# TABLE OF CONTENTS

## College Calendar ................................................................. 3

## Admission/Enrollment ......................................................... 4
Admission as a Priority Student .............................................. 5
Admission as a Drop-In Student ............................................. 7
Admission as an International Student ................................. 8
Admission as a Running Start Student ................................. 9
Advising/Educational Planning .............................................. 10
Registration ........................................................................... 11

## College Costs ..................................................................... 13
Financial Aid .......................................................................... 15
Services for Veterans ............................................................ 17
Worker Retraining ................................................................. 18

## Academic Information ....................................................... 19
Grades ................................................................................... 20
Student Records ................................................................... 22
Academic Standards Policy .................................................. 25
Graduation ............................................................................. 26

## Student Transfer ............................................................... 27
Transfer Degrees ................................................................... 28

## Services for Students ......................................................... 30
Bookstore .............................................................................. 30
Cafeteria ............................................................................... 30
Children’s Lab School ......................................................... 30
Advising/Counseling Center ............................................... 31
Honors and Recognition ...................................................... 31
International Students Programs ....................................... 32
Transitional Education .......................................................... 32
Testing Center ...................................................................... 32
Instructional Support ............................................................. 32
Parking .................................................................................. 33
Sports Programs ................................................................... 33
Student Job Center ............................................................... 34
Disability Services ............................................................... 34
Student Life and Involvement Center (SLIC) ....................... 35
Student Rights and Responsibilities .................................... 36
TRiO Programs ..................................................................... 37
Technology Resources ........................................................ 37
Email ..................................................................................... 37
Online Courses ..................................................................... 38
Continuing Education .......................................................... 38
Centralia College East .......................................................... 39
Garrett Heyns and Cedar Creek Corrections Education Centers .................................................. 40
Cooperative Education ........................................................ 40

## Degrees/Certificates ......................................................... 41
Educational Outcomes .......................................................... 42
Program Outcomes .............................................................. 42
General Transfer Degrees .................................................... 43
Limited Transfer Degrees ..................................................... 46
Workforce Degrees .............................................................. 46
Associate in General Studies Degree ................................... 47
Certificates and Programs .................................................... 48
Distribution Area Outcomes and Courses ........................... 50

## Programs of Study ............................................................. 57

## Course Descriptions ........................................................ 123

## Bachelor of Applied Science Programs ......................... 176
Bachelor of Applied Science in Applied Management (BAS-AM) ............................................................................. 178
Bachelor of Applied Science in Diesel Technology (BAS-DT) ............................................................................. 184
Bachelor of Applied Science in Information Technology: Applications Development (BAS-IT: AD) ............................... 188

## Distribution Area Outcomes and Courses ........................ 50
<table>
<thead>
<tr>
<th>FALL QUARTER 2016</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor Day Holiday</td>
<td>Sept. 5</td>
</tr>
<tr>
<td>Faculty Days</td>
<td>Sept. 6-16</td>
</tr>
<tr>
<td>Assessment Day</td>
<td>Dec. 5</td>
</tr>
<tr>
<td>First Day of Class</td>
<td>Sept. 19</td>
</tr>
<tr>
<td>All Campus Meeting (no classes)</td>
<td>Oct. 14</td>
</tr>
<tr>
<td>Advising Day (no classes)*</td>
<td>Nov. 8</td>
</tr>
<tr>
<td>Veterans Day Holiday (no classes)</td>
<td>Nov. 11</td>
</tr>
<tr>
<td>Thanksgiving Holiday (no classes)</td>
<td>Nov. 24, 25</td>
</tr>
<tr>
<td>Last Day</td>
<td>Dec. 2</td>
</tr>
<tr>
<td>Final Examinations</td>
<td>Dec. 6-8</td>
</tr>
<tr>
<td>Faculty Days</td>
<td>Dec. 9, 12</td>
</tr>
<tr>
<td>Winter Holiday</td>
<td>Dec. 26</td>
</tr>
<tr>
<td>Quarter Break</td>
<td>Dec. 9-Jan. 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WINTER QUARTER 2017</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>New Year’s Day Holiday</td>
<td>Jan. 2</td>
</tr>
<tr>
<td>First Day of Class</td>
<td>Jan. 3</td>
</tr>
<tr>
<td>Martin Luther King Holiday (no classes)</td>
<td>Jan. 16</td>
</tr>
<tr>
<td>Advising Day (no classes)*</td>
<td>Feb. 9</td>
</tr>
<tr>
<td>President's Day Holiday (no classes)</td>
<td>Feb. 20</td>
</tr>
<tr>
<td>Last Class Day</td>
<td>March 16</td>
</tr>
<tr>
<td>Assessment Day (no classes)</td>
<td>March 17</td>
</tr>
<tr>
<td>Final Examinations</td>
<td>March 20-22</td>
</tr>
<tr>
<td>Faculty Days</td>
<td>March 23-24</td>
</tr>
<tr>
<td>Quarter Break</td>
<td>March 22-April 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING QUARTER 2017</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>First Day of Class</td>
<td>April 3</td>
</tr>
<tr>
<td>Advising Day (all classes in session)</td>
<td>May 16</td>
</tr>
<tr>
<td>Memorial Day Holiday (no classes)</td>
<td>May 29</td>
</tr>
<tr>
<td>Last Class Day</td>
<td>June 12</td>
</tr>
<tr>
<td>Assessment Day (no classes)</td>
<td>June 13</td>
</tr>
<tr>
<td>Final Examinations</td>
<td>June 14-16</td>
</tr>
<tr>
<td>Commencement</td>
<td>June 16</td>
</tr>
<tr>
<td>Quarter Break</td>
<td>June 17-July 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUMMER QUARTER 2017</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>First Day of Class</td>
<td>July 3</td>
</tr>
<tr>
<td>Fourth of July Holiday</td>
<td>July 4</td>
</tr>
<tr>
<td>Last Class Day (6 week session)</td>
<td>Aug. 11</td>
</tr>
<tr>
<td>Last Class Day (8 week session)</td>
<td>Aug. 25</td>
</tr>
</tbody>
</table>

*BAS-AM 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 360-736-9391, ext. 671.
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, Running Start, GED, and bachelor’s degrees.

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 360-736-9391, ext. 320. Students are encouraged to do this as early as possible.
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. Submit an Application for Admission. Apply on the college website.

B. Take a class placement test. There are several options;
   1. Take a placement test on campus. For test times, fees, and instructions, contact the Testing at 360-736-9391, ext. 216.
   2. If a student has completed testing someplace else, they can submit their test scores to the Enrollment Services Office. COMPASS, ASSET, SAT, ACT, Smart Balance, and ACCUPLACER scores will be accepted. Test scores must be no older than two years.
   3. Students may request equivalent placement into pre-college and college-level courses based on their placement at another college. To do so, students must submit a copy of the document that provides specific placement recommendation information from the sending institution, along with a completed Placement Reciprocity Student Request form. Documentation must be no older than one year. Contact the Enrollment Services Office for details.

II. Returning Student

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

A. Students who have taken off 1-4 quarters need to fill out the Returning Student Update form (available online). Students can update their admissions file at the Enrollment Services Office.

B. Students who have been out for a year or more need to reapply for admission online.

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 to have their credits considered for a degree.

III. Transfer Student

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

A. Submit an application for admission online.

B. Take a class placement test and submit it to the Enrollment Services Office. There are three options:
   1. Take a COMPASS placement test on campus. For test times, fees, and instructions, contact the Testing Center on campus at 360-736-9391, ext. 216.
   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. Students may request equivalent placement into pre-college and college-level courses based on their placement at another college. To do so, students must submit a copy of the document that provides specific placement recommendation information from the sending institution, along with a complete Placement Reciprocity Student Request Form. Documentation can be no older than one year. Contact Enrollment Services for information.
   3. Students who have taken an English and math class can use their transcripts to waive the placement test. To do so, students must submit their transcripts to the Enrollment Services Office. Unofficial transcripts will be accepted for this purpose.

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.

NONTRADITIONAL CREDITS

There are six other ways to apply nontraditional credits toward a program at Centralia College.

To have nontraditional credits evaluated, students must submit official test scores or official transcripts to the Enrollment Services Office. The Enrollment Services Office will notify students of any courses and credits granted. The following methods are available:

1. CLEP (College-Level Examination Program): Five General Exams and more than 30 Subject Exams (worth 5 credits each) are available. The College Board administers these tests. Centralia College accepts CLEP Exams for credit if a student scores 50 or above. Students may earn up to 45 college credits. To apply for CLEP credit, students must request that official transcripts of CLEP scores be sent directly from the College Board to Admissions and Records. Students who completed the CLEP before July 2001 must contact an evaluator for prior scoring minimums.

2. Credit by examination: This is also called challenging a course. Centralia College recognizes that students may already have gained competence in a particular area. These students may receive credit for their knowledge without formally taking a course in that area. Not every course is available for credit by exam. Credit may not be earned for an audited course, one that was enrolled in previously, or if a more advanced course in that subject area has been completed. Students must arrange to challenge a specific course at Centralia College with the appropriate dean and course instructor. They must then enroll in the course and pay tuition.

3. Law enforcement training: Credit may be awarded for courses taken from the Washington State Criminal Justice Training Commission.
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 quarterly class schedule 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.

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 quarterly class schedule 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)
360-736-9391, ext. 492 • 360-753-3433, ext. 492
intl@centralia.edu • 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.

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 Programs office via email to intl@centralia.edu or via postal mail to International 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. 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 5.0 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 5.0 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 • Student Center Building (Note: The Advising/Counseling Center is expected to move to the TransAlta Commons in 2017.)
8 a.m. – 5 p.m. Monday-Friday (summer hours may vary)
360-736-9391, ext. 265 • 360-496-5022, Centralia College East • 360-330-7102 Fax
runningstart@centralia.edu • 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.
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.

PLACEMENT TESTING

Placement testing determines a student’s best starting point in math, English, and reading. College placement test scores identify courses that fit a student’s individual skill level.

Centralia College requires placement test scores that are no more than three years old. Placement test fees can be paid at the cashier’s window on the second floor of the Student Center Building. For testing hours, call the Testing Center at ext. 216 or Centralia College East.

Students whose test scores indicate they need to improve skills in English, math, or reading should enroll in college prep courses. These courses prepare students for success in college-level work. College prep courses should be taken during the first or second quarter of college. An advisor will assist in scheduling these classes.

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 • Student Center Building (Note: The Enrollment Services Office is scheduled to move to the TransAlta Commons in 2017.)
360-736-9391, ext. 221 • 360-496-5022, Centralia College East
admissions@centralia.edu • 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
• Take a placement test or submit test scores or official transcripts demonstrating qualifying grades or test scores no more than two years old.
• 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 360-736-9391, ext. 221, or admissions@centralia.edu to request this change. Eligible students will be assigned an advisor and changed to priority status.

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 360-736-9391, ext. 265 or 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 360-736-9391, ext. 221 or 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 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.
- 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, 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, 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, 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.

The instructor must notify the Enrollment Services Office of this withdrawal by noon of the sixth business day since the start of the class.

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.
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

For resident students, state tax money pays a portion of the cost of an education at Centralia College; tuition money pays the remaining. Tuition is set by the Washington Legislature and is subject to change by legislative action. Current rates are available on the college website.

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 (undocumented students) 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
RESIDENCY REQUIREMENTS (CONTINUED)

- 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 in the quarterly class schedule.

For classes beginning after the first week of the quarter, refunds are calculated according to policies listed in the class schedule. 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 working 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 • Student Center Building (Note: The Financial Aid Office is scheduled to move to the TransAlta Commons in 2017.)
8 a.m.-5 p.m. Monday-Friday (summer hours vary)
360-736-9391, ext. 234 • 360-330-7105 Fax
financialaid@centralia.edu • 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 15. 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. 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 mail 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

LOANS

Centralia College does not participate in the Stafford Student 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 24 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, 360-736-9391, ext. 385
WorkFirst, 360-736-9391, ext. 694

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, 360-736-9391, ext. 517, 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.

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

SCHOLARSHIPS

Scholarship Coordinator
Vice President of Student Services
360-736-9391, ext. 788
scholarships@centralia.edu
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 website beginning in December and are typically due in March. Recipients are selected based on academic excellence, community service/work experience/school activities, a personal essay, writing sample, potential for success, and/or financial need. 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

Enrollment Services Office • Student Center Building (Note: The Enrollment Services Office is scheduled to move to the TransAlta Commons in 2017.)
360-736-9391, ext. 684
www.centralia.edu/admissions/veterans.html

Centralia College is approved to provide educational benefits to veterans, active-duty service members, National Guard, and eligible spouses/dependents who receive 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. Students who are current military, veterans and eligible spouses/dependents need to request transfer credit for military training by contacting the Credentials Evaluator in the Enrollment Services office. The student must provide an official Joint Services Transcript (JST) through the armed services in which he/she served or from the Community College of the Air Force and from any other college/university attended.

EARLY REGISTRATION

Centralia College allows early registration (as defined by RCW 288.15.624 and HB 1052) to all eligible veterans (with qualifying DD214), National Guard members, and spouses/dependents who are receiving benefits. See the Academic Calendar for registration dates.

SCHOOL CERTIFYING OFFICIAL

Enrollment Services Office
360-736-9391, ext. 684

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

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

VETERANS CENTER

Kemp Hall, Room 103
360-736-9391, ext. 276

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.
The Worker Retraining program can help students retrain in an in-demand professional/technical program. Worker Retraining is a partnership between community and technical colleges and the Employment Security Department. It provides in-demand training to eligible members of Washington’s workforce who have drawn Unemployment Insurance within the last 48 months.

Worker Retraining funds may be available to displaced homemakers who have lost their main breadwinner, or were self-employed, or in Stop-Gap employment.

Worker Retraining funds may be awarded for tuition, fees, and books on a case-by-case basis. Other program funding, such as childcare, tools, and Training Completion Aid, may be available to eligible students.

College staff can 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
Student Services Building (Note: The Enrollment Services Office is scheduled to move to the TransAlta Commons in 2017.)
360-736-9391, ext. 221 • 360-496-5022, Centralia College East
admissions@centralia.edu • 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
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.

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.

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.

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 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.

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

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/ccssgradcomm.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 2.0 or above to be in good academic standing. If a student does not receive a cumulative GPA of 2.0 or higher, the college will place the student on warning, probation, or suspension. The category depends on how many times the student’s GPA has falling below 2.0. If the students raises their cumulative GPA to 2.0 or above, the college will remove any warning, probation, or suspension status.

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.
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.
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.

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.”

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

Bookstore

Student Center, Room 001
7:30 a.m. - 4 p.m. Monday – Friday (summer hours vary)
360-736-9391, ext. 310
bookstore@centralia.edu
www.centraliabookstore.com

Note: The Bookstore is expected to move to the TransAlta Commons in 2017.

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.

Children’s Lab School

412 S. Oak St., Centralia
7:30 a.m.-5:30 p.m. (summer hours may vary)
360-736-9391, ext. 462

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.

Cafeteria

Student Center
7:45 a.m.-2 p.m. Monday-Thursday
7:45 a.m. -1:30 p.m. Friday (summer hours vary)
360-736-9391, ext. 240

Note: The Cafeteria is expected to move to the TransAlta Commons in 2017.

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

Student Center Building
8 a.m.-5 p.m. Monday-Friday (summer hours may vary)
360-736-9391, ext. 265
advising@centralia.edu

Note: The Advising/Counseling Center is scheduled to move to the TransAlta Commons in 2017.

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
360-736-9391, ext. 492
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 international houses, 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.

STUDY ABROAD

Student Center Building, Room 103
360-736-9391, ext. 364

Note: The Study Abroad Office is scheduled to move to the TransAlta Commons in 2017.

Centralia College is a member of the Washington Community College Consortium for Study Abroad (www.wcccsa.com). In cooperation with Green River Community College, Centralia College offers study abroad programs to Japan, Australia/New Zealand, and The Netherlands.

Transitional Education

Kirk Library Building
7:30 a.m.-9 p.m. Monday-Thursday
7:30 a.m.-4 p.m. Friday (summer hours may vary)
360-736-9391, ext. 216
www.centralia.edu/academics/basic

Transitional Education offers classes in high school and GED content, academic and career preparation, and English as a Second Language.

Testing Center

Kirk Library Building
7:30 a.m.-9 p.m. Monday-Thursday
7:30 a.m.-4 p.m. Friday (summer hours may vary)
360-736-9391, ext. 320
www.centralia.edu/students/testing.html

The Testing Center offers proctored testing for Adult Basic Education, English as a Second Language, eLearning, Pearson Vue, and other Centralia College academic classes. Testing is offered on a drop-in basis. Current photo ID is required.

TESTS OFFERED

• COMPASS assessment
• 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)

TESTING CENTER ACCOMMODATIONS

Students with a documented disability can request accommodations and apply for services through Centralia College Disability Services at 360-736-9391, ext. 320. For accommodation requests for GED testing, contact Pearson Vue at www.ged.com.

Instructional Support

WRITING CENTER

Kemp Hall, Room 105
Hours vary by quarter
360-736-9391, ext. 564
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)

Washington Hall, Room 205
10 a.m.-1 p.m. Monday-Friday (closed in the summer)
360-736-9391, ext. 539

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

MATH AND SCIENCE LEARNING CENTER

Walton Science Center, Room 309
360-736-9391, ext. 205
www.centralia.edu/students/tutoring.html

The Math and Science Learning 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
360-736-9391, ext. 205
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

360-736-9391, ext. 241
librarian@centralia.edu
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
360-736-9391, ext. 672
elearning@centralia.edu
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. Additional decals are available at a modest cost.

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 Central Services and are valid in any undesignated on-campus parking spaces.

Racks are provided for bicycles. Bicycles are not permitted inside buildings.

