATH& 163	Calculus III .....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
Biology (for science majors) sequence .....		OR
Physics (calculus or non-calculus based) sequence* .....		5
SCIE 115	Weather and Climate.....	OR
GEOL 108	Natural Hazards & Catastrophes .....	5
Social Science Distribution .....		5
		<b>15</b>

\* Some baccalaureate institutions require physics with calculus.



# EDUCATION

**Emphasis:** Education

**Degree:** Associate in Arts

**PURPOSE:** The Associate in Arts degree with an emphasis on Education transfers to a four-year college or university for students planning a teaching career. Requirements of four-year colleges vary greatly, and individual programs need to be coordinated with the institution to which the prospective teacher plans to transfer. Future elementary teachers should also seriously consider involvement in music, art, or drama activities. See your advisor for additional information.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I.....	5
PSYC& 100	General Psychology.....	5
	Science Distribution .....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II .....	5
	Content Elective .....	5
	Health & Fitness Distribution .....	1
	Humanities Distribution .....	5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CMST& 220	Public Speaking.....	5
	Health & Fitness Distribution .....	1
	Science Distribution .....	5
	Social Science Distribution .....	5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
EDUC& 201	Intro to Education.....	3
EDUC 202	Classroom Observation.....	2
	Health & Fitness Distribution .....	1
	Quantitative Skills Distribution .....	5
	Science Distribution .....	5
		<b>16</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
PSYC& 200	Lifespan Psychology.....	5
	Content Elective .....	5
	Humanities Distribution .....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
EDUC 190	Cooperative Work Experience.....	OR
	Elective .....	2
	Academic Elective .....	5
	Social Science Distribution .....	5
		<b>12</b>

# ELECTRONICS, ROBOTICS & AUTOMATION

**Emphasis:** Electronics, Robotics & Automation

**Degree:** Associate in Applied Science

**Total Credits:** 95-103

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** The goal of this program is to provide a graduate with the skills needed to find a job at a company that uses high-end automation equipment.

This equipment ranges from devices controlled by programmable logic controllers (industrial computers) to robotic devices. A successful student will have learned core electronics skills, characteristics and operation of various types of electric motors, pneumatics and embedded controllers.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Safely operate equipment and evaluate situations for safety issues.
- Work as members of a team in an office or industrial setting.
- Determine quantitative solutions to AC/DC electronic circuits.
- Apply common theorems and instrumentation to safely troubleshoot complex circuits.
- Design, implement and maintain automated systems using Programmable Logic Controllers and industrial sensors.
- Integrate modern microcontrollers into robotic systems to retrieve data and produce specified results.
- Obtain, process and articulate visualizations of sets of data from industrial equipment, and use that data to propose logical system improvements.
- Think independently to obtain solutions, and to recognize the need to pursue results which exceed the minimum standards whenever possible.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>			<i>Credits</i>
ERA	101	Electronics Assembly.....	5
MEC	105	Computer Operation.....	2
MEC	151	Mechanical Systems.....	5
MATH	098	Algebra 1 (pre-college).....	5
			<b>12-17</b>

<i>Winter Quarter, First Year</i>			<i>Credits</i>
CAD	110	CAD for Electronics.....	3
HR	110	Human Relations-Workplace.....	5
MEC	116	AC/DC Electronics.....	4
TMATH	121	Electronics Math 1.....	5
			<b>17</b>

<i>Spring Quarter, First Year</i>			<i>Credits</i>
ERA	117	Advanced AC/DC Electronics.....	4
ERA	170	Solid State Electronics.....	4
MEC	270	Industrial Robotics.....	5
WRT	105	Writing in the Workplace.....	5
			<b>18</b>

<i>Fall Quarter, Second Year</i>			<i>Credits</i>
ERA	212	Digital Electronics.....	4
OR			
MEC	220	Sensors and Instruments.....	5
MEC	250	Industrial Electronics.....	2
MEC	260	Allen Bradley PLCs.....	5
PPO	201	Plant Systems.....	5
			<b>16-17</b>

<i>Winter Quarter, Second Year</i>			<i>Credits</i>
ERA	230	Robotic Controllers.....	4
ERA	240	Amplifiers.....	OR
PPO	202	Plant Maintenance.....	5
IT	201	Network Technology 1.....	4
MEC	155	Preventive Maintenance.....	3
			<b>16</b>

<i>Spring Quarter, Second Year</i>			<i>Credits</i>
ENGR	111	Engineering Graphics 1.....	2
PPO	130	Industrial Safety.....	5
ERA	235	Communication Systems.....	3 OR
PPO	203	Plant Operations.....	5
ERA	276	Robotics Capstone.....	3
HLTH	145	Safety & Fitness.....	3
			<b>16-18</b>

# ELECTRONICS, ROBOTICS & AUTOMATION

**Emphasis:** Mechatronics

**Degree:** Associate in Applied Science

**Total Credits:** 91

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** The Mechatronics AAS prepares students for entry level positions involving installation, repair and preventive maintenance as performed by Industrial Maintenance Mechanics or Millwrights. The program includes instruction in Electronics, Robotics, Control Systems and Welding to expose students to the multiple skills necessary to repair, install, adjust, or maintain industrial production or processing machinery.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Safely operate equipment and demonstrate practices that promote work place safety.
- Work as members of a team in an office or industrial setting and to recognize the need to pursue results which exceed the minimum standards whenever possible.
- Understand and embrace the inevitability of change in technology and pursue opportunities to improve skills with an attitude of "Life Long Learning".
- Diagnose, troubleshoot, maintain and repair electrical components and systems.
- Design, implement and maintain automated systems including Programmable Logic Controllers and industrial sensors.
- Develop skills as an industrial robotics operator. Plan and write robot programs. Optimize industrial robotic work cells and automated operations.
- Understand, diagnose, troubleshoot and repair mechanical, hydraulic and pneumatic components and systems.
- Think independently to analyze system errors and implement solutions.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>			<i>Credits</i>
H R	110	Human Relations-Workplace.....	5
MEC	105	Computer Operations.....	2
MEC	151	Mechanical Systems .....	5
MATH	098	Algebra 1 (pre-college).....	5
			<b>12-17</b>

<i>Winter Quarter, First Year</i>			<i>Credits</i>
MEC	152	Power Transmission .....	3
MEC	116	AC/DC Electronics.....	4
PPO	120	Blueprint Reading.....	5
TMATH	121	Electronics Math I .....	5
			<b>17</b>

<i>Spring Quarter, First Year</i>			<i>Credits</i>
MEC	270	Industrial Robotics .....	5
MEC	260	Allen Bradley PLCs.....	5
WRT	105	Writing for the Workplace .....	5
			<b>15</b>

<i>Fall Quarter, Second Year</i>			<i>Credits</i>
MEC	220	Sensors and Instruments .....	5
MEC	250	Industrial Electronics .....	2
MEC	261	Siemens PLCs .....	3
WELD	180	GTAW Welding .....	5
			<b>15</b>

<i>Winter Quarter, Second Year</i>			<i>Credits</i>
BTEC	191	Work Experience seminar .....	1
MEC	153	Hydraulic Systems .....	5
MEC	155	Preventive Maintenance .....	3
MEC	120	Machining .....	6
			<b>15</b>

<i>Spring Quarter, Second Year</i>			<i>Credits</i>
DET	102	Forklift Certification .....	1
HLTH	145	Safety & Fitness .....	3
MEC	154	Electrohydraulics .....	4
MEC	190	Cooperative Work Experience.....	5
PPO	130	Industrial Safety .....	5
			<b>18</b>

\* Pre-college math if needed

# ENERGY TECHNOLOGY

**Emphasis:** Energy Technology – Power Operations

**Degree:** Associate in Applied Science

**Total Credits:** 100-110

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** The Power Operations AAS Degree program prepares students to compete for employment in the Power Generation Industry.

Centralia College is designated as Washington State’s Center of Excellence for Energy Technology and is supported by statewide energy industry and labor leaders. The Energy Technology degree offers coursework in traditional sources of power generation as well as renewable energy and energy efficiency. The program prepares students for entry level positions such as power plant assistant control operator, technician, and other high voltage apprenticeships.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Operate electrical systems.
- Explain the components used in the transmission of electricity.
- Specialize in power generating, power transmission, metering, substation operations, plant mechanics, or boiler operations.
- Provide examples of the necessary steps to complete an energy audit of a home or building.
- Describe a practice for entrance exams that are typically required for entry into the electric utility industry.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>			<i>Credits</i>
IT	117	Intro to Windows OS.....	3
MATH	098	Algebra I*.....	5
PPO	100	Intro to Energy Industry.....	5
PPO	150	Energy Efficiency.....	5
			<b>13-18</b>

<i>Winter Quarter, First Year</i>			<i>Credits</i>
MATH	099	Algebra II*.....	5
PPO	102	Power Generation.....	5
PPO	120	Print Reading.....	5
			<b>10-15</b>

<i>Spring Quarter, First Year</i>			<i>Credits</i>
BTEC	210	Word I.....	5
MATH&	107	Math in Society.....	5
PPO	103	Electric Utility Distribution.....	5
PPO	130	Industrial Safety.....	5
			<b>20</b>

<i>Summer Quarter, Optional</i>			<i>Credits</i>
PPO	191	Power Plant Job Prep.....	4
			<b>4</b>

<i>Fall Quarter, Second Year</i>			<i>Credits</i>
ENGL&	101	English Composition I.....	5
HLTH	145	Safety & Fitness.....	3
H R	110	Human Relations-Workplace.....	5
PPO	201	Plant Systems.....	5
			<b>18</b>

<i>Winter Quarter, Second Year</i>			<i>Credits</i>
ENVS&	100	Survey of Env Science.....	5
PPO	202	Plant Maintenance.....	5
ENGL&	102	Composition II.....	5
Elective.....			5
			<b>20</b>

<i>Spring Quarter Second Year</i>			<i>Credits</i>
BTEC	214	Excel.....	5
PPO	203	Plant Ops Refrigeration.....	5
Elective Credits.....			5
			<b>15</b>

### *Recommended Elective Courses:*

CAD	112	Computer Aided Drafting I.....	5
PHYS&	100	Physics: Non-Science Majors.....	5
PPO	205	Power System Operator I.....	5
PPO	206	Power System Operator II.....	5

\* Credits not included in graduation totals.

# ENGINEERING

**Emphasis:** Bioengineering and Chemical Engineering

**Degree:** Associate in Science-MRP

**PURPOSE:** The Bio/Chemical Engineering Associate in Science degree is a pre-engineering Major Related Program designed for students transferring to a four-year college or university to complete a degree in the sub-discipline of bioengineering or chemical engineering. Elective credits should be planned with the help of an engineering advisor and based on the requirements of the specific discipline at the baccalaureate institution the student plans to attend. This two-year program requires students to be ready for calculus by the second quarter of the first year.

If you are not well prepared in high school mathematics and science, you should plan a three-year program at Centralia College in preparation for transfer to a four-year school with the main emphasis in the first year on strengthening your mathematics, basic sciences, communication, and reading skills.

## Suggested Order of Classes

<i>Fall Quarter, First Year*</i>		<i>Credits</i>
CHEM& 161	General Chem w/lab I .....	6
ENGL& 101	English Composition I .....	5
ENGR 100	Intro to Engineering .....	2
Elective**	.....	OR
	Humanities Distribution .....	OR
	Social Science Distribution .....	5
		<b>18</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
CHEM& 162	General Chem w/lab II .....	6
MATH& 151	Calculus I .....	5
Elective**	.....	OR
	Humanities Distribution .....	OR
	Social Science Distribution .....	5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CHEM& 163	General Chem w/lab III .....	6
MATH& 152	Calculus II .....	5
Elective**	.....	OR
	Humanities Distribution .....	OR
	Social Science Distribution .....	5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
CHEM& 261	Organic Chemistry I .....	6
MATH 118	Linear Algebra .....	5
PHYS& 221	Engineering Physics I .....	5
		<b>16</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
BIOL& 222	Majors Cell/Molecular(lab) .....	OR
CHEM& 262	Organic Chemistry w/lab .....	5-6
MATH& 163	Calculus III .....	5
PHYS& 222	Engineering Physics II .....	5
		<b>15-16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
MATH 212	Differential Equations .....	5
PHYS& 223	Engineering Physics III .....	5
ENGR& 214	Statics .....	5
	Health & Fitness Distribution .....	3
		<b>18</b>

An Economics class is recommended.

\* If you need review prior to MATH& 151 Calculus I, you may take Precalculus.

\*\* Choose one elective from CS& 131, CS& 141, MATH 264

Check for specific prerequisites for transfer institutions, particularly natural science and foreign language requirements.

# ENGINEERING

**Emphasis:** Computer and Electrical Engineering

**Degree:** Associate in Science-MRP

**PURPOSE:** This pre-engineering degree is a Major Related Program designed for students transferring to a four-year college or university to complete a bachelor's degree in computer engineering or electrical engineering.

Elective credits should be planned with the help of an engineering advisor and based on the requirements of the specific discipline at the baccalaureate institution the student plans to attend. This two-year program requires students to be ready for calculus by the second quarter of the first year.

If you are not well prepared in high school mathematics and science, you should plan a three-year program at Centralia College in preparation for transfer to a four-year school with the main emphasis in the first year should be on strengthening your mathematics, basic sciences, communication, and reading skills.

## Suggested Order of Classes

<i>Fall Quarter, First Year**</i>		<i>Credits</i>
CHEM& 161	General Chemistry w/lab I.....	6
ENGL& 101	English Composition I.....	5
ENGR 100	Intro to Engineering.....	2
Humanities Distribution .....		OR
Social Science Distribution .....		5
		<b>18</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 235	Technical Writing.....	5
MATH& 151	Calculus I.....	5
Health & Fitness Distribution .....		3
Humanities Distribution .....		OR
Social Science Distribution* .....		5
		<b>18</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CS& 131	Computer Science I C++.....	OR
CS& 141	Computer Science I Java.....	5
MATH& 152	Calculus II.....	5
ENGR& 214	Statics.....	5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
MATH 118	Linear Algebra .....	5
PHYS& 221	Engineering Physics I .....	5
Humanities Distribution .....		OR
Social Science Distribution .....		5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ENGR 203	Applied Numerical Methods.....	5
ENGR& 215	Dynamics.....	5
MATH& 163	Calculus III .....	5
PHYS& 222	Engineering Physics II .....	5
		<b>20</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
ENGR& 204	Electrical Circuits.....	5
MATH 212	Differential Equations .....	5
MATH 264	Calculus IV.....	3
PHYS& 223	Engineering Physics III .....	5
		<b>18</b>

\* An Economics class is recommended.

\*\* If you need review prior to MATH& 151 Calculus I, you should take Precalculus.

# ENGINEERING

**Emphasis:** Mechanical & Civil Engineering

**Degree:** Associate in Science-MRP

**PURPOSE:** This pre-engineering degree is a Major Related Program designed for students transferring to a four-year college or university to complete a degree in the sub-disciplines of mechanical, civil, aeronautical, industrial, and materials science engineering.

Elective credits should be planned with the help of an engineering advisor and based on the requirements of the specific discipline at the baccalaureate institution the student plans to attend.

This two-year program requires students to be calculus ready second quarter of the first year. If you are not well prepared in high school mathematics and science, you should plan a three-year program at Centralia College in preparation for transfer to a four-year school. The main emphasis in the first year should be on strengthening your mathematics, basic sciences, communication, and reading skills.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
CHEM& 161	General Chemistry w/lab I.....	6
ENGL& 101	English Composition I.....	5
ENGR 100	Intro to Engineering .....	2
Social Science Distribution** .....		5
		<b>18</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
CHEM& 162	General Chemistry w/lab II.....	6
MATH& 151	Calculus I* .....	5
Humanities Distribution .....		5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ENGR& 214	Statics.....	5
MATH& 152	Calculus II.....	5
Health & Fitness Distribution .....		3
Humanities Distribution .....		OR
Social Science Distribution** .....		5
		<b>18</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
ENGR& 225	Mechanic of Materials.....	5
MATH 118	Linear Algebra .....	5
PHYS& 221	Engineering Physics I.....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ENGR& 215	Dynamics.....	5
MATH& 163	Calculus III .....	5
PHYS& 222	Engineering Physics II .....	5
ENGR 203	Applied Numerical Methods .....	5
		<b>20</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
ENGR& 204	Electrical Circuits.....	5
MATH 212	Elementary Differential Equations .....	5
MATH 264	Calculus IV .....	3
PHYS& 223	Engineering Physics III .....	5
		<b>18</b>

Electives must include a minimum of 2 or more courses chosen from Calculus IV, Technical Writing, and Electrical Circuits.

\* If you need review prior to (MATH& 151) Calculus I, you should take Pre-Calculus.

\*\* A course in economics is recommended, either ECON& 201 or ECON& 202.

# ENGLISH

**Emphasis:** English

**Degree:** Associate in Arts

**PURPOSE:** The Associate in Arts degree with an emphasis in English provides introductory-level and survey courses within the parameters of an English major as that English major is defined at the baccalaureate degree-granting institution to which the student transfers. Most English departments at the baccalaureate level will accept 10-15 credits of lower-level English courses as meeting minimum requirements toward a major in English. English credits taken at Centralia College beyond the 10-15 acceptable credits at the baccalaureate institution will be considered elective credits and may or may not fulfill English major requirements at the baccalaureate transfer institution.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>	<i>Credits</i>
ENGL& 101 English Composition I.....	5
Humanities Distribution .....	5
Social Science Distribution* .....	5
	<b>15</b>

<i>Winter Quarter, First Year</i>	<i>Credits</i>
ENGL& 102 Composition II .....	5
Elective (Literature or Creative Writing Class) .....	5
Humanities Distribution .....	5
	<b>15</b>

<i>Spring Quarter, First Year</i>	<i>Credits</i>
Elective (Literature Class).....	5
Health & Fitness Distribution .....	3
Quantitative Skills Distribution .....	5
Social Science Distribution .....	5
	<b>18</b>

<i>Fall Quarter, Second Year</i>	<i>Credits</i>
Elective (Literature Class).....	5
Humanities Distribution .....	5
Science Distribution .....	5
	<b>15</b>

<i>Winter Quarter, Second Year</i>	<i>Credits</i>
Elective (Literature or Creative Writing Class) .....	5
Science Distribution .....	5
Social Science Distribution .....	5
	<b>15</b>

<i>Spring Quarter, Second Year</i>	<i>Credits</i>
Elective (Literature Class).....	5
Humanities Distribution .....	5
Science Distribution .....	5
	<b>15</b>

**To satisfy the 3-5 credit diversity requirement, students may wish to take:**

- ENGL 260 Non-Western Literature
- ENGL 160 Women in Literature

Other "D" courses listed in current college catalog.

\* History is recommended for a Social Science distribution requirement.



# ENVIRONMENTAL SCIENCE

**Emphasis:** Environmental Studies

**Degree:** Associate in Arts

**PURPOSE:** The Associate in Arts degree with an emphasis in Environmental Studies is intended for students who plan a career in an environmental field in areas such as environmental policy and law, urban planning, environmental ethics, and environmental advocacy.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
BIOL& 100	Survey of Biology.....	5
ENGL& 101	English Composition I.....	5
Humanities Distribution .....		5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENVS& 100	Survey of Env Science.....	5
Social Science Distribution .....		5
Elective.....		5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II .....	5
CHEM& 121	Intro to Chemistry .....	5
Humanities Distribution .....		5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
GEOG& 101	Intro to Physical Geology.....	5
MATH& 146	Introduction to Stats .....	5
Social Science Distribution .....		5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
HLTH 130	Health and Wellness .....	3
Social Science Distribution .....		5
Electives.....		7
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
Humanities Distribution .....		5
Electives.....		10
		<b>15</b>

### *Recommend choosing one from the following:*

Select three Social Science distribution classes, one class from each of the following disciplines:

- ANTH& 100, OR 206, OR 225, OR GEOG& 200
- ECON& 202 OR ECON& 201
- POLS& 101 OR POLS& 202

Select Humanities distribution classes from the following:

- CMST& 220, PHIL& 101
- Plus five (5) credits of foreign language or other Humanities distribution. Additional science classes are recommended for electives: BIOL& 221, 222, 223; BOTA 113, 150; GEOG 201, and GEOL 108, 208

# ENVIRONMENTAL SCIENCE

**Emphasis:** Environmental Science

**Degree:** Associate in Science

**PURPOSE:** The Associate in Science degree with an emphasis in Environmental Science is intended for students who plan a career as a scientist or technician in an environmental field such as conservation biology, environmental chemistry, environmental geology, energy resources, environmental planning, agro- ecology or atmospheric sciences.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
CHEM& 161	General Chemistry w/lab I.....	6
ENGL& 101	English Composition I.....	5
ENVS& 100	Survey of Env Science .....	5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
CHEM& 162	General Chemistry w/lab II.....	6
GEOL& 101	Intro to Physical Geology.....	5
MATH& 142	Precalculus II.....	5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CHEM& 163	General Chemistry w/lab III.....	6
ECON& 201	Microeconomics.....	5
MATH& 151	Calculus I.....	5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
BIOL& 221	Majors Ecology/Evolution .....	5
MATH& 152	Calculus II.....	5
PHYS& 221	Engineering Physics I.....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
BIOL& 222	Majors Cell/Molecular .....	5
MATH& 146	Introduction to Stats .....	OR
MATH& 163	Calculus III .....	5
CMST& 220	Public Speaking.....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
BIOL& 223	Majors Organismal Phys.....	5
HLTH 130	Health & Wellness .....	3
Humanities Distribution .....		OR
Social Science Distribution .....		5
		<b>13</b>

Check for specific prerequisites for transfer institutions, particularly natural science and foreign language requirements.

---

# EXERCISE SCIENCE

See Physical Education, Health and Recreation

# FINE ARTS

**Emphasis:** Fine Arts

**Degree:** Associate in Arts

**PURPOSE:** The Associate in Arts degree with a Fine Arts emphasis is for students interested in transferring to a four-year college or university to complete a bachelor's degree with a major in art.

As well as providing a basic liberal arts foundation, this program provides a solid base in studio art and art history which is essential for those interested in entering a variety of art professions.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ART& 100	Art Appreciation .....	5
ART 110	Design.....	4
Humanities Distribution .....		5
		<b>14</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ART 111	Sculpture .....	5
ENGL& 101	English Composition I.....	5
Social Science Distribution .....		5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ART 102	Drawing I .....	5
ENGL& 102	Composition II .....	5
Science Distribution .....		5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
ART 200	Art History: Ancient .....	5
Quantitative Skills Distribution .....		5
Science Distribution .....		5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ART 201	Art History: 15th-17th Century.....	5
Health & Fitness Distribution .....		3
Science Distribution .....		5
Social Science Distribution .....		3
		<b>16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
ART 202	Art History: 18th-20th Century.....	5
Humanities Distribution .....		5
Social Science Distribution .....		5
		<b>15</b>

# FOREIGN LANGUAGES

**Emphasis:** Chinese, French, Spanish

**Degree:** Associate in Arts or Associate in Liberal Arts

**PURPOSE:** The degree plan is designed for transfer but is also appropriate for anyone who wishes a solid foundation in Chinese, French, or Spanish. It will benefit students with personal reasons for speaking a foreign language as well as travelers and those planning a career in international business, teaching, social work, interpreting, translating, and the Foreign Service, to name just a few possibilities.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>	<i>Credits</i>
CHIN&, FRCH&, or SPAN& 121 .....	5
ENGL& 101 English Composition I .....	5
Quantitative Skill Distribution .....	5
	<b>15</b>

<i>Winter Quarter, First Year</i>	<i>Credits</i>
CHIN&, FRCH&, or SPAN& 122 .....	5
ENGL& 102 Composition II .....	5
ANTH& 206 Cultural Anthropology.....	5
Health & Fitness Distribution .....	1
	<b>16</b>

<i>Spring Quarter, First Year</i>	<i>Credits</i>
CHIN&, FRCH&, or SPAN& 123 .....	5
CMST 250 Intercultural Communications.....	5
Science Distribution .....	5
	<b>15</b>

<i>Fall Quarter, Second Year</i>	<i>Credits</i>
CHIN&, SPAN& 221 .....	OR
Elective (for French majors) .....	5
Humanities Distribution .....	5
Social Science Distribution .....	5
Health & Fitness Distribution .....	1
	<b>16</b>

<i>Winter Quarter, Second Year</i>	<i>Credits</i>
CHIN&, SPAN& 222 .....	OR
Elective (for French majors) .....	5
Social Science Distribution .....	5
Science Distribution .....	5
Health & Fitness Distribution .....	1
	<b>16</b>

<i>Spring Quarter, Second Year</i>	<i>Credits</i>
CHIN&, SPAN& 223 .....	OR
Elective (for French majors) .....	5
Elective .....	5
Science Distribution .....	5
	<b>15</b>

Students are advised to consult their advisor for the selection of distribution and elective credits. Foreign language majors are encouraged to include courses in Anthropology, Political Science, Business, Education, Criminal Justice or Medical and Legal Terminology, depending on focus.

# GEOGRAPHY

See Earth Sciences

# GEOLOGY

See Earth Science

# GENERAL ENGINEERING

See Engineering

# GRAPHIC DESIGN

**Emphasis:** Graphic Design

**Degree:** Associate in Arts

**PURPOSE:** Graphic design is art that interests, informs, persuades, or sells. It has taken the traditional form of printed material and now includes computer imaging.

The Associate in Arts degree with emphasis in graphic design is for students who want to complete a two-year program or transfer to a four-year college or university. This educational plan gives students a solid base in studio art. A portfolio of artwork is required to demonstrate studio abilities upon completion of the program.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ART 110	Design.....	4
ENGL& 101	English Composition I.....	5
Health & Fitness Distribution .....		1
Humanities Distribution .....		5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ART 201	Art History: 15th-17th Century.....	5
CMST& 102	Intro to Mass Media .....	5
Health & Fitness Distribution .....		1
Quantitative Skills Distribution .....		5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ART 102	Drawing I .....	5
ART 202	Art History: 18th-20th Century.....	5
ENGL& 102	Composition II .....	5
Health & Fitness Distribution .....		1
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
ART 130	Computer Graphics .....	5
Science Distribution .....		5
Social Science Distribution .....		5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
IT 119	Web Scripting 1 .....	5
Science Distribution .....		5
Social Science Distribution .....		5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
ART 174	Digital Photography .....	5
Science Distribution .....		5
Social Science Distribution .....		5
		<b>15</b>

<i>Recommended distribution for Graphic Design majors:</i>		
CMST& 220	Public Speaking.....	5

# HISTORY

**Emphasis:** History

**Degree:** Associate in Arts

**PURPOSE:** The Associate in Arts with an emphasis in History is designed to prepare students to major in history when they transfer to a four-year college or university.

Through the study of history students systematically examine the past and gain an opportunity to explore human nature and contemporary concerns. Historians work from the written records (cultural, economic, political, and scientific) of past generations to discover the kinds of lives led and problems faced.

The study of the trials and accomplishments, deeds, and aspirations of past generations is an excellent way to obtain the kind of broad education needed in our constantly changing world.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I.....	5
HIST& 116	Western Civilization I.....	5
HUM 110	Ethics & Cultural Values.....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II.....	5
HIST& 117	Western Civilization II.....	5
Health & Fitness Distribution.....		1
Science Distribution.....		5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ECON& 202	Macroeconomics.....	5
HIST& 118	Western Civilization III.....	5
Health & Fitness Distribution.....		1
Quantitative Skills Distribution.....		5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
ANTH& 100	Survey of Anthropology.....	5
HIST& 146	U.S. History I.....	5
Science Distribution.....		5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ENGL 260	Non-Western World Literature.....	5
HIST& 147	U.S. History II.....	5
Health & Fitness Distribution.....		1
Science Distribution.....		5
		<b>16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
HIST& 148	U.S. History III.....	5
POLS& 202	American Government.....	5
Humanities Distribution.....		5
		<b>15</b>

These Humanities courses would be particularly valuable: Speech, Art History, and Music of the World.

# HUMANITIES

**Emphasis:** Humanities

**Degree:** Associate in Arts

**PURPOSE:** The Associate in Arts degree with emphasis in Humanities is designed for those planning to major in English, History, Political Science, or related academic areas after transferring to a four-year college or university.

The study of a foreign language is highly recommended.

Students should consult with their advisor before selecting electives. This will allow coordination of electives with desired career goal.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I.....	5
HUM& 116	Humanities I.....	5
	Quantitative Skills Distribution .....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II .....	5
HUM& 117	Humanities II .....	5
	Science Distribution .....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
HIST& 118	Western Civilization III.....	5
HUM& 118	Humanities III .....	5
PSYC& 100	General Psychology .....	5
	Health & Fitness Distribution .....	3
		<b>18</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
CMST& 220	Public Speaking.....	5
ENGL& 244	American Literature .....	5
HUM 110	Ethics & Cultural Values .....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
HUM 270	Survey of Film Studies.....	5
SOC& 101	Intro to Sociology .....	5
	Science Distribution .....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
MUSC 140	History of American Music .....	5
	Science Distribution .....	5
	Elective .....	2
		<b>12</b>

# MATHEMATICS

**Emphasis:** Mathematics

**Degree:** Associate in Arts

**PURPOSE:** The Associate in Arts degree with an emphasis in Mathematics is for students interested in transferring to a four-year college or university to complete a bachelor's degree in mathematics.

If you are not well prepared in high school math, you should plan, with your advisor, a three-year program to prepare for transfer to a four-year college or university. The emphasis in the first year should be on strengthening your math, basic science, communication, and reading skills.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
(MATH dependent on placement)		
MATH& 141	Precalculus I .....	OR
MATH& 142	Precalculus II.....	5
Health & Fitness Distribution .....		1
Humanities Distribution .....		5
Social Science Distribution .....		5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition .....	5
MATH& 142	Precalculus II.....	OR
MATH& 151	Calculus I.....	5
MATH 156	Calculus I Lab.....	1
Social Science Distribution .....		5
		<b>15-16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II .....	5
MATH& 151	Calculus I.....	OR
MATH& 152	Calculus II.....	5
Health & Fitness Distribution .....		1
Social Science Distribution .....		5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
MATH 118	Linear Algebra .....	5
MATH& 152	Calculus II.....	OR
MATH& 146	Introduction to Stats .....	5
Humanities Distribution .....		5
Science Distribution .....		5
		<b>20</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
MATH& 163	Calculus III .....	5
Humanities Distribution .....		5
Science Distribution .....		5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
MATH 212	Differential Equations .....	OR
MATH 228	Discrete Mathematics .....	5
MATH 264	Calculus IV .....	3
Health & Fitness Distribution .....		1
Science Distribution .....		5
		<b>14</b>

<i>Recommended Courses</i>		
BIOL& 221, 222, 223, 241, 242 .....		5
PHYS& 221, 222, 223.....		5



# MATHEMATICS EDUCATION

**Emphasis:** Mathematics Education

**Degree:** Associate in Math Education – MRP

**PURPOSE:** The Associate in Math Education is intended to prepare students who aspire to be secondary math teachers. Students who complete this degree will have completed lower division general education requirements as well as the prerequisites for a major in math.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I.....	5
(MATH dependent on placement)		
MATH& 141	Precalculus I.....	OR
MATH& 142	Precalculus II (dependent on placement) ...	5
Humanities Distribution .....		5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II.....	5
MATH& 142	Precalculus II.....	OR
MATH& 151	Calculus I.....	5
CMST& 220	Public Speaking.....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
PSYC& 100	General Psychology.....	5
MATH& 151	Calculus I.....	OR
MATH& 152	Calculus II.....	5
Humanities Distribution .....		5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
MATH 118	Linear Algebra.....	5
MATH& 152	Calculus II.....	OR
MATH& 146	Introduction to Stats.....	5
Science Distribution* .....		5
Social Science Distribution .....		5
		<b>20</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
EDUC& 201	Intro to Education.....	3
MATH& 163	Calculus III.....	5
Health & Fitness Distribution .....		3
Social Science Distribution .....		5
		<b>16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
EDUC 202	Classroom Observation.....	2
MATH 264	Calculus IV.....	3
MATH 212	Elem Differential Equations.....	OR
MATH 228	Discrete Mathematics.....	5
Science Distribution* .....		5
		<b>15</b>

\* Physics, Chemistry, Geology or Biology; at least one lab science required.

# MEDIA STUDIES

**Emphasis:** Radio Broadcasting, Television Production

**Degree:** Associate in Arts

**PURPOSE:** The Media Studies program is designed for students interested in transferring to a four-year college or university to complete a bachelor's degree in Electronic Media which includes: Radio, Television, Video Production, Film Broadcast Journalism and Sports Announcing. In some cases this program is equally suited for students interested in a two-year terminal degree prior to entry in the media field.

The Electronic Media facilities at Centralia College are unique among Washington State community colleges. Students learn on professional audio and video equipment and are provided experience in numerous areas of production. KCED-FM, a fully equipped radio station authorized by the Federal Communications Commission, is operated by students in the Media Studies programs. Those students desiring an emphasis in radio broadcasting have ample opportunity for live "on-the-air" experience in broadcasting as well as studio production experience. The Centralia College television studio and production facilities are well equipped and provide experience in taping, directing, editing and producing. Students who transfer to a four year college should consult their advisors for choice of distribution credit and elective courses.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I .....	5
M ST 230	Intro to Radio Broadcasting* .....	5
M ST 260	Intro to TV & Video Production .....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II .....	5
M ST 231	Adv. Radio Broadcasting* .....	3
M ST 261	Adv. TV & Video Production .....	5
Health & Fitness Distribution .....		1
		<b>14</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CMST& 102	Intro to Mass Media .....	5
M ST 220	Intro Broadcast News and Prod .....	4
M ST 262	Television Production .....	5
Health & Fitness Distribution .....		1
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
M ST 271	Radio Broadcasting Internship ** .....	OR
M ST 281	Television Internship .....	1
Humanities Distribution .....		5
Science Distribution .....		5
Social Science Distribution .....		5
		<b>16</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
Humanities Distribution .....		5
Social Science Distribution .....		5
Science Distribution .....		5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
Health & Fitness Distribution .....		1
Science Distribution .....		5
Social Science Distribution .....		5
Quantitative Skill Distribution .....		5
		<b>16</b>

\* Radio Majors

\*\* In cooperation with a professional radio or television company, a student may enroll in MST 190, Cooperative Work Experience. The student may receive up to 12 credits for learning that occurs on the job. Attendance at a Work Experience Seminar is required of Co-op students. You must take the Work Experience Seminar before or in the same quarter as the Co-op course.

# MEDIA STUDIES

**Emphasis:** Film

**Degree:** Associate in Arts

**PURPOSE:** The Media Studies program is designed for students interested in transferring to a four-year college or university to complete a bachelor's degree in Electronic Media. In some cases this program is equally suited for students interested in a two-year terminal degree prior to entry in the media field. The Electronic Media facilities at Centralia College are unique among Washington State community colleges. Students learn on professional audio and video equipment and are provided experience in numerous areas of production.

For students interested primarily in Television and Film the Centralia College television studio and production facilities are well equipped and provide experience in taping, directing, editing and producing.

Classes will help students attain skills in camera work, studio and field production. Lighting, running an audio board, writing, directing, producing and editing short video projects are also covered. The Media Studies program in conjunction with the Drama department also offers students the opportunity to learn some set design and building crafts as well as lighting techniques and skills.

Students in the Television and Film classes will have the opportunity to participate in live productions including broadcast of college basketball games, community forums as well as help in recording the College Musical. Students who transfer to a four-year college should consult their advisors for choice of distribution credit and elective courses.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
M ST	159 Stagecraft for TV & Film.....	2
ENGL&	101 English Composition I .....	5
M ST	260 Intro to TV & Video Production.....	5
	Social Science Distribution .....	5
		<b>17</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL&	102 Composition II .....	5
HUM	270 Survey of Film Studies.....	5
M ST	261 Adv. TV & Video Production .....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
M ST	158 Studio & Outdoor Lighting.....	2
M ST	262 Television Production.....	5
	Health & Fitness Distribution .....	3
	Elective.....	5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
DRMA	107 Beginning Acting.....	5
	Quantitative Skills Distribution .....	5
	Science Distribution .....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
CMST&	102 Intro to Mass Media .....	5
	Science Distribution .....	5
	Social Science Distribution .....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
	Academic Elective .....	3-5
	Science Distribution .....	5
	Social Science Distribution .....	5
		<b>13-15</b>

# MEDIA STUDIES

**Emphasis:** Sports Announcing and Production

**Degree:** Associate in Arts

**PURPOSE:** The Media Studies program is designed for students interested in transferring to a four-year college or university to complete a bachelor's degree in Electronic Media. In some cases this program is equally suited for students interested in a two-year terminal degree prior to entry in the media field. The Electronic media facilities at Centralia College are unique among Washington State community colleges.

Students learn on professional audio and video equipment and are provided experience in numerous areas of production. Students primarily interested in Sports Announcing have the opportunity to perfect their skills on campus radio station KCED-FM, on live broadcasts over the local cable access channel and in the college's television studio and production rooms. Classes and practical application will help students develop skills sports announcers use to broadcast and report on sporting events.

Students also have the opportunity to host their own sports discussion show on KCED as well as calling the play by play action of college basketball, baseball and local high school football games.

Instruction on vocal techniques, production, conducting and recording interviews, writing and research as well as specific duties of each member of a broadcast booth will be covered. Students who transfer to a four-year college should consult their advisors for choice of distribution credit and elective courses.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I .....	5
M ST 126	Sports Announcing for Football.....	1
M ST 230	Radio Broadcasting.....	5
	Social Science Distribution .....	5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II .....	5
M ST 127	Sports Announcing for Basketball.....	1
M ST 231	Adv. Radio Broadcast.....	3
	Health & Fitness Distribution .....	1
	Social Science Distribution .....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CMST& 102	Intro to Mass Media .....	5
M ST 128	Sports Announcing for Baseball.....	1
M ST 220	Intro to Broadcast News & Production....	4
	Health & Fitness Distribution .....	1
	Science Distribution .....	5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
M ST 260	Television Broadcasting And Production .....	5
CMST& 220	Public Speaking.....	5
	Quantitative Skills Distribution .....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
DRMA 107	Beginning Acting .....	5
M ST 261	TV and Video Production.....	5
	Science Distribution .....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
M ST 262	Television Production.....	5
	Health & Fitness Distribution .....	1
	Science Distribution .....	5
	Social Science Distribution .....	5
		<b>16</b>

# MEDICINE

See Pre-Medicine, Pre-Dentistry

# METEOROLOGY

See Earth Science

# NATURAL RESOURCE MANAGEMENT

**Emphasis:** Forestry, Fisheries, Wildlife Management

**Degree:** Associate in Arts

**PURPOSE:** This AA emphasis prepares students for transfer into Natural Resource Management professional programs typically with very specific coursework for a bachelor's degree.