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)
360-736-9391, ext. 345
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

Walk-ins welcome.
Student Job Center

Student Center Building
8 a.m.-4:30 p.m. (summer hours may vary)
360-736-9391, ext. 208

Note: The Student Job Center is scheduled to move to the TransAlta Commons in 2017.

The Student Job Center can help Centralia College students find part-time student employment 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

Student Center Building
360-736-9391, ext. 320
www.centralia.edu/students/disabilities

Note: The Disability Services Office is scheduled to move to the TransAlta Commons in 2017.

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)

Student Center Building, Room 101
360-736-9391, ext. 224
activities@centralia.edu
www.centralia.edu/slic

Note: The SLIC is scheduled to move to the TransAlta Commons in 2017.

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.
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.


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.


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-350-180.

26. There are rules about how this code is changed. WAC 132L-350-240.
TRiO Programs

Student Services Building
8 a.m.-5 p.m. Monday-Friday (summer hours may vary)
360-736-9391, ext. 201
TRiO@centralia.edu
www.centralia.edu/students/trio/

Note: TRiO Programs are scheduled to move to the TransAlta Commons in 2017.

Three federally funded TRiO programs – Talent Search, 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.

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

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

STUDENT SUPPORT SERVICES
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

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

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 360-736-9391, ext. 245.

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 360-736-939, ext. 320. Students are encouraged to do this as early as possible.

Continuing Education

Office of Continuing Education
Technology Building
360-736-9391, ext. 427

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 360-736-9391, ext. 427.

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 allow 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 360-736-9391, ext. 245.
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, T.E.E.N. Program (high school completion program for pregnant and parenting teens and their partners), 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
360-736-9391, ext. 208
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, a Work Experience Seminar is required either prior to or concurrent with all cooperative work experiences.
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
E 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.
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.

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
- Practical Nursing
- Medical Office Assistant
- Office Assistant
- 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 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. Requisite: co-enrollment in ESL classes.
ADULT BASIC EDUCATION

English as a Second Language Lab

Students will develop listening, speaking, reading, and writing skills in an integrated manner that fosters cognitive English language acquisition and participation in native English communication in English-speaking environments. The ESL program helps students become more active participants in the community and workplace. It offers them the opportunity to transition into the ABE program, where they can pursue an academic track to either earn a GED or continue to improve their academic English in order to follow a career pathway.

Work Skills Development

Students with a high school diploma or GED can enroll in work skills development courses. These courses embed reading, writing, math, and computer skills in multiple employment contexts to prepare students to continue on to vocational/technical certificates or into the local job market. Program orientation is held daily (M-F) at noon in the Kirk Library building. Classes are held in the mornings. Classes are $25 per quarter (waivers are available).

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 in the evening, Monday through Thursday, from 5-8:45 p.m. Classes are $25 per quarter (waivers are available), and students can co-enroll in basic courses and college courses. Call ext. 216 or come to the Testing 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. Students may register any time during the quarter. Requisite: co-enrollment in ESL classes.
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).

   

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH&amp; 107</td>
<td>Math in Society</td>
<td>5</td>
</tr>
<tr>
<td>MATH 118</td>
<td>Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 131</td>
<td>Math for Elementary Ed I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 132</td>
<td>Math for Elementary Ed II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 135</td>
<td>Precalculus Refresher</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 141</td>
<td>Precalculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 142</td>
<td>Precalculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stats</td>
<td>5</td>
</tr>
<tr>
<td>MATH 147</td>
<td>Finite Math for Business</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 148</td>
<td>Business Calculus</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 228</td>
<td>Discrete Mathematics</td>
<td>5</td>
</tr>
</tbody>
</table>

English

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 102</td>
<td>Composition II</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 235</td>
<td>Technical Writing</td>
<td>5</td>
</tr>
</tbody>
</table>
OTHER REQUIREMENTS

Humanities (H)

1. The course carries three or more credits.
2. 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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH&amp; 100</td>
<td>Survey of Anthropology</td>
<td>5</td>
</tr>
<tr>
<td>ANTH&amp; 206</td>
<td>Cultural Anthropology</td>
<td>5</td>
</tr>
<tr>
<td>ANTH&amp; 210</td>
<td>Indians of North America</td>
<td>5</td>
</tr>
<tr>
<td>ANTH 225</td>
<td>Cultural &amp; Ethnic Pluralism</td>
<td>5</td>
</tr>
<tr>
<td>ANTH 235</td>
<td>Myth, Ritual, and Magic</td>
<td>5</td>
</tr>
</tbody>
</table>

**Economics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON&amp; 201</td>
<td>Microeconomics</td>
<td>5</td>
</tr>
<tr>
<td>ECON&amp; 202</td>
<td>Macroeconomics</td>
<td>5</td>
</tr>
</tbody>
</table>

**Geography**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG&amp; 200</td>
<td>Human Geography</td>
<td>5</td>
</tr>
</tbody>
</table>

**History**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST&amp; 116</td>
<td>Western Civilization I</td>
<td>5</td>
</tr>
<tr>
<td>HIST&amp; 117</td>
<td>Western Civilization II</td>
<td>5</td>
</tr>
<tr>
<td>HIST&amp; 118</td>
<td>Western Civilization III</td>
<td>5</td>
</tr>
<tr>
<td>HIST&amp; 146</td>
<td>U.S. History I</td>
<td>5</td>
</tr>
<tr>
<td>HIST&amp; 147</td>
<td>U.S. History II</td>
<td>5</td>
</tr>
<tr>
<td>HIST&amp; 148</td>
<td>U.S. History III</td>
<td>5</td>
</tr>
<tr>
<td>HIST&amp; 214</td>
<td>Pacific NW History</td>
<td>5</td>
</tr>
</tbody>
</table>

**Political Science**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS&amp; 101</td>
<td>Intro to Political Science</td>
<td>5</td>
</tr>
<tr>
<td>POLS&amp; 202</td>
<td>American Government</td>
<td>5</td>
</tr>
<tr>
<td>POLS&amp; 204</td>
<td>Comparative Government</td>
<td>5</td>
</tr>
</tbody>
</table>

**Psychology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC&amp; 100</td>
<td>General Psychology</td>
<td>5</td>
</tr>
</tbody>
</table>

**Sociology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC&amp; 101</td>
<td>Intro to Sociology</td>
<td>5</td>
</tr>
<tr>
<td>SOC 125</td>
<td>Sociology of the Family</td>
<td>5</td>
</tr>
<tr>
<td>SOC&amp; 201</td>
<td>Social Problems</td>
<td>5</td>
</tr>
<tr>
<td>SOC 225</td>
<td>Cultural &amp; Ethnic Pluralism</td>
<td>5</td>
</tr>
</tbody>
</table>
Natural Science (S)

1. The course is broad in scope, covering major concepts.

2. 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)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR</td>
<td>The Solar System</td>
</tr>
<tr>
<td>ASTR</td>
<td>Stars &amp; Galaxies</td>
</tr>
<tr>
<td>ASTR</td>
<td>The Solar System &amp; Universe</td>
</tr>
<tr>
<td>ASTR</td>
<td>Observational Astronomy w/lab</td>
</tr>
<tr>
<td>BIOL&amp;</td>
<td>Survey of Biology w/lab</td>
</tr>
<tr>
<td>BIOL&amp;</td>
<td>Human Biology</td>
</tr>
<tr>
<td>BIOL&amp;</td>
<td>Majors Ecology/Evolution w/lab</td>
</tr>
<tr>
<td>BIOL&amp;</td>
<td>Majors Cell/Molecular w/lab</td>
</tr>
<tr>
<td>BIOL&amp;</td>
<td>Majors Organismal Phys w/lab</td>
</tr>
<tr>
<td>BIOL&amp;</td>
<td>Human A &amp; P 1 w/lab</td>
</tr>
<tr>
<td>BIOL&amp;</td>
<td>Human A &amp; P 2 w/lab</td>
</tr>
<tr>
<td>BIOL</td>
<td>Adv Topics Human A &amp; P w/lab</td>
</tr>
<tr>
<td>BIOL</td>
<td>Intro to Marine Biology w/lab</td>
</tr>
<tr>
<td>BIOL&amp;</td>
<td>Microbiology w/lab</td>
</tr>
<tr>
<td>BOTA</td>
<td>Survey of Botany (lab)</td>
</tr>
<tr>
<td>BOTA</td>
<td>Plant Identification w/lab</td>
</tr>
<tr>
<td>BOTA</td>
<td>Dendrology-Trees in Our Env w/lab</td>
</tr>
<tr>
<td>CHEM&amp;</td>
<td>Intro to Chemistry w/lab</td>
</tr>
<tr>
<td>CHEM&amp;</td>
<td>Intro to Organic/Biochemistry w/lab</td>
</tr>
<tr>
<td>CHEM&amp;</td>
<td>General Chemistry w/lab I</td>
</tr>
<tr>
<td>CHEM&amp;</td>
<td>General Chemistry w/lab II</td>
</tr>
<tr>
<td>CHEM&amp;</td>
<td>General Chemistry w/lab III</td>
</tr>
<tr>
<td>CHEM&amp;</td>
<td>Organic Chemistry w/lab I</td>
</tr>
<tr>
<td>ENVS&amp;</td>
<td>Survey of Env Science</td>
</tr>
<tr>
<td>ENVS&amp;</td>
<td>Intro to Environmental Science Lab</td>
</tr>
<tr>
<td>ENVS&amp;</td>
<td>Intro to Env Science</td>
</tr>
<tr>
<td>ENVS</td>
<td>Watersheds: Connecting Mountains to the Sea</td>
</tr>
<tr>
<td>ENVS</td>
<td>Intro to Natural Resources</td>
</tr>
<tr>
<td>GEOG</td>
<td>Physical Geography w/lab</td>
</tr>
</tbody>
</table>
**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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 120</td>
<td>Women's Health Issues</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 130</td>
<td>Health and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 135</td>
<td>Eating &amp; Weight Control</td>
<td>2</td>
</tr>
<tr>
<td>HLTH 140</td>
<td>Exercise and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 145</td>
<td>Safety and Fitness</td>
<td>3</td>
</tr>
</tbody>
</table>

**Physical Education**

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 107</td>
<td>Cycling Basics</td>
<td>2</td>
</tr>
<tr>
<td>PE 110</td>
<td>Physical Fitness</td>
<td>1</td>
</tr>
<tr>
<td>PE 120</td>
<td>Lifestyle Management &amp; Exercise</td>
<td>2</td>
</tr>
<tr>
<td>PE 123</td>
<td>Weight Training</td>
<td>1</td>
</tr>
<tr>
<td>PE 125</td>
<td>Free Weights</td>
<td>1</td>
</tr>
<tr>
<td>PE 140</td>
<td>Boot Camp Basics</td>
<td>1</td>
</tr>
<tr>
<td>PE 142</td>
<td>Cardio Combo</td>
<td>1</td>
</tr>
<tr>
<td>PE 150</td>
<td>Yoga</td>
<td>1</td>
</tr>
<tr>
<td>PE 151</td>
<td>Aerobic Fitness</td>
<td>1</td>
</tr>
<tr>
<td>PE 152</td>
<td>Pilates</td>
<td>1</td>
</tr>
<tr>
<td>PE 153</td>
<td>Tai Chi Basics</td>
<td>1</td>
</tr>
<tr>
<td>PE 158</td>
<td>Beginning Tae Kwon Do</td>
<td>2</td>
</tr>
<tr>
<td>PE 163</td>
<td>Step Aerobics</td>
<td>1</td>
</tr>
<tr>
<td>PE 168</td>
<td>Lifetime Fitness</td>
<td>2</td>
</tr>
<tr>
<td>PE 169</td>
<td>Cardio Kick boxing</td>
<td>1</td>
</tr>
<tr>
<td>PE 210</td>
<td>Advanced Physical Fitness</td>
<td>1</td>
</tr>
<tr>
<td>PE 223</td>
<td>Advanced Weight Training</td>
<td>1</td>
</tr>
<tr>
<td>PE 229</td>
<td>Physical Fitness Concepts</td>
<td>3</td>
</tr>
<tr>
<td>PE 251</td>
<td>Advanced Aerobic Fitness</td>
<td>1</td>
</tr>
<tr>
<td>PE 263</td>
<td>Advanced Step Aerobics</td>
<td>1</td>
</tr>
<tr>
<td>PE 269</td>
<td>Advanced Cardio Kick boxing</td>
<td>1</td>
</tr>
</tbody>
</table>
**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

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

**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**

**Fall Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201</td>
<td>Principles of Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 214</td>
<td>Excel I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 121</td>
<td>Business Math</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 202</td>
<td>Principles of Accounting II</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 210</td>
<td>Word I</td>
<td>5</td>
</tr>
<tr>
<td>HR 110</td>
<td>Human Relations-Workplace</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 203</td>
<td>Principles of Accounting III</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>OR</td>
</tr>
<tr>
<td>BTEC 221</td>
<td>Business Communications</td>
<td>5</td>
</tr>
<tr>
<td>ECON&amp; 202</td>
<td>Macroeconomics (SS)</td>
<td>OR</td>
</tr>
<tr>
<td>ECON&amp; 201</td>
<td>Microeconomics (SS)</td>
<td>5</td>
</tr>
<tr>
<td>Health Distribution – Choose one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HLTH 130</td>
<td>Health and Wellness</td>
<td>OR</td>
</tr>
<tr>
<td>HLTH 140</td>
<td>Exercise and Nutrition</td>
<td>OR</td>
</tr>
<tr>
<td>HLTH 145</td>
<td>Safety and Fitness</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

**Fall Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 260</td>
<td>Individual Income Tax</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 270</td>
<td>Payroll Accounting</td>
<td>5</td>
</tr>
<tr>
<td>BUS 215</td>
<td>Principles of Finance</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 220</td>
<td>Accounting Information</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 240</td>
<td>Business Entity Tax</td>
<td>5</td>
</tr>
<tr>
<td>BUS 275</td>
<td>Principles of Management</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Spring Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 210</td>
<td>Intro to Audit</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 285</td>
<td>Bookkeeper Cert. Course</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 201</td>
<td>Business Law</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
ACCOUNTING

Emphasis: Accounting Clerk
Degree: Certificate of Proficiency

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.
- Demonstrate the relationships among the various business functions such as accounting, finance, marketing, purchasing, operations, and human resources.
- Demonstrate computer proficiency on the computer keyboard and ten-key calculator as well as Quick Books Pro.
- Prepare written and oral business communications.
- Demonstrate familiarity with business law concepts such as contract law and the Uniform Commercial Code.

Suggested Order of Classes

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 270</td>
<td>3</td>
</tr>
<tr>
<td>BUS&amp; 201</td>
<td>5</td>
</tr>
<tr>
<td>BUS 121</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 202</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 210</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 214</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 220</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 203</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 221</td>
<td>5</td>
</tr>
<tr>
<td>HR 110</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

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.
- Demonstrate the relationships among the various business functions such as accounting, finance, marketing, purchasing, operations, and human resources.
- Demonstrate computer proficiency on the computer keyboard and ten-key calculator as well as Quick Books Pro.
- Prepare written and oral business communications.
- Demonstrate familiarity with business law concepts such as contract law and the Uniform Commercial Code.

Suggested Order of Classes

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 270</td>
<td>3</td>
</tr>
<tr>
<td>BUS&amp; 201</td>
<td>5</td>
</tr>
<tr>
<td>BUS 121</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 202</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 210</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 214</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 220</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 203</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 221</td>
<td>5</td>
</tr>
<tr>
<td>HR 110</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
**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 working in agricultural development and educational reform or as a consultant, planner, market analyst, survey researcher, forensic scientist, or refugee coordinator.

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

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

*** MATH 146 Introduction to Stats is recommended.

*** HIST 101 General Psychology or HIST 116 Western Civilization I.

Anthropology majors are encouraged to develop a broad base in the social sciences to include SOC& 101 to specialize in Archaeology.

### Suggested Order of Classes

<table>
<thead>
<tr>
<th>Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Quarter, First Year</td>
<td>15</td>
</tr>
<tr>
<td>ANTH&amp; 100 Survey of Anthropology</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 101 English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution*</td>
<td>5</td>
</tr>
<tr>
<td>Winter Quarter, First Year</td>
<td>15</td>
</tr>
<tr>
<td>ANTH&amp; 210 Indians of North America</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 102 Composition II</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution*</td>
<td>5</td>
</tr>
<tr>
<td>Spring Quarter, First Year</td>
<td>15</td>
</tr>
<tr>
<td>ANTH 235 Myth, Ritual and Magic</td>
<td>5</td>
</tr>
<tr>
<td>Quantitative Skills Distribution**</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 170 Human Biology (S)</td>
<td>5</td>
</tr>
<tr>
<td>Fall Quarter, Second Year</td>
<td>15</td>
</tr>
<tr>
<td>ANTH&amp; 206 Cultural Anthropology</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution***</td>
<td>5</td>
</tr>
<tr>
<td>Winter Quarter, Second Year</td>
<td>15-18</td>
</tr>
<tr>
<td>Electives</td>
<td>7-10</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>3</td>
</tr>
<tr>
<td>Social Science Distribution***</td>
<td>5</td>
</tr>
<tr>
<td>Spring Quarter, Second Year</td>
<td>15</td>
</tr>
<tr>
<td>ANTH 225 Cultural and Ethnic Pluralism in Contemporary Society</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

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 101 General Psychology or HIST 116 Western Civilization I.

**Anthropology majors are encouraged to develop a broad base in the social sciences to include SOC 101 to specialize in Archaeology.

*** HIST 101 General Psychology or HIST 116 Western Civilization I.

Anthropology majors are encouraged to develop a broad base in the social sciences to include SOC 101 to specialize in Archaeology.
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**

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

**Winter Quarter, First Year**  
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  

**Spring Quarter, First Year**  
CHEM& 163 General Chemistry w/lab III ...............................6  
MATH& 151 Calculus I .........................................................5  
Humanities Distribution ......................................................5  

**Fall Quarter, Second Year**  
BIOL& 221 Majors Ecology/Evolution ....................................5  
Humanities Distribution*** ..................................................5  
Elective** or Social Science Distribution ...............................5  

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

**Spring Quarter, Second Year**  
BIOL& 223 Majors Organismal Phys .....................................5  
Social Science Distribution*** ...............................................5  
Elective .............................................................5  

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**

**Fall Quarter, First Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 221</td>
<td>Majors Ecology/Evolution</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 161</td>
<td>General Chemistry w/lab I</td>
<td>6</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 222</td>
<td>Majors Cell/Molecular</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 162</td>
<td>General Chemistry w/lab II</td>
<td>6</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 223</td>
<td>Majors Organismal Phys</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 163</td>
<td>General Chemistry w/lab III</td>
<td>6</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
</tbody>
</table>

**Fall Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology/Chemistry/Physics sequence*</td>
<td>5-6</td>
<td></td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology/Chemistry/Physics sequence*</td>
<td>5-6</td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stats</td>
<td>OR</td>
</tr>
<tr>
<td>MATH&amp; 163</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

**Spring Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology/Chemistry/Physics sequence*</td>
<td>5-6</td>
<td></td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

**Science electives:**

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

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

BUSINESS

Emphasis: Business Administration
Degree: Associate in Business-DTA/MRP

Suggested Order of Classes

**Fall Quarter, First Year**
- ECON& 202 Macroeconomics ............................................5
- ENGL& 101 English Composition I ...................................5
- Humanities Distribution** .............................................................5
  15

**Winter Quarter, First Year**
- ECON& 201 Microeconomics..............................................5
- ENGL& 102 Composition II .................................................5
- Science Distribution*** ...................................................................5
  15

**Spring Quarter, First Year**
- 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
  15-18

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

**Winter Quarter, Second Year**
- ACCT& 202 Principles of Accounting II ...........................5
- MATH& 151 Calculus I* ..........................................................5
- Science Distribution*** ...................................................................5
  15

**Spring Quarter, Second Year**
- ACCT& 203 Principles of Accounting III .........................5
- MATH& 152 Calculus II* ............................................................5
- Humanities Distribution** ............................................................5
  15

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 – ONLINE

Emphasis: Business Administration
Degree: Competency Based Education
Associate in Business-DTA/MRP

PURPOSE: The Competency Based Education (CBE) Business Transfer Degree is an exclusively online, self-paced, competency based version of the Associate in Business DTA. Students use knowledge they already have from work and life to pass assessments and prove competencies. This degree is designed for students who plan to transfer to a four-year college or university to complete a bachelor’s degree in business.

Students should check with their potential transfer institutions about the requirement for overall minimum GPA, a higher GPA in a select subset of courses, or a specific minimum grade in one or more courses such as math or English.

CBE Program Information:
There are two terms, one beginning in January and ending the middle of June, and one beginning in July and ending the middle of December. Students may start within the first three months of each term, and take as many courses as they are able (20 credits minimum) during that time for the flat tuition rate.

CBE program courses use Open Educational Resources (OER). These are freely accessible, openly licensed online documents and media. They are well-chosen for the program to assist in mastering competencies in each course. Because they are free, they help save students a lot of money.

Students move through the program at their own pace. In the CBE program, students can start and complete competencies and assessments at their own pace, based on knowledge, needs, schedule, and effort. Learning is not tied to the pace of other students. Students show mastery of competencies as soon as they are ready.

Required courses only applicable for students enrolled in the CBE Program

**Communication**
- ENGL& 101 English Composition I ................................... 5
- ENGL& 102 Composition II ................................................. 5

**Quantitative/Symbolic Reasoning**
- MATH 147 Finite Math ........................................................ 5
- MATH& 148 Business Calculus ............................................. 5

**Humanities (no more than 10 credits per discipline area)**
- ART& 100 Art Appreciation ............................................. 5
- CMST& 220 Public Speaking ............................................... 5
- ENGL& 244 American Literature I ..................................... 5

**Social and Behavioral Sciences**
- ECON& 201 Microeconomics ............................................ 5
- ECON& 202 Macroeconomics ............................................ 5
- SOC& 101 Intro to Sociology ........................................... 5

**Mathematical and Natural Science**
- MATH& 146 Introduction to Stats ..................................... 5
- BIOL& 151 Survey of Biology ........................................... 5
- GEOL& 101 Intro to Physical Geology ............................. 5

**Business**
- ACCT& 201 Principles of Accounting I ......................... 5
- ACCT& 202 Principles of Accounting II ......................... 5
- ACCT& 203 Principles of Accounting III ....................... 5
- BUS& 201 Business Law .................................................. 5

**Elective**
- POLS& 202 American Government .................................. 5

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.
PURPOSE: The Associate in Applied Science with a Business Administration Emphasis of Management, 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 the entity.
- 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.
- Demonstrate the ability to apply acquired skills to workplace scenarios.
- Demonstrate 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

**Fall Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 200</td>
<td>Financial Reporting 5</td>
</tr>
<tr>
<td>OR ECON&amp; 201 Microeconomics 5</td>
<td></td>
</tr>
<tr>
<td>ECON&amp; 202 Macroeconomics 5</td>
<td></td>
</tr>
<tr>
<td>BUS&amp; 101 Intro to Business 5</td>
<td></td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 203 Principles of Accounting III 5</td>
<td></td>
</tr>
<tr>
<td>BTEC 214 Excel I 5</td>
<td></td>
</tr>
<tr>
<td>BUS 121 Business Math 5</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution 3</td>
<td></td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 210 Word I 5</td>
<td></td>
</tr>
<tr>
<td>BTEC 221 Business Communications 5</td>
<td></td>
</tr>
<tr>
<td>OR ENGL&amp; 101 English Composition I 5</td>
<td></td>
</tr>
<tr>
<td>HR 110 Human Relations-Workplace 5</td>
<td></td>
</tr>
</tbody>
</table>

**Fall Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 220 Principles of Marketing 5</td>
<td></td>
</tr>
<tr>
<td>OR MATH&amp; 146 Intro to Stats 5</td>
<td></td>
</tr>
<tr>
<td>BUS 240 Merchandising 5</td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 220 Public Speaking 5</td>
<td></td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS&amp; 201 Business Law 5</td>
<td></td>
</tr>
<tr>
<td>BUS 215 Principles of Finance 5</td>
<td></td>
</tr>
<tr>
<td>BUS 275 Principles of Management 5</td>
<td></td>
</tr>
<tr>
<td>OR Natural Science with lab 5</td>
<td></td>
</tr>
</tbody>
</table>

**Spring Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 130 Basic Computer Accounting 3</td>
<td></td>
</tr>
<tr>
<td>HR 210 Human Resource Mgmt 5</td>
<td></td>
</tr>
<tr>
<td>BUS 232 Entrepreneurship 5</td>
<td></td>
</tr>
</tbody>
</table>
BUSINESS OFFICE TECHNOLOGY

**Emphasis:** Administrative Assistant  
**Degree:** Associate in Technical Arts

**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:

- 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.
- Demonstrate the ability to relate effectively with others in the classroom.
- Demonstrate human relations skills and professional behavior necessary for successful job performance.
- Demonstrate the ability to 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**

### Fall Quarter, First Year

<table>
<thead>
<tr>
<th>BTEC</th>
<th>102</th>
<th>Skillbuilding I</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC</td>
<td>110</td>
<td>Business English</td>
<td>5</td>
</tr>
<tr>
<td>BTEC</td>
<td>220</td>
<td>Ten Key Calculator</td>
<td>1</td>
</tr>
<tr>
<td>H R</td>
<td>110</td>
<td>Human Relations-Workplace</td>
<td>5</td>
</tr>
<tr>
<td>IT</td>
<td>117</td>
<td>Intro to Windows OS</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credits:** 17

### Winter Quarter, First Year

<table>
<thead>
<tr>
<th>BUS&amp;</th>
<th>201</th>
<th>Business Law</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC</td>
<td>210</td>
<td>Word I</td>
<td>5</td>
</tr>
<tr>
<td>BTEC</td>
<td>221</td>
<td>Business Communications</td>
<td>5</td>
</tr>
<tr>
<td>BTEC</td>
<td>233</td>
<td>Files Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credits:** 18

### Spring Quarter, First Year

<table>
<thead>
<tr>
<th>BTEC</th>
<th>120</th>
<th>Applied Business Math</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC</td>
<td>191</td>
<td>Work Experience Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGL&amp;</td>
<td>101</td>
<td>English Composition I</td>
<td>4</td>
</tr>
<tr>
<td>SPEE</td>
<td>101</td>
<td>Fund. of Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credits:** 17

### Fall Quarter, Second Year

<table>
<thead>
<tr>
<th>ACCT</th>
<th>110</th>
<th>Practical Accounting I</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC</td>
<td>191</td>
<td>Work Experience Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BTEC</td>
<td>214</td>
<td>Excel I</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp;</td>
<td>101</td>
<td>Intro to Business</td>
<td>5</td>
</tr>
<tr>
<td>HLTH</td>
<td>145</td>
<td>Safety &amp; Fitness</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credits:** 17

### Winter Quarter, Second Year

<table>
<thead>
<tr>
<th>ACCT</th>
<th>120</th>
<th>Practical Accounting II</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC</td>
<td>190</td>
<td>Cooperative Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>BTEC</td>
<td>205</td>
<td>Outlook</td>
<td>1</td>
</tr>
<tr>
<td>BTEC</td>
<td>212</td>
<td>Access I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credits:** 12

### Spring Quarter, Second Year

<table>
<thead>
<tr>
<th>ACCT</th>
<th>130</th>
<th>Basic Computer Accounting</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC</td>
<td>222</td>
<td>Power Point Module*</td>
<td>1</td>
</tr>
<tr>
<td>BTEC</td>
<td>218</td>
<td>Desktop Publishing*</td>
<td>4</td>
</tr>
<tr>
<td>BTEC</td>
<td>224</td>
<td>Office Procedures</td>
<td>5</td>
</tr>
</tbody>
</table>

**Credits:** 13

* Recommended course schedule: BTEC courses are offered on odd numbered years, please see a BTEC advisor for specific class offerings.
BUSINESS OFFICE TECHNOLOGY

Emphasis: Medical Administrative Assistant
Degree: Associate in Technical Arts

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:

• Demonstrate 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.
• Demonstrate the ability to relate effectively with others in the classroom.
• Demonstrate human relations skills and professional behavior necessary for successful job performance.
• Demonstrate the ability to apply acquired skills in the workplace.
• Use medical terms correctly.
• Compose business letters, memos, resumes, and letters of application.
• Demonstrate an understanding of human biology.
• Transcribe medical documents from recorded dictation.
• Enter patient record information using electronic software.
• Demonstrate an understanding of 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

Fall Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 102</td>
<td>Skillbuilding I</td>
</tr>
<tr>
<td>BTEC 110</td>
<td>Business English</td>
</tr>
<tr>
<td>BTEC 220</td>
<td>Ten Key Calculator</td>
</tr>
<tr>
<td>H R 110</td>
<td>Human Relations-Workplace</td>
</tr>
</tbody>
</table>

Winter Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 210</td>
<td>Word I</td>
</tr>
<tr>
<td>BTEC 221</td>
<td>Business Communications</td>
</tr>
<tr>
<td>BTEC 233</td>
<td>Files Management</td>
</tr>
<tr>
<td>HLTH 145</td>
<td>Safety &amp; Fitness</td>
</tr>
</tbody>
</table>

Spring Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 120</td>
<td>Applied Business Math</td>
</tr>
<tr>
<td>BTEC 219</td>
<td>Word II</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>SPEE 101</td>
<td>Medical Law and Ethics</td>
</tr>
</tbody>
</table>

Fall Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 110</td>
<td>Practical Accounting I</td>
</tr>
<tr>
<td>BTEC 107</td>
<td>Electronic Medical Records</td>
</tr>
<tr>
<td>BTEC 214</td>
<td>Excel I</td>
</tr>
<tr>
<td>MA 260</td>
<td>Medical Terminology</td>
</tr>
</tbody>
</table>

Winter Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 120</td>
<td>Practical Accounting II</td>
</tr>
<tr>
<td>BIOL&amp; 170</td>
<td>Human Biology</td>
</tr>
<tr>
<td>BTEC 191</td>
<td>Work Experience Seminar</td>
</tr>
<tr>
<td>BTEC 255</td>
<td>Insurance and Billing</td>
</tr>
<tr>
<td>BTEC 255</td>
<td>Outlook</td>
</tr>
</tbody>
</table>

Spring Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 190</td>
<td>Cooperative Work Experience</td>
</tr>
<tr>
<td>BTEC 261</td>
<td>Medical Office Procedures</td>
</tr>
<tr>
<td>BTEC 263</td>
<td>Medical Transcription</td>
</tr>
</tbody>
</table>
**BUSINESS OFFICE TECHNOLOGY**

**Emphasis:** Medical Office Assistant  
**Degree:** Certificate of Proficiency

**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:

- Demonstrate 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.
- Demonstrate the ability to apply acquired skills in the workplace.
- Demonstrate the ability to relate effectively with others in the classroom.
- Demonstrate human relations skills and professional behavior necessary for successful job performance.
- Use medical terms correctly.
- Obtain a first aid certificate.
- Demonstrate an understanding of 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**

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter</strong></td>
<td>BTEC 102</td>
<td>Skillbuilding I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BTEC 107</td>
<td>Medical Records</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BTEC 233</td>
<td>Files Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>H R 110</td>
<td>Human Relations-Workplace</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>MA 260</td>
<td>Medical Terminology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Winter Quarter</strong></td>
<td>BTEC 110</td>
<td>Business English</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>BTEC 210</td>
<td>Word I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>BTEC 255</td>
<td>Insurance and Billing</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>HLTH 145</td>
<td>Safety &amp; Fitness</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Spring Quarter</strong></td>
<td>BIOL&amp; 170</td>
<td>Human Biology</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>BTEC 120</td>
<td>Applied Business Math</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>BTEC 261</td>
<td>Medical Office Procedures</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>BTEC 266</td>
<td>Medical Law &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>
BUSINESS OFFICE TECHNOLOGY

Emphasis: Office Assistant  
Degree: Certificate of Proficiency

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:

- Demonstrate 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.
- Demonstrate the ability to relate effectively with others in the classroom.
- Demonstrate human relations skills and professional behavior necessary for successful job performance.
- Develop effective presentations using presentation software.
- Organize data using business math and practical accounting.
- 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

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter</strong></td>
<td></td>
</tr>
<tr>
<td>ACCT 110</td>
<td>3</td>
</tr>
<tr>
<td>BTEC 102</td>
<td>3</td>
</tr>
<tr>
<td>BTEC 110</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 210</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 120</td>
<td>3</td>
</tr>
<tr>
<td>BTEC 205</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 214</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 233</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 145</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 120</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 220</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 222</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 224</td>
<td>5</td>
</tr>
<tr>
<td>HR 110</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17</td>
</tr>
</tbody>
</table>
CHEMICAL DEPENDENCY

**Degree:** Associate in Applied Science

**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:

- Demonstrate an understanding of 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.
- Demonstrate skills necessary to perform clinical evaluations, HIV/AIDS risk interventions and case management functions.

**Suggested Order of Classes**

**Fall Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC&amp; 100</td>
<td>General Psychology ................................... 5</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I .................................. OR</td>
</tr>
<tr>
<td>WRT 105</td>
<td>Writing in the Workplace .................................. 5</td>
</tr>
<tr>
<td>CDP 100</td>
<td>Intro to Chem Dependency .................................. 5</td>
</tr>
<tr>
<td>Health and Fitness Distribution .................................. 3</td>
<td></td>
</tr>
</tbody>
</table>

18 Credits

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC&amp; 220</td>
<td>Abnormal Psychology ..................................... 5</td>
</tr>
<tr>
<td>MATH&amp; 107</td>
<td>Math in Society* ........................................... 5</td>
</tr>
<tr>
<td>BIOL&amp; 170</td>
<td>Human Biology ............................................. OR</td>
</tr>
<tr>
<td>NUTR&amp; 101</td>
<td>Nutrition .................................................. 5</td>
</tr>
</tbody>
</table>

15 Credits

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDP 101</td>
<td>Drug &amp; Alcohol Responses ................................... 5</td>
</tr>
<tr>
<td>PSYC&amp; 200</td>
<td>Lifespan Psychology ........................................ 5</td>
</tr>
<tr>
<td>CDP 110</td>
<td>CDP Counseling Theory ..................................... 4</td>
</tr>
<tr>
<td>CDP 111</td>
<td>CDP Counseling Lab ......................................... 1</td>
</tr>
</tbody>
</table>

15 Credits

**Fall Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDP 120</td>
<td>CDP Law and Ethics ......................................... 4</td>
</tr>
<tr>
<td>CDP 130</td>
<td>Assess &amp; Treatment Plans .................................... 5</td>
</tr>
<tr>
<td>CDP 140</td>
<td>Counseling Adolescents ..................................... 3</td>
</tr>
<tr>
<td>Humanities Distribution ........................................ 5</td>
<td></td>
</tr>
</tbody>
</table>

17 Credits

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDP 210</td>
<td>Groups within Treatment .................................... 4</td>
</tr>
<tr>
<td>CDP 220</td>
<td>Chem Dependency &amp; Family ................................... 4</td>
</tr>
<tr>
<td>CDP 230</td>
<td>CDP Cultural Diversity ....................................... 3</td>
</tr>
<tr>
<td>CDP 240</td>
<td>Relapse Prevention ............................................ 2</td>
</tr>
<tr>
<td>CDP 250</td>
<td>Community Prevention ......................................... 3</td>
</tr>
</tbody>
</table>

16 Credits

**Spring Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDP 280</td>
<td>CDP Supervised Practicum .................................... 5</td>
</tr>
<tr>
<td>CDP 281</td>
<td>Practicum Seminar ............................................ 1</td>
</tr>
<tr>
<td>HR 110</td>
<td>Human Relations - Workplace ................................... 5</td>
</tr>
<tr>
<td>Social Science Distribution other than Psychology ........... 5</td>
<td></td>
</tr>
</tbody>
</table>

16 Credits

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

<table>
<thead>
<tr>
<th>Fall Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101 English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 161 General Chem w/lab I</td>
<td>6</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>OR</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 162 General Chem w/lab II</td>
<td>6</td>
</tr>
<tr>
<td>MATH&amp; 151 Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220 Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 163 General Chem w/lab III</td>
<td>6</td>
</tr>
<tr>
<td>MATH&amp; 152 Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 261 Organic Chemistry w/lab I</td>
<td>6</td>
</tr>
<tr>
<td>PHYS&amp; 221 Engineering Physics I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 118 Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 262 Organic Chemistry w/lab II</td>
<td>6</td>
</tr>
<tr>
<td>MATH&amp; 163 Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 222 Engineering Physics II</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 263 Organic Chemistry w/lab III</td>
<td>6</td>
</tr>
<tr>
<td>MATH 212 Differential Equations</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 223 Engineering Physics III</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>
PURPOSE: The Certificate of Completion in CAD is specifically designed for individuals who are currently in a technical profession and desire to upgrade skills in computer-aided drafting technology. Upon successful completion, the individual will have developed solid technical skill with CAD in their current profession.