To prepare for a program in forestry, fisheries, or wildlife management students should take at least two quarters of Calculus and one quarter of Introduction to Stats.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I .....	5
GEOL& 101	Intro to Physical Geology.....	5
	Social Science Distribution** .....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II .....	5
ENVS 170	Intro to Natural Resources.....	5
MATH& 146	Introduction to Stats .....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
BOTA 150	Dendrology-Trees in our Environ.....	5
GEOL& 208	Geology of Pacific NW* .....	5
CHEM& 121	Intro to Chemistry .....	5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
BIOL& 221	Majors Ecology/Evolution .....	5
	Humanities Distribution .....	5
	Social Science Distribution .....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
BIOL& 222	Majors Cell/Molecular .....	5
	Humanities Distribution .....	5
	Social Science Distribution .....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
BIOL& 223	Majors Organismal Phys.....	5
	Elective.....	2
	Health & Fitness Distribution .....	3
	Humanities Distribution .....	5
		<b>15</b>

\* GEOL& 208 Offered every other year.

# MUSIC

**Emphasis:** Music

**Degree:** Associate in Music

**PURPOSE:** The Associate in Music degree is for students who plan to transfer to a four-year college or university to pursue a bachelor's degree in with a major in music. This degree provides a solid liberal arts foundation, in addition to the courses required to complete the first two years of a bachelor's degree in music. Students who complete the Associate in Music degree, who have also met any specific institutional GPA, performance, and audition requirements, will be regarded as having met the minimum preparation for consideration for admission to a baccalaureate Music program. Baccalaureate institutions will apply the 101-104 quarter credits required to the credits required in the bachelor's degree, subject to institutional policy on the transfer of lower division credits.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
MUSC& 141	Music Theory I *	5
MUSC 150	Functional Piano I	1
	Applied Music (course number varies)	1
	Ensemble (course number varies)	2
	Social Science Distribution	5
		<b>14</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I	5
MUSC& 142	Music Theory II	5
MUSC 151	Functional Piano II	1
	Applied Music (course number varies)	1
	Ensemble (course number varies)	2
	Science Distribution **	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II	5
MATH& 107	Math in Society	5
MUSC& 143	Music Theory III	5
MUSC& 152	Functional Piano III	1
	Applied Music (course number varies)	1
	Ensemble (course number varies)	2
		<b>19</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
MUSC& 241	Music Theory IV	5
	Applied Music (course number varies)	1
	Ensemble (course number varies)	2
	Science Distribution **	5
	Social Science Distribution	5
		<b>18</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
MUSC& 242	Music Theory V	5
	Applied Music (course number varies)	1
	Ensemble (course number varies)	2
	Health & Fitness Distribution	3
	Social Science Distribution	5
		<b>16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
MUSC& 243	Music Theory VI	5
	Applied Music (course number varies)	1
	Ensemble (course number varies)	2
	Humanities Distribution	5
	Science Distribution **	5
		<b>18</b>

\* Students must place into MUSC& 141 or take MUSC 100 before MUSC& 141.

\*\* At least one Science Distribution class must include a lab component.

# NATURAL RESOURCE MANAGEMENT

**Emphasis:** Forestry, Fisheries, Wildlife Management  
**Degree:** Associate in Arts

**PURPOSE:** The AA emphasis prepares students for transfer into Natural Resource Management professional programs typically with very specific coursework for a bachelor's degree.

To prepare for a program in forestry, fisheries, or wildlife management students should take at least two quarters of Calculus and one quarter of Introduction to Stats. Natural Science requirements vary among transfer institutions. Some require only 10 credits of BIOL& 221, 222, 223 while others also require CHEM& 131. Consult your advisor as you plan your curriculum and coordinate your program with the requirements of the institution to which you plan to transfer.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I .....	5
GEOL& 101	Intro to Physical Geology.....	5
Social Science Distribution** .....		5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II .....	5
ENVS 170	Intro to Natural Resources.....	5
MATH& 146	Introduction to Stats .....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
BOTA 150	Dendrology-Trees in our Environ.....	5
GEOL& 208	Geology of Pacific NW* .....	5
CHEM& 121	Intro to Chemistry .....	5
		<b>5</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
BIOL& 221	Majors Ecology/Evolution .....	5
Humanities Distribution .....		5
Social Science Distribution .....		5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
BIOL& 222	Majors Cell/Molecular .....	5
Humanities Distribution .....		5
Social Science Distribution .....		5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
BIOL& 223	Majors Organismal Phys.....	5
Elective .....		2
Health & Fitness Distribution .....		3
Humanities Distribution .....		5
		<b>15</b>

\* GEOL& 208 Offered every other year.

# NURSING – REGISTERED

**Major:** Nursing

**Degree:** Associate in Applied Science – Transfer

**PURPOSE:** The RN nursing program at Centralia College is designed to prepare men and women to give nursing care in a variety of health care settings. Students who complete the RN program are eligible to take the National Council Licensure Examination for Registered Nursing (NCLEX-RN). In addition to preparing a student to compete for employment in the nursing profession, the AAS-T degree provides science and general education courses appropriate for students planning a future transfer directly into selected Bachelor of Science in Nursing (BSN) programs.

A maximum of 24 students are selected each year for the RN program. RN students must apply for admission to the program. Students wishing to enter the RN program must meet all of the prerequisite courses, grade point average requirements, and have Nurse Aide Certification in Washington State. Complete RN admission application materials are available through the Centralia College Office of Admissions & Records. Applications are due in April; course completed through spring quarter will be considered. (Subject to change.)

If you are admitted to the RN program, you must then provide consent forms and immunization records to the Nursing Director and attend a mandatory orientation session. Before beginning clinicals, Nationwide and Washington State specific background checks will be obtained. This includes a criminal records check required by clinical facilities in order to be at those clinical sites. You also must show proof of current Basic Life Support (BLS) for Health Care Providers (HCP).

**PROGRAM OUTCOMES:** Students who successfully complete this program should be able to meet the Program Objectives associated with the following nursing roles:

- **Caregiver** – Provides nursing care interventions that demonstrate safety and a personal sense of accountability and commitment.
- **Decision Maker** – Uses decision making as a purposeful, self-regulated process that incorporates critical thinking in the consideration of evidence, contexts, conceptualizations, methods and criteria.
- **Communicator** – Demonstrates interactive communication processes (verbal, non-verbal, written, or through technology) that express advocacy, caring, compassion and cultural awareness.
- **Teacher** – Transmits health information, evaluates responses to teaching, and modifies teaching based on identified responses to promote and facilitate informed decision making, achieve positive outcomes and support self-care activities.

- **Manager/Leader** – Uses human, physical, financial and technological resources efficiently and effectively to meet client needs and support organizational outcomes. Possesses the ability to guide, teach, motivate, direct, and influence others to attain goals through cooperation and open professional communication in shared planning, decision making, problem solving and goal setting.
- **Professional** – Respects individual rights and professional standards, adheres to the nurse practice act and demonstrates honesty and integrity in behaviors characterized by commitment to others, appreciation for the values of the nursing profession, and participation in professional development activities.
- **Researcher** – Applies the scientific method to gain new knowledge, discover solutions to problems, advance the profession of nursing, and improve the delivery of nursing and health care.

<i>Prerequisites</i>		<i>Credits</i>
CHEM& 121	Intro to Chemistry .....	5
ENGL& 101	English Composition I .....	5
MATH& 146	Introduction to Stats .....	5
PSYC& 200	Lifespan Psychology .....	5
BIOL& 241	Human A & P 1 .....	5
BIOL& 242	Human A & P 2 .....	5
NAC Certification		

<i>Core Requirements</i>		<i>Credits</i>
Courses which are recommended to be taken prior to admission into the Nursing Program.		
BIOL& 260	Microbiology .....	5
CMST& 220	Public Speaking .....	5
ANTH& 206	Cultural Anthropology .....	OR
SOC& 101	Intro to Sociology .....	5
Health & Fitness Distribution .....		3

## NURSING COURSES

<i>First Year, Fall Quarter</i>		<i>Credits</i>
NURS 101	Basic Nursing Care Concepts .....	12

<i>First Year, Winter Quarter</i>		<i>Credits</i>
NURS 102	Common Alterations I .....	12

<i>First Year, Spring Quarter</i>		<i>Credits</i>
NURS 103	Common Alterations II .....	12

<i>Second Year, Fall Quarter</i>		<i>Credits</i>
NURS 201	Mental Health and Lifespan .....	10
NURS 220	Management & Leadership .....	2
		<b>12</b>

<i>Second Year, Winter Quarter</i>		<i>Credits</i>
NURS 202	Complex Alterations .....	12

<i>Second Year, Spring Quarter</i>		<i>Credits</i>
NURS 203	Complex Management .....	8
NURS 222	Transition to Practice .....	4
		<b>12</b>



# MEDICAL ASSISTANT

**Emphasis:** Medical Assistant

**Degree:** Associate in Applied Science

**Total Credits:** 92

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** Medical Assistants are multi-skilled practitioners who perform a wide range of skills in physicians' offices and other health care settings. Program graduates assist physicians and other health care practitioners on many aspects of medical practice, including patient care management, administrative, and clinical procedures. Clinical procedures include: assisting with physical examinations, phlebotomy, administering injections, performing electrocardiograms (EKGs) and instrument sterilization.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Perform administrative tasks using computer software to research and organize data for medical information systems.
- Efficiently maintain accurate and well-organized patient medical records.
- Effectively use oral and written communication skills as they relate to a medical office environment.
- Perform within legal and ethical boundaries, including issues of patient confidentiality.
- Recognize the impact of cultural differences in care of patients.
- Use problem-solving and critical thinking to identify proper medical office procedures and processes, including infection control guidelines (Standard Precautions) as determined by the Center for Disease Control and the Occupational Safety and Health Administration.
- Prepare and maintain examination and treatment areas.
- Prepare a patient for and assist with routine and specialty examinations and procedures, including obtaining and documenting vital signs and body measurements.
- Apply knowledge of basic pharmacology and medication administration.
- Apply knowledge of laboratory procedures performed in the medical office laboratory, including venipuncture and capillary puncture.
- Recognize and be able to respond to medical office emergencies within the scope of training.
- Maintain medical office equipment and supplies.

**Prerequisites include:**

Demonstrated proficiency in math, reading, English, and basic keyboarding skills.

NOTE: MATH 096 is the prerequisite to MA 130 Medical Math.

**Suggested Order of Classes**

<i>Fall Quarter, First Year</i>			<i>Credits</i>
HLSV	121	Introduction to Healthcare .....	2
ENGL&	101	English Composition I .....	5
BTEC	102	Skillbuilding I .....	3
MA	139	MA Medical Terminology .....	5
			<b>15</b>

<i>Winter Quarter, First Year</i>			<i>Credits</i>
HR	110	Human Relations-Workplace .....	5
BIOL&	170	Human Biology .....	5
BIOL	172	Human Biology Lab .....	1
MA	140	Medical Assisting Intro .....	5
			<b>16</b>

<i>Spring Quarter, First Year</i>			<i>Credits</i>
PSYC&	100	General Psychology .....	5
MA	130	Medical Math .....	5
BTEC	266	Medical Law & Ethics .....	3
Health & Fitness Distribution .....			3
			<b>16</b>

**Prerequisites for 2nd year:**

MA 130, MA 139, MA 140, BIOL& 170, BIOL 172;  
2.5 in each prerequisite course; cumulative 2.5 GPA.

**Apply for Medical Assistant Year 2**

<i>Fall Quarter, Second Year</i>			<i>Credits</i>
MA	241	MA Clinical Procedures I .....	10
MA	249	MA Admin Procedures .....	8
			<b>18</b>

<i>Winter Quarter, Second Year</i>			<i>Credits</i>
MA	242	Medication Administration .....	6
MA	246	MA Laboratory Procedures .....	5
HLSV	110	Basic Life Support for Healthcare .....	1
			<b>12</b>

<i>Spring Quarter, Second Year</i>			<i>Credits</i>
MA	243	MA Clinical Procedures II .....	6
MA	244	MA Externship Seminar .....	1
MA	245	MA Clinical Externship .....	6
MA	208	ECG .....	2
			<b>15</b>

# PRE-NURSING DTA

**Emphasis:** Pre-Nursing

**Degree:** Associate in Pre-Nursing – MRP

**PURPOSE:** The Associate in Arts degree with Pre-Nursing emphasis is designed for students who intend to pursue a Bachelor of Science in Nursing (BSN) degree from a baccalaureate institution. The educational plan provides courses identified by both public and private colleges and universities to prepare students for further study in the field of nursing. Admission to all nursing programs in Washington State is highly competitive. Completing this program of study will prepare students to transfer with junior standing to most four-year colleges and universities in Washington State but does NOT guarantee admission to the Nursing program.

Students are urged to consult an advisor and refer to admission requirements for individual baccalaureate institutions for specific requirements and admission criteria.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I.....	5
MATH& 146	Introduction to Stats.....	5
	Health & Fitness Distribution.....	1
	Humanities Distribution.....	5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
BIOL& 100	Survey of Biology.....OR	
BIOL& 170	Human Biology.....	5
CHEM& 121	Intro to Chemistry.....	5
PSYC& 100	General Psychology.....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CHEM& 131	Intro to Organic/Biochemistry.....	5
ENGL& 102	Composition II.....	5
PSYC& 200	Lifespan Psychology.....	5
	Health & Fitness Distribution.....	1
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
HUM 110	Ethics & Cultural Values.....	5
NUTR& 101	Nutrition.....	5
BIOL& 241	Human A & P 1.....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
SOC& 101	Intro to Sociology.....	5
CMST& 220	Public Speaking.....	5
BIOL& 242	Human A & P 2.....	5
	Health & Fitness Distribution.....	1
		<b>16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
BIOL& 260	Microbiology.....	5
BIOL 243	Adv. Topics Human A & P.....	5
	Elective.....	5
		<b>15</b>

It is strongly recommended that students confer with an advisor at their potential transfer baccalaureate institution to determine the courses that best support or may be prerequisites for their BSN program.

BIOL 243, although not required, is strongly recommended.

# PHLEBOTOMY

**Emphasis:** Phlebotomy  
**Degree:** Certificate of Proficiency  
**Total Credits:** 45  
**Class Type:** Lecture, Lab

**PURPOSE:** Laboratory procedures and regulation as set forth by federal standards will be the focus of this program. Students will be taught how to perform clinical laboratory testing that is within their scope of practice. Phlebotomy training will be a major emphasis in this program with hands on practice and dexterity for successful and safe venipuncture. Other common lab tests performed in clinical settings will be learned.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Competently collect blood via venipuncture, syringe, butterfly and arterial draws as well as other biological specimens and substances.
- Recognize the legal and ethical standards in the laboratory setting.
- Understand factors that can affect procedures and results of specimen testing.
- Know laboratory safety and take appropriate actions on safety.
- Display professionalism and interpersonal skills with patients, laboratory personnel as well as other health care providers.
- Recognize the responsibilities of a phlebotomist in the working laboratory.

NOTE: MATH 096 is the prerequisite to MA 130 Medical Math unless Compass score places student directly into college level math.

Students must receive a 2.5 GPA or higher in PHLE 132 Advanced Phlebotomy to receive a certificate in the program.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>			<i>Credits</i>
HR	110	Human Relations-Workplace.....	5
BIOL&	170	Human Biology.....	5
BIOL	172	Human Biology Lab .....	1
MA	139	Medical Terminology.....	5
			<b>16</b>

<i>Winter Quarter, First Year</i>			<i>Credits</i>
PHLE	131	Intro to Phlebotomy Tech .....	5
WRT	105	Writing in the Workplace .....	5
MA	130	Medical Math .....	5
			<b>15</b>

<i>Spring Quarter, First Year</i>			<i>Credits</i>
PHLE	132	Advanced Phlebotomy.....	8
BTEC	160	Records Confidentiality-HIPAA .....	1
AHC	161	HIV/AIDS Awareness.....	1
NURS	210	BLS for Healthcare Providers .....	1
Health & Fitness Distribution .....			3
			<b>14</b>

For students who have taken prerequisites for the Nursing Program, class substitutions may apply.

Recommended elective: PSYC& 200

---

# PHARMACY

See Pre-Pharmacy

# PHYSICAL EDUCATION

**Emphasis:** Teacher Education

**Degree:** Associate in Arts

**PURPOSE:** The Teacher Education plan is designed for students wanting to transfer to a four-year college or university to complete a bachelor's degree. The plan is well suited for students preparing for a career in education.

## Suggested Order of Classes

### Fall Quarter, First Year Credits

ENGL& 101	English Composition I.....	5
MATH& 107	Math in Society.....	5
PSYC& 100	General Psychology .....	5
		<b>15</b>

### Winter Quarter, First Year Credits

CHEM& 121	Intro to Chemistry .....	5
ENGL& 102	Composition II .....	5
NUTR& 101	Nutrition.....	5
		<b>15</b>

### Spring Quarter, First Year Credits

BIOL& 170	Human Biology.....	5
CMST& 220	Public Speaking.....	5
PE 229	Physical Fitness Concepts.....	3
Humanities Distribution .....		5
		<b>18</b>

### Fall Quarter, Second Year Credits

BIOL& 241	Human A & P 1.....	5
HLTH 140	Exercise & Nutrition .....	3
SOC& 101	Intro to Sociology .....	5
		<b>13</b>

### Winter Quarter, Second Year Credits

BIOL& 242	Human A & P 2.....	5
EDUC& 201	Intro to Education.....	3
EDUC 202	Classroom Observation .....	2
HLTH 130	Health & Wellness .....	3
		<b>13</b>

### Spring Quarter, Second Year Credits

HLTH 154	First Aid/CPR.....	1
PSYC& 200	Lifespan Psychology .....	5
Humanities Distribution .....		5
Social Science Distribution .....		5
		<b>16</b>

# PHYSICAL EDUCATION

**Emphasis:** Exercise Science

**Degree:** Associate in Arts

**PURPOSE:** The Associate in Arts degree with an emphasis in Exercise Science is designed for students wanting to transfer to a four-year college or university to complete a bachelor's degree. This educational plan is well suited for students preparing for a career in exercise science.

## Suggested Order of Classes

### Fall Quarter, First Year Credits

ENGL& 101	English Composition I.....	5
MATH& 146	Introduction to Stats .....	5
PSYC& 100	General Psychology .....	5
		<b>15</b>

### Winter Quarter, First Year Credits

CHEM& 121	Intro to Chemistry .....	5
ENGL& 102	Composition II .....	5
NUTR& 101	Nutrition.....	5
		<b>15</b>

### Spring Quarter, First Year Credits

BIOL& 170	Human Biology.....	5
CMST& 220	Public Speaking.....	5
PE 229	Physical Fitness Concepts.....	3
Humanities Distribution .....		5
		<b>18</b>

### Fall Quarter, Second Year Credits

BIOL& 241	Human A & P 1.....	5
HLTH 140	Exercise & Nutrition .....	3
HLTH 154	First Aid/CPR.....	1
SOC& 101	Intro to Sociology .....	5
		<b>14</b>

### Winter Quarter, Second Year Credits

BIOL& 242	Human A & P 2.....	5
HLTH 130	Health & Wellness .....	3
PSYC& 220	Abnormal Psychology.....	5
		<b>15</b>

### Spring Quarter, Second Year Credits

CHEM& 131	Intro to Organic/Biochemistry .....	5
Humanities Distribution .....		5
Social Science Distribution .....		5
		<b>15</b>

# PHYSICS

**Emphasis:** Physics

**Degree:** Associate in Science

**PURPOSE:** The Associate in Science, Track 2, with an emphasis in physics is designed for students transferring to a four-year college or university to complete a degree in physics.

If you are not well prepared in high school mathematics and science, you should plan, with your advisor, a three-year program at Centralia College in preparation for transfer to a four-year college or university.

The emphasis in the first year at Centralia should be on strengthening skills in mathematics, basic sciences, communications, and reading.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
CHEM& 161	General Chemistry w/lab I.....	6
ENGL& 101	English Composition I.....	5
Health & Fitness Distribution .....		3
		<b>14</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
CHEM& 162	General Chemistry w/lab II.....	6
ENGL& 235	Technical Writing .....	5
MATH& 151	Calculus I.....	5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CHEM& 163	General Chemistry w/lab III.....	6
MATH& 152	Calculus II.....	5
Humanities Distribution .....		OR
Social Science Distribution .....		5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
MATH 118	Linear Algebra .....	5
PHYS& 221	Engineering Physics I .....	5
Humanities Distribution .....		OR
Social Science Distribution .....		5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ENGR 203	Applied Numerical Methods .....	5
MATH& 163	Calculus III .....	5
PHYS& 222	Engineering Physics II .....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
MATH 212	Differential Equations .....	5
MATH 264	Calculus IV .....	3
PHYS& 223	Engineering Physics III .....	5
Humanities Distribution .....		OR
Social Science Distribution .....		5
		<b>18</b>

A minimum of 15 credits in Humanities and Social Science are required. See Associate in Science Degree description.

# PRE-CHIROPRACTIC PRE-PHYSICAL THERAPY

**Emphasis:** Pre-Chiropractic, Pre-Physical Therapy

**Degree:** Associate in Science

**PURPOSE:** The Pre-Chiropractic, Pre-Physical Therapy program is intended for persons who plan to pursue a professional career in chiropractic or physical therapy.

The plan of study presents a challenging blend of natural and physical sciences and can be tailored to meet individual needs. If you complete the courses recommended, you are reasonably assured of being able to transfer with junior standing to most colleges and universities in Washington State. Students interested in physical therapy should be aware that a master's degree is required for entry into professional practice. You are urged to consult with your advisor as you plan your curriculum and select electives. This will allow your advisor to coordinate your program with the requirements of the institution to which you expect to transfer.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
BIOL& 221	Majors Ecology/Evolution .....	5
CHEM& 161	General Chemistry w/lab I .....	6
ENGL& 101	Composition I .....	5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
BIOL& 222	Majors Cell/Molecular .....	5
CHEM& 162	General Chemistry w/lab II .....	6
MATH& 151	Calculus I .....	5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
BIOL& 223	Majors Organismal Phys.....	5
CHEM& 163	General Chemistry w/lab III .....	6
MATH& 152	Calculus II.....	5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
BIOL& 241	Human A & P 1 .....	OR
PHYS& 221	Engineering Physics I .....	5
Health & Fitness Distribution .....		3
Social Science Distribution .....		5
		<b>13</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
BIOL& 242	Human A & P 2 .....	OR
PHYS& 222	Engineering Physics II .....	5
MATH& 146	Introduction to Stats .....	5
Humanities Distribution .....		5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
BIOL& 243	Adv. Topics Human A & P .....	OR
PHYS& 223	Engineering Physics III .....	5
Social Science or Humanities Distribution .....		5
Elective .....		5
		<b>15</b>

### *Science electives:*

BIOL& 221, 222, 223 Majors

BIOL& 241, 242, 243 Human A & P w/lab I-III

CHEM& 261, 262, 263 Organic Chem w/lab i-III

PHYS& 221, 222, 223 Engineering Physics I-III

# PRE-DENTAL HYGIENE

**Degree:** Associate in Arts

**PURPOSE:** The Pre-Dental Hygiene program provides appropriate science and general education courses for persons transferring to either a two- or four-year dental hygiene program. You may prepare for the program by completing high school chemistry, biology, and algebra or BIOL& 100 and MATH 098. Since there may be differences in prerequisites or curricula for dental hygiene programs at various colleges, you need to contact your advisor or the institution to which you will apply for specific details.

You may also be required to complete the Dental Hygiene Aptitude Test. Your advisor will help you set an educational plan to complete this program of study.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
CHEM& 121	Intro to Chemistry .....	5
ENGL& 101	English Composition I .....	5
MATH& 107	Math in Society .....	OR
MATH& 146	Introduction to Stats .....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II .....	5
SOC& 101	Intro to Sociology .....	5
Humanities Distribution .....		5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
BIOL& 170	Human Biology .....	5
CHEM& 131	Intro to Organic/Biochemistry .....	5
PSYC& 100	General Psychology .....	5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
BIOL& 241	Human A & P 1 .....	5
NUTR& 101	Nutrition .....	5
Humanities Distribution .....		5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
BIOL& 242	Human A & P 2 .....	5
CMST& 220	Public Speaking .....	5
Social Science Distribution .....		5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
BIOL& 260	Microbiology .....	5
HLTH 145	Safety & Fitness .....	3
Diversity Elective .....		5
Elective .....		3-5
		<b>16-18</b>

It is strongly recommended that students confer with an advisor at their potential transfer institution to determine the courses that best support or may be prerequisites for their program.

Not all transfer institutions require an AA degree. Students should check their transfer institutions to determine their specific program requirements.

BIOL 243, although not required, is strongly recommended.

# PRE-PHARMACY

**Degree:** Associate in Science

**PURPOSE:** The Pre-Pharmacy program is intended for students who plan to pursue a professional career in pharmacy. The plan of study presents a challenging blend of natural and physical sciences and can be tailored to meet individual needs.

If you complete the program outlined, you are reasonably assured of being able to transfer with junior standing to most colleges and universities in Washington State. You are urged to consult with your advisor as you plan your curriculum and select electives. This will allow your advisor to coordinate your program with the requirements of the institution to which you expect to transfer.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
BIOL& 221	Majors Ecology/Evolution .....	5
CHEM& 161	General Chemistry w/lab I .....	6
ENGL& 101	English Composition I .....	5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
BIOL& 222	Majors Cell/Molecular .....	5
CHEM& 162	General Chemistry w/lab II .....	6
MATH& 151	Calculus I .....	5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
BIOL& 223	Majors Organismal Phys.....	5
CHEM& 163	General Chemistry w/lab III .....	6
MATH& 152	Calculus II.....	5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
Biology/Chemistry sequence* .....		5-6
Social Science Distribution* .....		5
Health & Fitness Distribution .....		3
		<b>13-14</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
Biology/Chemistry sequence* .....		5-6
MATH& 146	Introduction to Stats .....	5
Humanities Distribution* .....		5
		<b>15-16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
Biology/Chemistry sequence*** .....		5-6
Social Science or Humanities Distribution .....		5
Elective .....		5
		<b>15-16</b>

### *Science electives:*

BIOL& 241, 242, 243 Human A & P w/lab I-III;  
CHEM& 261, 262, 263 Organic Chem w/lab I-III;  
PHYS& 221, 222, 223 Engineering Physics I-III

\* Biology majors should select Organic Chemistry or Anatomy & Physiology (BIOL& 241, 242) and Microbiology (BIOL& 260) for second year sequence.



# PRE-MEDICINE, PRE-DENTISTRY

**Degree:** Associate in Science

**PURPOSE:** The Pre-Medicine, Pre-Dentistry program is intended for persons who wish to prepare for a career in a medical profession. Medical schools do not give higher priority to a given major field of study when selecting candidates.

You are therefore encouraged to formulate a program of study which is scholastically challenging and which can be the basis for a future career or for graduate study in the event you are not admitted to a medical school. The program outlined below provides a solid foundation in the natural and physical sciences. If you complete this program of study, you are reasonably assured of being able to transfer with junior standing to most four-year colleges and universities in Washington State.

Consult with an advisor as you plan your curriculum and select electives. This will allow you to coordinate your program with the requirements of your intended major at the institution to which you expect to transfer.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
BIOL& 221	Majors Ecology/Evolution .....	OR
PHYS& 221	Engineering Physics I.....	5
CHEM& 161	General Chemistry w/lab I .....	6
ENGL& 101	Composition I.....	5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
BIOL& 222	Majors Cell/Molecular .....	OR
PHYS& 222	Engineering Physics II .....	5
CHEM& 162	General Chemistry w/lab II .....	6
MATH& 151	Calculus I.....	5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
BIOL& 223	Majors Organismal Phys.....	OR
PHYS& 223	Engineering Physics III .....	5
CHEM& 163	General Chemistry w/lab III .....	6
MATH& 152	Calculus II.....	5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
Biology/Chemistry/Physics sequence*.....		5-6
PSYC& 100	General Psychology .....	5
HUM 110	Ethics and Cultural Values .....	5
		<b>15-16</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
Biology/Chemistry/Physics sequence*.....		5-6
MATH& 146	Introduction to Stats .....	OR
MATH& 163	Calculus III .....	5
CMST& 220	Public Speaking.....	5
		<b>15-16</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
Biology/Chemistry/Physics sequence*.....		5-6
SOC& 101	Intro to Sociology .....	5
Health & Fitness Distribution .....		3
		<b>13-14</b>

### *Science electives:*

BIOL& 221, 222, 223 Majors;  
 BIOL& 241, 242, 243 Human A & P w/lab I-III;  
 BIOL& 260 Microbiology;  
 CHEM& 261, 262, 263 Organic Chemistry w/lab I-III;  
 PHYS& 221, 222, 223 Engineering Physics I-III

\* Some baccalaureate institutions require physics with calculus. Biology majors should select Organic Chemistry or Physics for second year sequence.

# PRE-VETERINARY MEDICINE

**Degree:** Associate in Science

**PURPOSE:** The Pre-Veterinary Medicine program is intended for persons who plan to pursue a professional career. The plan of study presents a challenging blend of natural and physical sciences and can be used to meet the requirements for an animal science major at Washington State University. If you complete the program outlined below, you are reasonably assured of being able to transfer with junior standing to most colleges and universities in Washington State. You are urged to consult with your advisor as you plan your curriculum and select electives.

This will allow your advisor to coordinate your program with the requirements of the institution to which you expect to transfer.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
BIOL& 221	Majors Ecology/Evolution .....	5
CHEM& 161	General Chemistry w/lab I .....	6
ENGL& 101	Composition I .....	5
		<b>16</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
BIOL& 222	Majors Cell/Molecular .....	5
CHEM& 162	General Chemistry w/lab II .....	6
MATH& 151	Calculus I .....	5
		<b>16</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
BIOL& 223	Majors Organismal Phys.....	5
CHEM& 163	General Chem w/lab III .....	6
MATH& 152	Calculus II.....	5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
CHEM& 261	Organic Chemistry w/lab I.....	5
Social Science Distribution .....		5
Health & Fitness Distribution .....		3
		<b>13</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
CHEM& 262	Organic Chemistry w/lab II.....	5
MATH& 146	Introduction to Stats .....	OR
MATH& 163	Calculus III .....	5
CMST& 220	Public Speaking.....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
Science Elective .....		OR
CHEM& 263	Organic Chemistry w/lab III .....	5
Social Science or Humanities Distribution .....		5
Elective.....		5
		<b>15</b>

# PSYCHOLOGY

**Emphasis:** Psychology

**Degree:** Associate in Arts

**PURPOSE:** The Associate in Arts with an emphasis in psychology is for students interested in transferring to a four-year institution. This educational plan addresses issues of human behavior and thought, provides the opportunity to gain fuller understanding of one's self and others, and develops skills in human relations, communication, research, and analysis.

Emphasis in psychology provides preparation for a variety of careers, and will benefit students majoring in education, nursing, physical and occupational therapy, business, law, medicine, or other disciplines which deal with people. Consult with psychology faculty for additional information.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I.....	5
PSYC& 100	General Psychology.....	5
	Humanities Distribution.....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II.....	5
PSYC& 200	Lifespan Psychology.....	5
	Science Distribution.....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
MATH& 146	Introduction to Stats.....	5
PSYC 210	Personality Theories.....OR	5
PSYC 250	Social Psychology.....	5
	Health & Fitness Distribution.....	1
	Humanities Distribution.....	5
		<b>16</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
	Health & Fitness Distribution.....	1
	Humanities Distribution.....	5
	Science Distribution.....	5
	Social Science Distribution.....	5
		<b>16</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
	Elective.....	5
	Elective.....	5
	Social Science Distribution.....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
	Elective.....	7
	Health & Fitness Distribution.....	1
	Science Distribution.....	5
		<b>13</b>

## Recommended Courses

BIOL& 170	Human Biology,.....	5
CHEM& 121	Intro to Chemistry.....OR	5
CHEM& 161	General Chemistry w/lab I.....	5
PSYC& 220	Abnormal Psychology.....	5
SOC& 101	Intro to Sociology.....	5

Psychology majors are encouraged to develop a broad base in the social sciences.

# SOCIOLOGY

**Emphasis:** Sociology  
**Degree:** Associate in Arts

**PURPOSE:** The AA degree with Sociology emphasis provides a better understanding of what makes people behave the way they do. The focus is on the kinds of groups that people create and on specific interactions that take place as part of the basic social processes. How group activities influence individual members are also analyzed.

By following this sociology program, students gain an adequate foundation to transfer to a four-year college or university. See the sociology faculty advisor for details.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I.....	5
SOC& 101	Intro to Sociology.....	5
	Humanities Distribution* .....	5
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGL& 102	Composition II .....	5
MATH& 146	Introduction to Stats .....	5
	Social Science Distribution .....	5
		<b>15</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
ANTH/SOC225	Cultural & Ethnic Pluralism.....	5
SOC& 201	Social Problems.....	5
	Humanities Distribution .....	5
		<b>15</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
ANTH& 206	Cultural Anthropology .....	5
	Humanities Distribution .....	5
	Science Distribution** .....	5
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ANTH& 210	Indians of North America.....	5
	Elective.....	2
	Health & Fitness Distribution .....	3
	Science Distribution .....	5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
	Elective.....	5
	Science Distribution .....	5
	Social Science Distribution .....	5
		<b>15</b>

\* Recommend a language

\*\* Recommend ENVS& 100

Sociology majors are encouraged to develop a broad base in the social sciences to include:

PSYC& 100	General Psychology
PSYC& 200	Lifespan Psychology

# TECHNOLOGY

**Degree:** Associate in Technology – MRP

**PURPOSE:** This degree is a Major Related Program designed for students transferring to Eastern, Central, or Western Washington Universities to complete one of the bachelors of science in technology degrees, such as Industrial Technology, Mechanical Technology, Applied Technology, technology education, or technology with various options (manufacturing, electronics, design, or construction).

This degree meets the requirements of the Statewide Technology DTA and Engineering Technology AS-T Track 2 (MRP) Agreement.

Elective credits should be planned with the help of an engineering advisor and be based on requirements of the specific program at the baccalaureate institution that the student plans to attend.

This two-year program requires students to be calculus ready by third quarter of the first year. Students not well prepared in high school mathematics and science should plan a three-year program at Centralia College in preparation for transfer to a four-year school. The main emphasis in the first year should be to strengthen mathematics, basic sciences, communication, and reading skills.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
ENGL& 101	English Composition I.....	5
ENGR 100	Intro to Engineering .....	2
MATH& 141	Precalculus* .....	5
Health & Fitness Distribution .....		3
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
ENGR& 111	Engineering Graphics**.....	2
ENGL& 235	Technical Writing .....	5
MATH& 142	Precalculus II* .....	5
Social Science Distribution .....		5
		<b>17</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
CS& 131	Computer Science I C++ .....	OR
CS& 141	Computer Science I Java .....	5
ENGR& 112	Engineering Graphics II** .....	3
MATH& 151	Calculus I.....	5
Humanities Distribution .....		5
		<b>18</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
CHEM& 161	General Chemistry w/lab I.....	6
PHYS& 221	Engineering Physics I.....	5
Humanities Distribution .....		5
		<b>16</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
ENGR 203	Applied Numerical Methods .....	5
PHYS& 222	Engineering Physics II .....	5
Social Science Distribution .....		5
		<b>15</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
CMST& 220	Public Speaking.....	5
PHYS& 223	Engineering Physics III .....	5
Social Science Distribution .....		5
		<b>15</b>

\* Students could take MATH 135 in place of MATH& 141 and 142.

\*\* Students may petition for an independent study or transfer equivalent credits from another college for the following: ENGR& 111 and ENGR& 112.

# TELEVISION

See Media Studies

# THEATER

See Dramatic Arts

# WELDING

**Emphasis:** Welding Technology

**Degree:** Associate in Technical Arts

**Total Credits:** 104

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** The Welding Technology program prepares students to compete for employment as an entry-level welder in building trades, ship building, structural fabrication, automatic and semiautomatic welding, and in maintenance welding.

The Welding Technology ATA program prepares students for advanced welding skills in FCAW (Flux Cored Arc), GTAW (TIG), GMAW (MIG), and SMAW (stick) welding. Students will have the opportunity to gain WABO Welding Certification.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Follow industry safety practices and recognize the effects of welding on health.
- Set-up and adjust SMAW, GMAW, FCAW, GTAW, and oxy-fuel equipment and accessories.
- Apply principles and welding design practices to welding fabrication and inspection.
- Identify and make repairs to finished welds.
- Interpret information on welding blueprints.
- Apply principles of Metallurgy to welding fabrication and inspection.
- Develop basic computer aided drafting skills.
- Perform 3-G and 4-G AWS - WABO welding code qualification tests.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
IT 117	Intro to Windows OS.....	3
WELD 161	SMAW Welding .....	12
WELD 167	Metallurgy for Welders .....	3
Pre-college Math .....		(if needed)
		<b>18</b>

NOTE: GPA of 2.0 or higher is required in any previous WELD classes to continue enrollment each quarter.

<i>Winter Quarter, First Year</i>		<i>Credits</i>
CAD 115	CAD for Industry .....	3
TMATH 116	Industrial Math .....	5
WELD 164	GMAW Welding .....	12
		<b>20</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
DET 166	Shop Skills .....	3
WELD 159	Oxyfuel & GTAW .....	12
WRT 105	Writing in the Workplace .....	5
		<b>20</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
WELD 265	Adv. Arc Welding.....	12
WELD 271	Blueprint Reading.....	3
		<b>15</b>

<i>Winter Quarter, Second Year</i>		<i>Credits</i>
WELD 267	Adv. Gas Shielded Arc Welding.....	12
HR 110	Human Relations-Workplace.....	5
		<b>17</b>

<i>Spring Quarter, Second Year</i>		<i>Credits</i>
HLTH 145	Safety & Fitness .....	3
WELD 269	Advanced Fabrication .....	11
		<b>14</b>

# WELDING

**Emphasis:** Welding Technology (4-quarter program)

**Degree:** Certificate of Proficiency

**Total Credits:** 77

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** The Welding Certificate of Proficiency program prepares students for advanced welding skills in FCAW (Flux Cored Arc), GTAW (TIG), GMAW (MIG) and SMAW (stick) welding. Students will have the opportunity to gain WABO Welding Certification.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Follow industry safety practices and recognize the effects of welding on health.
- Set-up and adjust SMAW, GMAW, FCAW, GTAW, and oxy-fuel equipment and accessories.
- Apply principles and welding design practices to welding fabrication and inspection.
- Identify and make repairs on finished welds.
- Interpret information on welding blueprints.
- Apply the principles of Metallurgy to welding fabrication and inspection.
- Develop basic computer aided drafting skills.
- Perform 3-G and 4-G AWS –WABO welding code qualification tests.