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

- Import and edit survey points.
- Create a surface.
- Utilize paper space, model space and multiple viewports.
- Create and label contours.
- Calculate cut and fill items.
- Create blocks, attributes and reports.
- Create simple 3D wire frame and 3D solid models.
- Utilize dimension commands.

Suggested Order of Classes

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Quarter</td>
<td>CAD 112</td>
<td>Computer Aided Drafting I</td>
<td>5</td>
</tr>
<tr>
<td>Winter Quarter</td>
<td>CAD 113</td>
<td>Computer Aided Drafting II</td>
<td>5</td>
</tr>
<tr>
<td>Spring Quarter</td>
<td>CAD 114</td>
<td>Computer Aided Drafting III</td>
<td>5</td>
</tr>
</tbody>
</table>

Students will benefit from completing coursework in Computer Applications and Applied Mathematics. Students must earn a 2.0 or better in each CAD class to progress in the program.
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

**Fall Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 141</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

**Credits:** 18

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 102</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 142</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

**Credits:** 15

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science Elective</td>
<td>OR</td>
</tr>
<tr>
<td>MATH 228</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

**Credits:** 15

**Fall Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science Elective</td>
<td>OR</td>
</tr>
<tr>
<td>Science Distribution*</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

**Credits:** 15

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science Elective</td>
<td>OR</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

**Credits:** 15

**Spring Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science Elective</td>
<td>OR</td>
</tr>
<tr>
<td>MATH 228</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

**Credits:** 15

**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 ability to:

- Function effectively as a member of a team to accomplish common goals.
- Read and interpret technical information, as well as listen effectively to and communicate orally with a wide range of audiences.
- Demonstrate the attitudes, knowledge and abilities associated with quality customer service.
- Research IT problems, develop and carry out appropriate strategies for resolving them.
- Design and implement a hardware and/or software solution responsive to an identified scenario.
- Use a variety of practices for securing data and end-user systems.
- Demonstrate core IT competency in their area of specialization.

Suggested Order of Classes

<table>
<thead>
<tr>
<th>Fall Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 101  Intro to Programming</td>
<td>4</td>
</tr>
<tr>
<td>IT 123  Desktop OS 1</td>
<td>4</td>
</tr>
<tr>
<td>WRT 105  Writing in the Workplace</td>
<td>OR</td>
</tr>
<tr>
<td>ENGL&amp; 101  English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>HLTH 145  Safety &amp; Fitness</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 119  Web Scripting 1</td>
<td>4</td>
</tr>
<tr>
<td>IT 124  Desktop OS 2</td>
<td>4</td>
</tr>
<tr>
<td>IT 240  Mobile Device OS</td>
<td>3</td>
</tr>
<tr>
<td>TMATH 171  Computer Science Math 1</td>
<td>OR</td>
</tr>
<tr>
<td>MATH&amp; 141  Precalculus I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 125  Desktop OS 3</td>
<td>4</td>
</tr>
<tr>
<td>SPEE 101  Fund. of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CMST&amp; 220  Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>HR 110  Human Relations - Workplace</td>
<td>5</td>
</tr>
<tr>
<td>IT 140  IT Support Internship</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14-16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 140  IT Support Internship</td>
<td>2</td>
</tr>
<tr>
<td>IT 144  Microsoft Office for IT</td>
<td>5</td>
</tr>
<tr>
<td>IT 201  Network Technology 1</td>
<td>4</td>
</tr>
<tr>
<td>IT 218  Server OS 1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 140  IT Support Internship</td>
<td>2</td>
</tr>
<tr>
<td>IT 202  Network Technology 2</td>
<td>4</td>
</tr>
<tr>
<td>IT 219  Server OS 2</td>
<td>4</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>OR</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 140  IT Support Internship</td>
<td>2</td>
</tr>
<tr>
<td>IT 203  Network Technology 3</td>
<td>5</td>
</tr>
<tr>
<td>IT 220  Server OS 3</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>OR</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option 1: Despots &amp; Network Systems Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Quarter, First Year Credits</td>
</tr>
<tr>
<td>CS&amp; 131  C++</td>
</tr>
<tr>
<td>IT 121  Web Scripting 2</td>
</tr>
<tr>
<td>IT 130  IT Apps Internship</td>
</tr>
<tr>
<td>TMATH 172  Computer Science Math II</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>MATH&amp; 142  Precalculus II</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

| Fall Quarter, Second Year Credits               |
| IT 130  IT Apps Internship                       | 2       |
| IT 205  PHP/SQL                                  | 4       |
| IT 224  Java 1                                   | 5       |
| Social Science Distribution OR                   |         |
| Science Distribution                             | 5       |
| **Total** | 16       |

| Winter Quarter, Second Year Credits             |
| IT 130  IT Apps Internship                       | 2       |
| IT 228  Java 2                                   | 5       |
| SPEE 101  Fund. of Public Speaking OR            |         |
| CMST& 220  Public Speaking OR                    |         |
| ART 130  Computer Graphics                      | 5       |
| Social Science Distribution OR                   |         |
| Science Distribution                             | 5       |
| **Total** | 15-17    |

| Spring Quarter, Second Year Credits             |
| IT 130  IT Apps Internship                       | 2       |
| IT 230  Java 3                                   | 5       |
| HR 110  Human Relations-Workplace                | 5       |
| **Total** | 12       |

<table>
<thead>
<tr>
<th>Option 2: Programming &amp; Web Development Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Quarter, First Year Credits</td>
</tr>
<tr>
<td>IT 121  Web Scripting 2</td>
</tr>
<tr>
<td>IT 130  IT Apps Internship</td>
</tr>
<tr>
<td>MATH&amp; 142  Precalculus I</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

| Fall Quarter, Second Year Credits                   |
| IT 130  IT Apps Internship                           | 2       |
| IT 228  Java 2                                      | 5       |
| SPEE 101  Fund. of Public Speaking OR                |         |
| CMST& 220  Public Speaking OR                       |         |
| ART 130  Computer Graphics                          | 5       |
| Social Science Distribution OR                      |         |
| Science Distribution                               | 5       |
| **Total** | 15-17    |

| Winter Quarter, Second Year Credits                 |
| IT 130  IT Apps Internship                           | 2       |
| IT 230  Java 3                                      | 5       |
| HR 110  Human Relations-Workplace                    | 5       |
| **Total** | 12       |
**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

#### Fall Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stats</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Winter Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 202</td>
<td>Principles of Accounting II</td>
</tr>
<tr>
<td>ENGL&amp; 235</td>
<td>Technical Writing*</td>
</tr>
<tr>
<td>ENGL&amp; 102</td>
<td>Composition II*</td>
</tr>
<tr>
<td>ENGR&amp; 111</td>
<td>Engineering Graphics</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
</tr>
</tbody>
</table>

#### Spring Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 203</td>
<td>Principles of Accounting III</td>
</tr>
<tr>
<td>BUS&amp; 201</td>
<td>Business Law</td>
</tr>
<tr>
<td>ENGR&amp; 214</td>
<td>Statics*</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
</tr>
</tbody>
</table>

#### Fall Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 161</td>
<td>General Chem w/lab I*</td>
</tr>
<tr>
<td>PHYS&amp; 221</td>
<td>Engineering Physics I</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

#### Winter Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON&amp; 201</td>
<td>Microeconomics</td>
</tr>
<tr>
<td>GEOL&amp; 101</td>
<td>Intro to Physical Geology</td>
</tr>
<tr>
<td>PHYS&amp; 222</td>
<td>Engineering Physics II</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Spring Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON&amp; 202</td>
<td>Macroeconomics*</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
</tbody>
</table>

* Select course as appropriate for intended transfer institution.
CRIMINAL JUSTICE

Emphasis: Criminal Justice
Degree: Associate in Technical Arts

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 and demonstrate 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

Fall Quarter, Every Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 101</td>
<td>Intro to Criminal Justice</td>
<td>5</td>
</tr>
<tr>
<td>CJ 103</td>
<td>Constitutional Case Law</td>
<td>5</td>
</tr>
<tr>
<td>WRT 105</td>
<td>Writing in the Workplace</td>
<td>5</td>
</tr>
<tr>
<td>Criminal Justice Elective</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

20

Winter Quarter, Every Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 104</td>
<td>Intro to Law Enforcement</td>
<td>5</td>
</tr>
<tr>
<td>CJ 107</td>
<td>Criminal Procedures</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 120</td>
<td>Applied Business Math</td>
<td>OR</td>
</tr>
<tr>
<td>MATH 096</td>
<td>Pre-Algebra (Pre-req for BTEC 120)</td>
<td>5</td>
</tr>
<tr>
<td>Criminal Justice Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20

Spring Quarter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 109</td>
<td>Community Policing</td>
<td>5</td>
</tr>
<tr>
<td>CJ 110</td>
<td>Criminal Law</td>
<td>5</td>
</tr>
<tr>
<td>CJ 111</td>
<td>Criminal Justice Ethics</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 120</td>
<td>Applied Business Math</td>
<td>OR</td>
</tr>
<tr>
<td>Criminal Justice Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20

Summer Quarter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 106</td>
<td>Juvenile Justice</td>
<td>5</td>
</tr>
<tr>
<td>CJ 112</td>
<td>Criminology</td>
<td>5</td>
</tr>
<tr>
<td>CJ 114</td>
<td>Critical &amp; Current Issues</td>
<td>5</td>
</tr>
<tr>
<td>Criminal Justice Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20

Fall Quarter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>H R 110</td>
<td>Human Relations -Workplace</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criminal Justice Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Education Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16-18

Criminal Justice Elective Credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 105</td>
<td>Intro to Corrections</td>
<td>5</td>
</tr>
<tr>
<td>CJ 116</td>
<td>Community Corrections</td>
<td>5</td>
</tr>
<tr>
<td>CJ 126</td>
<td>Homicide Investigation</td>
<td>5</td>
</tr>
<tr>
<td>CJ 129</td>
<td>Intro to Victimology</td>
<td>3</td>
</tr>
<tr>
<td>CJ 130</td>
<td>Domestic Violence and Abuse</td>
<td>5</td>
</tr>
<tr>
<td>CJ 223</td>
<td>Felony Investigation</td>
<td>5</td>
</tr>
<tr>
<td>CJ 224</td>
<td>Interview and Interrogation</td>
<td>5</td>
</tr>
<tr>
<td>CJ 225</td>
<td>Crime Scene Technology</td>
<td>5</td>
</tr>
<tr>
<td>CJ 228</td>
<td>Crime Scene Photography</td>
<td>5</td>
</tr>
<tr>
<td>CJ 240</td>
<td>Intro to Forensic Science</td>
<td>5</td>
</tr>
</tbody>
</table>

Recommended Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN&amp; 121</td>
<td>Spanish I</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 100</td>
<td>General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>SOC&amp; 101</td>
<td>Intro to Sociology</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 101</td>
<td>Keyboarding for Business</td>
<td>3</td>
</tr>
<tr>
<td>BTEC 221</td>
<td>Business Communications</td>
<td>5</td>
</tr>
</tbody>
</table>
### Suggested Order of Classes

#### Fall Quarter, First year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ&amp; 101</td>
<td>Intro Criminal Justice</td>
</tr>
<tr>
<td>CJ 105</td>
<td>Intro to Corrections</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Winter Quarter, First year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 104</td>
<td>Intro to Law Enforcement</td>
</tr>
<tr>
<td>ENGL&amp; 102</td>
<td>Composition II</td>
</tr>
<tr>
<td>MATH&amp; 107</td>
<td>Math in Society</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stats</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Spring Quarter, First year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ&amp; 110</td>
<td>Criminal Law</td>
</tr>
<tr>
<td>Humanities</td>
<td>Distribution</td>
</tr>
<tr>
<td>Science</td>
<td>Distribution</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Summer or Spring Quarter  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ&amp; 106</td>
<td>Juvenile Justice</td>
</tr>
<tr>
<td>CJ&amp; 112</td>
<td>Criminology</td>
</tr>
<tr>
<td>Science</td>
<td>Distribution</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Fall Quarter, Second year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Science Distribution</td>
</tr>
<tr>
<td>Humanities</td>
<td>Distribution</td>
</tr>
<tr>
<td>POLS&amp; 202</td>
<td>American Government</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Winter Quarter, Second year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 103</td>
<td>Intro to Ethics</td>
</tr>
<tr>
<td>Science</td>
<td>Distribution</td>
</tr>
<tr>
<td>Social</td>
<td>Science Distribution</td>
</tr>
<tr>
<td>Health &amp; Fitness</td>
<td>Distribution</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 120</td>
<td>Applied Business Math</td>
</tr>
<tr>
<td>CJ&amp; 240</td>
<td>Intro to Forensic Science</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 129</td>
<td>Intro to Victimology</td>
</tr>
<tr>
<td>CJ 224</td>
<td>Criminal Interviews &amp; Interrogations</td>
</tr>
<tr>
<td>WRT 105</td>
<td>Writing in the Workplace</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 126</td>
<td>Homicide Investigation</td>
</tr>
<tr>
<td>CJ 225</td>
<td>Crime Scene Technology</td>
</tr>
<tr>
<td>HR 110</td>
<td>Human Relations-Workplace</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 130</td>
<td>Domestic Violence &amp; Abuse</td>
</tr>
<tr>
<td>CJ 223</td>
<td>Felony Investigations</td>
</tr>
<tr>
<td>CJ 228</td>
<td>Crime Scene Photography</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

DENTAL HYGIENE

See Pre-Medicine, Pre-Dentistry

DENTISTRY

Pre-Medicine, Pre-Dentistry
DIESEL EQUIPMENT TECHNOLOGY

Emphasis: Diesel Equipment Technology
Degree: Associate in Applied Science

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

Fall Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT 117</td>
<td>Windows Workstation OS</td>
<td>2</td>
</tr>
<tr>
<td>DET 100</td>
<td>Shop Skills</td>
<td>7</td>
</tr>
<tr>
<td>DET 125</td>
<td>Power Transmissions I</td>
<td>7</td>
</tr>
<tr>
<td>DET 102</td>
<td>Forklift*</td>
<td>1</td>
</tr>
<tr>
<td>MATH 095</td>
<td>Basic Math****</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16-22</strong></td>
</tr>
</tbody>
</table>

Winter Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET 110</td>
<td>Electrical Systems I</td>
<td>7</td>
</tr>
<tr>
<td>DET 130</td>
<td>Mobile Hydraulics</td>
<td>7</td>
</tr>
<tr>
<td>TMATH 116</td>
<td>Industrial Mathematics OR College Level Math</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

Spring Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET 105</td>
<td>Writing in the Workplace</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>Composition I</td>
<td>5</td>
</tr>
<tr>
<td>DET 120</td>
<td>Engines I</td>
<td>7</td>
</tr>
<tr>
<td>WELD 151</td>
<td>Welding for Mechanics</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Fall Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET 200</td>
<td>Electrical Systems II</td>
<td>7</td>
</tr>
<tr>
<td>DET 220</td>
<td>Engine II</td>
<td>7</td>
</tr>
<tr>
<td>HLTH 145</td>
<td>Safety &amp; Fitness</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Winter Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 191</td>
<td>Work Experience Seminar**</td>
<td>1</td>
</tr>
<tr>
<td>DET 210</td>
<td>Power Transmissions II</td>
<td>7</td>
</tr>
<tr>
<td>DET 225</td>
<td>Heavy Duty Chassis</td>
<td>7</td>
</tr>
<tr>
<td>H R 110</td>
<td>Human Relations-Workplace</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

Spring Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET 230</td>
<td>Practical Applications</td>
<td>7</td>
</tr>
<tr>
<td>DET 190</td>
<td>Cooperative Work Experience***</td>
<td>7</td>
</tr>
<tr>
<td>DET 235</td>
<td>Mobile HVAC</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

* 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.

****Credits not included in graduation total.

STUDENTS WILL NEED TO PURCHASE TOOLS FOR CLASS. PLEASE SEE A DIESEL INSTRUCTOR FOR TOOL LIST.

Students interested in fulfilling BAS-DT program admission requirements should take ENGL& 101 and five credits of Quantitative skills (MATH& 146 recommended).
**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.