## Suggested Order of Classes

<i>Fall Quarter, First Year</i>		<i>Credits</i>
WELD 161	SMAW Welding .....	12
WELD 167	Metallurgy for Welders .....	3
Pre-college Math .....		(if needed)
		<b>15</b>

<i>Winter Quarter, First Year</i>		<i>Credits</i>
CAD 115	CAD for Industry .....	3
TMATH 116	Industrial Math .....	5
WELD 164	GMAW Welding .....	12
		<b>20</b>

<i>Spring Quarter, First Year</i>		<i>Credits</i>
DET 166	Shop Skills .....	3
WELD 159	Oxyfuel & GTAW .....	12
WRT 105	Writing in the Workplace .....	5
		<b>20</b>

<i>Fall Quarter, Second Year</i>		<i>Credits</i>
HLTH 145	Safety and Fitness* .....	3
HR 110	Human Relations-Workplace* .....	5
WELD 265	Advanced Arc Welding .....	11
WELD 271	Blueprint Reading for Welders .....	3
		<b>22</b>

Completion of HR 110 Human Relations-Workplace and HLTH 145 Safety & Fitness is required and may be completed during any quarter.

# WELDING

**Emphasis:** Welding (Evening)

**Degree:** Certificate of Proficiency

**Total Credits:** 77

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** Students who complete the following 20 credits will be awarded a certificate of completion in Welding Fundamentals (this certificate can be completed entirely in the evening). These courses will be offered in the evening every fall, winter, and spring quarters.

**PROGRAM OUTCOMES:** Students who successfully complete this program will have demonstrated the ability to:

- Follow industry safety practices and recognize the effects of welding on health.
- Set-up and adjust SMAW, GMAW, FCAW, GTAW, and oxy-fuel equipment and accessories.
- Identify and make repairs to finished welds.
- Perform 3-G and 4-G AWS- WABO welding code qualification tests.

## Suggested Order of Classes

### Fall Quarter, First Year

			<i>Credits</i>
WELD	180	Oxyfuel & GTAW .....	5
WELD	181	Shielded Metal Arc Welding .....	5
WELD	182	Gas Metal Arc Welding.....	5
WELD	285	Arc Welding Certification.....	5

### Winter Quarter (choose one of the following)

WELD	180	Oxyfuel & GTAW .....	5
WELD	181	Shielded Metal Arc Welding .....	5
WELD	182	Gas Metal Arc Welding.....	5
WELD	285	Arc Welding Certification.....	5

### Spring Quarter (choose one of the following)

WELD	180	Oxyacetylene and GTAW.....	5
WELD	181	Shielded Metal Arc Welding .....	5
WELD	182	Gas Metal Arc Welding.....	5
WELD	285	Arc Welding Certification.....	5

### Summer Quarter (choose one of the following)

WELD	180	Oxyacetylene and GTAW.....	5
WELD	181	Shielded Metal Arc Welding .....	5
WELD	182	Gas Metal Arc Welding.....	5
WELD	285	Arc Welding Certification.....	5

When students complete WELD 180, 181, 182, 285 for a total of 20 credits, they will receive a certificate of completion.



# COURSE DESCRIPTIONS

## DISTRIBUTION REQUIREMENTS

Courses meeting distribution requirements are designated after the course titles in the following manner:

C = Communication Skills

D = Diversity

H = Humanities

M = Math/Quantitative Skills

S = Natural Science

SS = Social Science

HF = Health and Fitness

Courses which are part of a professional/technical program and which might not be considered for transfer by four-year colleges are designated after the course title in the following manner:

PT = Professional/Technical

---

## ACCOUNTING

*ACCT 110*

### **Practical Accounting I (3)**

Emphasizes fundamental principles of double-entry accounting as applied to bookkeeping systems. The course focuses on the development of the accounting cycle for small businesses and professional organizations.

*ACCT 120*

### **Practical Accounting II (3)**

Accounting theory as applied to bookkeeping systems of small businesses and professional organizations. Focuses on accounting for payroll, merchandise sales and purchases, cash receipts and payments, preparation of the worksheet and annual financial statements. Prerequisite: ACCT 110.

*ACCT 130*

### **Basic Computer Accounting (3)**

Accounting experience on a personal computer using QuickBooks Pro software. Reinforces procedures learned in ACCT 110 and 120 or ACCT& 201. Students use QuickBooks Pro software to record transactions, prepare financial statements, and payroll. Prerequisite: ACCT& 201 or ACCT 110 and 120.

*ACCT 200*

### **Financial Reporting (5)**

This course emphasizes the fundamentals of double-entry accounting and the preparation of financial statements for business entities. Topics include, but are not limited to, accounting for assets, liabilities, equity, revenue and expenses. Prerequisite: compass minimum score of MATH 096 or evidenced score entrance equivalent.

*ACCT& 201*

### **Principles of Accounting I (5)**

This course emphasizes fundamental principles of double-entry accounting and the preparation of financial statements for sole proprietorships. Prerequisite: MATH 098 or equivalent or instructor permission.

*ACCT& 202*

### **Principles of Accounting II (5)**

This course emphasizes accounting for partnerships and corporations. Topics include, but are not limited to, accounting for fixed and intangible asset, payroll, stock, bonds, the statement of cash flows, and financial statement analysis. Prerequisite: ACCT& 201.

ACCT& 203

### **Principles of Accounting III (5)**

This course emphasizes accounting for departments and branches, cost accounting in a manufacturing environment cost-volume-profit analysis, budget preparation and analysis, standard costs, segment reporting, differential costs and revenues, and capital budgeting decisions. Prerequisites: ACCT& 201 and 202 or ACCT 200.

ACCT 210

### **Introduction to Audit (5)**

An introduction to the audit environment as it applies to the professional spectrum of financial accounting and reporting. Prerequisite: ACCT& 203.

ACCT 220

### **Accounting Information Systems (5)**

The application of accounting information systems used in the computing environment. It is intended for the public bookkeeper managing transactional disposition of all accounts, developing financial statements, and maintaining external schedules. Prerequisite: ACCT 201 or instructor permission.

ACCT 240

### **Business Entity Tax (5)**

This course focuses on the determination and disposition of taxation as it applies to business entities, as well as introducing elements of tax planning and research. Prerequisite: ACCT& 203.

ACCT 260

### **Individual Income Taxes (5)**

Introductory course in taxation emphasizing the preparation of individual federal income tax returns. Course focuses on history, economics, social aspects, equity, and structure of the federal income tax laws of the United States. Prerequisite: ACCT& 201.

ACCT 270

### **Payroll Accounting (3)**

ACCT 270 is an introductory course covering aspects of the Fair Labor Standards Act, the Social Security Act, Federal Income Tax withholding laws, and other laws affecting payroll operations and employment practices. Prerequisite: ACCT& 201.

ACCT 285

### **Bookkeeper Certification Course (5)**

This is the capstone course for accounting students participating in the Associate of Technical Arts (ATA) program and culminating in the student candidacy of either the Certified Bookkeeper (CB), Registered Tax Return Preparer (RTRP), or both. Prerequisite: ACCT& 203, ACCT 240.

## **ADULT BASIC EDUCATION**

ABE 003

### **IEL Civics 3 (1-15)**

Introduces beginning and intermediate non-native speakers of English to career pathways within business. Students will learn listening, speaking, reading, writing and math skills through contextualized instruction and use of technology. Prerequisite: valid scores from CASAS pre- or post-tests.

ABE 011, 012, 013, 014, 016

### **English as a Second Language I – V (1-10)**

Students demonstrate knowledge of sound-letter relationships by listening, speaking, reading, and writing the English alphabet. They become familiar with US currency and recognize common forms of print found in the home and environment. Prerequisite: CASA/ESL appraisal test.

ABE 015

### **English as a Second Language Lab (1-6)**

Students will improve listening, speaking, and reading skills while participating in computer assisted learning activities, conversation, and focused listening activities and use of multimedia that will aid them in becoming independent learners. Corequisite: recommended in conjunction with ABE 011, 012, 013, 014, and 016.

ABE 018

### **ABE Integrated Level 1 (1-15)**

Designed for students to learn and/or review beginning grammar, punctuation, spelling, sentence structure, paragraph development, reading comprehension, and math skills in preparation for passing of the GED exam. Prerequisite: CASAS appraisal score 200 and below.

ABE 020

### **Adult Basic Education Orientation (1)**

Includes individual goal setting, an introduction to educational programs offered at CC, placement testing, advising, and educational planning. Prerequisite for all new students to the ABE/ESL programs.

ABE 021, 022, 023

### **Adult Basic Education Level II Reading, Writing, Math (1-5)**

Students will complete Level 2A reading competencies mandated by the Washington State Basic Skills Competency Indicators and CASAS assessment in lab, lecture/lab setting. Prerequisite: CASAS score of 200-210.

ABE 028

### **ABE Integrated Level 2 (1-15)**

Designed for students to learn and/or review beginning grammar, punctuation, spelling, sentence structure, paragraph development, reading comprehension, and math skills in preparation for passing of the GED exam. Prerequisite: CASAS appraisal score 201 to 210.

ABE 030

### **Life and Work Strategies (1-5)**

A life and work skills overview for ABE students. Emphasis is placed on developing skills in learning to learn, communication, thinking, personal management, group effectiveness and leadership. Prerequisite: 2.0 or above on TABE Reading test.

ABE 031, 032, 033

### **Adult Basic Education Level III Reading, Writing, Math (1-5)**

Students will study Level 3 reading competencies mandated by the Washington State Basic Skills Competency Indicators and CASAS assessment in lab, lecture, or lecture/lab setting. Prerequisite: CASAS score of 211-220.

ABE 036

### **ABE II Level 2 Writing (1)**

This course is designed to meet the needs of adults whose English skills are between the fourth and seventh grade level. Assessment will determine each student's starting level. This course is not designed to be completed within one quarter's time span. Students will work only in those areas where they need assistance. Washington State Core Competencies including practical living applications will be emphasized. Prerequisite: successful completion of ABE 022 or placement score between 4.0 and 6.9 on TABE.

ABE 038

### **ABE Integrated Level 3 (1-15)**

Designed for students to learn and/or review intermediate grammar, punctuation, spelling, sentence structure, paragraph development, reading comprehension, and math skills in preparation for passing of the GED exam. Prerequisite: CASAS appraisal score 211 to 220.

ABE 039

### **Job Readiness (1-3)**

Students compare aptitudes, interests and skills against current job market. Emphasis is placed on resume development, job applications and the interview process. Prerequisite: 2.0 or above on the TABE reading test.

ABE 041, 042, 043

### **Adult Basic Education Level IV Reading, Writing, Math (1-5)**

Students will study Level 4 reading competencies mandated by the Washington State Basic Skills Competency Indicators and CASAS assessment in lab, lecture, or lecture/lab setting. Prerequisite: CASAS score of 221-235.

ABE 046

### **Written and Oral Communication (1-5)**

Class participants enhance written and oral communication skills through the introduction of computer skill development and introductory communication skills for the workplace. Prerequisite: CASAS testing with a minimum score of 210.

ABE 048

### **ABE Integrated Level 4 (1-15)**

Designed for students to learn and/or review advanced grammar, punctuation, spelling, sentence structure, paragraph development, reading comprehension, and math skills in preparation for the GED exam. Prerequisite: CASAS appraisal score 221 to 235.

ABE 051, 052, 053

### **Adult Basic Education Level V Reading, Writing, Math (1-5)**

Students will study Level 5 reading competencies mandated by the Washington State Basic Skills Competency Indicators and CASAS assessment in lab, lecture, or lecture/lab setting. Prerequisite: CASAS score of 236-245.

ABE 058

### **ABE Integrated Level 5 (1-15)**

Designed for students to learn and/or review advanced grammar, punctuation, spelling, sentence structure, paragraph development, reading comprehension, and math skills in preparation for the GED exam. Prerequisite: CASAS appraisal score 236 to 245.

ABE 060

### **Key Skills for Success (1-10)**

This course will provide students with targeted skills in areas that will ease their transition into academic and vocational courses or into employment and training. Targeted skills include coursework that addresses personal management, interpersonal communication, career information, college resources, computer basics and help for success within vocational content areas. The instruction in these areas is pre-academic or pre-vocational with the purpose of creating a bridge for students to traditional college courses and services. Prerequisite: CASAS testing.

ABE 061, 062, 063

### **Adult Basic Education Level VI Reading, Writing, Math (1-5)**

Students will study Level 6 reading competencies mandated by the Washington State Basic Skills Competency Indicators and CASAS assessment in lab, lecture, or lecture/lab setting. Prerequisite: CASAS score of 246+.

ABE 068

### **ABE Integrated Level 6 (1-15)**

Designed for students to learn and/or review advanced grammar, punctuation, spelling, sentence structure, paragraph development, reading comprehension, and math skills in preparation for the GED exam. Prerequisite: ABE 058, completion of 3 GED tests or CASAS 246-255.

ABE 080, 081, 082, 083

### **Reading for Civics - Level 1 - 4 (1-3)**

Students develop their reading and comprehension skills focusing on topics that will aid them in becoming better members of the community. Placement is based on CASAS reading scores.

ABE 085

### **Contemporary World Problems (1-5)**

Designed to improve analysis, synthesis, evaluation, and application of text in reading, writing, and thinking within the context of contemporary world problems.

ABE 086

### **Pacific NW History (1-5)**

Designed to improve analysis, synthesis, evaluation, and application of text in reading, writing, and thinking within the context of the U.S. and Northwest history.

ABE 087

### **US Government & Civics (1-5)**

Designed to improve analysis, synthesis, evaluation, and application of text in reading, writing, and thinking within the context of U.S. Civics.

ABE 088

### **US History (1-5)**

Designed to improve analysis, synthesis, evaluation, and application of text in reading, writing, and thinking within the context of U.S. and Northwest history.

ABE 089

### **Health and Nutrition (1-5)**

A review of nutrition and a healthy diet to enhance one's overall health.

ABE 090

### **Health and Exercise (1-5)**

A review of nutrition and exercise to enhance one's overall health.

ABE 092

### **Critical Reading/Writing (1-5)**

Course is designed to improve analysis, synthesis, evaluation, and application of text in reading, writing, and thinking.

ABE 093

### **Fine Arts (1-5)**

Course is designed to improve analysis, synthesis, evaluation, and application of text in reading, writing, and thinking through exploration of the arts.

ABE 094

### **Science Literacy (1-5)**

Course is designed to improve analysis, synthesis, evaluation, and application of text reading, writing, and thinking through exploration of the general fields in science.

ABE 095

### **Occupational Education (1-5)**

Course is designed to improve analysis, synthesis, evaluation, and application of text in reading, writing, and thinking through exploration and implementation of career choices.

ABE 096

### **Science Lit Laboratory (1-5)**

Course is designed to improve analysis, synthesis, evaluation, and application of scientific material/procedure through reading, writing, and exploration- using scientific methodology and evaluation of data.

## **ALLIED HEALTH CARE**

AHC 107

### **Electronic Medical Records (3)**

Provides an overview of medical records as legal documents. Topics include the make-up of an electronic medical record, charting methods, and retention and storage of records. Course includes computerized medical record work. Prerequisite: keyboarding skill, medical terminology.

AHC 160

### **Records Confidentiality - HIPAA (1)**

Overview of general confidentiality considerations and specific rules of the 1966 HIPAA law for healthcare/mental health professions. Explains and illustrates the law, with extensive review of security/privacy of patient information and records.

AHC 161

### **HIV/AIDs Awareness (1)**

Course includes epidemiology pathophysiology, risk behaviors, opportunistic diseases, and diagnostic tests. Transmission, prevention, and current treatment modalities are discussed.

## **AMERICAN SIGN LANGUAGE**

ASL& 121

### **American Sign Language I (5)**

An introductory course in American Sign Language (ASL). Topics covered include visual awareness, vocabulary, basic grammatical principles, comprehension skills, and the historical overview of the deaf community and its language.

ASL& 122

### **American Sign Language II (5)**

Enables students to better use and comprehend ASL by building vocabulary, improving skills of signing, reading of signs, and understanding of the deaf community. Prerequisite: ASL& 121 or instructor permission.

ASL& 123

### **American Sign Language III (5)**

An in-depth study of American Sign Language applications including conversation regulators, classifiers and locatives, directional verbs and cultural information. Prerequisite: ASL& 122.

ASL& 221

### **American Sign Language IV (5)**

Express yourself using not only hands, but the whole body. Emphasizes the beauty of the language of signs; increasing flexibility, reducing inhibitions, and accuracy or expression of the concept as distinct from the words. Prerequisite: ASL& 123 or instructor permission.

## **ANTHROPOLOGY**

ANTH& 100

### **Survey of Anthropology (SS) (D) (5)**

Participate in a four-field approach to the study of the diversity of humans and human cultures. Explore subfields of anthropology: social/cultural anthropology, physical/biological anthropology, archaeology, and anthropological linguistics.

ANTH& 206

### **Cultural Anthropology (SS) (D) (5)**

Explore the whole of the human social and cultural world by means of investigating other people's beliefs and behaviors. Through a cross-cultural perspective we attempt to understand others in order to better learn about ourselves.

ANTH& 210

### **Indians of North America (SS) (D) (5)**

Investigate cultural systems of beliefs, behaviors and technology practiced by native North American peoples. Learn about subsistence patterns, exchange and trading relationships, marriage and the family, political organization, the life cycle, religion, belief and knowledge.

ANTH& 215

### **Bioanthropology w/Lab (S) (5)**

Exploration of human biology, evolution, paleontology, taxonomy, primatology, genetics and human variation. ANTH& 100 or ANTH& 206 highly recommended.

ANTH 225

### **Cultural & Ethnic Pluralism in Contemporary Society (SS) (D) (5)**

Examine ethnicity, ethnic identity, and cultural characteristics of ethnic and social groups in North America and around the world. Understand the relationship between social organization and forms of social, economic, and political domination and subordination.

ANTH 235

### **Myth, Ritual, and Magic (SS) (D) (5)**

Experience the supernatural and religious beliefs of peoples and cultures. Examine different modes of constructing "reality" and "belief" as well as their methods of ritual application in societies worldwide.

ANTH& 236

### **Introduction to Forensic Anthropology (S) (5)**

Students will explore forensic anthropology method and theory, forensic taphonomy theory and practice, research methods, and the processing, analysis, and identification of human remains.

ANTH 260, 261, 262, 263

### **Latin America Field Trip I - IV (D) (5)**

Explore the culture(s) and language(s) of a specific region of Latin American through first-hand experience. Contact instructors or follow Field Trip links on Anthropology or Foreign Language pages of college website for current information. Prerequisite: instructor permission.

## **ART**

ART& 100

### **Art Appreciation (H) (5)**

Introduction to the visual arts. Painting, drawing, sculpture and architecture will be examined as art forms and for their role in human history. Students will be introduced to a variety of art media and techniques.

ART 102

### **Drawing I (H) (5)**

Study the fundamentals of drawing: composition, technique and manipulation of materials, exploration of subject matter. Lectures on contemporary and historical artists support drawing labs.

ART 103

### **Drawing II (5)**

Intermediate level study of the fundamentals of drawing: composition, technique and manipulation of materials, exploration of subject matter. Lectures on contemporary and historical artists support drawing labs. Prerequisite: ART 102 or instructor permission.

ART 104

**Drawing III (5)**

Advanced level study of the fundamentals of drawing: composition, technique and manipulation of materials, exploration of subject matter. Lectures on contemporary and historical artists support drawing labs. Prerequisite: ART 102, 103 or instructor permission.

ART 110

**2D Design (H) (5)**

Learn and utilize the principles of two-dimensional design and its application on a two-dimensional plane through lecture and studio practice.

ART 111

**Sculpture (4)**

An introduction to the fundamentals of three-dimensional design. Assignments include a variety of subject matter and materials. All are welcome.

ART 130

**Computer Graphics (H) (5)**

An overview of computer programs used to create images for print and screen, still and moving. Gain basic skills in design and programs by creating digital art work in a series of assignments.

ART 135

**Graphic Design Layout (H) (5)**

Problem solving in basic type and graphic design. A sequence of studio projects demonstrate students' ability to create, design and prepare art for reproduction. Prerequisite: ART 130 or instructor permission.

ART 136

**Graphic Design II (5)**

Continued problem solving in basic graphic design. A sequence of studio projects demonstrates student's ability to create, design and prepare art for reproduction. Lectures explore graphic design as an art form and as a business. Prerequisite: Art 135 or instructor permission.

ART 151

**Typography (5)**

This course covers the history of type, designing with type, reproduction of type. Type is the foundation for graphic design. Students will apply knowledge gained in a series of studio projects. Prerequisite: ART 110 or permission of instructor.

ART 160

**Introduction to Fibers (H) (5)**

An introduction to fiber art history and techniques with an emphasis on traditional, hand-manipulated processes such as basketry, felting, dyeing and simple loom work.

ART 174

**Digital Photography (H) (5)**

An introduction to digital photography as an expressive art form. Students will explore the creative and technical requirements of digital imaging, as well as examine the contributions of contemporary fine artists working in this medium. Prerequisite: basic computer experience required.

ART 190

**Cooperative Work Experience (1-12)**

See description under COOP 190 for additional information.

ART 200

**Art History: Ancient (D) (H) (5)**

A survey of the development of art in Europe, the Near East and Asia from prehistoric times through the 14th century CE. The course will explore developments in architecture, painting, sculpture and other art forms.

ART 201

**Art History: 15th-17th C (D) (H) (5)**

A survey of the development of art in Pre-Columbian America, Africa and 15th-17th century Europe. The course will explore developments in architecture, sculpture, painting and other art forms.

ART 202

**Art History: 18th-20th C (D) (H) (5)**

A survey of the history of art in 15th-20th century Asia and 18th-20th century Europe. Historical developments in architecture, sculpture, painting and other art forms will be examined.

ART 203

**History of American Art (H) (5)**

A survey of American painting, sculpture, and architecture from colonial times to the present.

ART 210

**Painting (4)**

A painting course which uses the nude human form as a point of departure for creating art. Students will experiment with a variety of materials and techniques.

ART 211

**Painting (4)**

A continuation of ART 210 with increased emphasis on development of individual styles.

ART 220

### **Computer 3-D Modeling (3)**

This is an advanced computer-based course for students interested in learning surface and solid modeling techniques for future use in applications such as mechanical design, game development, and animation. Instructor permission is required.

ART 269

### **Portfolio (3)**

Development and presentation of an individual portfolio which meets professional standards of excellence for job potential. Open to art and photography students. Prerequisite: Permission of instructor.

## **ASTRONOMY**

ASTR 125

### **The Solar System (S) (3)**

Brief overview of the history and scope of astronomy, followed by a study of our own solar system including its sun, planets, moons, asteroids, and comets, and its origin. Some writing and computation is expected. Prerequisite: completion of MATH 098 with a 2.0 or above.

ASTR 126

### **Stars and Galaxies (S) (3)**

Introduction to the astronomy of stars and galaxies including nuclear processes, spectroscopy, stellar evolution, black holes, quasars, and an introduction to cosmology. Some writing and computation are expected.

ASTR 127

### **The Solar System & the Universe (S) (5)**

Brief overview of the history and scope of astronomy, followed by a systematic study of the solar system, stars, galaxies, and the universe. Prerequisite: one year HS algebra or MATH 098.

ASTR 128

### **Observational Astronomy (S) (2)**

Introduces the night sky as seen with the naked eye and a telescope. Lectures, labs, and observations provide astronomical concepts and hands on applications of these concepts. Transportation to Onalaska's Observatory is the student's responsibility.

## **BIOLOGY**

BIOL& 100

### **Survey of Biology (S) (5)**

Surveys the structures and functions of cells and organisms. Explores basic genetic and evolutionary processes, and outlines the characteristics of life, its history, and biodiversity.

BIOL& 170

### **Human Biology (S) (5)**

Presents the structure, organization, and life functions of the human; cells, tissues, and organ systems; development from embryo to adult; aging and disease; human evolution and ecology.

BIOL 172

### **Human Biology Lab (1)**

Investigate the structure and function of the integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, immune, respiratory, digestive, urinary, and reproductive systems. Prerequisite: BIOL& 170.

BIOL 180

### **Regional Biodiversity (5)**

Explore the biological diversity of a region. Identify the dominant organisms, describe their interactions with their physical, chemical, and biological environments. Focus on field trips. Prerequisite: instructor permission.

BIOL 190

### **Cooperative Work Experience (1-5)**

See description under COOP 190 for additional information.

BIOL& 221

### **Majors Ecology/Evolution (S) (5)**

Ecology, evolution, taxonomy and phylogeny, diversity of life forms. First course in a three-quarter series (BIOL& 221, 222, 223). Prerequisite: HS biology or BIOL& 100 and MATH 098 or equivalent.

BIOL& 222

### **Majors Cell/Molecular (S) (5)**

Metabolism and energetics, structure and function of biomolecules, Mendelian and molecular genetics, biotechnology, cell structure and function. Second course in a three-quarter series (BIOL& 221, 222, and 223). Prerequisites: HS biology or BIOL& 100; CHEM& 121 or CHEM& 161 recommended.

BIOL& 223

### **Majors Organismal Physiology (S) (5)**

Plant and animal comparative anatomy and physiology. Final course in a three-quarter series (BIOL& 221, 222, and 223). Prerequisite: BIOL& 221 or 222 or instructor permission.

*BIOL& 241*

**Human Anatomy & Physiology 1 (S) (formerly ZOO 251) (5)**

Investigate interactions between structure (anatomy) and function (physiology) essential for human health. Investigate organization and function of macromolecules, membranes and the cell, tissues, integument, skeleton and articulations, skeletal muscles, nervous system and the brain. Prerequisite: HS biology and chemistry or BIOL& 100 or BIOL& 170 and CHEM& 121.

*BIOL& 242*

**Human Anatomy & Physiology 2 (S) (5)**

Investigate the interactions between structure (anatomy) function (physiology) essential for human health. Investigate organization and function of the sensory, endocrine, cardiovascular, immune, respiratory, digestive, urinary, and reproductive systems. Prerequisite: BIOL& 241 or instructor permission.

*BIOL 243*

**Advanced Topics Human A & P (S) (5)**

Investigate the inheritance of human characteristics and the regulation of gene expression. Trace the development of major organ systems in utero and fetal development. Trace the physiological and anatomical transformations in older individuals. Prerequisite: BIOL& 242 or instructor permission.

*BIOL 250*

**Introduction to Marine Biology (S) (5)**

Introduction to physical and chemical factors affecting marine organisms: the various marine habitats, the animals and plants which inhabit them, and human exploitation of marine resources. Field trips to local marine habitats.

*BIOL& 260*

**Microbiology (S) (5)**

Understand the morphology, physiology, metabolism, genetics, and evolution of microbes. Explore the interactions of pathogenic microbes and human health. Review processes that inhibit microbial disease. Develop skills of culturing, identifying, and manipulating microbes. Prerequisite: one college chemistry course.

*BIOL 270*

**Research in Biology (1-12)**

Design a research project, set up experiments, collect data in the lab or in the field, and/or analyze data. Each credit hour requires 33 hours of activity per quarter. Prerequisite: instructor permission.

## BOTANY

*BOTA 110*

**Survey of Botany (S) (5)**

Basic concepts in plant biology for non-majors, with emphasis on plant diversity and how plants grow and reproduce. Modern issues concerning agriculture and conservation will be discussed.

*BOTA 113*

**Plant Identification & Classification (S) (5)**

The identification and classification of flowering plants of the Northwest with emphasis on plant families of western Washington. One full day field trip included.

*BOTA 150*

**Dendrology-Trees in Our Environment (S) (5)**

Introduction to biology through trees, from cells and evolution through tree ecology and urban trees. Identification of trees will be featured, including both Pacific Northwest natives and common street trees.

## BUSINESS ADMINISTRATION

*BUS& 101*

**Intro to Business (5)**

Introduction to the world of business. Emphasis will include functions of business, management, types of business ownership, human resources, production, marketing, ethics, and the role of accounting.

*BUS 121*

**Business Math (5)**

Surveys the commercial application of mathematics designed to assess and analyze business activities and their effect on cost, profitability and overall performance. Prerequisite: MATH 096 or equivalent test score.

*B A 190*

**Cooperative Work Experience (1-12)**

See description under COOP 190 for additional information.

*BUS& 201*

**Business Law (5)**

Introduction to state and federal constitution, laws and procedures including international trade, crimes, torts, contracts, sales, property, bankruptcy, securities, consumer protection, employment, and debtor-creditor relationships. The relationship between ethics and law will be discussed.



*BUS 203*

### **Human Resource Management (5)**

Introduction to fundamental concepts of human relations management. This course will focus on recruiting, employee selection and training, employee performance and compensation, and employee laws and labor. Prerequisite: BUS& 101, college level reading and writing.

*BUS 215*

### **Principles of Finance (5)**

An introduction to the sources and uses of funds in a business. Focuses on ratio analysis, cost-volume-profit analysis, business valuation, and the relationship between risk and rate of return. Emphasizes the managerial implications of financial risk. Prerequisite: ACCT& 201, BUS 121 or instructor permission.

*BUS 220*

### **Marketing (5)**

A broad overview of the market structure and marketing philosophies currently being used in business. Includes a description, analysis, and evaluation of the marketing system. Each student will conduct a marketing research project.

*BUS 225*

### **Money and Banking (5)**

An introduction to the core principles of money and banking. Topics to be discussed include interest rates, financial instruments, financial markets, financial institutions, central banks, monetary policy, financial stability, and modern monetary economics. Prerequisite: ACCT& 201, 202.

*BUS 232*

### **Entrepreneurship (5)**

Experience the challenge and reward of planning a new business. Topics include: development of a business plan, failure factors in small businesses, capital, accounting, financial statements, marketing, human resource management, legal/regulatory issues and management principles. Prerequisite: BUS& 101; ACCT& 201, BUS 220.

*BUS 240*

### **Merchandising Management (5)**

This course emphasizes the principles and concepts of merchandising management and studies store management, inventory control, purchasing, pricing, logistics, customer relationship management, and advertising.

*BUS 250*

### **Project Management (5)**

Explore the concept of projects and the unique administrative approach needed to successfully complete a project on time and within budget. Identify the components of projects and the tools available to track project progression.

*BUS 275*

### **Principles of Management (5)**

Management styles and effective management of personnel from the manager's side of business. The course is built around the five traditional functions of management and exploring management problems and practices. Real-life case problems used.

## **BUSINESS OFFICE TECHNOLOGY**

*BTEC 101*

### **Keyboarding for Business (3)**

For beginning students. Learn to keyboard to 25wpm by touch. Develop speed, accuracy and apply basic word processing techniques to letters, reports and tables.

*BTEC 102*

### **Keyboard Skillbuilding I (3)**

Individualized skillbuilding program for increasing keyboarding speed and improving accuracy. Upon completion of this course, students should be able to type at a minimum of 35wpm with no more than one error per minute. Prerequisite: BTEC 101 and typing at 35wpm or instructor permission.

*BTEC 107*

### **Electronic Medical Records (3)**

Provides an overview of medical records as legal documents. Topics include the make-up of an electronic medical record, charting methods, and retention and storage of records. Course includes computerized medical record work. Corequisite: keyboarding skill, medical terminology.

*BTEC 110*

### **Business English (5)**

Editing skills including grammar, punctuation, proofreading, and spelling for office correspondence. A basis for machine transcription, business communication, and office procedures.

*BTEC 120*

### **Applied Business Math (5)**

Fundamental arithmetic skills applied to a wide range of business activities. Topics include: banking, discounts, payroll, simple interest, markups and markdowns and promissory notes.

*BTEC 160*

### **Records Confidentiality-HIPAA (1)**

Overview of general confidentiality considerations and specific rules of the 1996 HIPAA law for health care/mental health professions. Explains and illustrates the law, with extensive review of security/privacy of patient information and records. Corequisite: keyboarding skill, medical terminology.

*BTEC 190*

**Cooperative Work Experience (1-12)**

See description under COOP 190 for additional information.

*BTEC 191*

**Work Experience Seminar (1)**

Topics include professional image, business etiquette, sexual harassment, resolving conflict, and diversity in the workplace. Must be taken prior to or concurrently with Co-op Work Experience.

*BTEC 205*

**Microsoft Outlook (1)**

Course uses Microsoft Outlook for e-mail, scheduling meetings, maintaining appointment calendars, managing contacts, and tasks. Prerequisite: Windows experience and keyboarding skills.

*BTEC 210*

**Word I (5)**

Class covers Word in depth: document preparation, formatting, graphics, WordArt, columns, sorts, charts, mail merge, and styles. Students will format business documents to business standards. Prerequisite: keyboard skill of 35wpm or instructor permission.

*BTEC 212*

**Access I (3)**

An introduction to Microsoft Access. Students will learn basic concepts of database software and be able to integrate Access with Word and Excel. Prerequisite: keyboard speed of 30wpm, Word I and Excel or instructor permission.

*BTEC 214*

**Excel (5)**

A hands-on approach for beginning through intermediate level applications of Excel spreadsheet using a variety of business applications. Prerequisite: word processing, Windows, keyboard skills.

*BTEC 218*

**Desktop Publishing (4)**

Course covers desktop publishing terminology and concepts to plan, create, and design professional-looking businesses and personal documents. Prerequisite: Word, keyboard speed of 35wpm.

*BTEC 219*

**Word II (4)**

Course covers footnotes, endnotes, citations, bibliographies, table of contents, indexes, linked textboxes, multilevel lists, building blocks, fill-in forms, macros, outlines, Quick Parts, templates formal reports. Prerequisite: Word 1, keyboard speed of 35wpm.

*BTEC 220*

**Ten-Key Calculator (1)**

Touch control of 10-key pad with emphasis on speed and accuracy. Addition, subtraction, multiplication, and division techniques used in solving business problems. Basic or Business Math recommended first.

*BTEC 221*

**Business Communications (5)**

Applying principles of effective communication in written and oral business communication: letters, memos, reports, and presentations. Upon completion students should be able to produce effective positive, negative, and routine letters, memos, and reports and graphs. Prerequisite: BTEC 110 or ENGL& 101, or instructor permission.

*BTEC 222*

**Microsoft Office-PowerPoint Module (1)**

An introduction to Microsoft PowerPoint. Upon completion of this course students should have beginning knowledge of a presentation program. Prerequisite: keyboard speed of 35wpm, Windows Workstations OS or instructor permission.

*BTEC 224*

**General Office Procedures (5)**

Topics include: professional image and dress, employer expectations, human relations, receptionist techniques, telephone procedures, processing mail, business ethics, job safety, office supplies and equipment, travel and meeting arrangements, reprographics, financial activities, PC cleaning/care, internet and email. Prerequisite: grade of 2.0 in BTEC 110 or instructor permission.

*BTEC 233*

**Filing (3)**

Basic principles and procedures of records storage and management. Practice indexing, coding, and filing for alphabetic, numeric, subject, geographic filing systems, and introduction to forms design.

*BTEC 255*

**Insurance and Billing (5)**

Introduction to major insurance program information and federal healthcare legislation. Exploration of health insurance guidelines and the knowledge and skills required for billing and reimbursement. Includes hands-on practice with simulated billing software. Prerequisite: BTEC 260.

*BTEC 260*

**Medical Terminology (4)**

Development of a medical vocabulary with emphasis on definition and spelling. Upon completion of this course students should be able to recognize spoken medical terms, analyze word parts for meaning, and understand basic medical terminology.

*BTEC 261*

### **Medical Office Procedures (5)**

Topics include professional image, medical ethics and law, safety, patient records, appointments, billing and collections, mail processing, meetings and travel arrangements, office finance, patient education, telephone procedures, cultural differences, and health insurance. Prerequisite: 2.0 or above in BTEC 101, 110, and 260.

*BTEC 263*

### **Medical Transcription (4)**

A review of medical terminology and the preparation of medical transcripts. Prerequisite: 2.0 or above in BTEC 110, 260 and 101 and typing speed of 40wpm.

*BTEC 266*

### **Medical Law and Ethics (3)**

Overview of medical law/ethics for healthcare professionals in various settings: billing/coding, transcription, phlebotomy, etc. Designed to explain ethical/legal obligations to the patient, employer, and health worker and clarify confidentiality requirements regarding patient records and history.

## **CHEMICAL DEPENDENCY**

*CDP 100*

### **Intro Chem Dependency (5)**

Historical and current definitions of chemical dependency and abuse and effects abuse on behavior, health, youth, family, special populations and society; focusing on the nature of addictions, causality, progression, assessment, scope, intervention, treatment and prevention.

*CDP 101*

### **Drug & Alcohol Responses (5)**

Body's physical and behavioral response to alcohol and drugs, research findings, basic information and terminology essential for working and communicating with professionals, patients, and families. Four-hour HIV/AIDS brief risk intervention for the chemically dependent training. Prerequisite: CDP 100.

*CDP 110*

### **CDP Counseling Theory (4)**

Overview of communication skills, theories, and techniques used in developing a common understanding of addictive behavior. Comprehensive review of behaviors and an introduction to counseling methods to facilitate change in chemically dependent clients. Prerequisite: CDP 100 and PSYC& 200.

*CDP 111*

### **CDP Counseling Seminar (1)**

Practical training in Motivational Interviewing, the counseling method currently most commonly used in chemical dependency agencies. Prerequisite: CDP 110.

*CDP 120*

### **CDP Law and Ethics (4)**

Contemporary legal and ethical issues in chemical dependency counseling including professional and peer relationships, boundaries, NAADAC code of ethics, multiple relationships and values in the counseling relationship and laws surrounding counseling including confidentiality and HIPPA. Prerequisite: CDP 100.

*CDP 130*

### **Assess & Treatment Plans (5)**

Focus on assessment, placement, case planning and management of substance-abusing clients. Overview of federal, state, and agency policies and procedures, assessments, treatment and discharge planning. Prerequisite: CDP 100.

*CDP 140*

### **Counseling Adolescents (3)**

An overview class covering the needs of the addicted adolescent. Developmental, cognitive and physiological issues that are complicated by an adolescent's use of alcohol or other drugs will be covered. Prerequisite: CDP 100; corequisite: PSYC& 200.

*CDP 210*

### **Treatment in Groups (4)**

Group-counseling theory as applied to alcohol and drug treatment. Inpatient and outpatient treatment using groups to foster change and growth. Dynamics, interaction, composition, goals, managing tasks, role and normative boundaries, and skill practice. Prerequisite: CDP 100.

*CDP 220*

### **Chemical Dependency & Family (4)**

Family therapy: structural, functional and systems approaches of the chemically dependent family. Issues related to family stages of adaptation to chemical dependency, family roles, children and adult children of alcoholics. Emphasis: support, treatment and prevention. Prerequisite: CDP 100.

*CDP 230*

### **CDP Cultural Diversity (3)**

A course of study designed to improve knowledge and skills of chemical dependency professionals working with clients from diverse culture backgrounds. Prerequisite: CDP 100.

*CDP 240*

### **Relapse Prevention (2)**

Dynamics of post-acute withdrawal, relapse versus reoccurrence, and issues of relapse pertaining to the disease of addiction and the reuse of drugs after treatment as a separate and distinct episode not associated with treatment failure. Prerequisite: CDP 100.