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

#### Fall Quarter, First Year  
**Credits**

- DRMA 107 Beginning Acting ............................................ 5  
- ENGL& 101 English Composition I ................................... 5  
- Social Science Distribution ................................................ 5  
- Total Credits: 15

#### Winter Quarter, First Year  
**Credits**

- DRMA& 101 Introduction to Theatre ................................ 5  
- ENGL& 102 Composition II ............................................. 5  
- ENGL 204 Intro to Shakespeare ..................................... 5  
- Health & Fitness Distribution ........................................ 1  
- Total Credits: 16

#### Spring Quarter, First Year  
**Credits**

- DRMA 108 Intermediate Acting ...................................... 5  
- DRMA 110 Stage Makeup ................................................ 3  
- Elective ............................................................................. 3-5  
- Science Distribution ...................................................... 5  
- Total Credits: 16-18

#### Fall Quarter, Second Year  
**Credits**

- Health & Fitness Distribution ......................................... 1  
- Quantitative Skills Distribution ....................................... 5  
- Science Distribution ...................................................... 5  
- Social Science Distribution .......................................... 5  
- Total Credits: 16

#### Winter Quarter, Second Year  
**Credits**

- ENGL& 114 Intro to Dramatic Lit ..................................... 5  
- Elective* ........................................................................... 3-5  
- Health & Fitness Distribution ......................................... 1  
- Social Science Distribution .......................................... 5  
- Total Credits: 14-16

#### Spring Quarter, Second Year  
**Credits**

- DRMA 201 Advanced Acting ............................................ 5  
- Humanities Distribution ............................................... 3-5  
- Science Distribution ...................................................... 5  
- Total Credits: 13-15

* 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

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter, First Year</strong></td>
<td></td>
</tr>
<tr>
<td>ECED&amp; 105 Intro Early Child Ed</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 130 Guiding Behavior</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 150 Child/Family/Community</td>
<td>3</td>
</tr>
<tr>
<td>ENGL&amp; 101 English Composition I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Winter Quarter, First Year</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 102 Composition II</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 115 Child Development</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Spring Quarter, First Year</strong></td>
<td></td>
</tr>
<tr>
<td>EDEC&amp; 160 Curriculum Development</td>
<td>5</td>
</tr>
<tr>
<td>SOC&amp; 101 Intro to Sociology</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Fall Quarter, Second Year</strong></td>
<td></td>
</tr>
<tr>
<td>PSYC&amp; 100 General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Quantitative Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Winter Quarter, Second Year</strong></td>
<td></td>
</tr>
<tr>
<td>EDEC 132 Observation, Assessment</td>
<td>3</td>
</tr>
<tr>
<td>CMST&amp; 220 Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Health and Fitness</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>Spring Quarter, Second Year</strong></td>
<td></td>
</tr>
<tr>
<td>EDEC 180 Lang/Literacy Development</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
 EARLY CHILDHOOD EDUCATION

Emphasis: Early Childhood Education
Degree: Associate in Applied Science

PURPOSE: The Early Childhood Education-Associate in Applied Science (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.

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

• Demonstrate an understanding of 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.
• Demonstrate the ability to 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.
• Demonstrate an understanding of the early childhood profession and a commitment to professionalism.
• Demonstrate competence in managing 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

Fall Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120</td>
<td>2</td>
</tr>
<tr>
<td>EDUC&amp; 130</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 150</td>
<td>3</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>3</td>
</tr>
</tbody>
</table>

Winter Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 170</td>
<td>3</td>
</tr>
<tr>
<td>ECED&amp; 190</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 115</td>
<td>5</td>
</tr>
</tbody>
</table>

Spring Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 160</td>
<td>5</td>
</tr>
<tr>
<td>ECED 181</td>
<td>5</td>
</tr>
<tr>
<td>BUS 121</td>
<td>5</td>
</tr>
</tbody>
</table>

Fall Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 107</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 100</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

Winter Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC&amp; 136</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 139</td>
<td>3</td>
</tr>
<tr>
<td>HR 110</td>
<td>5</td>
</tr>
<tr>
<td>SOC&amp; 101</td>
<td>5</td>
</tr>
</tbody>
</table>

Spring Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 132</td>
<td>3</td>
</tr>
<tr>
<td>ECEED 233</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 134</td>
<td>3</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>
**EARLY CHILDHOOD EDUCATION**

**Emphasis:** Early Childhood Education  
**Degree:** Associate in Applied Science – Transfer

**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. Some four-year institutions accept this AAS-T. Students are responsible for knowing the transfer and admission requirements of the receiving institution. Students should check with their advisor at Centralia College and a representative from the college they plan to attend. With additional classes, this degree will transfer to any four-year institution.

**Suggested Order of Classes**

<table>
<thead>
<tr>
<th>Fall Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105 Intro Early Child Ed</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120 ECE Practicum I</td>
<td>2</td>
</tr>
<tr>
<td>EDUC&amp; 130 Guiding Behavior</td>
<td>3</td>
</tr>
<tr>
<td>ENGL&amp; 101 English Composition I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC&amp; 115 Child Development</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 102 Composition II</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 181 Language and Literacy</td>
<td>5</td>
</tr>
<tr>
<td>SOC&amp; 101 Intro to Sociology</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220 Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC&amp; 150 Child/Family/Community</td>
<td>3</td>
</tr>
<tr>
<td>HR 110 Human Relations-Workplace</td>
<td>5</td>
</tr>
<tr>
<td>Quantitative Skill Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 107 Health/Safety/Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 170 Environments</td>
<td>3</td>
</tr>
<tr>
<td>ECED&amp; 190 Observation/Assessment</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 160 Curriculum Development</td>
<td>5</td>
</tr>
<tr>
<td>ECED 233 ECE Practicum II</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 100 General Psychology</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Courses**

<table>
<thead>
<tr>
<th>Credits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105 Intro Early Child Education</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107 Health/Safety/Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120 ECE Practicum I</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

---

**EARLY CHILDHOOD EDUCATION**

**Emphasis:** Early Childhood Education  
**Degree:** Initial State Certificate-ECE

**PURPOSE:** The Early Childhood Education Initial State Certificate Program prepares students for employment in the childcare field. The Initial certificate also increases the knowledge and skills of people who currently work with children.

The Initial Certificate is the first of three “stackable” certificates that provide a foundation for the state early childhood education certificate and/or associate degree. Students may enter any quarter and participate on a part-time schedule. Students may complete the certificate program, a degree program or take a single course of special interest.
EARLY CHILDHOOD EDUCATION

**Emphasis:** Early Childhood Education

**Degree:** Short State Certificate of Specialization-ECE

**Purpose:** The ECE short certificate builds on the Initial Certificate as the second “stackable” certificate. At this point developing professionals have five choices for areas of specialization: CE General, Infant/Toddler Care, School-Age Child Care, Family Child Care and ECE Administration. All short certificates provide a foundation for the State ECE Credential and/or associate degree.

---

**Courses**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105</td>
<td>Intro Early Child Education 5</td>
</tr>
<tr>
<td>ECED&amp; 107</td>
<td>Health/Safety/Nutrition 5</td>
</tr>
<tr>
<td>ECED&amp; 120</td>
<td>ECE Practicum I 2 AND Early Childhood Education (General)</td>
</tr>
<tr>
<td>EDUC&amp; 115</td>
<td>Child Development 5</td>
</tr>
<tr>
<td>EDUC&amp; 130</td>
<td>Guiding Behavior 3 OR Infant and Toddler Care</td>
</tr>
<tr>
<td>EDUC&amp; 115</td>
<td>Child Development 5</td>
</tr>
<tr>
<td>EDUC&amp; 132</td>
<td>Infants/Toddlers Care 3 OR School-Age Care</td>
</tr>
<tr>
<td>EDUC&amp; 15</td>
<td>School Age Care 3 OR Family Child Care</td>
</tr>
<tr>
<td>EDUC&amp; 115</td>
<td>Child Development 5</td>
</tr>
<tr>
<td>EDUC&amp; 134</td>
<td>Family Child Care 3 OR Administration</td>
</tr>
<tr>
<td>EDUC&amp; 115</td>
<td>Child Development 5</td>
</tr>
<tr>
<td>ECED&amp; 139</td>
<td>Admin of Early Learning Prog 3</td>
</tr>
</tbody>
</table>

---

**Recommended course schedule**

**Fall Quarter**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105</td>
</tr>
<tr>
<td>ECED&amp; 107</td>
</tr>
<tr>
<td>ECED&amp; 120</td>
</tr>
<tr>
<td>EDUC&amp; 130</td>
</tr>
<tr>
<td>EDUC&amp; 132</td>
</tr>
<tr>
<td>EDUC&amp; 134</td>
</tr>
<tr>
<td>EDUC&amp; 139</td>
</tr>
<tr>
<td>EDUC&amp; 136</td>
</tr>
</tbody>
</table>

**Winter Quarter**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 190</td>
</tr>
<tr>
<td>EDUC&amp; 115</td>
</tr>
<tr>
<td>EDUC&amp; 150</td>
</tr>
<tr>
<td>ECED&amp; 170</td>
</tr>
</tbody>
</table>

**Spring Quarter**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 121</td>
</tr>
<tr>
<td>BTEC 120</td>
</tr>
<tr>
<td>ECED&amp; 160</td>
</tr>
<tr>
<td>ECED 181</td>
</tr>
</tbody>
</table>

**Summer or Fall Quarter**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRT 105</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
</tr>
<tr>
<td>HR 110</td>
</tr>
</tbody>
</table>

* 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

Fall Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 161</td>
<td>General Chemistry w/lab I</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>GEOL&amp; 101</td>
<td>Intro to Physical Geology</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Winter Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 162</td>
<td>General Chemistry w/lab II</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Spring Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 163</td>
<td>General Chemistry w/lab III</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Fall Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology (for science majors) sequence</td>
<td>OR</td>
</tr>
<tr>
<td>Physics (calculus or non-calculus based) sequence</td>
<td>5</td>
</tr>
<tr>
<td>OCEA&amp; 101</td>
<td>Intro to Oceanography</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>OR</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Winter Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology (for science majors) sequence</td>
<td>OR</td>
</tr>
<tr>
<td>Physics (calculus or non-calculus based) sequence</td>
<td>5</td>
</tr>
<tr>
<td>GEOG 201</td>
<td>Physical Geography</td>
</tr>
<tr>
<td>MATH&amp; 163</td>
<td>Calculus III</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Spring Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology (for science majors) sequence</td>
<td>OR</td>
</tr>
<tr>
<td>Physics (calculus or non-calculus based) sequence</td>
<td>5</td>
</tr>
<tr>
<td>SCIE 115</td>
<td>Weather and Climate</td>
</tr>
<tr>
<td>GEOL 108</td>
<td>Natural Hazards &amp; Catastrophes</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

* 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

<table>
<thead>
<tr>
<th>Quarter, Year</th>
<th>Credits</th>
<th>Course Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter, First Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>5</td>
<td>English Composition I</td>
</tr>
<tr>
<td>PSYC&amp; 100</td>
<td>5</td>
<td>General Psychology</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Winter Quarter, First Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 102</td>
<td>5</td>
<td>Composition II</td>
</tr>
<tr>
<td>Content Elective</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>Spring Quarter, First Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>5</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>Fall Quarter, Second Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC&amp; 201</td>
<td>3</td>
<td>Intro to Education</td>
</tr>
<tr>
<td>EDUC 202</td>
<td>2</td>
<td>Classroom Observation</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Quantitative Skills Distribution</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>Winter Quarter, Second Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC&amp; 200</td>
<td>5</td>
<td>Lifespan Psychology</td>
</tr>
<tr>
<td>Content Elective</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Spring Quarter, Second Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 190</td>
<td>2</td>
<td>Cooperative Work Experience OR</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
<td>Academic Elective</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>
**ELECTRONICS, ROBOTICS & AUTOMATION**

**Emphasis:** Electronics, Robotics & Automation  
**Degree:** Associate in Applied Science

**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:

- Safe equipment operation and ability to 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

#### Fall Quarter, First Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERA 101</td>
<td>Electronics Assembly 4</td>
</tr>
<tr>
<td>ERA 105</td>
<td>Computer Operation 3</td>
</tr>
<tr>
<td>HR 110</td>
<td>Human Relations-Workplace 5</td>
</tr>
<tr>
<td>MATH 098</td>
<td>Algebra 1 (pre-college) 5</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits: 17</strong></td>
</tr>
</tbody>
</table>

#### Winter Quarter, First Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERA 115</td>
<td>DC Electronics 5</td>
</tr>
<tr>
<td>CAD 110</td>
<td>CAD Electrical 3</td>
</tr>
<tr>
<td>ERA 151</td>
<td>Mechanical Systems 3</td>
</tr>
<tr>
<td>TMATH 121</td>
<td>Electronics Math 1 5</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits: 16</strong></td>
</tr>
</tbody>
</table>

#### Spring Quarter, First Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERA 121</td>
<td>AC Electronics 5</td>
</tr>
<tr>
<td>ERA 212</td>
<td>Digital Electronics 4</td>
</tr>
<tr>
<td>TMATH 122</td>
<td>Electronics Math 2 4</td>
</tr>
<tr>
<td>ERA 170</td>
<td>Solid State Electronics 4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits: 17</strong></td>
</tr>
</tbody>
</table>

#### Fall Quarter, Second Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERA 220</td>
<td>Sensors and Instruments 4</td>
</tr>
<tr>
<td>ERA 230</td>
<td>Robotic Controllers 4</td>
</tr>
<tr>
<td>ERA 240</td>
<td>Amplifiers 5</td>
</tr>
<tr>
<td>HLTH 145</td>
<td>Safety &amp; Fitness 3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits: 16</strong></td>
</tr>
</tbody>
</table>

#### Winter Quarter, Second Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERA 235</td>
<td>Communication Systems 5</td>
</tr>
<tr>
<td>ERA 250</td>
<td>Automation I 2</td>
</tr>
<tr>
<td>ERA 251</td>
<td>Automation II 3</td>
</tr>
<tr>
<td>ERA 270</td>
<td>Robotics III 4</td>
</tr>
<tr>
<td>CNT 201</td>
<td>Network Technology 1 4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits: 18</strong></td>
</tr>
</tbody>
</table>

#### Spring Quarter, Second Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERA 252</td>
<td>Data Processing 3</td>
</tr>
<tr>
<td>ERA 275</td>
<td>Job Search 3</td>
</tr>
<tr>
<td>ERA 290</td>
<td>Robotics Capstone 3</td>
</tr>
<tr>
<td>CAD 210</td>
<td>Advanced CAD Electrical 1</td>
</tr>
<tr>
<td>WRT 105</td>
<td>Writing in the Workplace 5</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits: 15</strong></td>
</tr>
</tbody>
</table>
PURPOSE: The Industrial Automation AAS prepares students for entry level positions involving installation, repair and preventive maintenance as performed by Industrial Maintenance Mechanics or Millwrights.

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

- Work with equipment and others in a safe, logical and efficient manner
- Use fabrication equipment required to make in-house repairs and create designs that meet or exceed specifications
- Apply welding principles for various methods of metal assembly
- Select and safely use proper equipment for measurement and testing
- Examine faulty control circuits leading to effective repairs and replacements
- Use Programmable Logic Controllers, connect field devices and configure networked devices
- Operate and program industrial robots to work in an automated process
- Incorporate the principles of effective project management in an industrial facility
- Use data to drive decisions regarding process improvements

Suggested Order of Classes

### Fall Quarter, First Year
- **WELD 180** GTAW (TIG) ........................................................ 5
- **DET 100** Shop Skills .......................................................... 7
- **ERA 105** Computer Operations ........................................... 3
- **MATH 096** Pre-Algebra (pre-college)* .................................. 5
  **Total Credits**: 15-20

### Winter Quarter, First Year
- **ERA 151** Mechanical/Fluid Systems................................. 5
- **WELD 181** SMAW (Stick) ...................................................... 5
- **TMATH 121** Electronics Math I ............................................. 1
- **Safety/Fitness Distribution**......................................................... 3
  **Total Credits**: 18

### Spring Quarter, First Year
- **WELD 110** Basic Metallurgy .............................................. 2
- **WELD 182** GMAW (MIG) ..................................................... 5
- **ERA 251** Automation/PLCs................................................... 4
- **ERA 116** AC/DC Electronics ................................................ 4
  **Total Credits**: 15

### Fall Quarter, Second Year
- **HR 110** Human Relations-Workplace .............................. 5
- **WELD 271** Blueprint Reading ............................................ 4
- **ERA 220** Sensors and Instruments ...................................... 4
- **ERA 250** Industrial Electronics (3-phase) ......................... 3
  **Total Credits**: 16

### Winter Quarter, Second Year
- **ERA 255** Quality Control/LEAN ....................................... 4
- **WELD 112** Basic Fabrication ............................................. 4
- **ERA 270** Industrial Robotics .............................................. 4
- **ERA 253** Advanced PLCs ................................................... 4
- **DET 102** Forklift Certification ............................................ 1
- **CET 101** Flagger Certification ............................................. 1
  **Total Credits**: 18

### Spring Quarter, Second Year
- **WRT 105** Writing in the Workplace ................................... 5
- **ERA 252** Data Processing .................................................. 3
- **ERA 275** Job Search ........................................................... 3
- **ERA 290** Operations Management ...................................... 4
  **Total Credits**: 15

* Pre-college math if needed
ELECTRONICS, ROBOTICS & AUTOMATION

Emphasis: Electronics Assembler
Degree: Certificate of Completion

PURPOSE: To be able to compete for work as an Electronics Assembler. Many electronics manufacturers hire assemblers to assemble electronics subassemblies or complete products. While these jobs do not require the extensive knowledge of an electronics technician, they do require knowledge about electronic components and assembly techniques. Examples of companies that hire assemblers are Boeing, John Fluke Co., Rane, and Hewlett-Packard.

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

- Discuss and demonstrate proper use of hand tools and safety procedures in the workplace.
- Decode resistor values using the EIA resistor color code.
- Identify electronic components and draw the schematic symbols for the components.
- Analyze series and parallel circuits.
- Use Breadboard DC series and parallel circuits.
- Discuss advantages and disadvantages of various soldering types.
- Demonstrate soldering skills.
- Demonstrate how to modify or repair damaged printed.

Suggested Order of Classes

<table>
<thead>
<tr>
<th>Fall Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERA 101 Electronics Assembly</td>
<td>4</td>
</tr>
<tr>
<td>ERA 105 Computer Operation</td>
<td>3</td>
</tr>
<tr>
<td>WRT 105 Writing in the Workplace</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 110 CAD for Electronics</td>
<td>3</td>
</tr>
<tr>
<td>MEC 116 DC Electronics</td>
<td>4</td>
</tr>
<tr>
<td>TMATH 121 Electronics Math 1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>
ENERGY TECHNOLOGY

Emphasis: Energy Technology – Power Operations
Degree: Associate in Applied Science

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:

- Understand and operate electrical systems.
- Understand the components used in the transmission of electricity.
- Specialize in power generating, power transmission, metering, substation operations, plant mechanics, or boiler operations.
- Knowledge of energy efficiency and hands-on experience of doing an energy audit of a home or building.
- Knowledge of a practice for entrance exams that are typically required for entry into the electric utility industry.

Suggested Order of Classes

**Fall Quarter, First Year**

- IT 117 Windows Workstation OS ......................................... 3
- MATH 098 Algebra I* ........................................................ 5
- PPO 100 Intro to Energy Industry ........................................ 5
- PPO 150 Energy Efficiency ................................................ 5

Total: 13-18

**Winter Quarter, First Year**

- MATH 099 Algebra II* ..................................................... 5
- PPO 102 Power Generation ................................................ 5
- PPO 120 Print Reading ..................................................... 5

Total: 15

**Spring Quarter, First Year**

- BTEC 210 Word I ............................................................. 5
- MATH& 107 Math in Society .............................................. 5
- PPO 103 Electric Utility Distribution .................................. 5
- PPO 130 Industrial Safety ............................................... 5

Total: 20

**Summer Quarter, Optional**

- PPO 191 Power Plant Job Prep ........................................ 4

Total: 4

**Fall Quarter, Second Year**

- ENGL& 101 English Composition I .................................... 5
- HLTH 145 Safety & Fitness ............................................. 3
- HR 110 Human Relations-Workplace ................................ 5
- PPO 201 Plant Systems .................................................. 5

Total: 18

**Winter Quarter, Second Year**

- ENVS& 100 Survey of Env Science .................................... 5
- PPO 202 Plant Maintenance ............................................ 5
- ENGL& 102 Composition II ............................................. 5
- Elective ............................................................................. 5

Total: 20

**Spring Quarter Second Year**

- BTEC 214 Excel .................................................................. 5
- PPO 203 Plant Ops Refrigeration .................................... 5
- Elective Credits ............................................................... 5

Total: 15

**Recommended Elective Courses:**

- CAD 112 Computer Aided Drafting I ................................ 5
- ERA 115 DC Electronics .................................................. 5
- ERA 121 AC Electronics .................................................. 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.
**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**

**Fall Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 161</td>
<td>General Chem w/lab I</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>ENGR 100</td>
<td>Intro to Engineering</td>
</tr>
<tr>
<td>Elective**</td>
<td>OR</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>OR</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 162</td>
<td>General Chem w/lab II</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
</tr>
<tr>
<td>Elective**</td>
<td>OR</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>OR</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 163</td>
<td>General Chem w/lab III</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
</tr>
<tr>
<td>Elective**</td>
<td>OR</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>OR</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Fall Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 261</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>MATH 118</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>PHYS&amp; 221</td>
<td>Engineering Physics I</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 222</td>
<td>Majors Cell/Molecular(lab)</td>
</tr>
<tr>
<td>CHEM&amp; 262</td>
<td>Organic Chemistry w/lab</td>
</tr>
<tr>
<td>MATH&amp; 163</td>
<td>Calculus III</td>
</tr>
<tr>
<td>PHYS&amp; 222</td>
<td>Engineering Physics II</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Spring Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 212</td>
<td>Differential Equations</td>
</tr>
<tr>
<td>PHYS&amp; 223</td>
<td>Engineering Physics III</td>
</tr>
<tr>
<td>ENGR&amp; 214</td>
<td>Statics</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
</tr>
</tbody>
</table>

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.
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.

ENGINEERING

Emphasis: Computer and Electrical Engineering
Degree: Associate in Science-MRP

Suggested Order of Classes

**Fall Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 161</td>
<td>6</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 100</td>
<td>2</td>
</tr>
<tr>
<td>Humanities Distribution*</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 235</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Distribution*</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS&amp; 131</td>
<td>OR</td>
</tr>
<tr>
<td>CS&amp; 141</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>5</td>
</tr>
<tr>
<td>ENGR&amp; 214</td>
<td>5</td>
</tr>
</tbody>
</table>

**Fall Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 118</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 221</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 203</td>
<td>5</td>
</tr>
<tr>
<td>ENGR&amp; 215</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 163</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 222</td>
<td>5</td>
</tr>
</tbody>
</table>

**Spring Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR&amp; 204</td>
<td>5</td>
</tr>
<tr>
<td>MATH 212</td>
<td>5</td>
</tr>
<tr>
<td>MATH 264</td>
<td>3</td>
</tr>
<tr>
<td>PHYS&amp; 223</td>
<td>5</td>
</tr>
</tbody>
</table>

* 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

#### Fall Quarter, First Year  
**Credits**

- CHEM& 161 General Chemistry w/lab I .................................................. 6
- ENGL& 101 English Composition I ......................................................... 5
- ENGR 100 Intro to Engineering ................................................................. 2
- Social Science Distribution** ............................................................... 5

**Total:** 18

#### Winter Quarter, First Year  
**Credits**

- CHEM& 162 General Chemistry w/lab II .................................................. 6
- MATH& 151 Calculus I* ........................................................................ 5
- Humanities Distribution ...................................................................... 5

**Total:** 16

#### Spring Quarter, First Year  
**Credits**

- ENGR& 214 Statics .................................................................................. 5
- MATH& 152 Calculus II ........................................................................... 5
- Humanities Distribution ...................................................................... 3
- Social Science Distribution** ............................................................... 5

**Total:** 18

#### Fall Quarter, Second Year  
**Credits**

- ENGR& 225 Mechanic of Materials ......................................................... 5
- MATH 118 Linear Algebra ......................................................................... 5
- PHYS& 221 Engineering Physics I ............................................................. 5

**Total:** 15

#### Winter Quarter, Second Year  
**Credits**

- ENGR& 215 Dynamics ............................................................................. 5
- MATH& 163 Calculus III .......................................................................... 5
- PHYS& 222 Engineering Physics II ......................................................... 5
- ENGR 203 Applied Numerical Methods .................................................. 5

**Total:** 20

#### Spring Quarter, Second Year  
**Credits**

- ENGR& 204 Electrical Circuits ................................................................. 5
- MATH 212 Elementary Differential Equations ......................................... 5
- MATH 264 Calculus IV ............................................................................ 3
- PHYS& 223 Engineering Physics III ......................................................... 5

**Total:** 18

Electives must include a minimum of 2 or more courses chosen from Calculus IV, Technical Writing, and Electrical Circuits.

* Students who need review prior to (MATH& 151) Calculus I should take Precalculus.

** 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

#### Fall Quarter, First Year  
**Credits**  
ENGL& 101 English Composition I ................................... 5  
Humanities Distribution ....................................................... 5  
Social Science Distribution* .............................................. 5  
**Total: 15**

#### Winter Quarter, First Year  
**Credits**  
ENGL& 102 Composition II ........................................... 5  
Elective (Literature or Creative Writing Class) .................. 5  
Humanities Distribution ....................................................... 5  
**Total: 15**

#### Spring Quarter, First Year  
**Credits**  
Elective (Literature Class) .............................................. 5  
Health & Fitness Distribution .......................................... 3  
Quantitative Skills Distribution ....................................... 5  
Social Science Distribution ............................................... 5  
**Total: 18**

#### Fall Quarter, Second Year  
**Credits**  
Elective (Literature Class) .............................................. 5  
Humanities Distribution ....................................................... 5  
Science Distribution .......................................................... 5  
**Total: 15**

#### Winter Quarter, Second Year  
**Credits**  
Elective (Literature or Creative Writing Class) .................. 5  
Science Distribution .......................................................... 5  
Social Science Distribution ............................................... 5  
**Total: 15**

#### Spring Quarter, Second Year  
**Credits**  
Elective (Literature Class) .............................................. 5  
Humanities Distribution ....................................................... 5  
Science Distribution .......................................................... 5  
**Total: 15**

*To satisfy the 3-5 credit diversity requirement, students may wish to take:*  
• Non-Western Literature – winter  
• Women in Literature – spring  

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

#### Fall Quarter, First Year  
**Credits**
- BIOL& 100 Survey of Biology ............................................ 5  
- ENGL& 101 English Composition I ................................. 5  
- Humanities Distribution ............................................. 5  
  - **Total:** 15

#### Winter Quarter, First Year  
**Credits**
- ENVS& 100 Survey of Env Science ................................... 5  
- Social Science Distribution ............................................. 5  
- Elective ........................................................................... 5  
  - **Total:** 15

#### Spring Quarter, First Year  
**Credits**
- ENGL& 102 Composition II ............................................. 5  
- CHEM& 121 Intro to Chemistry ....................................... 5  
- Humanities Distribution ................................................ 5  
  - **Total:** 15

#### Fall Quarter, Second Year  
**Credits**
- GEOL& 101 Intro to Physical Geology ............................. 5  
- MATH& 146 Introduction to Stats ................................... 5  
- Social Science Distribution ............................................. 5  
  - **Total:** 15

#### Winter Quarter, Second Year  
**Credits**
- HLTH 130 Health and Wellness .................................... 3  
- Social Science Distribution ............................................. 5  
- Electives ......................................................................... 7  
  - **Total:** 15

#### Spring Quarter, Second Year  
**Credits**
- Humanities Distribution ................................................ 5  
- Electives ......................................................................... 10  
  - **Total:** 15

### 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 Public Speaking,
  - PHIL& 101 Intro to Philosophy
  - 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

#### Fall Quarter, First Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 161</td>
<td>General Chemistry w/lab I</td>
<td>6</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENVLS&amp; 100</td>
<td>Survey of Env Science</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

#### Winter Quarter, First Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 162</td>
<td>General Chemistry w/lab II</td>
<td>6</td>
</tr>
<tr>
<td>GEOL&amp; 101</td>
<td>Intro to Physical Geology</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 142</td>
<td>Precalculus II</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

#### Spring Quarter, First Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 163</td>
<td>General Chemistry w/lab III</td>
<td>6</td>
</tr>
<tr>
<td>ECON&amp; 201</td>
<td>Microeconomics</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

#### Fall Quarter, Second Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 221</td>
<td>Majors Ecology/Evolution</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 221</td>
<td>Engineering Physics I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Winter Quarter, Second Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 222</td>
<td>Majors Cell/Molecular</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stats</td>
<td>OR</td>
</tr>
<tr>
<td>MATH&amp; 163</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Spring Quarter, Second Year  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 223</td>
<td>Majors Organismal Phys</td>
<td>5</td>
</tr>
<tr>
<td>HLTH 130</td>
<td>Health &amp; Wellness</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td></td>
<td>OR</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

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

Fall Quarter, First Year
ART& 100  Art Appreciation ............................................. 5
ART 110  Design ................................................................. 4
Humanities Distribution .......................................................... 5

Winter Quarter, First Year
ART 111  Sculpture ........................................................... 5
ENGL& 101  English Composition I ................................... 5
Social Science Distribution .......................................................... 5

Spring Quarter, First Year
ART 102  Drawing I ........................................................... 5
ENGL& 102  Composition II ................................................. 5
Science Distribution ......................................................................... 5

Fall Quarter, Second Year
ART 200  Art History: Ancient ....................................... 5
Quantitative Skills Distribution .................................................... 5
Science Distribution ......................................................................... 5

Winter Quarter, Second Year
ART 201  Art History: 15th-17th Century .................. 5
Health & Fitness Distribution .......................................................... 3
Science Distribution ......................................................................... 5
Social Science Distribution .......................................................... 3

Spring Quarter, Second Year
ART 202  Art History: 18th-20th Century .................. 5
Humanities Distribution ................................................................. 5
Social Science Distribution .......................................................... 5

96
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

Fall Quarter, First Year Credits
CHIN&, FRCH& or SPAN& 121 .......................................................5
ENGL& 101 English Composition I ...........................................5
Quantitative Skill Distribution ......................................................5

Winter Quarter, First Year Credits
CHIN&, FRCH& or SPAN& 122 .......................................................5
ENGL& 102 Composition II .........................................................5
ANTH& 206 Cultural Anthropology ..............................................5
Health & Fitness Distribution .......................................................1

Spring Quarter, First Year Credits
CHIN& FRCH& or SPAN& 123 .......................................................5
CMST 250 Intercultural Communications ......................................5
Science Distribution .................................................................5

Fall Quarter, Second Year Credits
CHIN&, SPAN& 221 .................................................................OR
Elective (for French majors) .........................................................5
Humanities Distribution ...............................................................5
Social Science Distribution .........................................................5
Health & Fitness Distribution .......................................................1

Winter Quarter, Second Year Credits
CHIN&, SPAN& 222 .................................................................OR
Elective (for French majors) .........................................................5
Social Science Distribution .........................................................5
Science Distribution .................................................................5
Health & Fitness Distribution .......................................................1

Spring Quarter, Second Year Credits
CHIN&, SPAN& 223 .................................................................OR
Elective (for French majors) .........................................................5
Elective ...................................................................................5
Science Distribution .................................................................5

To qualify for this degree students must complete a minimum of 90 credits in courses numbered 100 or above.

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.
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**

**Fall Quarter, First Year**
- ART 110 Design ................................................................. 4
- ENGL& 101 English Composition I ................................... 5
- Health & Fitness Distribution .................................................. 1
- Humanities Distribution ......................................................... 5

15 Credits

**Winter Quarter, First Year**
- ART 201 Art History: 15th-17th Century .................. 5
- CMST& 102 Intro to Mass Media ...................................... 5
- Health & Fitness Distribution .............................................. 1
- Quantitative Skills Distribution ......................................... 5

16 Credits

**Spring Quarter, First Year**
- ART 102 Drawing I .......................................................... 5
- ART 202 Art History: 18th-20th Century .................. 5
- ENGL& 102 Composition II ............................................. 5
- Health & Fitness Distribution ............................................. 1

16 Credits

**Fall Quarter, Second Year**
- ART 130 Computer Graphics ........................................... 5
- Science Distribution ............................................................ 5
- Social Science Distribution ............................................... 5

15 Credits

**Winter Quarter, Second Year**
- ART 135 Graphic Design .................................................. 5
- Science Distribution ............................................................. 5
- Social Science Distribution ............................................... 5

15 Credits

**Spring Quarter, Second Year**
- IT 119 Web Scripting I .................................................. 4
- Science Distribution ............................................................. 5
- Social Science Distribution ............................................... 5

15 Credits

**Recommended distribution for Graphic Design majors:**
- CMST& 220 Public Speaking ................................. 5
### 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.

### History Emphasis

- **Degree:** Associate in Arts

### Suggested Order of Classes

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter, First Year</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>HIST&amp; 116</td>
<td>Western Civilization I</td>
</tr>
<tr>
<td>HUM 110</td>
<td>Ethics &amp; Cultural Values</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 102</td>
<td>Composition II</td>
</tr>
<tr>
<td>HIST&amp; 117</td>
<td>Western Civilization II</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON&amp; 202</td>
<td>Macroeconomics</td>
</tr>
<tr>
<td>HIST&amp; 118</td>
<td>Western Civilization III</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
<tr>
<td>Quantitative Skills Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH&amp; 100</td>
<td>Survey of Anthropology</td>
</tr>
<tr>
<td>HIST&amp; 146</td>
<td>U.S. History I</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 260</td>
<td>Non-Western World Literature</td>
</tr>
<tr>
<td>HIST&amp; 147</td>
<td>U.S. History II</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST&amp; 148</td>
<td>U.S. History III</td>
</tr>
<tr>
<td>POLS&amp; 202</td>
<td>American Government</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

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

**Fall Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>5</td>
</tr>
<tr>
<td>HUM&amp; 116</td>
<td>5</td>
</tr>
<tr>
<td>Quantitative Skills Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 102</td>
<td>5</td>
</tr>
<tr>
<td>HUM&amp; 117</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST&amp; 118</td>
<td>5</td>
</tr>
<tr>
<td>HUM 118</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 100</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Fall Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST&amp; 220</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 244</td>
<td>5</td>
</tr>
<tr>
<td>HUM 110</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 270</td>
<td>5</td>
</tr>
<tr>
<td>SOC&amp; 101</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Spring Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 140</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>
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**

**Fall Quarter, First Year**

- MATH& 141 Precalculus I .................................................. OR  
- MATH& 142 Precalculus II ...................................................  
- Health & Fitness Distribution .........................................  
- Humanities Distribution ...............................................  
- Social Science Distribution .........................................  

**Credits:** 16

**Winter Quarter, First Year**

- ENGL& 101 English Composition ................................  
- MATH& 142 Precalculus II ........................................... OR  
- MATH& 151 Calculus I ....................................................  
- MATH 156 Calculus I Lab ..............................................  
- Social Science Distribution .........................................  