CDP 250

### **Community Prevention (3)**

Child and adolescent alcohol and drug abuse prevention. Discuss the history of prevention, research, community needs assessments and best/promising prevention practices. Design and evaluate an effective prevention program. Prerequisite: CDP 100

CDP 280

### **CDP Supervised Practicum (5)**

One hundred fifty unpaid hours of practicum with a minimum of 50 hours of direct supervised work experience in college faculty approved chemical dependency agency. Prerequisite: CDP 100.

## **CHEMISTRY**

CHEM& 121

### **Introduction to Chemistry (S) (5)**

Survey of chemistry with applications in everyday life: atoms, bonds, reactions, and calculations. Prerequisite: one year HS algebra or MATH 098.

CHEM& 131

### **Introduction to Organic/Biochemistry (S) (5)**

Study of major organic functional groups and their properties and major biochemical compounds including carbohydrates, lipids, proteins, and major cellular energy pathways. Targeted for allied health programs. Prerequisite: CHEM& 121 with a 2.0 or instructor permission.

CHEM& 161

### **General Chem w/Lab I (S) (6)**

First of a three-quarter sequence for science and engineering majors. Includes matter, measurements, equations, stoichiometry, solution chemistry, gases, thermochemistry, quantum theory, and electronic structure. Problem solving and critical thinking are stressed. Includes Lab.

CHEM& 162

### **General Chemistry w/Lab II (S) (6)**

Second of a three-quarter sequence. Includes periodic trends, chemical bonding and structure, valence bond/molecular orbital theory, intermolecular forces, liquids and solids, solutions, kinetics, and equilibrium introduction. Lab emphasizes data analysis and interpretation. Prerequisite: CHEM& 161 with a 2.0 or better or instructor permission

CHEM& 163

### **General Chemistry w/Lab III (S) (6)**

Third of a three-quarter sequence. Includes acids and bases, acid/base and solubility equilibria, thermodynamics, electrochemistry, and an introduction to organic and nuclear chemistry. Supplemental topics include polymers, transition metal, and/or coordination chemistry. PREREQUISITE: CHEM& 162

CHEM& 261

### **Organic Chemistry I (S) (6)**

General physical and chemical properties of simple aliphatic and aromatic compounds. Prerequisite: CHEM& 161, 162, 163 or instructor permission.

CHEM& 262

### **Organic Chemistry w/Lab II (6)**

Complex organic reactions: alkenes; alkynes; aromatics, aldehydes, ketones. Spectroscopy. Prerequisite: CHEM& 261 or equivalent.

CHEM& 263

### **Organic Chemistry w/Lab III (6)**

Complex organic reactions: acids, amines; carbanions, heterocycles; polyfunctional compounds. Prerequisite: CHEM& 262 or equivalent.

CHEM 270

### **Research in Chemistry (1-12)**

Design a research project, set up experiments, collect data in the lab or in the field, and/or analyze data. Each credit hour requires 33 hours of activity per quarter. Prerequisite: instructor permission.

## **CHILD & FAMILY STUDIES**

CFS 110

### **Learning and Playing (1-2)**

Parents learn about child development and how to apply that knowledge in their parenting role. Children attend classes with parents and participate in learning activities.

CFS 120, 121, 122

### **Learning with Infants and Toddlers (2)**

Parents learn about child development and how to apply that knowledge in their parenting role. Children attend classes with parents and participate in learning activities, music, discussion and art.

CFS 130, 131, 132

### **Positive Parenting I – III (1-4)**

Students are introduced to parenting skills to use with children through classroom participation, lecture, and discussion.

CFS 135

### **Winning at Fatherhood (2)**

Positive parenting techniques for fathers. Learn to build positive relationships with your children.

CFS 140, 141, 142

### **Positive Parenting IV - IV (1-4)**

Level II students develop and practice parenting skills with children through classroom participation, lecture, and discussion.

CFS 150, 151, 152

### **Positive Parenting VII - IX (1-4)**

Level III students demonstrate parenting skills from previous levels through classroom participation, lecture and discussion.

CFS 170

### **Nurturing Parents (1-4)**

Increase parenting skills through direct instruction and feedback. The focus includes: attachment and bonding; normal child development; age appropriate expectations, guidance and discipline, and understanding and responding to children's individual needs.

## **CHINESE**

CHIN& 121

### **Chinese I (D) (H) (5)**

Learn the fundamental skills of listening comprehension, speaking, reading and writing the Mandarin Chinese language. Develop an understanding and appreciation of the Chinese people and culture.

CHIN& 122, 123

### **Chinese II – III (H) (5)**

Continued study of the fundamental skills of listening comprehension, speaking, reading and writing the Mandarin Chinese language. Develop an understanding and appreciation of the Chinese people and culture. Prerequisite: CHIN& 121 or instructor permission.

CHIN& 221, 222, 223

### **Chinese IV –VI (H) (5)**

Continued study of the fundamental skills of listening comprehension, speaking, reading and writing the Mandarin Chinese language. Develop an understanding and appreciation of the Chinese people and culture. Prerequisite: CHIN& 123 or instructor permission.

## **COMMUNICATION STUDIES**

CMST& 102

### **Introduction to Mass Media (H) (5)**

A survey of the mass media in America: newspapers, magazines, books, recorded music, radio, television, motion pictures, the World Wide Web: with emphasis on structure, function, audience, content, effect and social responsibility.

CMST 104

### **Racism, Sexism and the Media (D) (H) (3)**

Examine issues of race and gender in the media from both an historical and a current perspective.

CMST& 220

### **Public Speaking (H) (5)**

Apply methods for managing speech anxiety, holding attention and making points in a variety of public speaking situations, including techniques for being credible and ethical. Communication theories and interpersonal skills also studied.

CMST 240

### **Advanced Public Speaking (H) (5)**

Build upon the skills learned in an introductory public speaking course. Become prepared to present in professional settings and lead effective business meetings as an audience-centered communicator. Prerequisite: CMST& 220 or instructor permission.

CMST 250

### **Intercultural Communications (H) (D) (5)**

Students will explore the dynamics of intercultural communication; how variables such as perceptions, language usage, nonverbal style, gender, class, and values influence face-to-face communication among individuals of different cultures; and strengthen communication skills.

## **COMMUNICATIONS**

COMM 100

### **Dragon NaturallySpeaking (2)**

Designed to assist students in the development of computer and English composition skills while using Dragon NaturallySpeaking (voice recognition) and text to speech software.

## **COMPUTER AIDED DRAFTING**

CAD 110

### **CAD for Electronics (3)**

Introduces students to the art and science of reading and creating electrical schematics from a Computer Aided Drafting perspective in the AutoCAD environment. Knowledge of component identification is required. Prerequisite: ERA 101.

CAD 112

### **Computer Aided Drafting I (5)**

AutoCAD drafting, drawing, editing, dimensioning, drawing aids, layer control, and plotting.

CAD 113

### **Computer Aided Drafting II (5)**

Advanced AutoCAD commands, blocks, symbols library, including assigning and extracting block attributes, creating attribute reports, incorporating and managing external references, isometric drawings, creating dimension styles, use of multiple viewports, and introduction to 3-D wireframe models and 3D solid. Prerequisite: minimum 2.0 grade in CAD 112 or instructor permission.

CAD 114

### **Computer Aided Drafting III (5)**

Develop sound computer-aided drafting. Emphasis is placed on importing survey points, defining parcels, creating 3D terrain models, calculating cut and fill volumes, and creating contours with labels. Prerequisite: minimum 2.0 grade in CAD 113 or instructor permission.

CAD 115

### **CAD for Industry (3)**

AutoCAD drawings, editing, dimensioning, drawing aids, layer control designed to develop basic computer-aided drafting skills that may be used in industry. Emphasis on creating basic drawings, blocks and plotting. Basic computer skills required.

## **COMPUTER SCIENCE TECHNOLOGY**

CS& 131

### **Computer Science I C++ (5)**

Intended as an introduction to programming. Emphasis is on the features of the "C" programming language with an introduction to C++ object oriented programming and good programming style.

CS& 141

### **Computer Science I Java (5)**

A study of rapid application development (RAD) JAVA. Development of GUIs using Swing Technology. Object Oriented Programming as it is implemented in JAVA. Introduction to graphics, animation, and multi-threading. Prerequisite: MATH 099 or equivalent.

## **COOPERATIVE WORK EXPERIENCE**

COOP 190

### **Cooperative Work Experience (1-12)**

Cooperative Work Experience allows students to apply classroom learning to on-the-job settings. Credit is earned for new and continued learning taking place in the work environment. Reaching set learning objectives and development of positive work habits are emphasized. The Cooperative Education Faculty Coordinator, the student employee, and the worksite supervisor identify the learning objectives. 30-360 hours on-the-job per quarter. Instructor's permission is required. Corequisite: Enrollment in a Work Experience Seminar is required of Co-op students. You may take the Work Experience Seminar before or in the same quarter as the Co-op course.

## **CRIMINAL JUSTICE**

CJ& 101

### **Intro to Criminal Justice (5)**

Examines local, state and Federal law enforcement agencies and the judicial and correctional systems. Career opportunities and qualifying requirements are studied.

CJ 103

### **Constitutional Case Law (5)**

Examines the Constitution and Bill of Rights in relation to law enforcement, the judiciary, and corrections. Defines guilt-laden facts, reasonable suspicion, and probable cause.

CJ 104

### **Intro to Law Enforcement (5)**

A broad survey of the theories, procedures and methods of police operations studied. Also examines police discretionary powers, career opportunities, and trends in law enforcement. Pre/corequisite: CJ& 101 or instructor permission.

CJ& 105

### **Intro to Corrections (5)**

A broad survey of the history and evolution of adult and juvenile correctional models in America. All forms of incarceration and restrictive custody are studied. Pre/corequisite: CJ& 101 or instructor permission.

CJ& 106

### **Juvenile Justice (5)**

Juvenile deviance and theories of criminality are studied. Economic, social, and psychological impact of juvenile delinquency trends examined. Pre/corequisite: CJ& 101 or instructor permission.

CJ 107

### **Criminal Procedures (5)**

Examines state and federal laws of arrest, search and seizure, civil and criminal liability. The rules of evidence and courtroom proceedings are studied. Pre/corequisite: CJ& 101 or instructor permission.

CJ 109

### **Community Policing (5)**

Focus on resolving community issues and concerns via Community Oriented Policing and Problem Solving (COPPS) skills and strategies. Pre/corequisite: CJ& 101 or instructor permission.

CJ& 110

### **Criminal Law (5)**

A broad survey of the common criminal laws and statutes of Washington and the other 49 United States. Pre/corequisite: CJ& 101 or instructor permission.

*CJ 111*

**Criminal Justice Ethics (5)**

Presents an in-depth examination and analysis of the practical, theoretical, ethical and moral considerations found in the criminal justice system. Pre/corequisite: CJ& 101 or instructor permission.

*CJ& 112*

**Criminology (5)**

Examines social components of crime, deviance, criminality, and societal reactions to crime. Includes discussion of causes and impacts of crime on society, classifications and theoretical interpretations of crime and the criminal justice system.

*CJ 114*

**Critical & Current Issues (5)**

Examines current issues, topics and trends in the criminal justice system. Explores the issues of racism and bigotry as related to criminal justice practitioners. Pre/corequisite: CJ& 101 or instructor permission.

*CJ 116*

**Community Corrections (5)**

Community corrections, alternative sentencing, probation and diversion concepts studied. Explores technology innovations pertaining to community supervision. Pre/corequisite: CJ& 101 or instructor permission.

*CJ 126*

**Homicide Investigation (5)**

Tactics, procedures, and forensic techniques of homicide investigation are examined. Various tools and processes systematically employed to identify, arrest, and convict perpetrators are studied. Pre/corequisite: CJ& 101 or instructor permission.

*CJ 129*

**Intro to Victimology (5)**

Introductory course examines violent crime and victimology in American society. Factors leading to acquaintance and stranger violence, proactive and reactive strategies to crime, legal issues and self-defense measures studied and discussed.

*CJ 130*

**Domestic Violence & Abuse (5)**

This course examines physical and sexual domestic violence in our society. This includes spouse/partner abuse and child abuse. Contemporary investigation and intervention strategies and techniques are studied including evidence discover, collection, and preservation.

*CJ 190*

**Cooperative Work Experience (1-10)**

See description under COOP 190 for additional information.

*CJ 204*

**Reports, Forms & Affidavits (5)**

Investigative report writing including narratives, police reports, common forms, affidavits, and search warrants.

*CJ 223*

**Felony Investigations (5)**

Practical application of investigation techniques for felony crimes is studied and examined. Includes Part I offenses and drug crime, crime scene considerations, search warrants, report writing, evidentiary issues, surveillance, using informants, and assisting with prosecution.

*CJ 224*

**Criminal Interviews & Interrogations (5)**

Basic and intermediate skills required for criminal and forensic interviews and interrogations. Study, practice, role-play, and evaluate the techniques used to elicit factual information from victims, witnesses and suspects in the course of criminal investigations.

*CJ 225*

**Crime Scene Technology (5)**

Students learn techniques to collect and preserve common evidentiary items located at crime scenes for future laboratory analysis and judicial proceedings while ensuring proper chain of custody. Aspects of arson investigation are also studied.

*CJ 228*

**Crime Scene Photography (5)**

Practical application of basic crime scene photography methods and techniques for criminal investigations studied. Skills designed to capture the details of automobile accidents, misdemeanor, and felony crime scenes are discussed and practiced.

*CJ& 240*

**Intro Forensic Science (5)**

Introductory course in forensic science examines physical evidence and laboratory analysis in criminal investigations. Skills and procedures required for collection, preservation, and identification of physical evidence are studied. Diagramming of crime scenes is practiced.

## **DIESEL EQUIPMENT TECHNOLOGY**

*DET 100*

**Shop Skills (7)**

Theory and application of basic tools and practices as used in heavy equipment repair facilities.

DET 102

### **Forklift Certification (1)**

A comprehensive classroom training along with practical, hands-on instruction on forklift operation and safety. Course covers state and federal regulations and proper operator training. Students are awarded a certification card upon successful completion. Prerequisite: DET 100.

DET 110

### **Mobile Electrical Systems I (7)**

The exploration and application of fundamental principles of direct current electrical systems found on mobile equipment. Prerequisite: DET 100 or instructor permission.

DET 120

### **Internal Combustion Engines I (7)**

This course covers the operating principles of internal combustion engines. A variety of diesel engines will be disassembled and reassembled with the use of service manuals. Prerequisite: DET 110 or instructor permission.

DET 125

### **Power Transmission (7)**

The theory and application of mechanical power transmitting devices and associated components as used in diesel powered equipment.

DET 130

### **Mobile Hydraulic Systems (7)**

Students will be introduced to terminology, physical properties, and principles relating to mobile hydraulic equipment. Students will engage in practical exercises that will aid in the understanding of basic hydraulic systems. Prerequisite: DET 110 or instructor permission.

DET 166

### **Shop Skills for Welders (3)**

Develop practical work skills and work habits in the student. Includes safety procedures and practices, proper use and maintenance of common shop equipment and common processes and materials of metal products fabrication and manufacturing.

DET 190

### **Cooperative Work Experience (1-15)**

See description under COOP 190 for additional information.

DET 200

### **Mobile Electrical Systems II (7)**

Students will examine electrical components and electronic systems. This course will cover electronic control modules and advanced direct current troubleshooting. Prerequisite: DET 110 or instructor permission.

DET 210

### **Power Transmission II (7)**

The study of power shift and automatic transmissions as used in diesel powered equipment. Prerequisite: DET 125.

DET 220

### **Internal Combustion Engines II (7)**

This course will cover diesel engine analysis and testing for optimal performance and longevity. Students will perform live engine testing, troubleshooting, and repairs. Prerequisite: DET 110 or instructor permission.

DET 225

### **Heavy-Duty Chassis Systems (7)**

The study and application of heavy duty chassis systems used in diesel powered equipment. Prerequisite: completion of 1st year diesel classes.

DET 230

### **Practical Shop Applications (7)**

The discussion and implementation of proper shop practices and repair procedures.

DET 235

### **Mobile HVAC Systems (7)**

The theory and application of basic principles used in Heating Ventilation and Air Conditioning (HVAC) systems of diesel powered equipment.

## **DRAMA**

DRMA 100

### **Applied Drama (3)**

Provides credit for participation in either the artistic or technical aspects of the college's quarterly play productions. This course may be repeated for credit.

DRMA& 101

### **Introduction to Theater (H) (5)**

Overview of theatre as an art form with emphasis on the play in production and the roles of various theatre artists. Students are expected to attend two plays during the quarter at their own expense.

DRMA 103

### **Set Design (3)**

Introduction to the basics of scenic design for the theatre; drafting and model building. Students will work on the concurrent Centralia College Drama production. Prior enrollment in DRMA 106 is preferred.



DRMA 105

**Theater History (H) (3)**

Survey of the major periods in Western drama through study of major representative plays and development of the physical theater of those periods.

DRMA 106

**Introduction to Stagecraft (3)**

Introduction to basic tools, materials, equipment, techniques used in the design and implementation of sets, lighting and sound for the theatre. Students will participate in the design, construction and lighting of the concurrent drama production.

DRMA 107

**Beginning Acting (H) (5)**

Introduction with emphasis on concentration, imagination, movement, and characterization via vocal, physical, emotional exercises, improvisation, and scene work. Students will be expected to attend two plays during the quarter at their own expense.

DRMA 108

**Intermediate Acting (H) (5)**

Continuation of acting fundamentals with an emphasis on improvisational techniques and exercises, and advanced monologue and scene work. Students will be expected to attend two plays during the quarter at their own expense. Prerequisite: DRMA 107 or instructor permission.

DRMA 110

**Stage Makeup (3)**

Introduction to the types of theatrical makeup and the techniques of application.

DRMA 111

**Stage Lighting (3)**

Introduction to the basic principles of stage lighting as an integral part of theatrical productions. The course will deal with theories and equipment commonly used in theatre lighting. Students will participate in the drama production.

DRMA 115

**Dramatic Performance (H) (5)**

For students involved in the creative/performance aspects of a play production, from audition through research/preparation for their portrayal and evaluation of their performance. The student must successfully audition and be cast in a college production. Prerequisite: audition selection for quarterly play production.

DRMA 120

**Introduction to Playwriting (H) (5)**

Study the art and craft of writing for the stage. Students will be required to complete and oversee the production of a short play. Final performances of student works will be presented to the public.

DRMA 141

**Theater Speech (3)**

The training of the human voice to develop control. The emphasis is on voice projection, quality and accuracy of sound and articulation of the English language.

DRMA 148

**Introduction to Dance (1)**

Study the fundamentals of Ballet, Modern, and Jazz dance. Prior dance experience is not necessary. The student will be required to wear casual, comfortable clothing. Students may participate barefoot. Dance shoes are optional.

DRMA 149

**Introduction to Movement for Theatre (1)**

Introduction to dance for Musical Theatre. Prior dance experience is not necessary. The student will be required to wear casual, loose fitting clothing. Students may participate barefoot. Dance shoes are optional.

DRMA 150

**Introduction to Modern Dance (1)**

Study basic Modern Dance, Latin, and Swing movements. Prior dance experience is not necessary. The student will be required to wear comfortable, loose fitting clothing. Students may participate barefoot. Dance shoes are optional.

DRMA 155

**Technical Production I (2)**

This course is an introduction to the technical aspects and procedures specific to setting up and running live entertainment.

DRMA 201

**Advanced Acting (H) (5)**

Continued study of acting; character analysis, scene interpretation and classical styles. Students will be expected to attend two plays at their own expense and will be responsible for the presentation of a children's theatre production. Prerequisite: DRMA 108 or instructor permission.

DRMA 205

**Contemporary World Theatre (3)**

Introduces contemporary world theatre using the theatrical productions of the Pacific NW regional theatres and the Broadway theatres of NY City. Travel to and study these productions. Visits to additional cultural events/locales will be included.

# ECONOMICS

*ECON& 201*

## **Microeconomics (SS) (5)**

Microeconomics is the study of households and firms and how they interact in markets under varying degrees of competition.

*ECON& 202*

## **Macroeconomics (SS) (5)**

Macroeconomics is the study of how any system allocates limited resources to meet unlimited wants. Major concerns of macroeconomic policy are: inflation, full employment, national income accounting, fiscal policy, the money supply and trade.

# EDUCATION

*EDUC& 115*

## **Child Development (5)**

An in-depth study of the physical, emotional, social and mental development of children from conception through age eight. An understanding of family structures, interaction and function will be integrated throughout the developmental process.

*EDUC& 130*

## **Guiding Behavior (3)**

Examine the principles and theories promoting social competence in young children and creating safe learning environments. Develop skills promoting effective interactions while providing positive individual guidance and enhancing group experiences.

*EDUC& 136*

## **School Age Care (3)**

Gain skills to provide developmentally appropriate and culturally relevant activities and care for school-age children. Focus is on preparing the environment, implementing curriculum, building relationships, guiding academic/social skill development, and community outreach.

*EDUC& 150*

## **Child/Family/Community (3)**

Investigate the family and community contexts in which children develop. Explore cultures and demographics of families in society, community resources, strategies for involving families in the education of their children and tools for effective communication.

*EDUC 190*

## **Cooperative Work Experience (1-12)**

See description under COOP 190 for additional information.

*EDUC& 201*

## **Intro to Education (3)**

Explore the role of education in our society and investigate teaching as a career. Both the historical perspective and current trends in education will be discussed.

*EDUC 202*

## **Classroom Observation (2)**

Students review teaching as a career. Students observe classrooms in action and attend seminars to discuss their findings. Students may make arrangement with the instructor to start observations before quarter begins.

*EDUC& 203*

## **Exceptional Child (3)**

Explains the role of Special Education in education systems. Provides techniques to work with the exceptional child in the classroom. Topics include exceptionality in all areas of development, diagnosis, communication, and working with family structures.

*EDUC 210*

## **Fundamentals of Tutoring (1)**

Examination of the core issues of individual learning: learning theories and styles, conferencing and assessment techniques, and developing sensitivity to diverse student populations.

*EDUC 225*

## **Teaching the Student with Special Needs (3)**

Examines methods and strategies for teaching students with special needs. Prerequisite: EDEC 230 and 235.

*EDUC 238*

## **Issues in Child Abuse and Neglect (3)**

Designed to provide a basic understanding of child abuse and neglect; including identification of physical, emotional and sexual abuse and neglect; understanding how abuse affects children's behavior and development; and the laws regarding mandated reporting.

*EDUC 275*

## **Curriculum Development (3)**

An examination of the nature, scope, and sequence of curriculum. Discussion of course goals, content and evaluation.

# EDUCATION-EARLY CHILDHOOD

*ECED& 100*

## **Child Care Basics (3)**

Designed to meet licensing requirements for early learning providers, STARS 30 hour basic course recognized in MERIT system. Topics: child development, cultural competency, community resources, guidance, health/safety/nutrition and professional practice.

*ECED& 105*

### **Intro Early Child Ed (5)**

Explore the foundations of early childhood education. Examine theories defining the field, issues and trends, best practices, and program models. Observe children, professionals and programs in action.

*ECED& 107*

### **Health/Safety/Nutrition (5)**

Develop knowledge and skills to ensure good health, nutrition, and safety of children in group care and education programs. Recognize the signs of abuse and neglect, responsibilities for mandated reporting, and available community resources.

*ECED& 120*

### **Practicum-Nurturing Relationships (2)**

Students gain experience engaging in nurturing relationships with children, keeping children safe and promoting children's growth and development.

*ECED& 132*

### **Infants/Toddlers Care (3)**

Examine the unique developmental needs of infants and toddlers. Study the role of the caregiver, relationships with families, developmentally appropriate practices, nurturing environments for infants and toddlers, and culturally relevant care.

*ECED& 134*

### **Family Child Care (3)**

Learn the basics of home/family child care program management. Topics include licensing requirements; business management, relationship building, health, safety, and nutrition, guiding behavior and promoting growth and development.

*ECED& 139*

### **Administration Early Learning Programs (3)**

Establish administrative skills required to develop, open, operate, manage, and assess early childhood education and care programs. Explore techniques and resources available that meet Washington State licensing and NAEYC standards.

*ECED& 160*

### **Curriculum Development (5)**

Investigate learning theories and create curriculum that enhances the development of language, fine/gross motor, social-emotional, cognitive and creative skills in young children.

*ECED& 170*

### **Environments-Young Child (3)**

Design and evaluate indoor and outdoor environments which ensure quality learning, nurturing experiences, and optimize the development of young children.

*ECED 181*

### **Language and Literacy (5)**

Create teaching strategies for language acquisition and literacy skills at each developmental stage (birth-8) through the four interrelated areas of listening, speaking, writing, and reading.

*ECED& 190*

### **Observation/Assessment (3)**

Collect data to assess children. Use this data to plan for group and individual needs.

*ECED 233*

### **ECE Practicum II (5)**

Develop a professional understanding of teaching methods and practices with an opportunity to evaluate teaching skills and learning environment. Must have completed at least 30 credits in ECE or have instructor permission.

*EDEC 201*

### **Play and the Young Child (3)**

An examination of the educational function of and methods to incorporate play into early childhood curriculum. An in-depth study of the nature and role of play in the cognitive, social, emotional, and physical development of the child.

## **ELECTRONICS, ROBOTICS, AND AUTOMATION**

*ERA 101*

### **Electronics Assembly (5)**

Techniques of electronics assembly using through-hole and surface mount components. Schematics and computer aided design will be studied. Heavy emphasis placed on personal and component safety and Electro-Static Discharge (ESD).

*ERA 117*

### **Advanced AC/DC Electronics (4)**

Advanced theorems, analysis and troubleshooting of Direct and Alternating Current. Devices including inductors and variable resistors and capacitors will be studied. Circuit simplification theorems will be studied and demonstrated. Prerequisite ERA 116 or MEC 116.

*ERA 170*

### **Solid State Devices (4)**

Applications of circuits using solid state electronic devices will be studied. Course content will include diodes, transistors, solid state relays, operational amplifiers and their respective applications in sensory and device control circuits. Prerequisite: ERA 115.

ERA 212

### **Digital Electronics (4)**

Digital logic systems and devices, boolean and hexadecimal numbering systems, combinational logic sequences and application of logic systems. Lab section emphasizes safety and electro-static discharge avoidance. Prerequisites: MATH 115, ERA 115.

ERA 230

### **Robotic Controllers (4)**

Introduction to robotic control systems and input/output processing. Platforms studied will include microcontrollers, computer numerically controlled (CNC) machines, various types of motor drive controllers and integration of input devices and sensors into algorithms to drive outputs. Prerequisite: TMATH 122 or equivalent.

ERA 235

### **Communication Systems (3)**

Survey of communication systems used in electronics. Wired systems will include Serial, Parallel, Ethernet, fiber optic, industrial communication protocols and others. Wireless systems will include RF, IR, Bluetooth and wi-fi including basic applications in robotics.

ERA 240

### **Amplifiers (5)**

Amplifier applications in audio and industrial settings. Topics will include small and large signal voltage and current amplifiers, analog and solid state configurations and applications to audio, sensing and measurement, and digital comparison circuits. Prerequisite: ERA 170.

## **ENERGY TECHNOLOGY**

ENER 100

### **Basic Energy (4)**

This class is a study of fuel sources used to produce electrical energy and how that energy is transformed into electrical power for the end user. Corequisite: ABE 060.

ENER 101

### **Basic Energy II (3)**

A study of the generation, transmission and distribution of electricity, careers in the electrical utility field and consumer skills related to entry level positions in the electrical utility field. Prerequisite: ABE 053 or higher.

PPO 100

### **Intro to Energy Industry (5)**

Provides a broad background in fields related to power generation.

PPO 102

### **Power Generation (5)**

Focus will be on environmental issues surrounding power plants. Introduction to boilers including design and ancillary equipment. Prerequisite: PPO 100.

PPO 103

### **Electric Utility Distribution System (5)**

Continuing coverage of power systems, boilers and prime movers. Prerequisite: PPO 102.

PPO 120

### **BluePrint Reading (5)**

An in-depth study of construction blueprints for residential, commercial, and industrial facilities emphasizing interpretation as it applies to the energy and HVAC industries, and electrical distribution systems.

PPO 130

### **Industrial Safety (5)**

Industrial safety practices, procedures, and equipment as found in modern power plants. Also included will be basic first aid and CPR, and basic firefighting equipment and procedures. Basic Rigging will be taught stressing safety. Prerequisite: PPO 102

PPO 150

### **Energy Efficiency (5)**

A study of Energy Efficiency concepts related to the efficient and effective use of electricity in home and industry. Subjects covered will include electrical terms, green alternative energy sources, transportation, solar, wind, biomass, and insulation.

PPO 191

### **Power Plant Job Preparation (4)**

Introduces students to local power generation facilities through touring potential job sites, performing market research and preparing for the POSS test which is required for entry level employment or apprenticeship.

PPO 201

### **Plant Systems (5)**

Provides a background in power plant cycles, systems and equipment, including an introduction to instrumentation and control. Prerequisite: PPO 102.

PPO 202

### **Plant Maintenance (5)**

Provides a background in refrigeration, heating, ventilation and air conditioning; and lighting. Prerequisite: PPO 201.

PPO 203

### **Plant Operations Refrigeration & HVAC (5)**

Provides a background in power plant operations and controls. Prerequisite: PPO 202.

PPO 205

### **Power System Operator I (5)**

First in a two-class series; provides background to operate the American electrical grid system under North American electrical Reliability Corporation (NERC) required standards and prepares for NERC exam. Prerequisite: minimum 2.5 grade in PPO 201 or instructor permission.

PPO 206

### **Power System Operator II (5)**

This continuation of PPO 205 provides students with background in operating the American electrical grid system under North American Electrical Reliability Corporation (NERC) required standards and prepares for NERC exam. Prerequisite: minimum 2.5 grade in PPO 205 or instructor permission.

## **ENGINEERING**

ENGR 100

### **Introduction to Engineering (2)**

Introduction to the various fields and careers of engineering. Topics will include: educational planning and transfer issues; problem solving, engineering design, teamwork, and communication skills.

ENGR& 111

### **Engineering Graphics I (2)**

Introduces the basic concepts of engineering graphics through freehand sketching and computer-aided drafting. Includes orthographic projection, section and auxiliary views, dimensioning and text.

ENGR& 112

### **Engineering Graphics II (3)**

Continuation of ENGR& 111. Emphasizes basic concepts of engineering graphics in CAD-based descriptive geometry applications. The latter part of the course covers a variety of 3-D modeling techniques and solid mass properties extraction. AUTOCAD software is used as the primary CAD-tool. Prerequisites: ENGR& 111 or equivalent, MATH 111, or permission of instructor.

ENGR& 204

### **Electrical Circuits (5)**

An introduction to basic electrical circuits and systems. Topics include: basic analysis techniques; nodal and mesh analysis; Thevenin and Norton equivalent circuits; operational amplifiers; step, natural and steady state circuit response. Concurrent enrollment in MATH 212 is recommended. Prerequisite: MATH& 152 and PHYS& 222.

ENGR& 214

### **Statics (5)**

First of a three-course sequence. The basic principles of vector statics; friction, analytical and graphical methods of solving force systems including frames, trusses, and other simple mechanisms; centroids and moments of inertia; chains and cables. Co-requisite: MATH& 151.

ENGR& 215

### **Dynamics (5)**

Second of a three-course sequence includes the study of kinematics and kinetics of a particle, work-energy, impulse-momentum, relative motion, and rigid-body mechanics. Vector methods will be stressed throughout. Prerequisite: MATH& 152.

ENGR& 225

### **Mechanics of Materials (5)**

The last of a three-course sequence. Includes the study of stress, strain, deflection in beams, columns, machine and structural members. Includes bending moments, shear, torsion, deformation, unsymmetrical bending, and eccentric loading. Prerequisite: ENGR& 214.

ENGR 270

### **Research in Engineering (12)**

Design a research project, set up experiments, collect data in the lab or in the field, and/or analyze data. Each credit hour requires 33 hours of activity per quarter. Prerequisite: instructor permission.

## **ENGLISH**

ENGL 093

### **Independent Study (1-5)**

Individualized instruction for the student whose needs are not currently being met by the available course offerings. Specialized curriculum and instruction are developed to meet each student's needs. Permission of instructor only.

ENGL 094

### **Spelling (1-5)**

Topics covered in this course include basic spelling patterns, commonly confused words, apostrophe use, capitalization, plural formation, and how pronunciation helps to improve spelling. Students utilize materials according to pretesting information.

ENGL 095

### **Vocabulary Development I (1-5)**

Builds a base of words used in everyday communication, provides systematic study, increases proficiency in oral and written communication and reading comprehension. Students are given a placement test and assigned materials at an appropriate level.

ENGL 096

**Vocabulary Development II (1-5)**

Builds a base of words used in everyday communication, provides systematic study, increases proficiency in oral and written communication and reading comprehension. Students are given a placement test and assigned materials at an appropriate level.

ENGL 097

**Vocabulary Development III (1-5)**

Course provides a systematic study of college level academic words and their roots, prefixes, and suffixes to increase proficiency in oral and written communication.

ENGL 098

**Writing & Grammar Review (1-5)**

Study proper word usage, sentence structure, and punctuation. Writing includes personal essays and summaries. Emphasis is on improving grammar and writing skills for personal needs and preparation for technical coursework. Prerequisite: students must meet mandatory placement requirements to enroll.

ENGL 099

**Fundamentals of English (1-5)**

Prepares students for college composition. Students analyze texts, review sentence structure and punctuation, and write several short essays and other writing. Students must meet mandatory placement requirements to enroll.

ENGL 100

**Writing for College (1)**

Lab hours in the Writing Center will support skill development and confidence in specific aspects of college writing, to be defined in an Individual Learning Plan (ILP) with instructor.

ENGL& 101

**English Composition I (C) (5)**

Expository writing course which encourages students to think and write with clarity, conciseness, and enjoyment; to organize and develop their ideas; and to express themselves sharply, economically, and grammatically. Prerequisite: students must meet mandatory placement requirements to enroll. A minimum score of 83 on the COMPASS test, a minimum score of 46 on the ASSET test, or completion of five credits of ENGL 099 with a minimum grade of 2.0.

ENGL& 102

**Composition II (C) (5)**

A course in argumentative and persuasive writing, methods of research, development and preparation of original source-based papers and projects. Prerequisite: completion of ENGL& 101 with a minimum grade of 2.0.

ENGL 103

**Writing for College (1)**

Lab hours in the Writing Center will support skill development and confidence in specific aspects of college writing, to be defined in an Individual Learning Plan (ILP) with instructor.

ENGL& 111

**Intro to Literature (H) (5)**

Introduces the major genres, techniques and themes of literature by examining the work of a variety of classic and contemporary authors.

ENGL& 113

**Intro to Poetry (H) (5)**

Introduction to modern poetry (mid-19th c. to present) through the study of major English language poets: their lives, influences, and works. Prerequisite: ENGL 101.

ENGL& 114

**Intro to Dramatic Lit (H) (5)**

Survey of dramatic literature from classical Greek to modern plays, emphasizing basic elements of plot, character, language, and the traditional genres of tragedy and comedy. Students will attend two plays at their own expense.

ENGL& 235

**Technical Writing (C) (5)**

An alternative to ENGL& 102 for science and engineering majors, focused on writing with clarity, objectivity, audience awareness, proper formats as well as research techniques, problem-solving, critical thinking and development of source-based writing. Prerequisite: completion of ENGL& 101 with a minimum grade of 2.0.

ENGL 160

**Women's Literature (H) (D) (5)**

Examines literature written by women to understand how gender, class and race shape their experience and their writing. Genres will include poetry, short stories, non-fiction, fiction and drama. College-level reading and writing skills expected.

ENGL 180

**Short Fiction (H) (5)**

Survey of short story as representational vehicle in romanticism, realism, modernism, horror, satire, science fiction, magical realism. Primarily American in focus; includes cross-cultural comparisons. College-level reading, writing skills expected. Creative writing options. Prerequisite: college level reading and writing skills.

ENGL 204

**Introduction to Shakespeare (H) (5)**

Learn about the life, times and works of William Shakespeare, how Elizabethans' likes and dislikes, superstitions, and social order influenced this golden age of the theatre by studying six of the Bard's 37 plays.

ENGL 208

**Intro to Creative Writing (H) (5)**

Writers will move beyond the traditional "academic essay" into an exploration of literary genres to include poetry, creative nonfiction, short fiction, and drama. Prerequisite: college-level writing: test into ENGL& 101.

ENGL 209

**The Hero's Quest: Survey of Eng Lit 7th Cent (H) (5)**

Surveys how medieval and early Renaissance English writers explored issues like the relationship between rulers and subjects, God and free will, and the war between the sexes. Covers the Beowulf poet, Chaucer, Shakespeare, and more.

ENGL 210

**The Crisis of Faith: Survey of English Lit 1616 (H) (5)**

Surveys late Renaissance through Enlightenment writers like John Donne, Ben Jonson, Andrew Marvell, John Milton, Daniel Defoe, Jonathan Swift, Alexander Pope, and Samuel Johnson, emphasizing how writers reflected social concern about faith, politics, and gender roles.

ENGL 211

**Survey of English Literature: 1798 - Present (H) (5)**

This survey studies how, amid political, technological, religious, and artistic ferment, English literature was transformed by the Romantic poets, the rise of the Victorian novel, and the innovations of modern fiction, drama, and poetry.

ENGL 220

**American Drama (H) (3)**

Presents six classic American plays which deal with society and family expectations. Students will view, analyze, discuss, and write on the literary components and substance of these plays.

ENGL 233

**Literature for Children and Adolescents (H) (5)**

Introduction to historical framework of this genre of literature and the authors and illustrators of children's books from pre-school to adolescence. Classics as well as contemporary publications included. Reading to children at day-care included.

ENGL& 244

**American Literature I (H) (5)**

Surveys three American literary movements: Puritans, Colonialists, and American Renaissance/Transcendentalism. Examines rise of a distinctly American literature, focusing on themes of faith, work, self government, race and gender. Prerequisite: ENGL& 101 with 2.0 or better or instructor permission.

ENGL& 245

**American Literature II (D) (H) (5)**

American literature from Civil War to World War I: Gilded Age of industry/capital, labor movement, postwar race relations, westward expansion, gender issues/ suffrage, shift from romanticism to realism/naturalism in prose and poetry. Prerequisite: ENGL& 101 with 2.0 or better or instructor's permission.

ENGL& 246

**American Literature III (D) (H) (5)**

Surveys development and diversification of American literature from Roaring 20s to the present, including modernist innovations in poetry/prose, the Beats, Harlem Renaissance, Latino/a, Asian American, Native American, feminist, environmental, science, and dystopian fictions. Prerequisite: ENGL& 101 with 2.0 or better or instructor's permission.

ENGL 249

**The Great American Novel (H) (5)**

Explore development of the American novel, its major themes and stylistic techniques, focusing on classics by writers like Hawthorne, Melville, Twain, Chopin, Hemingway, Faulkner, Morrison, as well as evaluating contemporary works. Prerequisite: ENGL& 101 with 2.0 or better or instructor permission.

ENGL 250

**Literary Themes (1-5)**

A major theme is followed through important works of fiction, poetry, and drama. Themes vary depending on the instructor and the quarter in which it is offered.

ENGL 251

**Science Fiction (H) (5)**

Surveys rise and development of science fiction, focusing on short stories; students may address novels in course projects. Explores common themes; science fiction as social commentary; technology; war; relationships; race; gender; defining "human." Creative writing options. Prerequisite: ENGL& 101.

ENGL 260

**Non-Western World Literature (H) (D) (5)**

Literature of the non-western world, ancient times to the present: Middle East, India, Africa, China, Japan, Americas focusing on how literature expresses these cultures' spiritual traditions, political values, gender issues, environmental beliefs. Prerequisite: ENGL& 101 with 2.0 or better or instructor permission.

ENGL 271

**Intermediate Creative Writing (3)**

Students will hone their creative writing, workshopping, and revising skills while working on an individual project. Prerequisite: ENGL 208 and instructor permission.

ENGL 272

**Advanced Creative Writing (3)**

For serious students who wish to prepare a manuscript for publication and/or writing program admission. Emphasis on workshopping, and revising of an individual project. Prerequisite: ENGL 271 and instructor permission.

WRT 105

**Writing in the Workplace (5)**

Study a variety of workplace communications, along with proper use of grammar, sentence structure, mechanics and vocabulary within those communications. Prerequisite: ENGL 098 or equivalent score on Compass/Asset test.

## ENVIRONMENTAL SCIENCE

ENVS 100

**Survey of Environmental Science Lab (S) (1)**

Field experience in environmental science. Visit local environments, both natural and human-dominated, ranging from old growth forests to floodplain restoration sites to recycling, forestry and organic farming operations. Includes two Saturday field trips.

ENVS& 100

**Survey of Env Science (S) (5)**

An introduction to the interactions between humans and the natural world. Topics include structure and function of ecosystems; population's growth; mineral, water, forest, food and energy resources, waste management, pollution. Local and global environmental issues will be discussed.

ENVS& 101

**Intro to Env Science w/Lab (S) (5)**

An interdisciplinary course for non-science majors and beginning science students. Topics include biodiversity, climate, pollution, energy and food. Independent laboratories and field trips included. Students cannot receive credit for Both ENVS& 100 and ENVS& 101.

ENVS 120

**Watersheds: Connecting Mountains to the Sea (S) (5)**

Investigate interconnections among geology, hydrology, biological diversity, ecology, human impacts and development along local rivers from headwaters to the ocean. General concepts presented in lectures are illustrated during day-long weekend field trips over rough terrain.

ENVS 121

**Fire and Ice, Rain and Rocks-The Geology (1)**

Examine the geologic and hydrologic characteristics and history of a river from its headwaters to its delta-how earthquakes, faulting, folding, climate, glaciers, volcanism, and man have affected the river. Includes a day-long field trip over rough terrain.

ENVS 122

**Plants, People, and Watershed Health (1)**

Investigate the role of upland forests and riparian vegetation on the health of watersheds and people. During a day-long field trip over rough terrain, identify plant species, measure ecosystem characteristics, observe healthy and impacted sites, and investigate the compatibility of forestry, agriculture and watersheds.

ENVS 123

**Let the Bugs Speak: Biological Communities (1)**

Investigate biological communities found in local streams and rivers, focusing on aquatic insects and aquatic vertebrates. Apply stream survey techniques to assess stream health. Includes a day-long field trip over rough terrain.

ENVS 124

**Life in the Mud: Where the River Meets the Sea (1)**

Estuaries, important and yet impacted ecosystems, are critical nursery habitats for many marine species, including endangered salmon and important overwintering habitat for migratory birds. Investigate the impacts of anthropogenic modification to the local estuaries and recent attempts at habitat restoration. Includes a day-long field trip over rough terrain.

ENVS 125

**Life on the Edge: Surviving the Intertidal (1)**

Investigate the flora and fauna living in the intertidal zones of sandy and rocky habitats in Puget Sound and the Straits of Juan de Fuca. Explore the physical and biological factors that regulate intertidal communities in the Pacific Northwest. Includes field trips over rough terrain.



ENVS 126

### **Our River's Keepers: Pollution & Remediation (1)**

Examines pollution within the Chehalis River watershed, including pollutant types, sources, impacts, environmental fates and methods of remediation. Asses water quality, examine potential sources of pollutants, and visit restoration/ remediation projects. Includes a day-long field trip over rough terrain.

ENVS 127

### **Fishes & Rivers in Northwest: Intro to the 4-H's (1)**

Investigate fish communities found in local streams and rivers. Examine the impacts of habitat loss, hydropower and dams, hatcheries, and overharvesting on local fish populations. Includes a day-long trip over rough terrain.

ENVS 170

### **Introduction to Natural Resources (S) (5)**

What are Pacific Northwest forests, fishes and wildlife? Learn some common species, historical human uses, what policies drive their management, how to conserve them for future use, and how to plan for a career in the field.

## **FRENCH**

FRCH& 121

### **French I (H) (5)**

A multimedia course that combines video, audio, and print. Emphasis is on communicative proficiency, self-expression and cultural insight. Resources include CDs, videos and the World Wide Web.

FRCH& 122

### **French II (H) (5)**

A multimedia course that combines video, audio, and print. Emphasis is on communicative proficiency, self-expression and cultural insight. Resources include CDs, videos, and the World Wide Web. Prerequisite: FRCH& 121 or permission of instructor.

FRCH& 123

### **French III (H) (5)**

A multimedia course that combines video, audio, and print. Emphasis is on communicative proficiency, self-expression and cultural insight. Resources include CDs, videos and the World Wide Web. Prerequisite: FRCH& 122 or permission of instructor.

FRCH& 221

### **French IV (5)**

Reviews and expands essential points of grammar. Students will develop reading skills, build their vocabulary, and increase their listening and speaking skills in a variety of topics. French is used almost exclusively in the classroom. Prerequisite: FRCH& 123 or permission of instructor.

FRCH& 222

### **French V (5)**

Reviews and expands essential points of grammar. Students will develop reading skills, build their vocabulary, and increase their listening and speaking skills in a variety of topics. French is used almost exclusively in the classroom. Prerequisite: FRCH& 221 or permission of instructor.

FRCH& 223

### **French VI (5)**

Reviews and expands essential points of grammar. Students will develop reading skills, build their vocabulary, and increase their listening and speaking skills in a variety of topics. French is used almost exclusively in the classroom. Prerequisite: FRCH& 222 or permission of instructor.

## **GEOGRAPHIC INFO SYSTEMS**

GIS 101

### **Introduction to GIS (5)**

Introduction to map creation and basic spatial analysis techniques using Geographic Information Systems (GIS) software and methods. Students apply GIS fundamentals to the fields of environmental science, urban planning, social science, business, and public health. Prerequisite: CNT 117 or equivalent skills recommended.

GIS 102

### **GIS Spatial Data Design (3)**

Provides in-depth analysis and hands-on practice with coordinate systems, projections, and the structure capabilities and methods for designing geodatabases within GIS. Students will complete Esri 'Virtual Campus' Certificates. Prerequisite: CNT 117 or equivalent skills recommended.

GIS 103

### **GIS Based Cartography (3)**

Introduces the art and science of GIS cartography (map making). Create digital and hardcopy representations for a variety of audiences, using the latest Esri GIS software and extensions. Students will complete Esri 'Virtual Campus' Certificates. Prerequisite: CNT 117 or equivalent skills recommended.

GIS 104

### **GIS and GPS Integration (3)**

Collect, transfer, and use Global Positioning System (GPS) data as primary and secondary data in GIS software for analysis and visualization. Students will complete Esri 'Virtual Campus' Certificates. Prerequisite: CNT 117 or equivalent; GIS 101 recommended.

GIS 110

### **Principles of GIS (5)**

Introduction to the principles of geographic information systems: data sources, data models, capturing and manipulating GIS data, geography concepts, and spatial data. Hands-on practice with GIS software. Prerequisite: MATH 098, must have computer skills (email, file structure, windows).

GIS 120

### **Spatial Analysis of GIS (5)**

Examination of spatial analysis methods within GIS. Analysis and visualization techniques will be developed using ArcGIS Extensions (3D Analyst, Network Analyst, Spatial Analyst), vector and raster data models, and three dimensional surfaces in urban space. Prerequisite: GIS 101 or instructor permission.

GIS 130

### **Applied GIS (5)**

Application of GIS techniques through lab work and case studies of social, economic, and environmental issues. Introduction of new techniques in online web mapping, basic programming for GIS, GPS integration, and remote sensing. Prerequisite: GIS 120.

GIS 200

### **GIS Extensions Analyst (3)**

Introduction to Esri's ArcGIS Extensions that provide advanced analysis and visualization options while developing skills using 3D Analyst, Spatial Analyst, Network Analyst, Model Builder, Maplex, and others. Students will complete Esri 'Virtual Campus' Certificates. Prerequisite: GIS 101, 102.

GIS 201

### **GIS Capstone (3)**

In this culminating course, students plan and implement a project using skills such as spatial data design, cartography, and extensions analysis acquired in previous GIS courses. Prerequisite: GIS 101, 102, 103, 104, and 200.

GIS 250

### **GIS and Remote Sensing (5)**

Application of geographic information systems (GIS) and techniques of remote sensing in natural resource management, including area determination, scale, height measurement, and forest analysis. Detailed cases are studied. Prerequisite: GIS 110, ENGL 099, MATH 099, or instructor permission.

## **GEOGRAPHY**

GEOG& 200

### **Human Geography (D) (SS) (5)**

Introduction to basic geographical concepts, with an emphasis on interrelationships of people and their physical and cultural environments. Course will satisfy requirements for elementary education majors and meet state-mandated Essential Academic Learning Requirements for geography.

GEOG 201

### **Introduction to Physical Geography (S) (5)**

Explore the characteristics of and relationships between Earth's natural systems: lithosphere, hydrosphere, atmosphere, and biosphere. Introduction to landforms, climates, vegetation, soils, mineral and water resources, plate tectonics, and maps. Course work will include some college level writing and math.

## **GEOLOGY**

GEOL 100

### **Geology for Engineering & Environmental Studies (S) (3)**

Explore minerals and rocks, geological processes, and geological investigation techniques that relate to geotechnical and environmental concerns.

GEOL& 101

### **Intro Physical Geology (S) (5)**

Explore and recognize earth materials, processes and structures within a plate tectonics framework; origin and structure of the Earth, rocks and minerals, geologic time, earthquakes and volcanoes, ocean basins, formation of landscapes, special topics.

GEOL 102

### **Earth Evolution & Global Change (S) (5)**

Students will explore the evolution of the Earth and life through geologic time. Origin of the earth, its oceans and atmosphere, evolution of plants and animals, plate tectonics, changes in the continents through time, sedimentary deposits and environments, fossils, geologic time. No prerequisites but GEOL 101/101L recommended; concurrent enrollment in GEOL 102L. Coursework will include some college level writing and math.

GEOL 108

### **Natural Hazards and Catastrophes (S) (5)**

An examination of earth materials and processes through the study of earthquakes, volcanoes, landslides, floods, tsunamis, hurricanes, tornadoes, wildfires, and meteorite impacts. Examination of causes and effects on human populations and the environment; preparedness, prediction and forecasting; mitigation of risks, and case studies.

GEOL 180

### **Cascade and Plateau Geology (S) (3)**

Students will explore the geology of a selected area of interest, for example, Hawaii, Grand Canyon, Rocky Mountains, Cascades, Yellowstone, Tetons, Southwest Deserts, etc.

GEOL& 208

### **Geology of Pacific NW (S) (5)**

Examines the geology and geologic history of the Pacific Northwest and geologic processes important to its evolution. Topics include volcanoes, earthquakes, plate tectonics, rock and minerals, faults and folds, mountain building, landforms, glaciation, and surface processes.

GEOL 270

### **Research in Geology (1-12)**

Design a research project, set up experiments, collect data in the lab or in the field, and/or analyze data. Each credit hour requires 33 hours of activity per quarter. Prerequisite: instructor permission.

## **GERMAN**

GERM& 121

### **German I (H) (5)**

A multimedia course that combines video, audio, and print. Emphasis is on communicative proficiency, self-expression and cultural insight. Resources include CDs, videos, and the World Wide Web.

GERM& 122

### **German II (H) (5)**

A multimedia course that combines video, audio, and print. Emphasis is on communicative proficiency, self-expression and cultural insight. Resources include computer study modules, recorded tapes, videos, laser disks, and the World Wide Web. Prerequisite: GERM& 121 or permission of instructor.

GERM& 123

### **German III (H) (5)**

A multimedia courses that combines video, audio, and print. Emphasis is on communicative proficiency, self-expression and cultural insight. Resources include CD's, videos, and the World Wide Web. Prerequisite: GERM& 122 or permission by the instructor.

GERM& 221

### **German IV (5)**

Reviews and expands essential points of grammar. Students will develop reading skills, build their vocabulary, and increase their listening and speaking skills in a variety of topics. German is used almost exclusively in the classroom. Prerequisite: GERM& 123 or permission of instructor.

GERM& 222

### **German V (5)**

Reviews and expands essential points of grammar. Students will develop reading skills, build their vocabulary, and increase their listening and speaking skills in a variety of topics. German is used almost exclusively in the classroom. Prerequisite: GERM& 221 or permission of instructor.

GERM& 223

### **German VI (5)**

Reviews and expands the essential points of grammar. Students will develop reading skills, build their vocabulary, and increase their listening and speaking skills in a variety of topics. German is used almost exclusively in the classroom. Prerequisite: GERM& 222 or permission of instructor.

## **HEALTH**

HLTH 120

### **Women's Health Issues (HF) (D) (3)**

An opportunity to examine current women's health and well-being issues.

HLTH 125

### **Exploring Healthcare Professions (3)**

An opportunity for investigating the many career opportunities in the health sciences.

HLTH 130

### **Health & Wellness (HF) (3)**

An exploration of current personal health issues and a presentation of contemporary approaches to obtaining and maintaining a high level of wellness.

HLTH 135

### **Healthy Weight Control (HF) (2)**

An introduction to healthy eating that focuses on a balance of foods, including a variety of lifestyle change strategies that will enhance the maintenance of a healthy weight.

HLTH 140

### **Exercise & Nutrition (HF) (3)**

Two core components of a healthy lifestyle - a healthy diet and a safe exercise program - will be explained and developed. Students are expected to exercise outside of class time.

HLTH 143

### **Stress Management (HF) (2)**

Understand how stress can impact quality of life. Learn methods for identifying stressors and strategies to effectively manage them. Construct a personalized stress management program.

HLTH 144

**Technology Health/Fitness (2)**

Explore current uses of technology for adherence, motivation and monitoring of health and fitness behaviors. Areas covered will be digital coaching, fitness monitors and trackers, downloadable applications and peer to peer or social apps.

HLTH 145

**Safety and Fitness (HF) (3)**

Emphasizes the importance of safety, first aid, and exercise as they relate to an individual's level of health and fitness. The course includes American Red Cross Community First Aid and Community CPR certification.

HLTH 154

**Community First Aid and CPR (1)**

Basic First Aid/CPR/AED class covering critical skills needed to respond to and manage first aid, choking or sudden cardiac arrest emergencies in the first few minutes until emergency medical services (EMS) arrives.

HLTH 159

**Anatomy & Terminology for EMT's (1)**

Provide EMT students with a basic understanding of basic anatomy, functions of the human body, and medical terminology. Topics include: anatomic definitions, initial medical terminology, skeletal system, circulatory system, respiratory system, and the nervous system.

## HISTORY

HIST 110

**History of Intolerance (SS) (D) (3)**

An examination and analysis, through reading and film, of intolerance in America's history. Particular attention will be paid to historical events which demonstrate intolerance based on: religion, ethnicity, race, gender, sexual orientation and age.

HIST& 116

**Western Civilization I (SS) (5)**

Analysis of the development of major political, economic, social and cultural characteristics of Antiquity and Medieval Europe.

HIST& 117

**Western Civilization II (SS) (5)**

Analysis of the modern state with emphasis on the Renaissance, the Reformation, Absolutism, Scientific and Political Revolutions.

HIST& 118

**Western Civilization III (SS) (5)**

Analysis of the late 19th and 20th centuries with special attention paid to the development of political, social and economic trends and events.

HIST& 146

**US History I (SS) (5)**

Analysis of American history from the pre-invasion to the Antebellum Era. Emphasis will be on the political, social, and economic changes.

HIST& 147

**US History II (SS) (5)**

Analysis of American history from Antebellum Era to the Progressive Era. Emphasis will be on the political, social, and economic changes.

HIST& 148

**US History III (SS) (5)**

Analysis of American history from World War One to the present. Emphasis will be on the political, social, and economic changes.

HIST 210

**Introduction to Pacific Asian History (SS) (D) (5)**

Description and analysis of emergence of modern nations of Pacific Asia. Gain understanding of historical and geographical context of the political and economic development of the region.

HIST& 214

**Pacific NW History (SS) (5)**

Study of the early exploration and settlement of the Pacific Northwest. Emphasis will be on the economic, political and social developments. The course is designed to meet state certification requirements for teachers.

HIST& 215

**Women in U.S. History (SS) (5)**

Exploration of female experiences in the 18th, 19th, 20th and 21st centuries by looking at class, race and ethnicity and study women in the context of the major historical developments in their time.

HIST& 220

**African American History (SS) (D) (5)**

Examines the history of the continent from the pre-colonial era to the present. Topics include pre-colonial lineage, patterns of ethnic identity, colonialism and tribal identity, urbanization and its impact, and apartheid.

HIST 275

**America in Vietnam (5)**

Overview of the Vietnam Conflict, including the Vietnamese culture, and history; U.S. foreign policy; roots of the war; effects on world politics media conduct during and after the war; and impacts on American society.

*HIST 280*

### **History of American Foreign Relations (SS) (5)**

Survey of American foreign relations from the 17th to the 21st centuries focusing on such issues as national security, economic needs, capitalism democracy and imperialism.

## **HONORS PROJECT**

*HON 160*

### **Honors Project (3)**

Honors students will work with one faculty mentor to develop, complete, and publicly present a three-credit project or paper that requires original research and development. It is expected that the project will involve 60 to 90 hours of work, including initial and progress meetings with the faculty mentor.

*HON 170*

### **Honors Project (3)**

Honors students will work with one faculty mentor to develop, complete, and publicly present a three-credit project or paper that requires original research and development. It is expected that the project will involve 60 to 90 hours of work, including initial and progress meetings with the faculty mentor.

*HON 250*

### **Honors Colloquium (5)**

Honors students will explore the annual Phi Theta Kappa (International Honors society of the Two-Year College). Honors Study Topic in a colloquium setting, using texts, films, Internet, and other resources.

## **HUMAN RELATIONS**

*HR 110*

### **Human Relations-Workplace (5)**

Study of behavior, personality, self-management, self-development, and elementary business psychology in the workplace. Focus on understanding and demonstrating skills imperative to workplace success including communications, personal attitude, motivation, and workplace etiquette.

## **HUMANITIES**

*HUM 110*

### **Ethics and Cultural Values (H) (D) (5)**

An interdisciplinary study of philosophy, literature, history and religion within Western and Oriental ethical systems of thought. It focuses on the importance of cultural values through a study of virtue, duty, utility, and rights.

*HUM& 116*

### **Humanities I (H) (5)**

A survey of the major movements in art, architecture, music, philosophy and literature in a historical context, from pre-history to 1400 C.E.

*HUM& 117*

### **Humanities II (H) (5)**

A survey of the major movements in art, architecture, music, philosophy, and literature in a historical context, from 1300 C.E. to 1800 C.E.

*HUM& 118*

### **Humanities III (H) (5)**

A survey of the major movements in art, architecture, music, philosophy, and literature in a historical context, from 1800 C.E. to the present.

*HUM 270*

### **Survey of Film Studies (H) (5)**

An examination of the social, historical, technical, and artistic aspects of film through viewing, study and discussion of notable motion pictures.

*HUM 281, 282, 283, 284, 285, 286*

### **Lyceum I - VI (1)**

The Lyceum offers a variety of lectures on topics of current interest across a wide variety of disciplines. The theme may vary from quarter to quarter.

## **INFORMATION TECHNOLOGY**

*IT 101*

### **Intro to Programming (5)**

This course provides an introduction to programming using Microsoft Visual Studio. Course focus is on building basic graphical applications using the Python programming language.

*IT 117*

### **Intro to Windows OS (3)**

An introduction to Windows Operating System. Course will cover such things as the taskbar, Start menu, recycle bin, windows views, Window Explorer, storage devices, printing, saving, control panels, etc.

*IT 119*

### **Web Scripting 1 (5)**

Designed for new web designers who want to develop, modify and design standards compliant web pages and sites using the HTML and CSS Languages. Students will be publishing their work on a web server.

IT 121

### **Web Scripting 2 (4)**

A second course in Web Development. Focus is on modern, responsive, and accessible web design using the latest web specifications. Students will be publishing their work on a web server. Prerequisite: IT 119 or CST 119.

IT 123

### **Desktop OS 1 (5)**

This is the first course based on CompTIA A+ certification materials. Material covered includes virtualization, vocabulary, operating system installation, configuration, customization, and usage basics.

IT 124

### **Desktop OS 2 (4)**

This is a second course based on CompTIA A+ and Linux+ certification materials. Material covered includes system hardware, advanced system configuration, and an introduction the command line. Prerequisite: IT 123 or CNT 123.

IT 125

### **Desktop OS 3 (4)**

This is a third course based on Comp IA A+ and Linux+ certification materials. Material covered includes advanced trouble-shooting, more advanced systems configuration and cmd/shell scripting. Prerequisite: IT 124 or CNT 124.

IT 130

### **IT Apps Internship (2)**

Students will get hands on, full life cycle software development experience working on projects for the department and college. Projects will include web and database application design, development, maintenance and support. Prerequisite: IT 101 and IT 119 or CST 101 and CST 119.

IT 140

### **IT Support Internship (2)**

This course is designed to provide students with an introduction to and experience in Help Desk operations. Students will learn the fundamentals of Tier 1 call taking and customer service. Prerequisite: IT 123 and IT 124 or CNT 123 and CNT 124.

IT 144

### **Microsoft Office for IT (5)**

This course provides an introduction to Microsoft Office from the perspective of a support technician. Coverage includes installation, configuration, formatting, document structure, templates, forms, security and troubleshooting. Prerequisite: IT 123 and IT 124 or CNT 123 and CNT 124.

IT 150

### **Relational Databases (5)**

Students learn the tools and processes for data modeling in Relational Database Management Systems. Topics include Structured Query Language (SQL), functional dependencies, normalization, database design methodologies and entity relationship modeling.

IT 201

### **Networking Fundamentals (5)**

This course is based on CompTIA Network+ certification materials. Material covered includes Fundamental Concepts, Terminology, LANs, WANs, Internetworking, VLANs, Routing Basics and Wireless Networking. Prerequisite: MATH 098.

IT 202

### **Advanced Networking (4)**

A second course in Network Technology focusing on configuring, managing and troubleshooting Cisco devices using Cisco IOS. Prerequisite: IT 201.

IT 203

### **Network Security (5)**

Course concentrates on materials commonly associated with Security+ certification. Coverage includes risk identification, intrusion detection, encrypted communication, firewalls and basic forensics. Prerequisite: IT 201 and IT 202.

IT 218

### **Server OS 1 (4)**

This is a first course on server installation, configuration and management. Coverage includes Active Directory fundamentals, SSH, DHCP, DNS and the basics of setting up and managing a web server. Prerequisite: IT 123 and IT 124 or CNT 123 and CNT 124.

IT 219

### **Server OS 2 (4)**

This is the second course on server installation, configuration and management. Coverage includes server content management systems, PHP, Microsoft Exchange and Office 365. Prerequisite: IT 218 or CNT 218.

IT 220

### **Server OS 3 (5)**

This is the third course on server installation, configuration and management. Coverage includes MS SQL, Lync, Hyper-V and an introduction to cloud computing. Prerequisite: IT 219 or CNT 219.

IT 228

### **JAVA 2 (5)**

Second course in the introduction to JAVA programming sequence. These topics include: abstract data structures, lists, stacks, queues, linked lists, maps, recursion, interfaces, encapsulation, serialization, file access, sorting and computational complexity. Prerequisite: IT 224 or CST 224.

IT 230

### **JAVA 3 (5)**

Third and final course in the introduction to Java programming sequence. This course covers recursion, exception handling and recovery, remote file access, event driven programming, binary search trees, and priority queues. Prerequisite: IT 224 and IT 228 or CST 224 and CST 228. .

IT 235

### **CISCO Networking (4)**

Utilizing CISCO equipment and operating systems, students will gain the ability to install, operate and troubleshoot network environments. This course is based upon the skills needed to achieve a CISCO Certified Entry Networking Technician certification.

IT 245

### **Object-Oriented Programming (4)**

An intermediate level course in object-oriented programming. Course covers creating classes from requirement documents, modeling using diagrams, object-relationship analysis, object reuse and good software design. Experience with one or more computer programming languages recommended.

IT 250

### **Discrete Structures (4)**

A programming-based course in discrete structures. Logic, set theory, counting, algorithmic efficiency, graphs and trees are presented. This course uses programming algorithms to demonstrate and explore the discrete math topics commonly used in computer programming.

IT 255

### **Design Patterns (4)**

This course builds upon object-oriented design methodologies and introduces the concept of design patterns to solve software problems. The well-known "Gang of Four (GOF)" patterns are explored.

IT 260

### **Advanced Web Development (5)**

Students will learn to develop applications that use three-tier architecture, allowing for rich client side user interfaces, sophisticated functionality, and advanced database interactions. This course build on previous experience in web development.

IT 265

### **Mobile Applications (5)**

Students will learn how to design and implement software in a mobile environment, using the device's sensors, distribution models, location awareness, and other interactive elements present in the mobile device.

IT 270

### **Dreamweaver (4)**

Learn the Adobe Dreamweaver CC software from several perspectives, including tool usage, and use as a development environment for web and mobile applications.

IT 275

### **CSS Frameworks & Grids (4)**

This course leads to the mastery of HTML and CSS in comprehensive and responsive design. Creation of grids, Syntactically Awesome Style Sheets (SASS) and responsive frameworks are covered.

IT 280

### **Advanced CSS & HTML (4)**

This course expands beyond the current World Wide Web Consortium (W3C) standards of HTML and CSS into future territories. The course explores the latest in HTML and CSS and compares them with today's techniques.

IT 285

### **WordPress Skinning (5)**

WordPress is among the most popular content management systems/bloggings systems in the world. Students learn how to "skin" a WordPress Site, providing the functionality of WordPress, but with the look and feel a customer wants.

## **INTENSIVE ENGLISH PROGRAM**

IEP 070, 072, 074, 076

### **Comprehension Language 1 – 4 (1-9)**

In these Level 1-4 Comprehension Language Skills courses, students will develop listening and reading comprehension skills needed to succeed in subsequent liberal arts and technical/occupational courses. Prerequisite: Official Language Test score or Accuplacer score.

IEP 071, 073, 074, 075

### **Communicative Language 1 - 4 (9)**

In these Communicative Language courses, students will develop speaking, grammar, and composition skills needed to succeed in subsequent liberal arts and technical/occupational courses.

# MATHEMATICS

*MATH 095*

## **Basic Mathematics (1-5)**

For students who need to review basic math concepts such as whole number, fraction and decimal operations. Appropriate placement test scores.

*MATH 096*

## **Pre-Algebra (1-5)**

Covers percents, proportions, unit conversions, geometry, simplifying algebraic expressions and solving simple first degree linear equations. Prerequisite: MATH 095 or appropriate test score placement.

*MATH 097*

## **Algebra for Statistics (5)**

An algebra course for students intending to enroll in MATH& 146, Introduction to Stats. This course does not meet the algebra prerequisite or other quantitative skills courses or for transfer to the University of Washington. Prerequisite: MATH 096 or Compass score of 78+.

*MATH 098*

## **Algebra I (1-5)**

For students with good arithmetic skills and familiarity with signed numbers and basic algebraic expressions. Problem-solving skills are emphasized. Topics include: linear equations and inequalities, graphing, polynomials, and rational expressions. Prerequisite: MATH 096.

*MATH 099*

## **Algebra II (1-5)**

Introduces the concept of functions, their graphs and properties. Particular attention will be paid to linear, quadratic, exponential and logarithmic functions. Prerequisite: MATH 098 or equivalent.

*MATH& 107*

## **Math in Society (M) (5)**

Designed to enhance math proficiency of liberal arts students as they meet personal and professional demands. Includes mathematics in management, statistics, probability, art, and other practical applications in society. Not preparation for calculus. Prerequisite: MATH 099 or equivalent.

*MATH 118*

## **Linear Algebra (M) (5)**

Computational and modeling tools with applications in physics, mathematics, engineering, economics, and business. Topics include systems of equations, matrix algebra, vector spaces, subspaces, bases, orthogonality, transformations, and eigenvalues. Prerequisite: MATH& 142 or equivalent placement.

*MATH& 131*

## **Math for Elem Educ 1 (M) (5)**

Designed to provide the conceptual framework for teaching mathematics from kindergarten through eighth grade. Prerequisite: MATH 099 or equivalent ASSET/COMPASS score.

*MATH& 132*

## **Math for Elem Educ 2 (M) (5)**

The second of two courses designed to provide the conceptual framework for teaching mathematics from kindergarten through eighth grade. Prerequisite: MATH& 131

*MATH 135*

## **Pre-Calculus Refresher (M) (5)**

Designed as a refresher course for students who have previously had a Pre-Calculus course. Content includes everything covered in MATH 141 and MATH 142. Prerequisite: High school pre-calculus equivalent or Instructor Approval.

*MATH& 141*

## **Pre-Calculus I (M) (5)**

Study of elementary functions (polynomial, exponential, logarithmic), systems of equations, matrix algebra. Modeling and problem solving techniques are emphasized from a graphic, symbolic and numeric perspective. Prerequisite: MATH 099 or equivalent placement.

*MATH& 142*

## **Pre-Calculus II (M) (5)**

Graphical, numerical, symbolic development of trigonometric functions and their inverses as defined on the unit circle and right triangles; identities, equations, and applications; complex numbers, polar coordinates, parametric equations, vectors, conics, and sequences and series. Prerequisite: MATH& 141.

*MATH 145*

## **Statistics Prep Seminar (1)**

Refreshes and enhances the necessary prerequisite skills for a college-level statistics course. Topics include algebra for statistics, spreadsheet software skills, and probabilistic reasoning. Prerequisite: MATH 097, 099 or equivalent, or instructor permission.

*MATH& 146*

## **Introduction to Stats (M) (5)**

Introduction to concepts of data collection, organization and summaries. Develop the fundamental concepts of mean, median and standard deviation, probability, probability distributions, and apply these ideas to hypothesis testing, linear regression and analysis of variance. Prerequisite: MATH 097, MATH 099 or equivalent.



MATH 147

**Finite Math for Business (M) (5)**

Linear, polynomial and rational function models. Exponential and logarithmic functions. Mathematics of finance, matrices, linear programming, set operations and probability.

Prerequisite: MATH 099 or equivalent.

MATH& 148

**Business Calculus (M) (5)**

An introduction to calculus concepts needed for business applications. Topics discussed are limits, derivative, integrals, and partial derivatives. Business applications are stressed.

Prerequisite: MATH 147 or MATH& 141 or equivalent.

MATH& 151

**Calculus I (M) (5)**

The first in a four-quarter sequence. Limits, derivatives of algebraic and some transcendental functions, applications of derivatives, the indefinite integral. Topics covered from numerical, analytical and graphical viewpoints. Prerequisite: MATH& 142 or equivalent.

MATH& 152

**Calculus II (M) (5)**

The second in a four-quarter sequence. Covers the calculus of transcendental functions (exponential, logarithm, inverse circular, hyperbolic), techniques of integration, sequences, series, and power series. Prerequisite: MATH& 151 or equivalent.

MATH 156

**Calculus I Lab (1)**

Analyze concepts from Calculus I using algebra-based computer software. For students currently enrolled in Calculus I or who have instructor permission. Corequisite: MATH& 151.

MATH& 163

**Calculus III (5)**

Third in a four-quarter sequence. Polar coordinates, parametric equations, vectors, and vector fields, the analytic geometry of three-space, partial derivatives, and multiple integrals.

Prerequisite: MATH& 152 or equivalent.

MATH 212

**Elementary Differential Equations (5)**

Linear ordinary differential equations with emphasis on supporting concepts of differential operators, Wronskians, characteristic polynomials, homogeneous and nonhomogeneous cases, variation of parameters, undetermined coefficients. Solution of IVP by Laplace transforms and power series method. Prerequisite: MATH& 163.

MATH 228

**Discrete Mathematics (M) (5)**

This class introduces the basic concepts of mathematics that are used in computer science. Topics covered include logic, mathematical induction, combinatorics, set theory, relations and functions and descriptive statistics. Prerequisite: MATH& 141 or equivalent.

MATH 264

**Calculus IV (3)**

Fourth in a four-quarter sequence. Optimization of 2 and 3 variable functions, Lagrange Multipliers, applications and techniques of multiple integration, Green's Theorem, Stokes Theorem, and line and surface integrals. Prerequisite: MATH& 163 or its equivalent.

TMATH 100

**Technical Mathematics I (5)**

Focus is on methods of problem solving for the technical fields. Course develops mathematical vocabulary and skill with algebraic expressions, formula manipulations, graphing techniques, right triangle trigonometry, geometry, exponents, logarithms, and equation/system of equation solving. Prerequisite: MATH 098.

TMATH 101

**Foundational Math Concepts (5)**

Study of foundational math theory and concepts including number sense, algebra, geometry, data analysis and math vocabulary through inquiry-based learning. Does not meet Quantitative Skills distribution requirement for AA degree. Prerequisite: MATH 095 or equivalent.

TMATH 110

**Technical Math II (3)**

Course emphasizes trigonometric functions used to solve engineering, electronics, and mechanics application problems. Prerequisite: TMATH 100.

TMATH 116

**Industrial Math (5)**

Application of basic mathematical operations to specific workforce programs including common fractions, decimal fractions, percentages, ratio and proportion, practical algebra, and computations involving rectangles and triangles. Emphasizes the use of mathematics in diesel and welding. Prerequisite: MATH 095.

TMATH 121

**Electronics Math 1 (5)**

Students will be introduced to math concepts relating to electronics and robotics. Topics studied will include functions, direct and inverse relationships, unit analysis, calculator operation, linear and exponential equations, and spreadsheet math operations. Prerequisite: MATH 098.

# MECHATRONICS

MEC 105

## **Industrial Computer Operations (2)**

Best practices for computer operations in an industrial environment. Topics include Microsoft Windows operating system navigation, hardware maintenance and various industrial software interfaces.

MEC 116

## **AC/DC Electronics (4)**

Basic analysis and troubleshooting of Direct and Alternating current circuits including Ohm's Law, Watt's Law, and Kirchoff's Laws; devices such as resistors, capacitors, and transformers are studied. Prerequisite: MATH 098 or equivalent.

MEC 120

## **Machine Tool Operation (6)**

Introduction to machining operations. Emphasis on safe application of the most common machining procedures and machines used by multi-skilled industrial maintenance technicians.

MEC 151

## **Mechanical Systems (5)**

Introduction to mechanical system components and safe operation of mechanical drive systems. Simple machines, basic drive systems, and operation of various tools will be studied.

MEC 152

## **Power Transmission (3)**

Continuation of MEC 151, course includes study of power transmission components including bearings, brakes and gear systems. Concepts will also include vibration analysis, heat control and maintenance, and gear/cam systems. Prerequisite: MEC 151

MEC 153

## **Hydraulic Systems (5)**

Introduction to fluid power - hydraulics and pneumatics. Safe operation of fluid systems will be emphasized. Course covers fluid characteristics, component symbols, control valves, pumps and reservoirs.

MEC 154

## **Electrohydraulics (4)**

Continuation of MEC 153. Fluid power transfer and electrohydraulic fluid systems. Components studied will include pipes and hoses, pressure regulators, pressure and flow sensors, and electrical control systems. Heavy emphasis on troubleshooting. Prerequisite: MEC 153

MEC 155

## **Preventative Maintenance (3)**

Basic Preventive and predictive maintenance procedures. Topics include facility upkeep, safety monitoring and risk management, teardown and inspection techniques, and technologies used in PM procedures. Prerequisite: MEC 151.

MEC 190

## **Coop Work Experience (1-12)**

See description under COOP 190 for additional information.

MEC 220

## **Sensors and Instruments (5)**

Examination of sensors and diagnostic tools used in industrial environments. Electrical and mechanical measurement instruments will be studied and troubleshooting steps performed to prove competency. Control systems will also be studied. Pre-requisite MEC 151

MEC 250

## **Industrial Electronics (2)**

Study of electricity in an industrial facility. Topics covered will focus on 3-phase power analysis and motion control devices including motors, motor drivers and controls. Pre-requisite: MEC 116 or equivalent knowledge of AC electricity.

MEC 260

## **Allen Bradley PLCs (5)**

Study of Allen Bradley programmable logic controllers. Input and output modules will communicate with peripheral devices such as sensors, motors, lights and relays. Heavy emphasis on ladder logic, safety, troubleshooting and efficiency.

MEC 261

## **Siemens PLCs (3)**

Study of Siemens programmable logic controllers. Siemens SIMATIC equipment and STEP7 software will be used to construct basic PLC systems. Heavy emphasis on Siemens ladder logic, safety, troubleshooting and efficiency. Prerequisite: MEC 260.

MEC 270

## **Industrial Robotics (5)**

Survey of robotics used in industry. Heavy emphasis on safe handling and work cell safety. Programming features include teaching points, program structure and device interfaces. Course includes FANUC Corporation Certified Education Robot Training (CERT) Certification.

# MEDIA STUDIES

*MST 125*

## **Introduction to Sports Announcing (1)**

Learn about the history of Sports Broadcasting. Specific duties of announcers as well as technical knowledge, current trends, career paths, legal and ethical issues of Sports Broadcasting will be covered during the quarter.

*MST 126*

## **Sports Announcing for Football (C) (1)**

Learn and apply the basic skills and knowledge required of today's football announcers. This course will emphasize practical tips, ideas and theories that will help you on your way to becoming a quality football announcer.

*MST 127*

## **Sports Announcing for Basketball (1)**

Learn and apply the basic skills and knowledge required of today's basketball announcers. This course will emphasize practical tips, ideas and theories that will help you on your way to becoming a quality basketball announcer.

*MST 128*

## **Sports Announcing for Baseball (1)**

Learn and apply the basic skills and knowledge required of today's baseball announcers. This course will emphasize practical tips, ideas and theories that will help you on your way to becoming a quality baseball announcer.

*MST 158*

## **Studio & Outdoor Lighting for Television & Film (2)**

Discover the basic principles and techniques of lighting television and film sets in both indoor and outdoor situations.

*MST 159*

## **Stagecraft for Television and Film (2)**

Designed specifically for television and film majors, this class introduces students to the basic tools, materials, equipment and techniques used in the design and building of television and film sets.