**Credits:** 15-16

**Spring Quarter, First Year**

- ENGL& 102 Composition II .........................................  
- MATH& 151 Calculus I .................................................... OR  
- MATH& 152 Calculus II ..................................................  
- Health & Fitness Distribution .....................................  
- Social Science Distribution .........................................  

**Credits:** 16

**Fall Quarter, Second Year**

- MATH 118 Linear Algebra ...........................................  
- MATH& 152 Calculus II .................................................. OR  
- MATH& 146 Introduction to Stats ...................................  
- Humanities Distribution ...........................................  
- Science Distribution ...................................................  

**Credits:** 20

**Winter Quarter, Second Year**

- MATH& 163 Calculus III ................................................  
- Humanities Distribution ...........................................  
- Science Distribution ...................................................  

**Credits:** 15

**Spring Quarter, Second Year**

- MATH 212 Differential Equations .................................. OR  
- MATH 228 Discrete Mathematics ................................  
- MATH 264 Calculus IV ...................................................  
- Health & Fitness Distribution .....................................  
- Science Distribution ...................................................  

**Credits:** 14

**Recommended Courses**

- BIOL& 221, 222, 223, 241, 242 ........................................  
- PHYS& 221, 222, 223 ....................................................  

**Credits:** 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**

**Fall Quarter, First Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 141</td>
<td>Precalculus I (MATH dependent on placement)</td>
<td>OR</td>
</tr>
<tr>
<td>MATH&amp; 142</td>
<td>Precalculus II (dependent on placement)</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 102</td>
<td>Composition II</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 142</td>
<td>Precalculus II</td>
<td>OR</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC&amp; 100</td>
<td>General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>OR</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Fall Quarter, Second Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 118</td>
<td>Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>OR</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stats</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution*</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC&amp; 201</td>
<td>Intro to Education</td>
<td>3</td>
</tr>
<tr>
<td>MATH&amp; 163</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

**Spring Quarter, Second Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 202</td>
<td>Classroom Observation</td>
<td>2</td>
</tr>
<tr>
<td>MATH 264</td>
<td>Calculus IV</td>
<td>3</td>
</tr>
<tr>
<td>MATH 212</td>
<td>Elem Differential Equations</td>
<td>OR</td>
</tr>
<tr>
<td>MATH 228</td>
<td>Discrete Mathematics</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution*</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

* 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

#### Fall Quarter, First Year  
**Credits**
- ENGL& 101 English Composition I ..................................5  
- M ST 230 Intro to Radio Broadcasting* ..........................5  
- M ST 260 Intro to TV & Video Production .....................5  
- Health & Fitness Distribution ........................................1  
- **Total:** 16

#### Winter Quarter, First Year  
**Credits**
- ENGL& 102 Composition II ...........................................5  
- M ST 261 Adv. TV & Video Production ............................5  
- Science Distribution ..................................................5  
- **Total:** 18

#### Spring Quarter, First Year  
**Credits**
- M ST 220 Intro Broadcast News and Prod .................4  
- M ST 262 Television Production...................................5  
- Quantitative Skills Distribution ..................................5  
- Health & Fitness Distribution ......................................1  
- **Total:** 15

#### Fall Quarter, Second Year  
**Credits**
- CMST& 102 Intro to Mass Media .................................5  
- Social Science Distribution .......................................5  
- Academic Elective ..................................................5  
- **Total:** 15

#### Winter Quarter, Second Year  
**Credits**
- HUM 270 Survey of Film Studies ...............................5  
- Health & Fitness Distribution .....................................1  
- Social Science Distribution .......................................5  
- Science Distribution ...............................................5  
- **Total:** 16

#### Spring Quarter, Second Year  
**Credits**
- Humanities Distribution .........................................5  
- Social Science Distribution .......................................5  
- Health & Fitness Distribution .....................................1  
- Science Distribution ...............................................5  
- **Total:** 16

* Radio Majors
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

Fall Quarter, First Year
- DRMA 106 Intro to Stage Craft ........................................ 3
- ENGL& 101 English Composition I ................................ 5
- M ST 260 Intro to TV & Video Production .................. 5
- Social Science Distribution ........................................... 5
- 18

Winter Quarter, First Year
- ENGL& 102 Composition II ........................................... 5
- HUM 270 Survey of Film Studies .................................. 5
- M ST 261 Adv. TV & Video Production ....................... 5
- 15

Spring Quarter, First Year
- DRMA 111 Stage Lighting ............................................ 3
- M ST 262 Television Production .................................. 5
- Health & Fitness Distribution ..................................... 3
- Science Distribution .................................................. 5
- 16

Fall Quarter, Second Year
- DRMA 107 Beginning Acting ....................................... 5
- M ST 281 Television Internship ................................... 1
- Quantitative Skills Distribution .................................. 5
- Science Distribution .................................................. 5
- 16

Winter Quarter, Second Year
- CMST& 102 Intro to Mass Media ................................. 5
- Science Distribution .................................................. 5
- Social Science Distribution ........................................ 5
- 15

Spring Quarter, Second Year
- Academic Elective ..................................................... 5
- Academic Elective ..................................................... 5
- Social Science Distribution ........................................ 5
- 15
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

Fall Quarter, First Year  Credits
ENGL& 101 English Composition I ..................5
M ST  126 Sports Announcing for Football ..........1
M ST  230 Radio Broadcasting ....................5
Social Science Distribution .........................5

Winter Quarter, First Year  Credits
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

Spring Quarter, First Year  Credits
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

Fall Quarter, Second Year  Credits
M ST  260 Television Broadcasting
   And Production ......................................5
JOUR 106 Introduction to News Writing ............5
Quantitative Skills Distribution ..................5

Winter Quarter, Second Year  Credits
DRMA 107 Beginning Acting ......................5
M ST  272 Radio Broadcasting Internship .........2
Science Distribution ...............................5
Social Science Distribution ......................5

Spring Quarter, Second Year  Credits
Academic Elective ..................................5
Health & Fitness Distribution .....................1
Science Distribution ..............................5
Social Science Distribution ......................5
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.

<table>
<thead>
<tr>
<th>Suggested Order of Classes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter, First Year</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101 English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>GEOL&amp; 101 Intro to Physical Geology</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution**</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Winter Quarter, First Year</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 102 Composition II</td>
<td>5</td>
</tr>
<tr>
<td>ENVS 170 Intro to Natural Resources</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 146 Introduction to Stats</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring Quarter, First Year</strong></td>
<td></td>
</tr>
<tr>
<td>BOTA 150 Dendrology-Trees in our Environ</td>
<td>5</td>
</tr>
<tr>
<td>GEOL&amp; 208 Geology of Pacific NW*</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 121 Intro to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Fall Quarter, Second Year</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 221 Majors Ecology/Evolution</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Winter Quarter, Second Year</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 222 Majors Cell/Molecular</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Spring Quarter, Second Year</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 223 Majors Organismal Phys.</td>
<td>5</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

* 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.

**Prerequisites**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 121</td>
<td>Intro to Chemistry</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stats</td>
</tr>
<tr>
<td>PSYC&amp; 200</td>
<td>Lifespan Psychology</td>
</tr>
<tr>
<td>BIOL&amp; 241</td>
<td>Human A &amp; P 1</td>
</tr>
<tr>
<td>BIOL&amp; 242</td>
<td>Human A &amp; P 2</td>
</tr>
<tr>
<td>NAC Certification</td>
<td></td>
</tr>
</tbody>
</table>

**Core Requirements**

Courses which are recommended to be taken prior to admission into the Nursing Program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 260</td>
<td>Microbiology</td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>ANTH&amp; 206</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>SOC&amp; 101</td>
<td>Intro to Sociology</td>
</tr>
</tbody>
</table>

Health & Fitness Distribution | 3

NURSING COURSES

**First Year, Fall Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 101</td>
<td>Basic Nursing Care Concepts</td>
</tr>
</tbody>
</table>

**First Year, Winter Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 102</td>
<td>Common Alterations I</td>
</tr>
</tbody>
</table>

**First Year, Spring Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 103</td>
<td>Common Alterations II</td>
</tr>
</tbody>
</table>

**Second Year, Fall Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 201</td>
<td>Mental Health and Lifespan</td>
</tr>
<tr>
<td>NURS 220</td>
<td>Management &amp; Leadership</td>
</tr>
</tbody>
</table>

**Second Year, Winter Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 202</td>
<td>Complex Alterations</td>
</tr>
</tbody>
</table>

**Second Year, Spring Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 203</td>
<td>Complex Management</td>
</tr>
<tr>
<td>NURS 222</td>
<td>Transition to Practice</td>
</tr>
</tbody>
</table>

12
MEDICAL ASSISTANT

Emphasis: Medical Assistant
Degree: Associate in Applied Science

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.
• Demonstrate efficiency in maintaining 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/critical thinking to identify proper medical office procedures/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.
• Demonstrate the ability to prepare a patient for and assist with routine and specialty examinations and procedures, including obtaining/documenting vital signs and body measurements.
• Demonstrate knowledge of basic pharmacology and medication administration.
• Demonstrate 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.
• Demonstrate ability to 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

Fall Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLSV 121</td>
<td>Introduction to Healthcare</td>
<td>2</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 102</td>
<td>Skillbuilding I</td>
<td>3</td>
</tr>
<tr>
<td>MA 139</td>
<td>MA Medical Terminology</td>
<td>5</td>
</tr>
<tr>
<td>MA 140</td>
<td>Medical Assisting Intro</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Winter Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR 110</td>
<td>Human Relations-Workplace</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 170</td>
<td>Human Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 172</td>
<td>Human Biology Lab</td>
<td>1</td>
</tr>
<tr>
<td>MA 140</td>
<td>Medical Assisting Intro</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Spring Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC&amp; 100</td>
<td>General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>MA 130</td>
<td>Medical Math</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 266</td>
<td>Medical Law &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

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

Fall Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 241</td>
<td>MA Clinical Procedures I</td>
<td>10</td>
</tr>
<tr>
<td>MA 249</td>
<td>MA Admin Procedures</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Winter Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 242</td>
<td>Medication Administration</td>
<td>6</td>
</tr>
<tr>
<td>MA 246</td>
<td>MA Laboratory Procedures</td>
<td>5</td>
</tr>
<tr>
<td>HLSV 110</td>
<td>Basic Life Support for Healthcare</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Spring Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 243</td>
<td>MA Clinical Procedures II</td>
<td>6</td>
</tr>
<tr>
<td>MA 244</td>
<td>MA Externship Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MA 245</td>
<td>MA Clinical Externship</td>
<td>6</td>
</tr>
<tr>
<td>MA 208</td>
<td>ECG</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
**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**

**Fall Quarter, First Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101 English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 146 Introduction to Stats</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 100 Survey of Biology</td>
<td>5  OR</td>
</tr>
<tr>
<td>BIOL&amp; 170 Human Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 121 Intro to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 100 General Psychology</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 131 Intro to Organic/Biochemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 102 Composition II</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 200 Lifespan Psychology</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Fall Quarter, Second Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 110 Ethics &amp; Cultural Values</td>
<td>5</td>
</tr>
<tr>
<td>NUTR&amp; 101 Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 241 Human A &amp; P 1</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC&amp; 101 Intro to Sociology</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220 Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 242 Human A &amp; P 2</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Spring Quarter, Second Year**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 260 Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 243 Adv. Topics Human A &amp; P</td>
<td>5</td>
</tr>
<tr>
<td>Elective</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

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.

---

**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**

<table>
<thead>
<tr>
<th>Fall Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101 English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 107 Math in Society</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 100 General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>PE 229 Physical Fitness Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 121 Intro to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 102 Composition II</td>
<td>5</td>
</tr>
<tr>
<td>NUTR&amp; 101 Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>PE 150/152/153</td>
<td>1</td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 170 Human Biology</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220 Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>PE 125/140/142</td>
<td>1</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 241 Human A &amp; P 1</td>
<td>5</td>
</tr>
<tr>
<td>HLTH 140 Exercise &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>SOC&amp; 101 Intro to Sociology</td>
<td>5</td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 242 Human A &amp; P 2</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 201 Intro to Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 202 Classroom Observation</td>
<td>2</td>
</tr>
<tr>
<td>HLTH 130 Health &amp; Wellness</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 154 First Aid/CPR</td>
<td>1</td>
</tr>
<tr>
<td>PSYC&amp; 200 Lifespan Psychology</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Fall Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101 English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 146 Introduction to Stats</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 100 General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>PE 229 Physical Fitness Concepts</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 145 Safety &amp; Fitness</td>
<td>3</td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 121 Intro to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 102 Composition II</td>
<td>5</td>
</tr>
<tr>
<td>NUTR&amp; 101 Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>PE 150/152/153</td>
<td>1</td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 170 Human Biology</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220 Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>PE 125/140/142</td>
<td>1</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 241 Human A &amp; P 1</td>
<td>5</td>
</tr>
<tr>
<td>HLTH 140 Exercise &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>SOC&amp; 101 Intro to Sociology</td>
<td>5</td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 242 Human A &amp; P 2</td>
<td>5</td>
</tr>
<tr>
<td>HLTH 130 Health &amp; Wellness</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 131 Intro to Organic/Biochemistry</td>
<td>5</td>
</tr>
<tr>
<td>HLTH 154 First Aid/CPR</td>
<td>1</td>
</tr>
<tr>
<td>PSYC&amp; 200 Lifespan Psychology</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
</tbody>
</table>
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 your mathematics, basic sciences, communications, and reading skills.

### Suggested Order of Classes

**Fall Quarter, First Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 161</td>
<td>General Chemistry w/lab I</td>
<td>6</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 162</td>
<td>General Chemistry w/lab II</td>
<td>6</td>
</tr>
<tr>
<td>ENGL&amp; 235</td>
<td>Technical Writing</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 163</td>
<td>General Chemistry w/lab III</td>
<td>6</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td></td>
<td>OR 5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Fall Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 118</td>
<td>Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 221</td>
<td>Engineering Physics I</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td></td>
<td>OR 5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 203</td>
<td>Applied Numerical Methods</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 163</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 222</td>
<td>Engineering Physics II</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Spring Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 212</td>
<td>Differential Equations</td>
<td>5</td>
</tr>
<tr>
<td>MATH 264</td>
<td>Calculus IV</td>
<td>3</td>
</tr>
<tr>
<td>PHYS&amp; 223</td>
<td>Engineering Physics III</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td></td>
<td>OR 5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

A minimum of 15 credits in Humanities and Social Science are required. See Associate in Science Degree description.
**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.

**Emphasis:** Pre-Chiropractic, Pre-Physical Therapy  
**Degree:** Associate in Science

### Suggested Order of Classes

<table>
<thead>
<tr>
<th>Fall Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 221 Majors Ecology/Evolution</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 161 General Chemistry w/lab I</td>
<td>6</td>
</tr>
<tr>
<td>ENGL&amp; 101 Composition I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 222 Majors Cell/Molecular</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 162 General Chemistry w/lab II</td>
<td>6</td>
</tr>
<tr>
<td>MATH&amp; 151 Calculus I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 223 Majors Organismal Phys</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 163 General Chemistry w/lab III</td>
<td>6</td>
</tr>
<tr>
<td>MATH&amp; 152 Calculus II</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 241 Human A &amp; P 1</td>
<td>OR</td>
</tr>
<tr>
<td>PHYS&amp; 221 Engineering Physics I</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td>3</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 242 Human A &amp; P 2</td>
<td>OR</td>
</tr>
<tr>
<td>PHYS&amp; 222 Engineering Physics II</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 146 Introduction to Stats</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 243 Adv. Topics Human A &amp; P</td>
<td>OR</td>
</tr>
<tr>
<td>PHYS&amp; 223 Engineering Physics III</td>
<td>5</td>
</tr>
<tr>
<td>Social Science or Humanities Distribution</td>
<td>5</td>
</tr>
<tr>
<td>Elective</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**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.

Suggested Order of Classes

**Fall Quarter, First Year**
- CHEM& 121 Intro to Chemistry .................................................5
- ENGL& 101 English Composition I ..................................5
- MATH& 107 Math in Society ...............................................OR
- MATH& 146 Introduction to Stats ............................................5

**Winter Quarter, First Year**
- ENGL& 102 Composition II .................................................5
- SOC& 101 Intro to Sociology ...............................................5
- Humanities Distribution .................................................................5

**Spring Quarter, First Year**
- BIOL& 170 Human Biology .................................................5
- CHEM& 131 Intro to Organic/Biochemistry ..........................5
- PSYC& 100 General Psychology ..............................................5

**Fall Quarter, Second Year**
- BIOL& 241 Human A & P 1 .................................................5
- NUTR& 101 Nutrition ............................................................5
- Humanities Distribution .................................................................5

**Winter Quarter, Second Year**
- BIOL& 242 Human A & P 2 .................................................5
- CMST& 220 Public Speaking ..............................................5
- Social Science Distribution ...........................................................5

**Spring Quarter, Second Year**
- BIOL& 260 Microbiology ...................................................5
- HLTH 145 Safety & Fitness .....................................................3
- Diversity Elective .................................................................5
- Elective ..............................................................................................3-5

Consult with an advisor for specific prerequisites for transfer institutions to determine the courses that best support their Dental Hygiene program.