*MST 190*

## **Cooperative Work Experience (1-12)**

See description under COOP 190 for additional information.

*MST 220*

## **Introduction to Broadcast News and Production (4)**

Learn basic media news writing, produce and broadcast news and feature stories on both radio and television. Some media production techniques will be covered during the quarter.

*MST 225*

## **Introduction to Telecommunications (5)**

The field of telecommunications is constantly changing and affecting the way we live our lives. Learn about the history, social impact, moral, ethical issues and philosophies of telecommunications in our society.

*MST 230*

## **Intro to Radio Broadcasting (C) (5)**

As an introduction to radio broadcasting you will learn about programming philosophies, announcing skills, production techniques, copy writing and the FCC rules and regulations that apply to the industry.

*MST 231*

## **Advanced Radio Broadcasting (3)**

Learn strategies to research and prepare material for broadcast. The use of promotions and contests to increase station ratings also will be covered.

*MST 260*

## **Intro to TV & Video Production for the Electronic Media (5)**

Learn studio and control room operations, field and studio camera techniques, basic script writing and video editing. At the end of the quarter students will be able to write, produce and edit short videos.

*MST 261*

## **Advanced TV & Video Production for Electronic Media (5)**

Improve editing skills while producing documentary and music videos. Advanced camera, editing, studio and field production techniques will be covered. Students will also take part in producing live college basketball games.

*MST 262*

## **Television Production (5)**

Students will write, direct, produce and edit video packages and participate as crew members in producing classmate's video projects.

*MST 271*

## **Radio Broadcasting Internship (1)**

Practice and perfect your announcing skills on the campus radio station KCED FM. Prerequisite: M ST 230, 231 or instructor permission.

*MST 272*

## **Radio Broadcasting Internship (2)**

Practice and perfect your announcing skills on the campus radio station KCED FM. Prerequisite: MST 230, 231 or instructor permission.

*MST 273*

### **Radio Broadcasting Internship (3)**

Practice and perfect your announcing skills on the campus radio station KCED FM. Prerequisite: M ST 230, 231 or instructor permission.

*MST 274*

### **Radio Broadcasting Internship (4)**

Practice and perfect your announcing skills on the campus radio station KCED FM. Prerequisite: M ST 230, 231 or permission of the instructor.

*MST 281*

### **TV Broadcasting Internship (1)**

Designed for students who wish to produce independent video projects outside of the classroom environment. Permission of instructor required. Prerequisite: M ST 260, 261, 262.

## **MEDICAL ASSISTANT**

*MA 130*

### **Medical Math (5)**

A mathematics course that focuses on solving applications using percent, proportion, and unit conversion as well as descriptive data interpretation. Satisfies the math requirement for Medical Assistant AAS. Prerequisite: MATH 096 or equivalent.

*MA 139*

### **MA Medical Terminology (5)**

A required class for all students enrolled in the Medical Assistant Program to develop a medical vocabulary from an anatomy, physiology, and pathology format. It is suitable for others entering medical-related fields.

*MA 140*

### **Medical Assisting Intro (5)**

An introduction to the profession of medical assisting in the ambulatory health care setting. Designed to explore the medical assistant as a valuable member of the health care team.

*MA 208*

### **MA Electrocardiography (2)**

Electrocardiography (ECG) for the medical assistant student; including anatomy of the heart and the cardiac cycle, ECG applications and methods for testing in ambulatory care.

*MA 241*

### **MA Clinical Procedures (6)**

Overview of physical examinations, procedures, and testing that a medical assistant would assist a health care provider with in an ambulatory care setting. Prerequisite: Acceptance into a 2nd year MA.

*MA 242*

### **Medical Administration (7)**

An overview of pharmacology and medication administration as it applies to the medical assistant's responsibilities in ambulatory care. Prerequisite: Acceptance into 2nd year MA program.

*MA 243*

### **MA Clinical Procedure II (6)**

Surgical setup for clinical/office procedures explored in detail; review of the role of diagnostic imaging, rehabilitation, and nutrition in the interdisciplinary approach of patient care. Prerequisite: MA 242, MA 246 with a 2.5 GPA or higher.

*MA 244*

### **MA Externship Seminar (1)**

This class allows the medical assistant extern to explore objectives and challenges in bridging their classroom/lab experiences to the experiences they are encountering in their externships. Prerequisite: MA 242, MA 246 with a 2.5 GPA or higher.

*MA 245*

### **MA Clinical Externship (6)**

One hundred eighty unpaid hours of externship in an ambulatory health care setting that allows the medical assistant student to bridge their classroom education and lab training to the real world medical setting. Prerequisite: MA 242, MA 246 with a 2.5 GPA or higher.

*MA 246*

### **MA Laboratory Procedures (10)**

Overview of laboratory procedures and regulations for the ambulatory health care setting, including phlebotomy training. Prerequisite: Acceptance into 2nd year MA program.

*MA 249*

### **MA Admin Procedures (8)**

Administrative protocols and procedures related to front and back office responsibilities in an ambulatory care setting; with emphasis on communications, medical records management, and fiscal management practices. Prerequisite: acceptance into 2nd year of MA program.

## **MUSIC**

*MUSC 100*

### **Fundamentals of Music (5)**

Introduction to the elements of music theory, including scales, intervals, keys, triads, elementary ear training, notation, meter and rhythm.

MUSC& 105

**Music Appreciation (D) (H) (5)**

Developing an understanding of music through the study of musical elements and cultural contexts.

MUSC 108

**Piano I (1)**

Introductory piano. Emphasizing basic keyboard skills, music reading, and conceptual understanding pertinent to early level study. Includes transposition, harmonization, sight reading, improvisation, and basic keyboard repertoire. Pre/corequisite: MUSC& 131.

MUSC 109, 110

**Piano II - III (1)**

Continued piano study for the non-keyboard music major. Emphasizes arpeggios, inversions, seventh chords, modes, pedaling and performance of elementary-level repertoire. Prerequisite: MUSC 108 with a minimum grade of 2.5 or instructor permission.

MUSC 114

**Fundamentals of Music for Education (3)**

A beginning music course to prepare elementary education majors for the upper division course or courses required which they will take to complete the education degree. Also aimed at the student seeking an AA degree who may have an interest in learning the mechanics of music reading and composition. In addition this course can be taken in preparation for those students who wish to major in music but who do not have enough basic skills to begin the Music Theory Sequence.

MUSC 118

**Broadway Today (H) (5)**

Study of current musicals including: Broadway musicals, television musicals and animated musicals. The following components will be examined: music, lyrics, plot, choreography, set design, costumes, generation of revenue, musical awards, and role of the critic.

MUSC& 121

**Ear Training I (H) (2)**

An aural study of musical scales and intervals, designed for music majors and minors. Emphasis on dictation, sight singing, functional keyboard skills. Required of all music majors. (Music majors are required to register for MUSC& 131 with MUSC& 121.) Prerequisite: Music reading skill.

MUSC& 122

**Ear Training II (2)**

An aural study of musical scales and intervals, designed for music majors and minors. Emphasis on dictation, sight singing, functional keyboard skill. Required of all music majors. The student must simultaneously register for MUSC& 132. Prerequisite: MUSC& 121 or permission of instructor.

MUSC& 123

**Ear Training III (2)**

An aural study of musical scales and intervals, designed for music majors and minors. Emphasis on dictation, sight singing, functional keyboard skills. Required of all music majors. Students must simultaneously register for MUSC& 133. Prerequisite: MUSC& 122 or permission of instructor.

MUSC 124, 125, 126, 127, 128, 129

**Jazz Ensemble I - VI (2)**

Performing ensemble made up of students and community members. The ensemble's instrumentation is flexible, depending on availability of musicians. One evening rehearsal and one evening concert will be required. Off campus performances may be required.

MUSC 130

**History of Western Music (H) (5)**

Introduction to musical elements, musical form, and stylistic periods in western music.

MUSC& 132

**Music Theory II (3)**

A technical study of music, designed for music majors and minors. Emphasis on part-writing, harmonization of melody and harmonic analysis. Required of all music majors. Prerequisite: MUSC& 131 or permission of instructor. Co-requisite: MUSC& 122.

MUSC 135

**Beginning Guitar (2)**

Presents the basic skills for reading and techniques needed to play the guitar. Intended for students with little or no background in guitar performance. Students must apply their own acoustic guitar.

MUSC 139

**Music of the World (H) (D) (5)**

A music survey of diversity found in music around the world. Examines music as accompaniment to ceremony and ritual, aid to work and routine, and an expression of universal unchanging human emotions. Prior musical experience is not necessary. Prerequisite: proficiency in reading, grammar skills.

MUSC 140

**History of American Popular Music (H) (D) (5)**

Exposure to styles of American popular music from the 1890's to the present. The development of four American styles: Blues, Ragtime, Dance band and Jazz showing the evolution of American popular music. Prior musical training is not required. Prerequisite: Proficiency in reading, grammar skills.

MUSC& 141

**Music Theory I (H) (5)**

A study of musical concepts, such as pitch and rhythmic notation, scales and modes, key signatures, intervals, seventh chords and triads. Prerequisite: MUSC 100 or placement by instructor.

MUSC& 142

**Music Theory II (H) (5)**

A study of musical concepts, including 16th and 18th century counterpoint, part writing, and musical phrases. Prerequisite: MUSC& 141

MUSC& 143

**Music Theory III (H) (5)**

A study of musical concepts, such as dominant substitutions, voice leading chords, secondary dominants, motives, and phrase structures. Prerequisite: MUSC& 143

MUSC 144, 145, 146, 147, 148, 149

**Choir I - VI (2)**

A vocal group consisting of the part distribution: soprano, alto, tenor, and bass. Will perform both sacred and secular music literature. Participation in one evening concert per quarter is mandatory. Previous choral experience not necessary. Prerequisite: by audition only.

MUSC 150

**Applied Flute (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

MUSC 151, 152, 153

**Functional Piano I - III (1)**

Functional piano study/skill requirement for music majors. A practical course to accompany any of the music theory courses. Emphasis placed on hand coordination, scales, transposition, harmonization and score reading. Corequisite: Simultaneous enrollment in music theory class.

MUSC 154

**Applied French Horn (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

MUSC 155

**Applied Trumpet (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

MUSC 156

**Applied Trombone (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

MUSC 157

**Applied Tuba (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

MUSC 158

**Applied Euphonium (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

MUSC 159

**Applied Percussion (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

MUSC 160

**Applied Piano (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 161*

**Applied Violin (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 162*

**Applied Viola (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 163*

**Applied Cello (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 164*

**Applied Double Bass (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 165*

**Applied Guitar (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 166*

**Applied Saxophone (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 167*

**Applied Voice (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 168*

**Applied Composition (1)**

This course teaches composition skills to students majoring in music. Students will study musical literature from various style periods and composers and will complete works based on guidelines set out by the instructor. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 169*

**Applied Clarinet (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 170*

**Applied Oboe (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 171*

**Applied Bassoon (1)**

This course teaches performance skills to students majoring in music. Musical literature from various style periods and composers will be selected to acquaint the student with a wide range of repertoire written for the instrument. Instructor's permission and/or audition required. Corequisite: Ensemble and/or music theory.

*MUSC 175, 176, 177, 178, 179, 180*

**Community Band I - VI (2)**

Performance ensemble consisting of students and community members. Repertoire will vary and be selected by the band director(s). The ensemble consists of band instrumentation and meets weekly for three hours.

MUSC 185, 186, 187, 188, 189, 190

**Community Orchestra I - VI (2)**

Performing ensemble made up of students and community members. Repertoire will vary and will be selected by the orchestra director. The ensemble consists of orchestral instrumentation and meets weekly for three hours.

MUSC& 221

**Ear Training IV (2)**

An aural study of musical scales and intervals, designed for music majors and minors. Emphasis on dictation, sight singing, functional keyboard skills. Required of all music majors. Prerequisite: MUSC& 123 or permission of instructor. Corequisite: MUSC& 231.

MUSC& 222

**Ear Training V (2)**

An aural study of musical scales and intervals, designed for music majors and minors. Emphasis on dictation, sight singing, functional keyboard skills. Required of all music majors. Prerequisite: MUSC& 221 or permission of instructor. Co-requisite: MUSC& 232.

MUSC& 223

**Ear Training VI (2)**

An aural study of melody, harmony and musical form, designed for music majors and minors. Emphasis on dictation and sight singing. Required of all music majors. Prerequisite: MUSC& 222 or permission of instructor. Co-requisite: MUSC& 233.

MUSC& 241

**Music Theory IV (H) (5)**

A study of musical concepts, such as modulation, binary and ternary forms, and contrapuntal genres, including fugues and inventions. Prerequisite: MUSC& 143

MUSC& 242

**Music Theory V (H) (5)**

A study of musical concepts, such as mode mixture, Neapolitan and Augmented Sixth chords, chromatic modulation, popular music and song forms, variation, Sonata and Rondo form. Prerequisite: MUSC& 241.

MUSC& 243

**Music Theory VI (H) (5)**

A study of musical concepts, focused on techniques and methods of the 20th and 21st century. Prerequisite: MUSC&242

MUSC 244, 245, 246, 247, 248, 249

**Performance Ensemble I - VI (1)**

An ensemble is for the advanced performer (Instrumentalists or Vocalists). Music reading is imperative. Will perform many styles of music. Concert performances will be both on and off campus and/or tour. By audition ONLY.

MUSC 250

**Musical Theatre Production I (H) (5)**

Designed to introduce the student to all the elements of musical theatre. The student will study the audition process, the effect of musical choreography, the historical setting of the work chosen, musical score and dialogue.

MUSC 251

**Musical Theatre Production II (5)**

The student will continue to study the audition process, the effect of musical choreography, the historical setting of work chosen, musical score and dialogue. Prerequisite: by audition only.

MUSC 254, 255, 256, 257, 258, 259

**Vocal Ensemble I - VI (2)**

A small vocal ensemble that prepares and performs chamber works, and contemporary vocal literature. Placement is by audition only. Auditions will take place during the first scheduled class.

MUSC 264

**Music History I (D) (5)**

Traces the development of musical composition from antiquity and the early Christian era, through the Baroque era. Music listening is a strong component of the course.

MUSC 265

**Music History II (H) (5)**

Study of the following periods in music history: Baroque, Classical and Romantic. Music listening is a strong component of the course. Writing and scholarly reading in the field of music will be required.

MUSC 266

**Music History III (5)**

Studies the development of music from the early twentieth century through contemporary music of the twenty first century. Music listening will be a strong component of the course.

MUSC 276

**Music Technology (3)**

Detailed study of MAC-based music software to create recordings. Will acquaint the student with music technology to professionally edit, publish and compose original music.

MUSC 281, 282, 283, 284, 285, 286

**Instrumental Improvisation I - VI (2)**

An historical study of improvisation in instrumental styles: Dixieland, jazz, and contemporary popular music. Course will involve stylistic and chordal analysis as well as performance on the student's major instrument.



# NATURAL RESOURCES

*NATR 131*

## **Plants of the Pacific Northwest (5)**

Basic biology, life history and distribution of plants of the Pacific Northwest, emphasizing major tree species. Laboratory exercises focus on taxonomy and identification methods. An accelerated two-week course: first in a three part series. Prerequisite: ENGL 099, placement in ENGL& 101 or instructor permission.

*NATR 150*

## **Disturbance Ecology (5)**

Investigation of forces that change forest and riparian plant communities: fire, wind, floods, and insects and diseases endemic to the Pacific Northwest. An accelerated two-week course; second part of a three-part series. Prerequisite: ENGL 099 or placement in ENGL& 101 or instructor permission.

*NATR 160*

## **NW Terrestrial Habitats (5)**

Exploration of diverse Pacific Northwest ecosystems. Succession, plant associations, site characteristics, biodiversity, population ecology and community ecology are studied within the context of ecosystem sustainability. A two-week, accelerated course; third in a three-part series. Prerequisite: ENGL 099 or placement in ENGL& 101 or instructor permission.

*NATR 191*

## **Work Experience Seminar (1)**

Preparation for cooperative work experience required for the Natural Resources- Forestry Technician program: job applications, resumes, cover letters, interview techniques, and employment research.

*NATR 260*

## **Forest Mensuration (5)**

Forestry measurement requirements, such as timber cruising, log scaling, tree grading, inventory techniques, and computer applications. Labs, some in the field, emphasize equipment and techniques necessary to measure forest resources. Prerequisite: ENGL 099, MATH 099 or college-level placement or instructor permission.

*NATR 265*

## **Forest Management (5)**

Contemporary forest management principles, economics and concepts. Emphasizes sustainable forest management; certification systems, fragmentation and current forest rules including policy and regulatory issues on the state and federal levels.

*NATR 270*

## **Silviculture (5)**

Forestry fundamentals, including methods of regeneration, site preparation, planting practices, animal damage control, nursery practices, pesticide/herbicide use and safety, prescribed burning, pre-commercial and commercial thinning and harvest treatments.

*NATR 280*

## **Harvest Systems and Products (5)**

Forest harvest techniques; includes transport systems, logging plans, wood products and other forest products, road layout and construction, best management practices, timber appraisal and contracts.

# NURSING

*NURS 101*

## **Basic Nursing Care Concepts (12)**

Program themes of homeostasis, the role of the nurse, and continuum of care are applied at on-campus theory and skills labs and off-campus clinical experiences at assisted living and long-term care facilities. Prerequisite: admission to the Centralia College Nursing Program.

*NURS 102*

## **Common Alterations I (12)**

Progressive competencies reflecting program themes are applied to nutrition; cardiac, respiratory, and endocrine systems; and medication and fluid administration. On-campus theory, skills labs and off-campus clinical experiences are provided. Prerequisite: NURS 101 or equivalent.

*NURS 103*

## **Common Alterations II (12)**

Progressive competencies reflecting program themes are applied to surgical, neurologic, musculoskeletal, renal, and gastrointestinal nursing care. On-campus theory and skills labs and off-campus acute care clinical experiences are provided. Prerequisite: NURS 101, 102 or equivalent.

*NURS 108*

## **Electrocardiography for Health Care Professional (2)**

Review of cardiac anatomy and physiology; ECG equipment operation and supplies; patient preparation; ECG testing procedure; rhythm recognition and interpretation; cardiovascular disorders; pharmacology in ECG testing. Includes hands on ECG training and practice. Co-requisite: RN, LPN, or nursing student or instructor permission.

NURS 110

### **Nursing Care Management (4)**

Presents basic concepts related to managing and directing members of a team, including delegation, communication, and evaluation. Emphasizes decision-making in the leadership role within the scope of practice for the practical nurse. Prerequisite: ENGL 101 and NURS 102

NURS 190

### **Cooperative Work Experience (1-5)**

See description under COOP 190 for additional information.

NURS 200

### **LPN to RN Transition (2)**

Explores LPN and RN roles and responsibilities. Centralia College Nursing Program philosophy, purpose, conceptual framework, and outcome criteria are reviewed. Includes orientation to clinical facilities and classroom, campus, and off-campus lab expectations. Prerequisite: Admission to RN program.

NURS 201

### **Mental Health & Lifespan (10)**

Progressive competencies reflecting program themes are applied to the care of clients with mental health alterations, complications of child-bearing and high-risk newborns and children. Community-based and in-patient clinical experiences are provided. Corequisite: NURS 101, 102 & 103 or equivalent.

NURS 202

### **Complex Alterations (12)**

Progressive competencies reflecting program themes are applied to the care of clients with complex alterations in health. Women's Health and Pediatric and Adult acute care clinical opportunities are provided at regional facilities. NURS 201 and 220 or equivalent.

NURS 203

### **Complex Management (8)**

Progressive competencies reflecting program themes are applied to the care of clients with complex alterations in health. Community-based and acute care inpatient clinical opportunities are provided at regional facilities. Prerequisite: NURS 201 and 202 or equivalent.

NURS 210

### **Basic Life Support for Healthcare Providers (1)**

Covers the information and skills needed for adult, child, and infant cardiopulmonary resuscitation; the use of an automated external defibrillator; recognition and treatment of choking; safety factors in training and actual rescue. Corequisite: admission to the nursing program or permission of the instructor.

NURS 220

### **Management & Leadership (2)**

Expands on the program theme of the role of the nurse to provide a stronger theoretical foundation for assuming a management and leadership role in a variety of care settings. Prerequisite: NURS 101, 102 and 103 or equivalent; corequisite: NURS 201.

NURS 222

### **Transition to Practice (4)**

Preceptor-guided experiences in a variety of community health care organizations are provided. Community-based and personal professional development projects are assigned. Prerequisite: NURS 201 and 202 or equivalent; corequisite: NURS 203.

## **NURSING ASSISTANT**

HLSV 110

### **Basic Life Support for Healthcare (1)**

Course covers the information and skills needed for adult, child, and infant cardiopulmonary resuscitation; the use of an automated external defibrillator; recognition and treatment of choking; safety factors in training and actual rescue.

HLSV 131

### **Nursing Assistant Certification (9)**

Awareness of the role of the nursing assistant in nursing care and skill development. Topics: maintain a safe environment, provide restorative care, communication, and practice basic concepts of care. Background check is required for clinical.

HLSV 132

### **Nurse Delegation (2)**

Class is for Washington State caregivers who work in or will work in specific community-based long-term care settings. Course covers: medication administration, diabetes care, roles and laws pertaining to delegation and hands-on skills practice. Prerequisite: NAC Certification or co-enrollment in NAC.

HLSV 133

### **Mental Health (1)**

Learn how a caregiver, in a generalized residential setting, can work effectively with a person who has a major mental disorder. Prerequisite: NAC certification or currently enrolled in NAC course.

HLSV 134

### **Dementia (1)**

Learn how a caregiver, in a generalized residential setting, can work effectively with a person who has memory impairments. Prerequisite: NAC certification or currently enrolled in NAC course.

HLSV 160

### **Emergency Medical Technician (12)**

Techniques of emergency medical care presently considered as the responsibilities of a technician in his/her role. Designed to assure a uniformly high level of knowledge and skills among those involved in emergency care. Prerequisite: healthcare provider CPR, instructor permission.

HLSV 163

### **Emergency Medical Responder (5)**

This course prepares students for certification as an Emergency Medical Responder in the State of Washington. Both lecture and practical training are used to teach important aspects of basic pre-hospital care. Prerequisite: 18 years old, affiliated with Lewis County EMS, valid driver's license.

## **NUTRITION**

NUTR& 101

### **Nutrition (S) (5)**

An exploration of the six basic nutrients with diet planning principles, human metabolism, weight control and digestion also being studied. Some chemistry or biology background is helpful. Prerequisite: prior knowledge of chemistry or biology would be helpful.

NUTR 202

### **Nutritional Laboratory (1)**

Consumer-oriented labs will teach students how to analyze their diet, apply nutrition knowledge to menu planning and reading food and supplement labels. Prerequisite: NUTR 201, HLTH 140 or permission of instructor.

NUTR 203

### **Issues in Nutrition (S) (5)**

Examines the interrelationship between diet and individual lifestyles with regard to health risks during all stages of life.

## **OCEANOGRAPHY**

OCEA& 101

### **Intro to Oceanography (S) (5)**

Explore the physical, geological, chemical and biological characteristics of the ocean: waves and tides, ocean and atmosphere circulation, coastal features and beach processes, ocean basins, sediments, ocean chemistry and physics, plate tectonics, and marine life.

## **PHILOSOPHY**

PHIL& 101

### **Intro to Philosophy (H) (5)**

Investigate the assumptions philosophers have made about reality, knowledge, truth, God, morality, social construction, freedom, and paternalism.

PHIL 103

### **Introduction to Ethics (H) (5)**

Focus on choices made in concrete circumstances. Study traditional ethical theories and present-day moral dilemmas.

## **PHLEBOTOMY**

PHLE 131

### **Intro to Phlebotomy Tech (5)**

Overview of laboratory procedures and regulations for the medical office laboratory. Prerequisites: BIO 170 & 172, MA 139 with a 2.5 GPA or higher.

PHLE 132

### **Advanced Phlebotomy (8)**

Expansion of Phlebotomy skills introduced in PHLE 131. This course will offer lecture and lab sessions with emphasis on hands on practice and dexterity for successful and safe venipuncture. Prerequisite: PHLE 131 with a 2.5 GPA or higher.

## **PHYSICAL EDUCATION**

PE 101

### **Introduction to Physical Education (3)**

A survey course designed for students considering a career in physical education, recreation and sports. Presents background information for the wide scope of career opportunities.

PE 102

### **Badminton (1)**

A course slanted toward beginners, with emphasis on techniques of the game. Rules and techniques of single and doubles games.

PE 103

### **Basketball (1)**

This course will cover the basic skills and techniques of basketball. Includes team defense and team offense.

PE 104

### **Bowling (1)**

This course is for beginners and novices. Four-step approach, how to choose equipment and scoring emphasized. Off-campus.

PE 106

### **Indoor Racquet Sports (1)**

Designed to cover skills, rules, equipment, safety, and strategy of racquet sports.

PE 107

### **Cycling Basics (HF) (2)**

A class consisting of road tours of varying distances as well as classroom lectures. Each student must have a bicycle in good repair and an approved helmet.

PE 109

### **Golf (1)**

Instructions for beginners, fundamentals, rules, and etiquette. Off campus but first class will meet in HWC 103.

PE 110

### **Physical Fitness (HF) (1)**

Study all five areas of fitness: aerobic endurance, muscle strength, muscle endurance, flexibility, and body composition. Students work at their own fitness levels.

PE 111

### **Fitness in the Workplace (HF) (1-2)**

Course will increase cardiovascular endurance, flexibility, and increase strength. Students will develop and conduct their own personal fitness program.

PE 113

### **Beginning Tennis (1)**

Instruction for beginners in fundamentals of the game. Rules and court etiquette. All students need their own racquet. Gold Street courts will be used. First class meets in GYM 120.

PE 114

### **Swim Fitness (HF) (1)**

Emphasizes cardio-respiratory endurance, muscle fitness and body composition improvement through lap swimming.

PE 115

### **Volleyball (1)**

This course will cover the fundamental skills and techniques of beginning volleyball. Includes basic rules, scoring and strategy.

PE 117

### **Lifeguard Training (2)**

Students will obtain the knowledge and skills needed to prevent and respond to aquatic emergencies. Upon successful completion of this class a student will obtain the American Red Cross Lifeguarding certificate. Prerequisite: PE 114 or permission of instructor.

PE 120

### **Lifestyle Management and Exercise (HF) (2)**

Designed to assist individual in making life style changes associated with health and fitness.

PE 123

### **Basic Weight Training/Conditioning (HF) (1)**

Designed to condition the musculature of the body using machine and free weights.

PE 125

### **Free Weights (HF) (1)**

Designed to develop muscle fitness through lifting free weights, Olympic lifts, plyometric and power lifting. Students need prior weight training experience.

PE 130

### **Basketball Applications (3)**

A course designed to provide experience in advanced strategies, fundamental skills, and team concepts of basketball. Prerequisite: PE 103, 167 or instructor permission.

PE 131

### **Baseball Application I (3)**

Learn the techniques and strategies in a practice or game situation with an emphasis on fundamentals, conditioning, team concept and sportsmanship.

PE 139

### **Volleyball Applications (3)**

A course designed to provide experiences in advanced strategies, skills, and team concepts of volleyball. Prerequisite: PE 115 or instructor permission.

PE 140

### **Boot Camp Basics (HF) (1)**

A high-impact exercise class designed to improve muscle strength, endurance, flexibility and aerobic capacity.

PE 141

### **Elite Fitness (1)**

A combination of cardio, strength, core and circuit training in athletic conditioning format. Topics of athletic durability, athletic functional training, and the typical physical adaptations will be covered throughout the quarter. Prerequisite: instructor permission.

PE 142

### **Cardio Combo (HF) (1)**

A combination of cardio experiences to improve cardiovascular endurance, body composition, muscle fitness and flexibility. A variety of movements will be explored, including step aerobics, kickboxing, Drums Alive, Zumba, and circuits and weights.

PE 150

**Yoga (HF) (1)**

An exercise class integrating components of flexibility, muscular strength and endurance, and relaxation. Students will be encouraged to work at their own level of fitness.

PE 151

**Aerobic Fitness/Walking (HF) (1)**

A fitness program emphasizing aerobic activities only. Designed to develop cardiovascular endurance, flexibility and body composition.

PE 152

**Pilates/Core (HF) (1)**

An exercise class designed to teach breathing with movement, body mechanics, balance, coordination, spatial awareness, strength and flexibility.

PE 153

**Tai Chi Basics (HF) (1)**

Develop balance, lower-body strength and relaxation in motion with Wu Style Tai Chi. Students will work at their own level of fitness.

PE 158

**Beginning Tae Kwon Do (HF) (2)**

Develop balance, coordination, agility, spatial awareness, strength, and flexibility through the Korean art of Tae Kwon Do. Students will work at their own level of fitness.

PE 159

**Intermediate Tae Kwon Do (2)**

Further development of the techniques, forms, the sport, and self-defense aspects required to advance to blue belt in the Korean martial art of Tae Kwon Do.

PE 160

**Advanced Tae Kwon Do (2)**

Further development of the techniques, forms, the sport, and self-defense aspects required to advance to blue and orange belt in the Korean martial art of Tae Kwon Do.

PE 162

**Softball Fundamentals (1)**

A mental and physical approach to the fundamentals of fast pitch softball. An emphasis will be placed on the basic skills and concepts needed to play the game effectively.

PE 163

**Step Aerobics (HF) (1)**

Combines simple, low impact step movements with music to improve cardiovascular endurance, flexibility and body composition.

PE 164

**Softball Theory (3)**

An analysis of the mental approach to the game of softball. An emphasis will be placed on the theories and strategies of fast pitch.

PE 165

**Softball Applications I (3)**

Learn how to apply the fundamentals of softball in game like situations.

PE 166

**Baseball Fundamentals (1)**

On-the-field practice in development of the basic fundamentals of baseball. Emphasis on basic skills and conditioning.

PE 167

**Basketball Fundamentals (1)**

This course will implement basic fundamentals with theory of various phases of the game. Conditioning for a lifetime activity is an important aspect of the course.

PE 168

**Lifetime Fitness (HF) (2)**

Cardiovascular endurance, muscle fitness, weight management and flexibility will be studied. One lecture hour and two hours of activity per week.

PE 169

**Cardio Kickboxing (HF) (1)**

Designed to offer high-impact aerobic conditioning. Each week new basic body moves and techniques introduced to improve the individual's level of fitness.

PE 172

**Theory of Baseball (3)**

A practical course with emphasis on the coaching of offensive and defensive strategies, theory, psychology and basic rules. First class meets in Gym.

PE 174

**Team Games (3)**

Planning, organizing and proper supervising of physical education team game activities. Practical experience in presentation, evaluation and safety in team games.

PE 175

**Physical Education Activities/Elementary Level (3)**

Instruction in organization, skills and rules of various games. Opportunity for planning, organizing, creating and leading activities suitable for elementary and middle school age levels.

PE 180

### **Officiating Basketball (3)**

A course designed for physical education and recreation majors. Presentation of rules and techniques involved in officiating basketball. Practical officiating experience in a laboratory situation to be included.

PE 181

### **Officiating Team Sports (2)**

Designed to present the rules and techniques involved in officiating basketball, volleyball, and soccer. Required for Physical Education Teaching majors but open to the public. Practical officiating experience in a laboratory situation to be included.

PE 184

### **Beginning Racquetball (1)**

This course will provide students with instruction in the basic fundamentals, and skills essential in beginning racquetball. Attention will also be given to racquetball equipment, rules, safety, and strategy.

PE 202

### **Advanced Badminton (1)**

A review of basic offensive and defensive skills with emphasis on advanced playing skills and techniques. Prerequisite: P E 102 or Instructors permission.

PE 203

### **Advanced Basketball (1)**

This course will review basic skills and techniques of basketball. Included in the course also will be advanced skills and techniques along with game strategies. Included team offense and team defense. Prerequisite: PE 103 or instructor permission.

PE 204

### **Advanced Bowling (1)**

Advanced bowling techniques. Prerequisite: PE 104 or instructor permission.

PE 209

### **Advanced Golf (1)**

The course is designed to help the individual develop more advanced skills and strategies of golf. Prerequisite: PE 109 or instructor permission. First class meets in Gym.

PE 210

### **Advanced Physical Fitness (HF) (1)**

Designed to continue the individual's personal health-related physical fitness - cardiovascular endurance, muscular strength, muscular endurance, body composition and flexibility. Students will be encouraged to work at their own level of fitness. Prerequisite: PE 110 or instructor permission.

PE 211

### **Advanced Fitness in the Workplace (1-2)**

Course will continue to increase cardiovascular endurance, flexibility, and increase strength. Students will develop and conduct their own advanced personal fitness program.

PE 213

### **Advanced Tennis (1)**

For students who are more advanced than the beginning level in tennis. First class will meet in the gym classroom. Borst Court will be used.

PE 215

### **Advanced Volleyball (1)**

Advanced techniques and skills included in competitive volleyball. Advanced offensive and defensive tactics and strategy will be covered. Prerequisite: PE 115 or instructor permission.

PE 223

### **Advanced Weight Training (HF) (1)**

Advanced weight training methods and programs including Olympic lifting and power lifting programs. Prerequisite: PE 123.

PE 228

### **Advanced Modern Dance (1)**

The development of creative dance movements with emphasis on form and choreography. Prerequisite: P E 128 or instructor's permission.

PE 229

### **Physical Fitness Concepts (HF) (3)**

A combination of theory and practice in the development of physical fitness. Two lecture hours and two activity hours per week.

PE 230

### **Advanced Basketball Applications (3)**

A course designed to provide experiences in advanced strategies, advanced fundamental skills, and advanced team concepts of basketball. Prerequisite: PE 130 or instructor permission.

PE 231

### **Baseball Application II (3)**

Learn advanced techniques and strategies in a practice or game situation with an advanced emphasis on fundamentals, conditioning, team concept and sportsmanship. Prerequisite: PE 131 or instructor permission.

PE 239

### **Advanced Volleyball Applications (3)**

Provides experiences in advanced techniques and tactics needed to execute advanced team concepts of volleyball.

PE 251

**Advanced Aerobic Fitness/Walking (HF) (1)**

Advanced aerobic conditioning class for the well-conditioned aerobic athlete. Prerequisite: PE 151.

PE 262

**Advanced Softball Fundamentals (1)**

Continuation of the physical and mental skills needed for playing fast pitch softball. Emphasis will be on a variety of strategies utilized in the game of softball.

PE 263

**Advanced Step Aerobics (HF) (1)**

Combines simple, low impact step movements with music to improve cardiovascular endurance, flexibility, and body composition. Prerequisite: PE 163.

PE 264

**Advanced Softball Theory (3)**

An advanced analysis of the mental approach to the game of softball. An emphasis will be placed on the theories and strategies of fast pitch. Prerequisite: PE 164.

PE 265

**Softball Applications II (3)**

Learn how to apply the advanced techniques of softball in game-like situations. Prerequisite: PE 165 or instructor permission.

PE 266

**Advanced Baseball Fundamentals (1)**

On the field practice in development of the advanced fundamentals of baseball. Emphasis on advanced skills, strategies, and techniques. Prerequisite: PE 166 or instructor permission.

PE 267

**Advanced Basketball Fundamentals (1)**

More advanced skills practiced. Prerequisite: PE 167 or instructor permission.

PE 269

**Advanced Cardio Kickboxing (HF) (1)**

Designed to offer high-impact aerobic conditioning with the addition of hand weights. Each week more involved forms of body moves and techniques introduced to improve the individual's level of cardiovascular fitness. Prerequisite: PE 169.

PE 271

**PE Practicum I (1)**

Physical Education Majors will observe K-6 Physical Education teachers. Exercise Science Majors will observe a commercial Fitness Center. Both majors will attend seminars to discuss their findings. Prerequisite: EDUC 201 or concurrent enrollment or instructor permission.

PE 272

**Physical Education Practicum II (1)**

Physical Education Majors will observe Middle School Physical Education teachers. Exercise Science Majors will observe a medical setting. Both majors will attend seminars to discuss their findings. Prerequisite: PE 271 or instructor permission.

PE 273

**Physical Education Practicum III (1)**

Physical Education Majors will observe Physical Education teachers in the high school setting. Exercise Science Majors will observe a community recreation program. Both majors will attend seminars to discuss their findings. Prerequisite: PE 272 or instructor permission.

PE 275

**Prevention and Care of Athletic Injuries (3)**

The prevention, recognition, and care of athletic injuries.

## PHYSICS

PHYS& 110

**Phys: Non-Science Majors w/Lab (S) (5)**

A survey of physics with applications in everyday life for non-science majors. Basic concepts in Newtonian mechanics, thermodynamics, electricity, magnetism, optics, and modern physics. Requires knowledge of basic algebra. Includes a 2 hour lab.

PHYS& 114

**General Phys I w/Lab (S) (5)**

Fundamentals of classical mechanics. The first of a three quarter sequence for science majors not requiring calculus based physics. Classical mechanics including statics and dynamics of particles, rigid bodies, and fluids. Prerequisite: two years HS algebra and trigonometry or concurrent enrollment in MATH 110.

PHYS& 115

**General Phys II w/Lab (S) (5)**

Fluids, electrostatics, simple circuits, and the fundamental laws of thermodynamics. A continuation of PHYS& 114. Prerequisite: PHYS& 114.

PHYS& 116

**General Phys III w/Lab (S) (5)**

Magnetism and A.C. circuits, optics, and modern physics. Includes Laws of Faraday, Lenz, and Ampere, geometrical and physical optics, special relativity, atomic and nuclear physics. A continuation of PHYS& 114 and PHYS& 115. Prerequisite: PHYS& 115.

*PHYS& 221*

**Engineering Physics I (S) (5)**

First in a three quarter calculus-based sequence for science and engineering majors stressing classical mechanics. Include dynamics of translational, rotation, and oscillatory systems of solids, particles and fluids. Prerequisite: MATH& 151 and Corequisite: MATH& 152

*PHYS& 222*

**Engineering Physics II (S) (5)**

Wave motion, thermodynamics, and electrostatics. Includes sound, heat transfer, law of thermodynamics, and electric fields. Prerequisite: PHYS& 221 and MATH& 152 and corequisite: MATH& 153.

*PHYS& 223*

**Engineering Physics III (S) (5)**

Optics modern physics, electricity and magnetism. Includes geometrical and physical optics, Maxwell's equations, AC/DC circuits and special relativity. Prerequisite: PHYS& 222 and MATH& 153.

*PHYS 270*

**Research in Physics (12)**

Design a research project, set up experiments, collect data in the lab or in the field, and/or analyze data. Each credit hour requires 33 hours of activity per quarter. Prerequisite: instructor permission.

## POLITICAL SCIENCE

*POLS& 101*

**Intro Political Science (SS) (5)**

Exploration of the fundamentals of political science: key concepts, principles, and theories. Analyze why and how leaders make the decisions they do, and why citizens obey most of these decisions.

*POLS& 202*

**American Government (SS) (5)**

Students will examine the American political structure and its ideological roots. We will explore how the structure is organized and how it operates.

*POLS& 204*

**Comparative Government (SS) (D) (5)**

Examine political theory and application within a comparative framework: ideology, nature of participation, as well as a variety of governmental structures, and functions. Contemporary situations will provide the cases for example and analysis.

*POLS 220*

**International Terrorism (5)**

An introduction to terrorism in contemporary society, focusing on the underlying political, social, economic, cultural and religious causes, its use as a political tool and measures to be taken to counter and prevent its use.

*POLS 280*

**History of American Foreign Relations (SS) (5)**

Survey of American foreign relations from the 17th to 21st centuries, focusing on such issues as national security, economic needs, capitalism, and democracy and imperialism.

## PSYCHOLOGY

*PSYC& 100*

**General Psychology (SS) (5)**

An introduction to the scientific study of behavior: history, research methods, biology of behavior, lifespan development, sensation and perception, learning, memory, intelligence, motivation, emotion, personality, psychological disorders and therapies, and social psychology.

*PSYC& 200*

**Lifespan Psychology (SS) (5)**

Human development from conception to death. Basic concepts and principles of biological, cognitive, and psychosocial development are integrated for each age period. Typical developmental tasks as well as problems are emphasized. Prerequisite: PSYC& 100.

*PSYC 202*

**Biopsychology (5)**

Biopsychology, studies the branch of neuroscience that explains human behavior in terms of the biology of the brain, including mechanisms that produce motivation, emotion, and aggression. Prerequisite: PSYC& 100.

*PSYC 209*

**Research Methods (5)**

Overview of scientific method, major research designs, statistical concepts and utilization of materials related to scientific journals. Prerequisites: PSYC& 100 (may be currently enrolled), eligible for ENGL& 101 and college-level math.

*PSYC 210*

**Introduction to Personality (5)**

An introduction to the study of personality, including major theories, with a focus on basic principles of psychology and their application to personality development, personal growth and psychological adjustment. Prerequisite: PSYC& 100 or instructor permission.



PSYC& 220

### **Abnormal Psychology (5)**

An introduction to the study of abnormal behavior, including behavioral problems, personality disorders and maladjustment, and the study of the causes, diagnoses, and treatment. Prerequisite: PSYC& 100.

PSYC 250

### **Social Psychology (5)**

The scientific study of how a person's thoughts, emotions and behaviors are influenced by other people. Includes an exploration of: propaganda, persuasion, social cognition, human aggression, prejudice, love, and interpersonal sensitivity. Prerequisite: PSYC& 100 or instructor permission.

## **READING**

READ 096

### **Independent Study (1-5)**

Individualized instruction for the student whose needs are not currently being met by the available course offerings. Specialized curriculum and instruction are developed to meet each student's needs. Permission of instructor only.

READ 097

### **Specific Reading Skill Development (1-3)**

This course is designed to provide students with opportunities to improve their reading specifically identified areas of need. Comprehension building, word attack skills, and content area reading are a few of the specific areas that can be targeted by this class.

READ 099

### **Improvement of Reading (1-5)**

Students strengthen thinking, reading comprehension, and vocabulary skills in learning to read and study textbooks, writing summaries, note taking, and test taking. Completion of course satisfies the basic skill deficiency in reading. Prerequisite: COMPASS placement (reading) 49.

READ 100

### **Technical Reading (3)**

Designed to teach discipline-specific reading strategies useful to students in both vocational and academic areas. It will also teach awareness of academic thought processes and present skills to enhance that thinking process.

READ 110

### **Speed Reading (3)**

Self-paced course for students wishing to increase reading rate and comprehension using proper eye movements, improved vocabulary, and correct reading methods based on reading material. Prerequisite: college level reading and vocabulary skills.

## **SCIENCE**

SCIE 103

### **Survey of Earth Sciences (S) (5)**

Explores topics in earth sciences: geology, oceanography, meteorology, astronomy. Earthquakes, volcanoes, glaciers, streams, floods, landslides, tides, coastal features, weather and climate, planets and stars. Integrates information about the relationship between humans and the physical environment. SCIE 103L must be taken concurrently or a later quarter to satisfy the requirement for a science course with a lab. Designed for students with little or no science background.

SCIE 104

### **Intro to Physical Science (S) (5)**

Study the basic concepts of physical science, learn to apply the scientific method to problem solving and popular science, and apply the scientific methods to a project.

SCIE 115

### **Weather and Climate (S) (5)**

Study of Earth's atmosphere, atmospheric processes, weather, climate, and climate history. Experience will be provided in weather map interpretation, use of instruments, forecasting, interpretation of past climate conditions, and hands-on dendrochronology. Prerequisite: MATH 098 or equivalent.

## **SOCIOLOGY**

SOC& 101

### **Intro to Sociology (SS) (5)**

Study of society and human interaction. Topics include social ranking, change, deviance, social control, the creation of thought and personality, groups, institutions, political and economic power, social movements, and how to gather valid sociological information.

SOC 125

### **Sociology of the Family (SS) (5)**

Introduction to the study of the family as a social institution. An overview of social theories and methodological underpinnings will be included.

SOC 190

### **Cooperative Work Experience (1-12)**

See description under COOP 190 for additional information.

SOC& 201

### **Social Problems (SS) (5)**

Investigate problems within society and how we view certain social conditions as social problems. Topics include technology, environment, population, economy, class, race/ethnic relations, sexism, ageism, family problems, education, cities, deviance, crime, mental health, physical health.

SOC 225

**Cultural & Ethnic Pluralism in Contemporary Society (SS)  
(D) (5)**

Examine ethnicity, ethnic identity, and cultural characteristics of ethnic and social groups in North America and around the world. Understand the relationship between social organization and forms of social, economic, and political domination and subordination.

## SPANISH

SPAN 105, 106, 107

**Spanish for Public Service I – III (3)**

Basic Spanish to meet the needs of working professionals who wish to communicate with Spanish speaking persons.

SPAN 170

**Latin American Texts (D) (H) (5)**

A survey course analyzing representative texts of Latin American literature in English from the pre-Columbian period to the present. Develop an understanding of the historical and cultural contexts and apply literary criticism.

SPAN 201, 202

**Heritage Spanish I – II (H) (5)**

Introduction to academic Spanish for heritage/native speakers. Course is first sequence designed to prepare speakers for more advanced study. Areas of focus included grammar terminology, spelling, accentuation, reading, writing and discussion of cultural topics. Prerequisite: Native or heritage speaker of Spanish, Instructor permission required.

SPAN 260, 261, 262, 263

**Latin America Field Trip I - IV (D) (5)**

Explore the culture(s) and language(s) of a specific region of Latin America through first-hand experience. Contact instructors or follow Field Trip links on anthropology or Foreign Language pages of college website for current information. Prerequisite: instructor permission.

SPAN& 121, 122, 123

**Spanish I – III (H) (5)**

Learn the fundamental skills of listening comprehension, speaking, reading and writing. Develop an awareness of Spanish speaking countries and their cultures.

SPAN& 221, 222, 223

**Spanish IV - VI (H) (5)**

Discuss Hispanic cultures in Spanish, develop oral and written skills, review and expand essential points of grammar, and build vocabulary. Prerequisite: SPAN& 123 or permission of instructor.

## SPEECH

SPEE 101

**Fundamentals of Public Speaking (H) (3)**

A course focusing on development, preparation, and delivery skills for beginning public speakers. Attention given to anxiety reduction techniques in addition to the preparation and use of visual aids in informative and persuasive speeches.

SPEE 111

**Interpersonal Communication in Film (1)**

Highlights concepts introduced in SPEE 110 by using films to identify a different application of the principles of interpersonal communication.

## STUDENT DEVELOPMENT

SDEV 097

**Introduction to Online Learning (0)**

Work in an online environment to communicate with others, submit homework, view lessons, and correctly configure technology.

SDEV 099

**Study Skills (1-5)**

Students learn essential skills needed for effective study. Course includes learning style assessment, time management, study reading, memory techniques, test-taking strategies, and research techniques.

SDEV 100

**Start Smart (1)**

A seminar for new students on college expectations and communication and technological skills for college. Introduction to academically related technology. Students will participate in small group activities, reading, writing and discussion exercises and practice accessing on-line resources.

SDEV 101

**Centralia College 101 (1)**

An orientation class emphasizing utilization of campus resources and offering multiple workshops on library research skills, note taking, test taking, stress management, reading skills and memory improvement.

SDEV 105

**Career Planning (2)**

Students identify their interests, skills and abilities and evaluate their personality styles, values and work environments as they relate to careers. Activities include interest inventory test, computer programs, job market research and informational interviewing. The format is lecture, discussion, group activities and individual projects.

SDEV 126

### **Career Workshops (1)**

Nine workshops cover analyzing peoples' interests, values, aptitudes and personalities as they relate to career success. Includes career information, transfer information, resume writing, interviewing, placement, and workforce trends.

SDEV 150

### **Student Success (3)**

College success strategies; goal-setting, time management, memory improvement, textbook reading strategies, note-taking, test-taking, project management. Taught by lecture, group and individual work. Includes Saturday field trip for challenge course activities.

SDEV 155

### **College Success (5)**

Major topics include setting academic, career and personal goals; effective communication and presentation skills; study, research and test-taking strategies; critical thinking; note taking and memory improvement. Includes Saturday field trip for challenge course activity.

SDEV 166

### **Stress Management for Test Anxiety (2)**

Identify causes of stress and physical and emotional side-effects. Learn methods for reducing stress, including progressive relaxation, meditation, biofeedback, cognitive analysis, and nutrition and exercise strategies. Management of test and math anxiety is emphasized.

## **WELDING**

WELD 151

### **Welding for Mechanics (5)**

Introduction of cutting and welding processes. Includes information on welding equipment and material, various welding techniques and proper safety procedures. Prerequisite: DET 110 or DET 130 or instructor permission.

WELD 159

### **Oxyfuel & GTAW Welding (12)**

Theory and practice of oxyacetylene welding, brazing, cutting and gas tungsten arc welding. Safety, handling and use of compressed gases, materials, types of weld joints, and procedures.

WELD 161

### **SMAW Welding (12)**

Shielded metal arc welding safety, joint design, electrode selection, welding machine setup and operations. Lab practice will include butt, lap, tee and corner joints in all positions. Weld testing and air carbon arc cutting included.

WELD 164

### **GMAW Welding (12)**

Gas metal-arc welding (GMAW) and flux-cored arc welding (FCAW) safety, setup, operation and troubleshooting. Lab practice includes butt, lap, tee and corner joints in all positions. Also includes GMAW with aluminum and AWS weld testing.

WELD 167

### **Metallurgy for Welders (3)**

Study of metals relevant to welding technology, extraction of metals from ores, refining metals, the manufacture of metal products, mechanical, physical and chemical properties of metals and the hardening, tempering and heat treating of metals.

WELD 180

### **Oxyacetylene and Gas Tungsten Arc Welding (5)**

Safety, setup, brazing, cutting, and welding in all positions using oxyacetylene and gas tungsten arc welding equipment.

WELD 181

### **Shielded Metal Arc Welding (5)**

Safety, setup, and welding in all positions using AC/DC arc welding equipment.

WELD 182

### **Gas Metal Arc Welding (5)**

Safety, setup, and welding in all positions using gas metal arc welding equipment.

WELD 190

### **Cooperative Work Experience (1-12)**

See description under COOP 190 for additional information.

WELD 265

### **Advanced Arc Welding (12)**

Theory and practice of advanced shielded metal arc welding (SMAW) to prepare for the Washington Association of Building Officials (WABO) certification tests on plate and pipe. Prerequisite: Completion of Year 1 Welding/permission of Instructor.

WELD 267

### **Adv. Gas Shielded Arc Welding (12)**

Advanced Gas Metal Arc Welding (GMAW), Flux Cored Arc Welding (FCAW), and Gas Tungsten Arc Welding (GTAW) techniques for all position plate and pipe welding. WABO certification testing is included. Prerequisite: WELD 164 or instructor permission.

WELD 269

### **Advanced Fabrication (11)**

Blueprint interpretation, layout tools and procedures, oxy-fuel and plasma cutting, fitting, and welding fabrication projects. Prerequisite: WELD 267 or instructor permission.

*WELD 271*

**Blueprint Reading (3)**

Fundamentals of drawing interpretation in the welding trade. Included are blueprint reading, welding symbols, fabrication techniques, identification of welds, and welding abbreviations. Prerequisite: WELD 126.

*WELD 281*

**Advanced Gas Metal Arc Welding - Aluminum (5)**

Provides a thorough understanding of welding safety and gas metal arc welding of aluminum. Prerequisite: WELD 165, WELD 181 or prior welding experience with permission of instructor.

*WELD 285*

**Arc Welding Certification (5)**

Practical exercises enable students to prepare for the Washington Association of Building Officials (WABO) certification tests in gas metal arc welding (GMAW), flux cored arc welding (FCAW), and shielded metal arc welding (SMAW). Prerequisite: prior welding experience required.

*WELD 287*

**Welding Fabrication (5)**

Fabrication and fitting tools, setup and procedures. Students have the opportunity to work on individual projects and/or cooperative work experience. Prerequisite: prior welding experience required.

# APPLIED BACCALAUREATE PROGRAMS

## Bachelor of Applied Science (BAS) Degree Programs

### WHAT IS A BACHELOR OF APPLIED SCIENCE (BAS) DEGREE?

A traditional bachelor degree requires general education classes from many disciplines and is designed to provide students a wide base of knowledge, allowing them to concentrate their education in the third or fourth year of their education. A BAS degree gives students the chance to focus their education on their specific educational and career goals early within your education and incorporates more practical and concentrated hands-on learning in a specific industry or the career of their choice.

- **The Bachelor of Applied Science in Applied Management (BAS-AM)**
- **The Bachelor of Applied Science in Diesel Technology (BAS-DT)**
- **The Bachelor of Applied Science in Information Technology: Applications Development (BAS-IT: AD)**
- **The Bachelor of Applied Science in Teacher Education (BAS-TE)**

### STEPS TO APPLY TO A BACHELOR OF APPLIED SCIENCE PROGRAM

1. Review the entrance requirements for the desired program. Refer to [www.bachelors.centralia.edu](http://www.bachelors.centralia.edu) website for a complete list of entrance requirements.
2. Complete and submit the application materials for the desired program within the date for priority registration.

### ADVISING

Students accepted into a bachelor program will receive quarterly advising from the faculty advisor.

### REGISTRATION

Students accepted into a BAS Program will be provided registration information quarterly by the faculty advisor. In most cases, registration for 300 and 400 level courses is restricted to students accepted into a BAS Program.

### TUITION

The Washington State Board for Community and Technical colleges sets the tuition rate for Applied Baccalaureate programs. Refer to [www.bachelors.centralia.edu](http://www.bachelors.centralia.edu) website for current rates.

### FINANCIAL AID & SCHOLARSHIPS

Please see page 14-15 of the catalog for information on applying for financial aid and scholarships.

### MINIMUM CENTRALIA COLLEGE CONTENT

To be eligible for the awarding of a degree, BAS students must complete a minimum of 30 credits of BAS coursework at Centralia College and that coursework must include any of the BAS capstone courses.

## MINIMUM GRADE

The student must achieve a grade of 2.0 or better in each of the upper division courses that comprise the BAS program. No credit is given for any grade lower than 2.0, and if the course is a prerequisite for another BAS course, that prerequisite is not met. A student who earns a grade lower than 2.0 in a BAS course may repeat that course only once. A student who earns grades lower than 2.0 in two or more courses is subject to removal from the program. The Dean of the BAS Program in consultation with the VP Instruction will determine the feasibility of a student repeating more than one BAS course due to a grade less than 2.0

## BAS COURSE ENROLLMENT BY NON-MATRICULATED STUDENTS

The BAS programs are designed for student cohorts who are committed to the attainment of the Bachelor of Applied Science degree. Non-matriculated students may be enrolled in specific courses on a space available basis at the discretion of the respective faculty member and with the concurrence of the BAS Program. A maximum of three courses may be taken by any non-matriculated student. Non-matriculated students must meet all of the normal BAS entrance requirements with the exception of the requirement to have an associate degree. Centralia College will consider non-matriculated students for enrollment in 300/400 level courses including:

- Community members employed in the occupation who could benefit from the specific course as an educational or skills upgrade.
- Students with deferred admission status.
- Students seeking future admission interested in trying an upper division course before applying to the program.
- Students in related lower division programs who use the 300 or 400 level courses as electives or substitutes for required courses in the associate degree.

## CONTACT INFORMATION

**Jake Fay**  
Associate Dean  
Bachelor's and Workforce Education  
360-623-8400  
bachelors@centralia.edu  
TEC 114C

# BACHELOR OF APPLIED SCIENCE IN APPLIED MANAGEMENT (BAS-AM)

**The Bachelor of Applied Science in Applied Management (BAS-AM) degree is designed to provide a rigorous educational experience that fulfills the program's mission.**

The mission is to ensure that graduates of the Centralia College Bachelor of Applied Science in Applied Management degree program will have the qualifications for entry into or promotion into management positions in a wide range of business or industries. Graduates will acquire skills to improve the success of small business or entrepreneurial ventures.

Centralia College's Bachelor of Applied Science in Applied Management (BAS-AM) builds on an existing Associate in Arts, Associate in Applied Science, or Associate in Applied Science-Transfer adding upper division coursework to complete a four-year degree. Applicants are accepted for the fall quarter of each year. The BAS-AM operates as a cohort-based program with all students starting in fall quarter and completing the program in two years (six quarters).

The BAS-AM degree program is designed to meet employment needs of the Centralia College service area and to provide program graduates the knowledge and skills needed to move into or advance in management and supervisory positions as well as to become entrepreneurs.

All classes are conducted using the hybrid modality with each class meeting on campus for one two-hour period in the evening each week. Classes are on Tuesdays from 5-7 p.m., 7-9 p.m. and Thursdays from 6-8 p.m. The balance of class work is online.

Admission into the BAS-AM program is competitive and merit based. Meeting the minimum entrance requirements does not guarantee admission as the number of qualified applicants may exceed the number of available enrollment spaces. In order to be placed into the admissions pool, applicants must complete or submit the following:

- All BAS application materials
- An earned associate's or higher degree from a regionally accredited college or university with a minimum cumulative GPA of 2.5.

**The following courses must be completed prior to bachelor degree obtainment.** The courses can be included in the two-year degree or be completed during the bachelor's program in addition to the required courses. Students who have completed the requirements at the time of application will receive preferred entrance consideration.

Successful completion of each of these required courses with a minimum 2.0 grade:

- English 101 – English Composition (5 credits).
- College-level math course for which intermediate algebra is a prerequisite (5 credits).
- Social science course (5 credits).
- Natural science course (5 credits).
- Five additional general education requirements.

Additional consideration will be given to applicants in the admissions pool who have successfully completed (2.0 grade minimum) these recommended courses:

- English 102 – Composition II (5 credits) or English 235 – Technical Writing (5 credits).
- CMST& 220 Public Speaking (Formerly known as Speech 110 – Principles of Speech Communication [5 credits] or Speech 220 – Theory and Practice of Public Speaking [5 credits])
- ACCT& 201, 202 – Principles of Accounting I & II (prerequisites for ACCT 301, 302, 401, 402, 403)

## DEGREE REQUIREMENTS

To qualify for a Bachelor of Applied Science – Applied Management degree, students must complete a minimum of 180 credits in courses numbered 100 and above of which 90 credits must be BAS courses all of which are numbered 300 or above. Students must have a cumulative grade point average (GPA) of at least a 2.0 (“C” average) for the BAS courses and all credits at the 300 or above levels must have been earned with a minimum grade of 2.0 in each course. The 180 credits must include the following general education requirements:

## GENERAL EDUCATION REQUIREMENTS:

### **Foundation Coursework from Associate Degree**

- ENGL& 101 English Composition
- Social Science course
- College-Level Math with prerequisite of intermediate algebra
- Physical, biological or earth science (lab course)
- Five additional credits in general education in one of the above distribution areas is required for admission

### **BAS-AM general education coursework**

- CMST 330 Professional and Organizational Communications
- HUM 315 Ethics
- MGMT 325 Legal Issues
- MGMT 320 Leadership and Organizational Behavior
- ECON 305 Managerial Economics
- MATH 350 Managerial Statistics
- ENVS 440 Environmental Issues

### **Management Core Coursework**

- MGMT 300 Foundations of Management
- MGMT 340 Applied Financial Management
- MGMT 370 Practicum
- MGMT 420 Human Resource Management
- MGMT 470 Management Internship
- MGMT 490 Strategic Management and Policy

### **BAS Electives (must take 5)**

- ACCT 310 Accounting Principles for Managers
- ACCT 401 Governmental Accounting\*
- MGMT 380 Marketing for Managers
- ACCT 402 Audit & Fraud\*
- MGMT 360 Business Principles, Planning & Strategy
- ACCT 301 Intermediate Accounting I\*
- MGMT 410 Project Management
- ACCT 302 Intermediate Accounting II\*
- MGMT 435 Operations Management
- ACCT 403 Issues in Federal Taxation\*

\* Prerequisite ACCT& 201 and 202.



# MANAGEMENT (BAS-AM) PROGRAM OF STUDY

**Emphasis:** Applied Management

**Degree:** Bachelor of Applied Science

Total Credits: 90

Class Type: Lecture, Lab, Hybrid

**PURPOSE:** The program is designed to provide a rigorous educational experience to graduate individuals who are well-grounded in management knowledge and ethical values, who possess the requisite skills in communications, teamwork, and business fundamentals, and who are ready to provide leadership and effective decision-making to both existing and startup organizations.

**PROGRAM OUTCOMES:** Students who successfully complete the Bachelor of Applied Science Applied Management Program will have demonstrated the ability to accomplish the following:

## **Communication Skills**

Recognize communications issues and be able to employ effective oral, written, and analytical communication appropriate to organizational settings including personnel situations and in large and small group discussions.

## **Decision-Making**

Understand the differences in decision-making strategies and when to use various approaches. This includes the application of analytical tools, quality information systems. Design evaluation strategies that foster continuous improvement.

## **Diversity**

Be able to articulate the key laws, ethical aspects, regulations and benefits associated with diverse populations. Analyze workplace scenarios and understand how the move from accommodation, to inclusion, to aggressive recruitment can create competitive advantages.

## **Finance and Analysis**

Design statistical models and apply data analysis techniques to the decision-making process. Utilize financial information, recognizing the reliability and accuracy of various sources, and managerial accountings tools to develop and analyze capital and operating budgets and understand various financing options to best meet organizational needs.

## **Global Perspectives**

Be able to apply a global perspective to recognize and understand what is required to mitigate and manage the impacts of global currency differences and fluctuations as related to the purchase of raw materials and commodities or the sale of products to offshore customers. Understand the implications of doing business across legal and cultural boundaries.

## **Leadership and Management**

Understand the difference between management and leadership, the variety of styles and roles and when they are best used as well as knowing how to work collaboratively in a team setting and how to create and manage productive teams. Recognize the value of diversity and community in business ventures.

## **Legal Issues and Ethics**

Understand the difference between the law and ethics which includes articulating a personal ethical philosophy and the application to the workplace, especially with regard to human resource issues. Evaluate the impact of state and federal laws on organizational practices and management scenarios.

## **Operations Management**

Know how to apply marketing principles and current technologies, including the development of marketing plans, to deliver goods and services with increasing levels of quality, efficiency and customer satisfaction to maximize the return from operations management.

## **Strategic Management**

Be able to move from the theoretical understanding of how market, local, national and global issues impact strategic management of an organization which includes the ability to develop an actionable strategic plan with appropriate contingencies for an organization. Apply project management concepts to develop, manage and track a project.

## **Tax and Audit**

Know how to report financial performance in accordance with accounting principles required in tax, commercial, or government conceptual frameworks. Be able to apply audit procedures necessary in creating reasonable assurance as it pertains to financial performance presentation.

The following courses must be completed prior to bachelor degree obtainment. The courses can be included in the two year degree or be completed during the bachelor's program in addition to the required courses. Students who have completed the requirements at the time of application will receive preferred entrance consideration.

**Successful completion of each of these required courses with a minimum 2.0 grade:**

ENGL& 101	English Composition .....	5
	College-level math course for which intermediate algebra is a prerequisite.....	5
	Social Science course .....	5
	Natural Science course .....	5
	Five additional credits in general education requirements.	

**REQUIRED COURSE SCHEDULE**

<b>First Year, Fall Quarter</b>		<b>Credits</b>
CMST 330	Pro. & Org. Communication .....	5
MGMT 300	Foundations of Mgmt .....	5
MGMT 380	Marketing for Managers* .....	OR
BAS-AM Accounting Elective*	.....	5
		<b>15</b>

<b>First Year, Winter Quarter</b>		<b>Credits</b>
HUM 315	Ethics .....	5
MGMT 370	Practicum in Management.....	5
ACCT 310	Acctg Principles for Managers* .....	OR
BAS-AM Accounting Elective*	.....	5
		<b>15</b>

<b>First Year, Spring Quarter</b>		<b>Credits</b>
MGMT 320	Leadership & Org Behavior .....	5
MGMT 420	Mgmt of Human Resources .....	5
MGMT 325	Legal Issues .....	5
		<b>15</b>

<b>Second Year, Fall Quarter</b>		<b>Credits</b>
ENVS 440	Environment Issues.....	5
MGMT 340	Applied Financial Mgmt.....	5
MGMT 360	Business Princ. Plan & Strat* .....	OR
BAS-AM Accounting Elective*	.....	5
		<b>15</b>

<b>Second Year, Winter Quarter</b>		<b>Credits</b>
MATH 350	Managerial Statistics .....	5
MGMT 490	Strategic Mgmt & Policy.....	5
MGMT 410	Project Management* .....	OR
BAS-AM Accounting Elective*	.....	5
		<b>15</b>

<b>Second Year, Spring Quarter</b>		<b>Credits</b>
MGMT 435	Operations Management* .....	OR
BAS-AM Accounting Elective*	.....	5
ECON 305	Managerial Economics .....	5
MGMT 470	Applied Mgmt Internship .....	5
		<b>15</b>

\* The accounting concentration includes the following electives:

ACCT 301	.....	Intermediate Accounting I
ACCT 302	.....	Intermediate Accounting II
ACCT 401	.....	Governmental Accounting
ACCT 402	.....	Audit & Fraud
ACCT 403	.....	Issues in Federal Taxation

Students should work with their advisor to determine the appropriate electives to meet their career goals.

# BACHELOR OF APPLIED SCIENCE IN DIESEL TECHNOLOGY (BAS-DT)

Admission into the BAS-DT program is merit-based. Meeting the minimum entrance requirements does not guarantee admission as the number of qualified applicants may exceed the number of available enrollment spaces. In order to be placed into the admissions pool, applicants must complete or submit the following:

- BAS application materials and
- Proof of an earned associate's degree in diesel technology, diesel mechanics, OR equivalent degree and transcripts approved by BAS administration from a regionally accredited college or university with a minimum cumulative GPA of 2.5

The following courses must be completed prior to bachelor degree obtainment. The courses can be included in the two-year degree or be completed during the bachelor's program in addition to the required courses. Students who have completed the requirements at the time of application will receive preferred entrance consideration.

Successful completion of each of these required courses with a minimum 2.0 grade:

- ENGL& 101 – English Composition (5 credits)
- Any college level MATH requiring MATH 099 as a prerequisite (such as MATH& 107, MATH& 141, MATH& 146)

To qualify for the Bachelor of Applied Science Diesel Technology, students must complete a minimum of 180 credits in courses numbered 100 and above of which 60 credits must be upper division courses which are numbered 300 or above. Students must have a cumulative grade point average (GPA) of at least a 2.0 ("C" average) for the degree courses and all credits at the 300 or above levels must have been earned with a minimum grade of 2.0 in each course. The 180 credits must include the following:

## GENERAL EDUCATION REQUIREMENTS

### Communications

- ENGL& 101 English Composition
- ENGL& 235 Technical Writing

### Humanities

- CMST& 220 Public Speaking
- HUM 315 Ethics
- Humanities elective

### Social Science

- ECON& 201/202 Micro OR Macroeconomics
- PSYC& 100 General Psychology

### Mathematical

- MATH college-level math with prerequisite of intermediate algebra

### Natural Science

- ENV& 100 Survey of Environmental Science
- PHYS& 110 Physics: Non Science major w/lab
- DET 400 Material Science of Fuels and Lubes w/lab

### Foundation Coursework from Associate Degree

#### Diesel Core Coursework

- DET 300 Survey of Business Management
- DET 310 Electrical III Advanced Circuits
- DET 320 Exhaust After Treatment/Regulations
- DET 330 Hydraulics II-Advanced Fluid Systems
- DET 340 Combustion Engine Fuels
- DET 350 Applied Failure Analysis
- DET 360 Power Generation and Maintenance
- DET 410 Regulatory Issues
- DET 420 Metallurgy and Fabrication
- DET 430 Shop/Fleet Management
- DET 440 Hybrid Drives Electric/Hydraulic
- DET 450 Internship

# DIESEL (BAS-DT) PROGRAM OF STUDY

**Emphasis:** Diesel Technology

**Degree:** Bachelor of Applied Science

**PURPOSE:** The Bachelor of Applied Science in Diesel Technology (BAS-DT) program is designed to provide a rigorous educational experience to graduate individuals who are trained in advanced diesel technologies, and are well-grounded in management knowledge, who possess the requisite skills in leadership, communication, teamwork, and ethical values to progress to senior technological positions or to enter their employer's management development programs.

**PROGRAM OUTCOMES:** Students who successfully complete the Bachelor of Applied Science Diesel Technology Program will have demonstrated the ability to:

## Technical

- **Analysis and devaluation of data** – Analyze and evaluate data collected from component failures, hydraulic systems, and complex electrical circuits.
- **Professional interactions** – Interact appropriately and professionally with customers and employees.
- **Complex system operations** – Explain the operation of complex systems including: computerized engine and transmission controls used for fuel efficiency and emissions control; regenerative hybrid technologies used to capture energy; multi-fuel technologies to save fuel costs.
- **Theory application** – Apply theories and skills taught in the classroom in a shop environment.
- **Shop procedures** – Create shop procedures that reflect industry standards and maintain compliance with regulations set by governing agencies.
- **Fluids analysis** – Apply the principles of tribology in the analysis of engine efficiency, life, and maintenance costs.
- **Analysis of failure modes** – Analyze test results from oil, coolant, fuel, or emissions analysis systems.

## Managerial

- **Policies and Practices** – Implement the practices, policies, and leadership to efficiently operate a fleet or repair facility.
- **HR management and ethical principles** – Apply fundamental principles of human resource management and ethics.
- **Communications** – Employ effective oral, written, and analytical communication appropriate to organizational settings including personnel situations and in large group discussions.
- **Leadership styles** – Distinguish between management and leadership, and differentiate among the varieties of styles and roles of management and be able to identify the most appropriate in a given situation.
- **Use of teams** – Create, manage, and participate effectively in teams.

The following courses must be completed prior to bachelor degree obtainment. The courses can be included in the two year degree or be completed during the bachelor's program in addition to the required courses. Students who have completed the requirements at the time of application will receive preferred entrance consideration.

**Successful completion of each of these required courses with a minimum 2.0 grade:**

ENGL& 101 English Composition .....5  
Any college level MATH requiring MATH 099 as a prerequisite (Such as MATH& 107, MATH& 141, MATH& 146)

<b>Fall Quarter, First Year</b>		<b>Credits</b>
CMST& 220	Public Speaking .....	5
DET 300	Applied Management.....	5
DET 320	Emissions Control.....	5
ENGL& 101	English Composition .....	OR
	College level MATH, if not met .....	5
		<b>15-20</b>

<b>First Year, Winter Quarter</b>		<b>Credits</b>
DET 400	Material Science of Fluids.....	5
DET 410	Regulatory Issues.....	5
ENGL& 235	Technical Writing * .....	5
Elective	.....	5
		<b>20</b>

<b>First Year, Spring Quarter</b>		<b>Credits</b>
DET 420	Metalwork and Fabrication.....	5
DET 440	Hybrid Drives Electric/Hydraulic.....	5
DET 450	Internship.....	5
ECON& 201	Microeconomics *.....	OR
ECON& 202	Macroeconomics * .....	5
		<b>20</b>

<b>Second Year, Fall Quarter</b>		<b>Credits</b>
DET 430	Shop/Fleet Management.....	5
DET 350	Applied Failure Analysis .....	5
ENVS& 100	Survey of Env. Science .....	5
		<b>15</b>

<b>Second Year, Winter Quarter</b>		<b>Credits</b>
DET 330	Hydraulics II .....	5
DET 340	Combustions Engine Fuels .....	5
PHYS& 110	Physics: Non Science Major w/Lab.....	5
PSYC& 100	General Psychology .....	5
		<b>20</b>

<b>Second Year, Spring Quarter</b>		<b>Credits</b>
DET 310	Electrical III .....	5
DET 360	Power Generation & Maintenance .....	5
HUM 315	Ethics.....	5
		<b>15</b>

\* Must meet GUR's (General University Requirements/ Distribution Requirements) as listed under the Associate in Arts Degree (DTA).

# BACHELOR OF APPLIED SCIENCE IN INFORMATION TECHNOLOGY: APPLICATIONS DEVELOPMENT (BAS-IT: AD)

Admission into the BAS-IT: AD program is merit-based. Meeting the minimum entrance requirements does not guarantee admission as the number of qualified applicants may exceed the number of available enrollment spaces. In order to be placed into the admissions pool, applicants must complete or submit the following:

- All BAS application materials
- Proof of an earned associate degree in computer science or information technology, OR an equivalent degree and transcripts approved by BAS administration from a regionally accredited college or university with a minimum cumulative grade point average (GPA) of 2.5
- Proof of completing 10 or more lower division credits in current programming languages.

**The following courses must be completed prior to bachelor degree obtainment.** The courses can be included in the two-year degree or be completed during the bachelor's program in addition to the required courses. Students who have completed the requirements at the time of application will receive preferred entrance consideration.

Successful completion of each of these required courses with a minimum 2.0 grade:

- English 101 – English Composition (5 credits)
- Math& 141 Pre-Calculus I (5 credits)
- Social science course (5 credits)
- Natural science course (5 credits)
- Five additional general education requirements

## DEGREE REQUIREMENTS

To qualify for a Bachelor of Applied Science – Information Technology: Application Development degree, students must complete a minimum of 180 credits in courses numbered 100 and above. Students must have a cumulative GPA of at least a 2.0 (“C” average) for the BAS courses and all credits at the 300 or above levels must have been earned with a minimum grade of 2.0 in each course.

## GENERAL EDUCATION REQUIREMENTS:

### Communications

- English Composition I
- CMST 330 Professional and Organizational Communications

### Humanities

- HUM 315 Ethics
- Humanities elective
- Social Science (10 credits)
- Social Science elective
- Social Science elective

### Mathematics

- MATH& 141 Pre-Calculus I
- MATH& 142 Pre-Calculus II
- MATH& 146 Intro to Statistics
- MATH 228 Discrete Mathematics

### Natural Science

Natural Science elective w/lab

Natural Science elective

Five additional general education credits in one of the above areas

### Foundation Coursework from Associate Degree IT: Application Development Core Coursework

- IT 310 Advanced Web Applications
- IT 320 Application Development Methodologies
- IT 330 Applications/Software Engineering I
- IT 340 Application/Software Engineering II
- IT 350 Advanced database Design and Implementation
- IT 410 Advanced data Access Techniques
- IT 420 Business Intelligence Applications
- IT 430 Information Security for Developers
- IT 440 BAS-IT: AD Internship I
- IT 450 BAS-IT: AD Internship II
- IT 460 BAS-IT: AD Capstone

# INFORMATION TECHNOLOGY: APPLICATION DEVELOPMENT PROGRAM OF STUDY

**Major:** Application Development

**Degree:** Bachelor of Applied Science

**Total Credits:** 90

**Class Type:** Lecture, Lab, Hybrid

**PURPOSE:** The Bachelor of Applied Science Information Technology: Application Development (BAS-IT:AD) program is designed to ensure graduates have a strong technical foundation in application and software development and will be prepared to work in teams, manage IT projects, and prepare software documentation.

## PROGRAM OUTCOMES:

- Develop efficient code following best practices in data design and software development
- Communicate effectively with stakeholders
- Demonstrated ability to troubleshoot and problem-solve defect from identification to resolution
- Write and present technical documentation
- Project management skills, such as estimating work effort, assessing risk, analyzing data, and defining project scope
- Perform software assurance activities

Admission into the BAS-IT: AD program is merit based. Meeting the minimum entrance requirements does not guarantee admission as the number of qualified applicants may exceed the number of available enrollment spaces. In order to be placed into the admissions pool, applicants must complete or submit the following:

Completion of the BAS application materials; proof of an earned associate's or higher degree from a regionally accredited college or university with a minimum cumulative GPA of 2.5; and proof of completing 10 or more lower division credits in programming languages with a minimum 2.0 grade in each course.

The following courses must be completed prior to bachelor degree obtainment. The courses can be included in the two year degree or be completed during the bachelor's program in addition to the required courses. Students who have completed the requirements at the time of application will receive preferred entrance consideration.

### **Successful completion of each of these required courses with a minimum 2.0 grade:**

ENGL& 101 – English Composition I (5 credits)

Social Science – any 100 level or above course that carries Social Science (SS) distribution

CMST& 220 – Public Speaking (5 credits)

Natural Science – any 100 level or above course that carries Natural Science (S) distribution w/lab

MATH& 141 – Pre-Calculus I (5 credits) OR MATH 118 Linear Algebra (5 credits) OR Math 128 Discrete Structures (5 credits)

Five additional credits in general education requirements.

## REQUIRED COURSE SCHEDULE

<i>Fall Quarter, First Year</i>		<i>Credits</i>
CMST& 330	Prof & Org Communication.....	5
IT 310	Advanced Web Applications .....	5
IT 320	Application Dev. Methodologies .....	5
		<b>15</b>

<i>First Year, Winter Quarter</i>		<i>Credits</i>
IT 330	Application/Software Engineering I .....	5
IT 350	Adv. Database Design & Implem .....	5
MATH& 146	Introduction to Stats .....	5
		<b>15</b>

<i>First Year, Spring Quarter</i>		<i>Credits</i>
HUM 315	Ethics.....	5
IT 340	Application/Software Engineering II .....	5
Social Science Elective.....		5
		<b>15</b>

<i>Second Year, Fall Quarter</i>		<i>Credits</i>
IT 410	Adv. Data Access Techniques .....	5
IT 440	BAS-IT: AD Internship I .....	5
MATH 228	Discrete Mathematics .....	5
		<b>15</b>

<i>Second Year, Winter Quarter</i>		<i>Credits</i>
IT 420	Business Intelligence App.....	5
IT 450	BAS-IT: AD Internship II.....	5
Science Elective .....		5
		<b>15</b>

<i>Second Year, Spring Quarter</i>		<i>Credits</i>
IT 430	Information Security for Developers .....	5
IT 460	BAS-IT: AD Capstone.....	5
General education elective* .....		5
		<b>15</b>

\*Must meet GUR's (General University Requirements/ Distribution Requirements) as listed under the Associate in Arts Degree (DTA).

# TEACHER EDUCATION

**Major:** Teacher Education Elementary Education

**Degree:** Bachelor of Applied Science

**Total Credits:** 93

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** The Bachelor of Applied Science Teacher Education (BAS-TE) program is designed to graduate individuals who are well-grounded in education and training and are prepared to obtain initial teaching certification (K-8) in the state of Washington with a primary endorsement in special education and elementary education.

## PROGRAM OUTCOMES:

- Communicate and collaborate effectively with children, parents/guardians, peers, administrators and the community
- Ensure cultural competence in teaching through adapting learner centered curricula that engage students in a variety of culturally responsive strategies.
- Recognize individual difference and learning styles and modify curricula and to meet the learners needs
- Design, facilitate, and evaluate age and developmental appropriate learning exercises for students in K-8 and special education.
- Develop standards-driven curricula and monitor student progress towards targets.
- Utilize the use of formal and informal assessment strategies to strengthen instruction and promote learning.
- Competently design and execute lessons rich in literacy, science, math, social studies and the arts.
- Generate strategies from multiple instructional approaches and differentiated instruction for all students.
- Foster positive, inclusive, learning settings in cognitive, behavior, language, physical and social domains to create a safe and productive learning environment.
- Integrate and model the use of technology in the classroom
- Utilize feedback and reflection to constantly improve teaching practices.

Admission into the BAS-TE program is merit based. Meeting the minimum entrance requirements does not guarantee admission as the number of qualified applicants may exceed the number of available enrollment spaces. In order to be placed into the admissions pool, applicants must complete and submit the following:

- All BAS application materials
- Evidence of an earned associate's degree or junior level status and transcripts approved by BAS administration from a regionally accredited college or university with a minimum cumulative GPA of 2.5.

Pre-requisite courses include:

- ENGL& 101
- A college level math (5 credits – recommend MATH& 131)
- Three EDUC or ECED courses

The following courses must be completed prior to bachelor degree obtainment. The courses can be included in the two year degree or be completed during the bachelor's program. Students who have completed the requirements at the time of application will receive preferred entrance consideration. Some courses may not be eligible for Financial Aid in which case a student apply for a scholarship or make a payment plan.

Successful completion of each of these required courses with a minimum 2.0 grade:

ENGL& 101 – English Composition I (5 credits)

Social Science – any 100 level or above course that carries Social Science (SS) distribution

CMST& 220 – Public Speaking (5 credits)

Natural Science – any 100 level or above course that carries Natural Science (S) distribution w/lab

MATH& 141 – Pre-Calculus I (5 credits) OR MATH 118 Linear Algebra (5 credits) OR Math 128 Discrete Structures (5 credits)

Five additional credits in general education requirements.

# TEACHER EDUCATION ELEMENTARY EDUCATION (CONTINUED)

## REQUIRED COURSE SCHEDULE

### *Fall Quarter, First Year* *Credits*

EDUC 300	Intro to Special Ed .....	3
EDUC 350	Diversity in Students .....	3
EDUC 360	Assessment and Evaluation .....	5
EDUC 421	Classroom Management.....	5

**16**

### *First Year, Winter Quarter* *Credits*

EDUC 330	Teaching and Technology.....	5
EDUC 400	Educational Psychology .....	5
EDUC 420	Curriculum and Instruction.....	5

**15**

### *First Year, Spring Quarter* *Credits*

EDUC 370	Supporting Exceptional Children & Their Families.....	5
EDUC 410	Instructional Strategies for Exceptional Learners .....	5
EDUC 481	Practicum 1: Intro to Schools.....	2
EDUC 482	Practicum 2: A look into Spec Ed .....	3

**15**

### *Second Year, Fall Quarter* *Credits*

EDUC 325	Biology for the Classroom .....	5
EDUC 483	Practicum 3: Diverse Pop .....	3
EDUC 484	Practicum 4: Teacher Eva.....	3
EDUC 485	Practicum 5: Ed System .....	3

**14**

### *Second Year, Winter Quarter* *Credits*

EDUC 315	Teaching Math .....	5
EDUC 335	Teaching Art, Music, Movement and Health and Fitness.....	5
EDUC 490	Student Teaching 1 –Elem Ed.....	5

**15**

### *Second Year, Spring Quarter* *Credits*

EDUC 345	Teaching Lang. Arts and Devel .....	5
EDUC 355	Teaching Reading .....	3
EDUC 365	Social Studies for Teachers .....	5
EDUC 498	Student Teaching 2/Elem. Ed Class .....	5

**18**



# TEACHER EDUCATION

**Major:** Teacher Education Elementary Education with a Special Education Endorsement

**Degree:** Bachelor of Applied Science

**Total Credits:** 92

**Class Type:** Lecture, Lab, Hybrid, Online

**PURPOSE:** The Bachelor of Applied Science Teacher Education (BAS-TE) program is designed to graduate individuals who are well-grounded in education and training and are prepared to obtain initial teaching certification (K-8) in the state of Washington with a primary endorsements in special education and elementary education.

## PROGRAM OUTCOMES:

- Communicate and collaborate effectively with children, parents/guardians, peers, administrators and the community
- Ensure cultural competence in teaching through adapting learner centered curricula that engage students in a variety of culturally responsive strategies.
- Recognize individual difference and learning styles and modify curricula and to meet the learners needs
- Design, facilitate, and evaluate age and developmental appropriate learning exercises for students in K-8 and special education.
- Develop standards-driven curricula and monitor student progress towards targets.
- Utilize the use of formal and informal assessment strategies to strengthen instruction and promote learning.
- Competently design and execute lessons rich in literacy, science, math, social studies and the arts.
- Generate strategies from multiple instructional approaches and differentiated instruction for all students.
- Foster positive, inclusive, learning settings in cognitive, behavior, language, physical and social domains to create a safe and productive learning environment.
- Integrate and model the use of technology in the classroom
- Utilize feedback and reflection to constantly improve teaching practices.

Admission into the BAS-TE program is merit based. Meeting the minimum entrance requirements does not guarantee admission as the number of qualified applicants may exceed the number of available enrollment spaces. In order to be placed into the admissions pool, applicants must complete and submit the following:

- All BAS application materials
- Evidence of an earned associate's degree or junior level status and transcripts approved by BAS administration from a regionally accredited college or university with a minimum cumulative GPA of 2.5.

Pre-requisite courses include:

- ENGL& 101
- A college level math (5 credits – recommend MATH& 131)
- Three EDUC or ECED courses

The following courses must be completed prior to bachelor degree obtainment. The courses can be included in the two year degree or be completed during the bachelor's program. Students who have completed the requirements at the time of application will receive preferred entrance consideration. Some courses may not be eligible for Financial Aid in which case a student apply for a scholarship or make a payment plan.

Successful completion of each of these required courses with a minimum 2.0 grade:

ENGL& 102 Composition II (5)

Social Science (10 credits)

Humanities (15 credits)

Natural Science (15 credits, must include one lab course)

# TEACHER EDUCATION ELEMENTARY EDUCATION (CONTINUED)

## REQUIRED COURSE SCHEDULE

<i>Fall Quarter, First Year</i>		<i>Credits</i>
EDUC 300	Intro to Special Ed .....	3
EDUC 350	Diversity in Students .....	3
EDUC 360	Assessment and Evaluation .....	5
EDUC 421	Classroom Management.....	5
		<b>16</b>

<i>First Year, Winter Quarter</i>		<i>Credits</i>
EDUC 330	Teaching and Technology.....	5
EDUC 400	Educational Psychology .....	5
EDUC 420	Curriculum and Instruction.....	5
		<b>15</b>

<i>First Year, Spring Quarter</i>		<i>Credits</i>
EDUC 370	Supporting Exceptional Children & Their Families.....	5
EDUC 410	Instructional Strategies for Exceptional Learners .....	5
EDUC 490	Student Teaching in Special Ed 1 .....	5
		<b>15</b>

<i>Second Year, Fall Quarter</i>		<i>Credits</i>
EDUC 325	Biology for the Classroom .....	5
EDUC 380	Dev. Of Differently Abled Children.....	5
EDUC 496	Student Teaching Spec. Ed 2 .....	5
		<b>15</b>

<i>Second Year, Winter Quarter</i>		<i>Credits</i>
EDUC 315	Teaching Math .....	5
EDUC 335	Teaching Art, Music, Movement and Health and Fitness.....	5
EDUC 490	Student Teaching 1 –Elem Ed.....	5
		<b>15</b>

<i>Second Year, Spring Quarter</i>		<i>Credits</i>
EDUC 345	Teaching Lang. Arts and Devel .....	5
EDUC 355	Teaching Reading .....	3
EDUC 365	Social Studies for Teachers .....	5
EDUC 498	Student Teaching 2/Elem. Ed Class .....	5
		<b>18</b>

# BACHELOR COURSE DESCRIPTIONS

## BAS APPLIED MANAGEMENT, DIESEL TECHNOLOGY, INFORMATION TECHNOLOGY

*ACCT 301*

### **Intermediate Accounting I (5)**

The first installment of a two-part course designed to teach a professional level understanding of financial accounting and reporting as it applies to business entities both publically traded and privately held. Prerequisite: ACCT& 202 or permission.

*ACCT 302*

### **Intermediate Acctg II (5)**

The second installment of a two-part course designed to teach a professional level understanding of financial accounting and reporting as it applies to business entities both publically traded and privately held. Prerequisite: ACCT 301 or permission.

*ACCT 310*

### **Accounting Principles for Managers (5)**

Foundation course in accounting principles from a management perspective. Analyze the interrelationships of financial statements and cost behavior to measure and control the performance of a business entity, and make decisions based on this information.

*ACCT 401*

### **Governmental Accounting (5)**

An accounting course as it applies to government and not-for-profit entities. The topics include fund management, budget preparation, presentation of both fund and government-wide financial statements, and not-for-profit entity financial performance. Prerequisite: ACCT& 202 or permission.

*ACCT 402*

### **Audit & Fraud (5)**

This course is designed to teach the audit environment of professional financial accounting and reporting as it applies to fraud and internal controls. Prerequisite: ACCT& 202 or by permission.

*ACCT 403*

### **Federal Taxation Issues (5)**

The application of tax law and internal revenue code used to complete tax returns associated with not-for-profit entities, estates, and trusts. Prerequisite: ACCT& 202 or by permission.

*CMST 330*

### **Professional & Organizational Communication (5)**

Foundation course designed to develop effective written and verbal communication skills in organizational settings. Students will gain an appreciation for the crucial role communication plays in organizations and how to improve their employability.

*DET 300*

### **Applied Management (5)**

Introduces the principles and concepts of effective management including human resource management, quality control, social responsibility, decision-making, communication, conflict resolution, and customer service. Prerequisite: enrollment in BAS-DT or instructor permission.

*DET 310*

### **Electrical III (5)**

Course content will focus on the theory and application of advanced electrical circuits, schematic reading, and proper troubleshooting techniques. Prerequisite: enrollment in BAS-DT or instructor permission.

*DET 320*

### **Emissions control (5)**

Course content will focus on the theory and application of diesel exhaust emissions reduction technology. Prerequisite: enrollment in BAS-DT or instructor permission.

*DET 330*

### **Hydraulics II (5)**

The study and application of complex hydraulic systems with an emphasis on troubleshooting and system design. Prerequisite: enrollment in BAS-DT or instructor permission.

*DET 340*

### **Combustion Engine Fuels (5)**

Identify and comprehend a variety of alternative power sources used in internal combustion engines. Power sources to be included are: diesel fuel, bio-diesel, gasoline, ethanol, propane, and CNG fueled engines. Prerequisite: enrollment in BAS-DT or instructor permission.

*DET 350*

### **Applied Failure Analysis (5)**

This course focuses on material failures, techniques of failure analysis, and examination/identification of failure root causes. Students will learn to interpret and explain their results to customers. Prerequisite: enrollment in BAS-DT or instructor permission.

DET 360

**Power Generation & Maintenance (5)**

Students will operate, maintain, test, and troubleshoot generators and related energized and de-energized components. Emphasizes safe working practices when working around on-site power generation systems. Prerequisite: Enrollment in BAS-DT or by permission.

DET 400

**Material Science of Fluids (5)**

Oil, fuel, and coolant properties and functions. Field sampling and laboratory testing of fluids will be performed. Results of testing will be interpreted and explained at a customer level. Prerequisite: enrollment in BAS-DT or instructor permission.

DET 410

**Regulatory Issues (5)**

Studies the requirements set forth by governing agencies, such as: DOE/EPA, MSHA, OSHA, and Labor and Industries relating to diesel fueled automotive and industrial equipment. Prerequisite: enrollment in BAS-DT or instructor permission.

DET 420

**Metalwork & Fabrication (5)**

Apply layout, blueprint, weld symbol interpretation, dimension conversations, welding, machine set-ups and fabrication skills to safely complete metal fabrication projects correctly. Prerequisite: enrollment in BAS-DT or instructor permission.

DET 430

**Shop/Fleet Management (5)**

Introduction and explanation of day-to-day shop processes. Managerial skills, tasks, and responsibilities relevant to the diesel and heavy equipment industry will include: warranties, policies, cores, credits, paper in process, work orders, and budgeting. Prerequisite: enrollment in BAS-DT or instructor permission.

DET 440

**Hybrid Drives Electric/h (5)**

Theory and application of gasoline/electric hybrid, diesel/electric hybrid, and diesel/hydraulic hybrid systems as well as commonly used electric drive systems in on and off highway equipment. System maintenance and cost benefit analysis will be covered. Prerequisite: enrollment in BAS-DT or instructor permission.

DET 450

**Internship (5)**

Provides students a venue to demonstrate the application of knowledge gained in the BAS-DT program, in the workplace. The internship will address BAS-DT program outcomes as agreed to by student, internship provider and instructor. Prerequisite: enrollment in BAS-DT or instructor permission.

ECON 305

**Managerial Economics (5)**

This course surveys economic condition and the application of tasks normally associated with a corporate economist. Topics of study include free market economics, supply and demand, regulation, inflation, price elasticity, and comparative advantage. Prerequisite: lower division social science course.

ENVS 440

**Environmental Issues (5)**

An exploration of environmental issues and their effect on business, communities and consumers. Case studies are used to examine basic concepts of ecology and environmental science as they relate to permitting and other business decisions. Prerequisite: lower division natural science course.

HUM 315

**Ethics (5)**

Foundation course in ethics as applied to businesses and organizations related to management issues. Students will explore theoretical concepts in business ethics and apply them to real-world situations based on challenges managers face. Prerequisite: BMGMT 300 or DET 300.

IT 310

**Advanced Web Applications (5)**

An advanced course in web development. This course covers the full web development stack including client side (HTML, CSS, JavaScript) server side (ASP.NET), database layer (MSSQL), using frameworks (MVC). Prerequisite: BAS-IT: AD admission or approval.

IT 320

**Development Methodologies (5)**

Students are introduced to formal software engineering methodologies. Various well known methodologies are covered through examination of case studies and in project work. Team development practices are emphasized. Prerequisite: BAS-IT: AD admission or approval.

IT 330

**Software Engineering I (5)**

An introduction course in software engineering. Software modeling using Unified markup language (UML) diagramming, systems (business) analysis, requirements gathering, analysis, and design are the focus of this course.

IT 340

**Software Engineering II (5)**

A second course in Application/Software Engineering. Introduces test-driven development. Coding exercises include building unit tests and application code based on the requirements documentation of a project. Prerequisite: BAS-IT: AD admission or approval.

IT 350

**Advanced Databases (5)**

A second course in Application/Software Engineering. Introduces test-driven development. Coding exercises include building unit tests and application code based on the requirements documentation of a project. Prerequisite: BAS-IT: AD admission or approval.

MATH 350

**Managerial Statistics (5)**

Statistical analysis techniques will be examined and applied in case studies involving real-world management issues. Students will examine difficulties, subjective decisions, and pitfalls when analyzing data and making inferences from numbers. Prerequisite: QSR math distribution.

MGMT 300

**Foundations of Mgmt (5)**

Foundation course that explores organizational theory and introduces the principles and concepts of effective management including planning, organizing, leading and controlling. Effective decision-making, change management and motivating employees will be discussed. Prerequisite: ENGL& 101 or instructor permission.

MGMT 320

**Leadership & Org. Behav. (5)**

Relate theory and research to organizational problems by reviewing advanced concepts in motivation, perception, leadership, decision-making, communication and influence, group behavior, diversity, conflict and cooperation, politics, corporate culture, organizational structure, and environmental influences.

MGMT 325

**Legal Issues (5)**

A core course concerning the impact of laws, regulations and legal responsibilities on management behavior with a focus on the application of this learning to real life situations for organizations both large and small.

MGMT 340

**Applied Financial Mgmt (5)**

Surveys the application of tasks normally associated with the corporate financial manager. Topics of study include planning, controls, capital markets, capital budgeting, capital structure, and working capital management. Prerequisite: ACCT 310 with a minimum grade of 2.0.

MGMT 360

**Bus Principles, Planning & Strategy (5)**

Core course in strategy and planning. Topics include: establishing organizational mission, formal planning, strategy formulation, and implementation. Identify strengths, weaknesses, opportunities, and threats facing organizations.

MGMT 370

**Practicum in Management (5)**

This course will explore and build student comprehension of the application of management functions covered in BAS-AM courses via direct interaction between students and local managers and entrepreneurs from private, public and non-profit sectors.

MGMT 380

**Marketing for Managers (5)**

A core course designed to develop the marketing knowledge and skills necessary for the successful manager of a profit or non-profit organization. Students will develop and present a comprehensive marketing plan.

MGMT 410

**Project Mgmt Application (5)**

The theory and practice of project management as it relates to managers. Planning, organizing, securing and managing the human, financial, and physical inputs required to meet project objectives will be covered.

MGMT 420

**Management of Human Resources (5)**

Core course in the responsibilities and role of human resource management in today's workplace. Material will concentrate on both regulatory and strategic responsibilities of HR. Topics include recruitment, interviewing, compensation and current HR issues.

MGMT 435

**Operations Management (5)**

Introduction to the key ideas and techniques used to plan, analyze, measure and improve an organization's production of goods and services. Topics explored include process-system modeling, product design/quality, inputs, processes, supply-chains, inventory, and people management. Prerequisite: enrollment in BAS-AM or instructor permission.

MGMT 470

**Management Internship (5)**

BAS-AM program outcomes in an internship with specific outcomes as agreed to by the student, internship provider and instructor. Classes will focus on sharing progress, issues or barriers from the internships. Prerequisite: completion of BAS-AM foundation courses and 30 additional BAS-AM core credits with a 2.0 minimum GPA.

MGMT 490

**Strategic Management (5)**

A capstone course which focuses on the key aspects that must be addressed for sustained organizational success, effective problem solving, and the capture of opportunities from the perspective of the general manager or the entrepreneur. Prerequisite: BAS 460 or instructor permission.

# DIRECTORY

## District Twelve Board of Trustees

Dr. Joe Dolezal  
Stuart Halsan  
Jim Lowery  
Joanne Schwartz  
Doris Wood-Brumsickle

## Centralia College

### **PRESIDENT'S OFFICE**

President.....Robert Mohrbacher, Ed.D.  
Executive Assistant to the President .....Janet Reaume  
Vice President of Human Resources & Legal Affairs.... Julie Huss  
Executive Assistant to the Vice President ..... Candi Fetch  
Director of College Relations .....Amanda Haines

### **INSTRUCTION**

Vice President of Instruction ..... John Martens  
Director of Instructional Services .....Cheryl Williams  
Dean of Academic Transfer Programs..... Christian Bruhn  
Dean of Child & Family Studies ..... Cristi Heitschmidt  
Dean of Library Services & eLearning ..... Kennedy James  
Dean of Transitional Education & CCEast ..... Kelli Bloomstrom  
Dean of Workforce & Continuing Education ..... Durelle Sullivan  
Director of the Pacific Northwest Center of  
Excellence for Clean Energy .....Barbara Hins-Turner  
Director of WorkFirst & Worker Retraining ..... Margret Friedley  
Faculty Director of Nursing..... Ellen Hinderlie  
Director of Corrections Education..... Jacqueline Armstrong

### **STUDENT SERVICES**

Director of Athletics.....Bob Peters  
Director of Counseling/Advising/  
Disability Services ..... Elizabeth Grant  
Director of Enrollment Services .....Kimberly Ingram  
Director of Financial Aid/Student Job Center ..... Tracy Dahl  
Director of International Student Programs/IE..... Laju Nankani  
Director of Student Life & Involvement Center .Shelley Bannish  
Director of TRiO Programs..... Liisa Preslan

### **ADMINISTRATIVE SERVICES**

Vice President of Finance & Administration/  
Executive Director, Foundation .....Steve Ward  
Executive Assistant to the Vice President ..... Diane McGuinn  
Director of Central Services & Purchasing.....Bonnie Myer  
Director of Custodial & Grounds .....Sean Mayfield  
Director of Donor & Alumni Relations ..... Julia Johnson  
Director of Fiscal Services.....Marla Miller  
Director of Institutional Budgets/Payroll ..... Lisa Rice  
Director of Maintenance & Construction Projects.....Gil Elder  
Interim Director of Information Technology ..... Sam Small

**This directory of Centralia College faculty and staff includes the year the individual began at Centralia College followed by the subject area of instruction (for faculty), college or university where a degree was earned and the field of study for the highest graduate degree earned.**

**Judith Aguilar** (1994), Associate Professor, Adult Basic Education/English as a Second Language. B.A., Universidad Nacional de la Plata.

**Patrick Allison** (2001), Assistant Professor, Information Technology. B.S., Park College, M.P.A., University of Alaska.

**Toby Avalos** (2017), Assistant Professor, Anthropology. A.A., Truckee Meadows Community College; B.A., University of Nevada; M.A., New Mexico State University; Ph.D., University of Iowa.

**Shelley Bannish** (1987), Director of Student Life and Involvement. B.A., Central Washington University; Master of Arts in Community College Management, Antioch University, Ohio.

**Ryer Banta** (2016), Assistant Professor/Librarian. B.A., Montana State University; M.S., University of Washington.

**Bobbi Barnes** (2015), Assistant Professor, Developmental Education. B.A., Western Washington University; M.S., Seattle Pacific University.

**Tadd Belden** (2007), Associate Professor, Criminal Justice. B.A. and M.P.A., Western Michigan University.

**Kelli Bloomstrom** (2010) Dean, Transitional Studies and Centralia College East. B.A., Saint Martin's University; M.A., Central Washington University.

**Tara Boerner** (2016), Assistant Professor, Medical Assistant. A.A.S., Centralia College.

**Cindy Broadbent** (1996), Talent Search Program Specialist. B.A., The Evergreen State College, Communications/Liberal Arts.

**Mark Brosz** (1994), Associate Professor, Basic Math. A.S., Centralia College; B.A., University of Washington.

**Christian Bruhn** (2015), Dean of Instruction, Academic Transfer Programs. B.S., Central Washington University; M.S., Central Washington University.

**Donna Burkhart** (2014), Program Manager, Child Development Center. A.A. and B.A., San Diego City College; M.A., University of Washington.

**Joe Burr** (2014), Assistant Professor, Adult Basic Education. B.A., The Evergreen State College; M.Ed., St. Martin's University.

**Vann Cantin** (1984), Assistant Professor, Computer Science. B.A., The Evergreen State College.

**Mary Capen** (2014), Assistant Professor, Nursing. A.A. and A.A.S., Centralia College; B.S., University of Phoenix; M.S., Grand Canyon University.

**Christopher Carlson** (2012), Associate Professor, Mathematics. B.S., Ohio State University; M.Ed., George Washington University; M.S. and Ph.D., University of California, Riverside.

**Lisa Carlson** (1999), Professor, General Biology/Botany. M.A., University of Virginia; Ph.D., University of Washington, Ecosystems Analysis.

**Michael Christensen** (2014), Outreach, Recruitment, and Marketing Specialist. A.A., Western Wyoming Community College; B.A., The Evergreen State College.

**David Coffman** (2016), Assistant Professor. B.A. and M.A., Western Washington University.

**Jacob Conrad** (2011), Associate Professor, Diesel Technology. A.A.S., Centralia College; B.S., Montana State University–Northern.

**Georganne Copeland** (1989), Professor, Business Education. A.T.A., Centralia College; B.A., Western Washington University; M.Ed., University of Puget Sound, Education.

**Robert Cox** (2014), Vice President of Student Services. A.A., Centralia College; B.A., Western Washington University; M.A., Oregon State University.

**Rulon Crawford** (2007), Assistant Professor, Energy Technology. B.S. Eastern Oregon University; M.B.A.; Marylhurst University.

**Tracy Dahl** (1998), Director of Financial Aid/Student Job Center. B.A. and M.A., Saint Martin's University, Education/ESA Certificate.

**Mike Driscoll** (1984), Professor, Welding. A.S., Lane Community College; B.S., Oregon State University; M.S., Oregon State University, Education.

**Kelly Erickson** (2014), Assistant Professor, English. B.A. and M.A., Washington State University.

**Jacob Fay** (2008), Interim Associate Dean for Bachelor's and Workforce Education. A.T.A., Centralia College; B.S., Montana State University.

**Wade Fisher** (1991), Professor, Media Studies. A.S., Ft. Steilacoom; B.A., University of Washington; M.B.A., City University, Marketing.

**Linda Foss** (1993), Professor, English. B.A., University of Washington; M.F.A., Antioch University, Writing.

**Isaac Freeman** (2016), Video and Photography Production Specialist. A.A., Centralia College; B.A., Warner Pacific College.

**Elizabeth Frey** (2005), Associate Professor, Art. B.A., The Evergreen State College; M.F.A., University of Washington.

**Margret Friedley** (2000), Director of Worker Retraining. A.A., Pierce College; B.A., St. Martin's University.

**Greg Gilbertson** (1999), Professor, Criminal Justice. B.A., University of Washington, History; M.S. Columbus State University, Justice Administration.

**Peggy Goldberg** (1997), Assistant Professor/Counselor, Director of Running Start. B.A., The Evergreen State College; M.A., Leadership Institute of Seattle/City University, Applied Behavioral Science/Counseling.

**Karen Goodwin** (2012), Associate Professor, Chemistry. B.S. and M.S., California State University, Sacramento.

**Mark Gorecki** (2013), Associate Professor, Spanish. B.A. Minnesota State University, Spanish; M.A. Kansas State University, Teaching English as a Foreign Language (TEFL); M.A. Kansas State University, Spanish Literature.

**Elizabeth Grant** (2015), Director of Counseling, Advising, and Disability Services. A.A., Garrett Community College; B.S., Frostburg State University; M.S., Loyola University.

**Clarence Gunderson** (2014), Talent Search Specialist. A.A., Centralia College; B.A., Eastern Washington University.

**Teneal Gustafson** (2015), Assistant Professor, Nursing. A.S., Tacoma Community College; B.S. and M.S., Western Governors University.

**Melissa Hahn** (2013), Program Manager, Testing Center. B.A., University of Toronto; M.B.A., Capilano University.

**Amanda Haines** (2014), Director of College Relations. B.A., Marquette University.

**Michelle Harris** (2017), Assistant Professor, Geosciences. B.S., Western Washington University; M.S., Central Washington University.

**Cristi Heitschmidt** (2007), Associate Dean, Child and Family Studies. B.A., St. Olaf College; M.Ed., University of Minnesota.

**Ellen Hinderlie** (2012), Director of Nursing. B.S., Pacific Lutheran University.

**Barbara Hins-Turner** (2005), Director, Pacific Northwest Center of Excellence for Clean Energy. B.S., Marylhurst University; MBA, Marylhurst University.

**Michael Hoel** (2006), Assistant Director, Disability Services. RN, ATACP. B.S., Washington State University.

**Anthony Holm** (2012), Upward Bound Specialist. B.A., Western Washington University.

**James Hovis** (2015), Program Manager, Center of Excellence. B.S., Sonoma State University.

**Julie Huss** (2011), Vice President of Human Resources/Legal Affairs. B.A., Washington State University; J.D., Western State University.

**Kimberly Ingram** (2013), Director of Enrollment Services. B.S., Washington State University.

**Staci Jacobson** (2015), Special Events and Social Media Coordinator. B.A., Central Washington University.

**Kennedy James** (2004), Dean of Library Services and eLearning, Librarian. M.L.I.S., University of Washington.

**Kelsea Jewell** (2015), Assistant Professor, Biology/Nutrition. B.A., Scripps College; M.S. and Ph.D., University of Wisconsin-Lacrosse.

**Kristi Jewell** (2005), Parent Education Program Manager. B.A., Seattle Pacific University.

**Carrie Johnson** (1989), Assistant Professor, Physical Education, A.A., Highline Community College; B.A., Western Washington University.

**Julia Johnson** (1998), Director of Donor and Alumni Relations. B.A., The Evergreen State College.

**Karie Jorgensen** (2013), Program Manager, Workforce and Continuing Education.

**R. Tyler Kaut** (2016), Foundation Specialist. A.A. and B.A.S., Centralia College.

**Nancy Keaton** (1985), Parent Education Program Manager. A.A., Centralia College; B.A., M.P.A., The Evergreen State College.

**Preston Kiekel** (2013), Assistant Professor, Mathematics. A.A., Los Angeles Pierce College; B.A., California State University; M.S. and Ph.D., New Mexico State University.

**Emily Kreilkamp** (2016), Assistant Professor, Drama. B.S., Saint Joseph's College; M.A., Kent State University.

**Tyson Lucas** (2014), Assistant Professor, Diesel Technology. A.S., Centralia College; B.S., Western Governors University.

**Atara MacNamara** (2008), Associate Professor, Psychology. B.A., Eastern Washington University; M.S. and Ph.D., University of Utah.

**Austin Majors** (2013), Student Support Services Specialist. A.A., Centralia College; B.S., Washington State University.

**John Martens** (1988), Vice President of Instruction. B.S., Metro State College; M.S., Colorado School of Mines, Physics.

**Sarah "Beth" May** (2015), Assistant Professor, Music. B.A., University of Illinois; M.A., Yale University; Ph.D., University of Texas.

**Sean Mayfield** (2007), Director of Custodial and Grounds. B.A., Washington State University.

**Linna "Lindy" McCarthy** (2016), Assistant Professor, Diesel Technology. B.S., Montana State University.

**Mary McClain** (2012), Assistant Professor, Business Technology. B.B.A., Boise State University

**Jeff McQuarrie** (2012), Associate Professor, English. B.A., Washington State University; M.S., Northeastern University.

**Sheryl Mercer** (1997), Professor, Counselor. B.A., University of California, Los Angeles; M.A., University of California, Los Angeles, Education and Work.

**Marla Miller** (1986), Director of Fiscal Services. A.A., Centralia College; B.A., The Evergreen State College.

**Karen Minnich** (2014), MERIT Program Director. B.A., Tulane University; M.Ed., The George Washington University.

**Sharon Mitchler** (1998), Professor, English. B.A., Iowa State University; M.A., Fayetteville State University, English; M.A., California State, Dominguez Hills, Humanities; Ph.D., University of Washington.

**Robert Mohbracher** (2016), College President. B.A., University of Washington; M.A., George Mason University; Ph.D., Oregon State University.

**Jason Moir** (2005), Student Success Specialist, Head Coach, Men's Basketball Team. A.A., Centralia College; B.A., The Evergreen State College.

**Bonnie Myer** (1980), Director of Central Services and Purchasing. A.A., Centralia College; B.A., The Evergreen State College.

**Ruby Nagelkerke** (1996), Professor, Chemistry. B.S., Simon Fraser University, B.C.; Ph.D., Queen's University, Ontario, Organic Chemistry.

**Laju Nankani** (2006), Director of International Student Programs. B.A., University of North Dakota; M.S., Canisius College.

**Stephen Norton** (2006), Associate Professor, Biology. B.A. Harvard University; M.A., University of California, Santa Barbara; Ph.D., University of California, Santa Barbara.

**Julie Nurse** (2013), Associate Professor/Librarian. B.S., Florida State University; M.L.I.S., North Carolina Central University.

**Nola Ormrod** (1991), Professor, Nursing. B.A., Reed College; A.D.N., Portland Community College; B.S.N., M.S.N., University of California, San Francisco, Oncology Nursing.

**Richard Perkins** (2010), Director of Facilities and Maintenance. B.S., Oregon State University.

**Zachary Peters** (2016), Assistant Professor, Welding. B.A., The Evergreen State College.

**Bob Peters** (1986), Director of Sports Programs. A.A., Centralia College; B.A., Western Washington University; M.Ed., City University, Curriculum and Instruction.

**David Peterson** (2011), Associate Professor, Electronics/Robotics. A.A. Centralia College, Engineering; B.S. Washington State University, Mechanical Engineering.



**Jody Peterson** (1999), Associate Professor, History. B.A., History, M.A., North Texas State University, European History; Ph.D., Washington State University, U.S. History.

**Price Peterson** (2017), Resident Life, Clubs, and Organizations Specialist. B.A., California State University, Chico; M.S., Indiana State University.

**Anthony Petzold** (2001), Technical Director/Stage Manager. B.F.A., University of Connecticut.

**Madonna Pool** (2015), Assistant Professor, Counselor. B.S., University of Utah; M.S., Frostburg State University.

**Carolyn Powell** (2013), eLearning Support Manager. B.A., University of Denver.

**Liisa Preslan** (2007), Director, TRIO Programs. A.A., Centralia College; B.A., Washington State University.

**Otto Rabe IV** (2012), Associate Professor, Accounting/Business. B.S., Southern Illinois University; M.B.A., St. Martin's University.

**Jessica Ramirez** (2014), Student Engagement Specialist. A.A., Centralia College; B.A., Western Washington University.

**Tammy Remund** (1983), Director of Employee Benefits and Compensation. A.A., Centralia College; B.S., City University.

**Lisa Rice** (2017), Director of Institutional Budgets/Payroll. A.A.S., Lower Columbia College.

**Mayra Sanchez** (2015), Talent Search Specialist. B.A., University of Washington.

**Lynn Schinnell** (2007), Program Manager, Centralia College East. B.S., Iowa State University.

**Teresa Schneider** (2015), ECEAP Program Director. A.A., Whatcom Community College; B.A., St. Martin's University.

**Anne Schuchmann** (2016), Assistant Professor, Nursing. A.A., Central Texas College; B.S. and M.S., St. Martin's University.

**Darcell Scott** (2016), Assistant Director of Student Success and Retention Programs. B.L.A., University of Missouri.

**Deborah Shriver** (2003), Assistant Professor High School Completion. A.A.S., Phoenix College; B.S., University of Phoenix; M.S., Capella University and Florida State University.

**Gene Shriver** (1998), Associate Professor, Developmental Reading/Writing. B.S., U.S. Coast Guard Academy; B.S., M.Ed., Oregon State University, Reading.

**Elizabeth Shultz** (2016), Assistant Professor, Business Technology. A.A., Centralia College; B.A., Central Washington University; M.B.A., Eastern Washington University.

**Sam Small** (2014), Interim Director of Information Technology. A.A., Centralia College; B.S., Heritage University.

**Connie Smejkal** (2006), Associate Professor, Business. B.S., National American University; M.M., University of Phoenix.

**Alexander Solomon** (2014), Assistant Professor, Art. B.A., Portland State University; M.F.A., Cranbrook Academy of Art.

**Amy Spain** (2016), Assistant Professor, Education/Early Childhood Education. B.S., Texas State University; M.Ed., Concordia University.

**Lorraine Speer** (2014), Assistant Professor, Nursing. B.S., Eastern Washington University; B.S., Intercollege Center for Nursing Education.

**Lisa Spitzer** (2008), Assistant Professor, Developmental Math. B.A. Central Washington University, Math Education; M.A. Grand Canyon University, Teaching.

**William Storms** (2016), ctLink/Data Integrity Project Consultant. A.A., Centralia College; B.A., Eastern Washington University.

**Tammy Strodemier** (1992) Bookstore Manager. B.S., City University.

**Durelle Sullivan** (1987), Dean of Instruction Workforce Education. B.A., The Evergreen State College.

**Linda Jo Sullivan** (2007), Assistant Professor, Nursing. A.A. Northern Idaho College; B.A., The Evergreen State College; M.S., University of Washington.

**W. Paul Suozzo** (2013), Associate Professor, Economics. B.S. Northeastern University, Business Administration; M.A. Northeastern University, Economics.

**Daniel Taylor** (2005), Professor, Mathematics. B.A., The Evergreen State College; M.S., Lehigh University.

**Michael Threapleton** (2004), Associate Professor, Physics/Math. B.S., University of Leeds, England; M.S., University of Sheffield, England.

**Kerry Trethewey** (2008), Associate Professor, Adult Basic Education. B.S. and M.Ed., Walla Walla College.

**Gregory van Alstyne** (1995), Professor, Anthropology/General Social Science. B.A., M.A., University of Wisconsin-Milwaukee; M.A., University of Arizona; M.Sc., The London School of Economics; D. Phil., Oxford University, England, Social and Cultural Anthropology.

**Carmen VanTuyl** (1997), Assistant Professor, Counselor. B.S., Washington State University, M.Ed., Saint Martin's University, Education, Counseling.

**Kathleen Vodjansky-Ward** (1996), Assistant Director, Educational Talent Search and Upward Bound. B.A., Central Washington University; M.Ed., University of Puget Sound, Education with Counseling emphasis.

**Scott Wagemann** (2016), Director of Institutional Research. B.A., Clemson University; M.S., Montana State University; M.S., University of Washington.

**Theresa Waliezer** (2009), Associate Professor, English. B.A., M.A., Washington State University.

**Steve Ward** (1993), Vice President of Finance and Administration. A.A., Centralia College; B.A., Saint Martin's University; M.P.A., The Evergreen State College, Public Administration.

**Suzanne Weil** (2004), Associate Professor, English. B.A., Swarthmore College; Ph.D., University of California, Berkeley.

**Lisa Welch** (2008), Financial Aid Program Specialist. A.A., Centralia College.

**Daniel Whalen** (2015), Assistant Professor, ERA/Industrial Automation. A.A., Centralia College.

**David White** (1967), Professor, Education, Sociology. A.A., Centralia College; B.A., M.Ed., University of Washington, Education.

**Cheryl Williams** (1996), Director of Instructional Services.

**Melissa Williams** (2015), Assistant Professor, Communication. B.A. and M.A., Regent University.

**Ardella Williams-Nelson** (2005), Financial Aid Assistant Director. A.A., Centralia College.

**Lisa Wilson** (2008), Assistant Professor, Counselor. B.S., University of Washington; M.Ed., City University.

**Emily Wilson-Edge** (2015), ECEAP Education Specialist. B.A., The Evergreen State College.

**Roberta Ziegler** (1993), Professor, Developmental Math. B.S., California State University-Bakersfield; M.Ed., City University, Education.