BIOL 243, although not required, is strongly recommended.
**PRE-PHARMACY**

**Degree:** Associate in Science

**PURPOSE:** The Pre-Pharmacy program is intended for persons 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

#### Fall Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 221</td>
<td>Majors Ecology/Evolution</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 161</td>
<td>General Chemistry w/lab I</td>
<td>6</td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

#### Winter Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 222</td>
<td>Majors Cell/Molecular</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 162</td>
<td>General Chemistry w/lab II</td>
<td>6</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

#### Spring Quarter, First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 223</td>
<td>Majors Organismal Phys</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 163</td>
<td>General Chemistry w/lab III</td>
<td>6</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

#### Fall Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology/Chemistry sequence***</td>
<td></td>
<td>5-6</td>
</tr>
<tr>
<td>Social Science Distribution*</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>13-14</strong></td>
</tr>
</tbody>
</table>

#### Winter Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology/Chemistry sequence***</td>
<td></td>
<td>5-6</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stats</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution*</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>15-16</strong></td>
</tr>
</tbody>
</table>

#### Spring Quarter, Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology/Chemistry sequence***</td>
<td></td>
<td>5-6</td>
</tr>
<tr>
<td>Social Science or Humanities Distribution</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Elective</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>15-16</strong></td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Suggested Order of Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter, First Year</strong></td>
</tr>
<tr>
<td>BIOL&amp; 221 Majors Ecology/Evolution OR</td>
</tr>
<tr>
<td>PHYS&amp; 221 Engineering Physics I</td>
</tr>
<tr>
<td>CHEM&amp; 161 General Chemistry w/lab I</td>
</tr>
<tr>
<td>ENGL&amp; 101 Composition I</td>
</tr>
<tr>
<td>Credits: 16</td>
</tr>
</tbody>
</table>

| **Winter Quarter, First Year** |
| BIOL& 222 Majors Cell/Molecular OR |
| PHYS& 222 Engineering Physics II |
| CHEM& 162 General Chemistry w/lab II |
| MATH& 151 Calculus I |
| Credits: 16 |

| **Spring Quarter, First Year** |
| BIOL& 223 Majors Organismal Phys OR |
| PHYS& 223 Engineering Physics III |
| CHEM& 163 General Chemistry w/lab III |
| MATH& 152 Calculus II |
| Credits: 16 |

| **Fall Quarter, Second Year** |
| Biology/Chemistry/Physics sequence* 5-6 |
| PSYC& 100 General Psychology 5 |
| HUM 110 Ethics and Cultural Values 5 |
| Credits: 15-16 |

| **Winter Quarter, Second Year** |
| Biology/Chemistry/Physics sequence* 5-6 |
| MATH& 146 Introduction to Stats OR |
| MATH& 163 Calculus III |
| CMST& 220 Public Speaking |
| Credits: 15-16 |

| **Spring Quarter, Second Year** |
| Biology/Chemistry/Physics sequence* 5-6 |
| SOC& 101 Intro to Sociology 5 |
| Health & Fitness Distribution 3 |
| Credits: 13-14 |

**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 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.

### Fall Quarter, First Year
- **BIOL& 221** Majors Ecology/Evolution ...............5
- **CHEM& 161** General Chemistry w/lab I ...............6
- **ENGL& 101** English Composition I ..................5

### Winter Quarter, First Year
- **BIOL& 222** Majors Cell/Molecular ...............5
- **CHEM& 162** General Chemistry w/lab II ..........6
- **MATH& 151** Calculus I .........................5

### Spring Quarter, First Year
- **BIOL& 223** Majors Organismal Phys ...............5
- **CHEM& 163** General Chem w/lab III ..........6
- **MATH& 152** Calculus II .........................5

### Fall Quarter, Second Year
- **CHEM& 261** Organic Chemistry w/lab I ..........5
- Social Science Distribution ........................................5
- Health & Fitness Distribution ................................3

### Winter Quarter, Second Year
- **CHEM& 262** Organic Chemistry w/lab II ..........5
- **MATH& 146** Introduction to Stats .................OR
- **MATH& 163** Calculus III .........................5
- **CMST& 220** Public Speaking .......................5

### Spring Quarter, Second Year
- Science Elective .................................................OR
- **CHEM& 263** Organic Chemistry w/lab III ..........5
- Social Science or Humanities Distribution ..........5
- Elective .........................................................5
### 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.

<table>
<thead>
<tr>
<th>Suggested Order of Classes</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter, First Year</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101 English Composition I ...................................</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 100 General Psychology .......................................</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution .............................................</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Winter Quarter, First Year</strong></th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 102 Composition II ........................................</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 200 Lifespan Psychology ...................................</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution .........................</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Spring Quarter, First Year</strong></th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH&amp; 146 Introduction to Stats .....................................</td>
<td>5</td>
</tr>
<tr>
<td>PSYC 210 Personality Theories..................................</td>
<td>OR</td>
</tr>
<tr>
<td>PSYC 250 Social Psychology .......................................</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution ..................................</td>
<td>1</td>
</tr>
<tr>
<td>Humanities Distribution .............................................</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Fall Quarter, Second Year</strong></th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health &amp; Fitness Distribution ..................................</td>
<td>1</td>
</tr>
<tr>
<td>Humanities Distribution .............................................</td>
<td>5</td>
</tr>
<tr>
<td>Science Distribution .........................</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution ..................................</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Winter Quarter, Second Year</strong></th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective .........................................................</td>
<td>5</td>
</tr>
<tr>
<td>Elective .........................................................</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution ..................................</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Spring Quarter, Second Year</strong></th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective .........................................................</td>
<td>7</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution ..................................</td>
<td>1</td>
</tr>
<tr>
<td>Science Distribution .........................</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>13</td>
</tr>
</tbody>
</table>

**Recommended Courses**

- BIOL& 170 Human Biology ................................................. | 5 |
- CHEM& 121 Intro to Chemistry .......................................... | OR |
- 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 Sociology program 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.

The sociology program provides an adequate foundation for students to transfer to a four-year college or university. See the sociology faculty advisor for details.

Suggested Order of Classes

Fall Quarter, First Year
- ENGL& 101 English Composition I 5 Credits
- SOC& 101 Intro to Sociology 5 Credits
- Humanities Distribution* 5 Credits
- Total 15 Credits

Winter Quarter, First Year
- ENGL& 102 Composition II 5 Credits
- MATH& 146 Introduction to Stats 5 Credits
- Social Science Distribution 5 Credits
- Total 15 Credits

Spring Quarter, First Year
- ANTH/SOC 225 Cultural & Ethnic Pluralism 5 Credits
- SOC& 201 Social Problems 5 Credits
- Humanities Distribution 5 Credits
- Total 15 Credits

Fall Quarter, Second Year
- ANTH& 206 Cultural Anthropology 5 Credits
- Humanities Distribution 5 Credits
- Science Distribution** 5 Credits
- Total 15 Credits

Winter Quarter, Second Year
- ANTH& 210 Indians of North America 5 Credits
- Elective 2 Credits
- Health & Fitness Distribution 3 Credits
- Science Distribution 5 Credits
- Total 15 Credits

Spring Quarter, Second Year
- Elective 5 Credits
- Science Distribution 5 Credits
- Social Science Distribution 5 Credits
- Total 15 Credits

* 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**

**Fall Quarter, First Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 100</td>
<td>Intro to Engineering</td>
<td>2</td>
</tr>
<tr>
<td>MATH&amp; 141</td>
<td>Precalculus*</td>
<td>3</td>
</tr>
<tr>
<td>Health &amp; Fitness Distribution</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR&amp; 111</td>
<td>Engineering Graphics**</td>
<td>2</td>
</tr>
<tr>
<td>ENGL&amp; 235</td>
<td>Technical Writing</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 142</td>
<td>Precalculus II*</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS&amp; 131</td>
<td>Computer Science I C++</td>
<td>OR</td>
</tr>
<tr>
<td>CS&amp; 141</td>
<td>Computer Science I Java</td>
<td></td>
</tr>
<tr>
<td>ENGR&amp; 112</td>
<td>Engineering Graphics II**</td>
<td>3</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

**Fall Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 161</td>
<td>General Chemistry w/lab I</td>
<td>6</td>
</tr>
<tr>
<td>PHYS&amp; 221</td>
<td>Engineering Physics I</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Distribution</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

**Winter Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 203</td>
<td>Applied Numerical Methods</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 222</td>
<td>Engineering Physics II</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Spring Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 223</td>
<td>Engineering Physics III</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Distribution</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

* 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.
WELDING

**Emphasis:** Welding Technology  
**Degree:** Associate in Technical Arts

**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

**Fall Quarter, First Year**  
**Credits**
- IT 117 Intro to Windows OS .......................... 3
- WELD 161 SMAW Welding .......................... 12
- WELD 167 Metallurgy for Welders .................. 3
  **Total:** 18

**Winter Quarter, First Year**  
**Credits**
- CAD 115 CAD for Industry ............................... 3
- TMATH 116 Industrial Math .......................... 5
- WELD 164 GMAW Welding .......................... 12
  **Total:** 20

**Spring Quarter, First Year**  
**Credits**
- DET 166 Shop Skills ..................................... 3
- WELD 159 Oxyfuel & GTAW ......................... 11
- WRT 105 Writing in the Workplace .................. 5
  **Total:** 19

**Fall Quarter, Second Year**  
**Credits**
- WELD 265 Adv. Arc Welding ....................... 12
- WELD 271 Blueprint Reading ......................... 3
  **Total:** 15

**Winter Quarter, Second Year**  
**Credits**
- WELD 267 Adv. Gas Shielded Arc Welding ......... 11
- HR 110 Human Relations-Workplace ............... 5
  **Total:** 16

**Spring Quarter, Second Year**  
**Credits**
- HLTH 145 Safety & Fitness .......................... 3
- WELD 269 Advanced Fabrication ..................... 10
  **Total:** 13
**WELDING**

**Emphasis:** Welding Technology (4-quarter program)

**Degree:** Certificate of Proficiency

**PURPOSE:** The Welding 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.
- Identify and make repairs on 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**

**Fall Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 161</td>
<td>SMAW Welding</td>
<td>12</td>
</tr>
<tr>
<td>WELD 167</td>
<td>Metallurgy for Welders</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits:</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Winter Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMATH 116</td>
<td>Industrial Math</td>
<td>5</td>
</tr>
<tr>
<td>WELD 164</td>
<td>GMAW Welding</td>
<td>12</td>
</tr>
<tr>
<td>CAD 115</td>
<td>CAD for Industry</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits:</strong></td>
<td><strong>20</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Spring Quarter, First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRT 105</td>
<td>Writing in the Workplace</td>
<td>5</td>
</tr>
<tr>
<td>WELD 159</td>
<td>Oxyfuel &amp; GTAW</td>
<td>11</td>
</tr>
<tr>
<td>DET 166</td>
<td>Shop Skills</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits:</strong></td>
<td><strong>19</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Fall Quarter, Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 145</td>
<td>Safety and Fitness*</td>
<td>3</td>
</tr>
<tr>
<td>WELD 265</td>
<td>Adv. Arc Welding</td>
<td>11</td>
</tr>
<tr>
<td>WELD 271</td>
<td>Blueprint Reading For Welders</td>
<td>3</td>
</tr>
<tr>
<td>HR 110</td>
<td>Human Relations-Workplace</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits:</strong></td>
<td><strong>22</strong></td>
<td></td>
</tr>
</tbody>
</table>

Completion of HR 110 Human Relations-Workplace (5 credits) is required and may be completed any quarter.
WELDING

**Emphasis:** Welding (Evening)
**Degree:** Certificate of Proficiency

**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**

<table>
<thead>
<tr>
<th>Fall Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 180 Oxyfuel &amp; GTAW</td>
<td>5</td>
</tr>
<tr>
<td>WELD 181 Shielded Metal Arc Welding</td>
<td>5</td>
</tr>
<tr>
<td>WELD 182 Gas Metal Arc Welding</td>
<td>5</td>
</tr>
<tr>
<td>WELD 285 Arc Welding Certification</td>
<td>5</td>
</tr>
</tbody>
</table>

**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.
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**  
Prin 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 consent of instructor.

**ACCT& 202**  
Prin 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**
Prin 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
Acctg Info 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 witholding laws, and other laws affecting payroll operations and employment practices. Prerequisite: ACCT& 201.

ACCT 285
Bookkeeper Cert. 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 011-014 and 016
English as a Second Language I - VI (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 (1-1)
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.
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.

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 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 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.

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.

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.

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 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 225
Cultural & Ethnic Pluralism in Contemporary (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.

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 instructor permission

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.
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 (S)
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: high school 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 permission of instructor.

BIOL& 241
Human A & P I (S) (formerly ZOOL 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 A & P II (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
Adv 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 (S) (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.

**BUS 161**  
*Leadership Development (2)*

Leadership is a key component to success in the 21st century. This course provides an introduction to the evolution of leadership, leadership styles, and traits needed for effective leadership in today's workplace.

**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 Mgmt (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.

**B A 223**  
*Principles of Retailing (Merchandising) (5)*

Overview of Retail Merchandising including: Potential careers, retail planning factors, the work environment, retail customers, legal and ethical behavior, location analysis managing retail operations, merchandise buying factor, fashion, and issues involved in managing human resources.

**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 235**  
*Investments (5)*

An introduction to the theory of investments. Topics to be discussed include interest rates, mutual funds, bond prices and yields, diversification, futures contracts, stock options, and risk and rate of return. Prerequisite: ACCT& 201, 202.
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 270
International Business (5)

This course is an introduction to international business. Management, accounting and finance, marketing, importing and exporting and strategy as they relate to international business will be emphasized.

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)


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 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 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 240
Legal Terminology (3)
Development of a legal vocabulary with emphasis on definitions and spelling. Upon completion of this course students should be able to recognize and use basic terminology used in the legal field.

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 102, 110, and 260 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& 220.

CDP 111
CDP Counseling Seminar (1)
Practical training in Motivational Interviewing, the counseling method currently most commonly used in chemical dependency agencies.

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.

CDP 281
Practicum Seminar (1)
Weekly seminar to share and integrate the learning from CDP 280, CDP Supervised Practicum. Prerequisite: CDP 100, CDP 280 (taken concurrently).

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 quarter of a 1-year course of general chemistry for science and engineering majors: Atoms, molecules and ions; stoichiometry; aqueous solution reactions; gases; energy; electronic structure; periodic table. Prerequisite: CHEM& 121 or high school chemistry AND MATH 099.
CHEM& 162
General Chemistry w/lab II (S) (6)

The periodic table, chemical bonding, introduction to organic chemistry, intermolecular forces and liquids and solids, physical properties of solutions and kinetics. Prerequisite: CHEM& 161, MATH 099 or equivalent.

CHEM& 163
General Chemistry w/lab III (S) (6)

Chemical equilibrium, acids and bases, solubility equilibria, thermodynamics, redox reactions, coordination chemistry, nuclear chemistry and polymers. 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 permission of instructor.

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)

Level I students are introduced to parenting skills to use with children through classroom participation, lecture, and discussion. First quarter of a three-year sequence.

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-VI (1-4)

Level II students develop and practice parenting skills with children through classroom participation, lecture, and discussion. Fourth quarter of a three-year sequence.

CFS 144
Family Relationships (2)

Students develop positive parenting skills to strengthen family relationships.

CFS 145
Foster Parentscope (3)

Provides an integrated training program for new and experienced foster parents. Areas of focus include key concepts of foster parenting, relationships, separation and visitation, child development, discipline, and self-esteem.

CFS 146
Parents and Adolescents (3)

Parents and teens strengthen their relationship through positive communications, self-awareness, feelings, problem solving, family rules and consequences, and age appropriate expectations and independence.

CFS 147
Family/Life Management (1-4)

Learn to effectively balance family and work.

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. Seventh quarter of a three-year sequence.

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 permission of instructor.

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 permission of instructor.

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  
Advance 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 by approval.

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.
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 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, must be 18 years old.

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 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 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 190**
**Cooperative Work Experience (1-12)**

See description under COOP 190 for additional information.

**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 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 275**
**Curriculum Development (3)**

An examination of the nature, scope, and sequence of curriculum. Discussion of course goals, content and evaluation.
EDUC 280
Teaching On-Line (4)
Experience being an online student, make the transition from “face to face” instruction to teaching online. Learn to use online instruction tools, become familiar with Blackboard basics, and begin creating online courses.

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& 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.

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.

EDUC& 115
Child Development (formerly EDEC/EDUC 245) (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.

ECED& 120
Practicum-Nurturing Rel (2)
Students gain experience engaging in nurturing relationships with children, keeping children safe and promoting children's growth and development.

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.

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.

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.

ECED& 139
Admin Early Lrng Prog (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.

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.
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 the learning environment. Must have completed at least 30 credits in ECE or have instructor’s permission in order to enroll in this course.

---

**EDUCATION – EARLY CHILDHOOD**

EDEC 142  
**Mentoring and Professional Development (1)**  
Explores effective ways mentors initially join with early childhood teachers to form professional development relationships. Increase culturally competency awareness and skills; learn strategies for establishing a strong foundation for support, co-learning and reflective practices.

EDEC 143  
**Mentoring for Leadership (1)**  
Increases awareness and skills for communication for empowerment. Topics include listening, reflective feedback, resolving conflict and increasing cultural competence.

EDEC 225  
**Teaching the Student with Special needs (3)**  
Examines methods and strategies for teaching students with special needs. Prerequisite: EDEC 230 and 235.

EDEC 232  
**Special Education Curriculum (3)**  
Examination of the theories and models of curriculum development for special education learners.

EDEC 233  
**Integrated Strategies for Teaching I (5)**  
Develops a professional understanding of teaching methods and practices with an opportunity to evaluate own teaching skills and the learning environment. Prerequisite: EDEC 132.

EDEC 234  
**Integrated Strategies for Teaching II (5)**  
Integration of theory, methods and child development into classroom practice. Opportunity to examine and experience all the competencies of the professional teacher. Prerequisite: EDEC 233.

EDEC 235  
**Special Education Practicum (5)**  
Integration of theory, methods and child development into classroom practice. Opportunity to examine and experience all of the competencies of the professional teaching in the Special Education classroom. Pre/Co-requisite: EDEC 225 and 230.

---

**ELECTRONICS/ROBOTICS/AUTOMATION**

ERA 101  
**Electronics Assembly (4)**  
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). Pre/Corequisite: MATH 098, ENGL 099 or equivalents.

ERA 105  
**Industrial Computer Operation (3)**  
Best practices computer operations in an industrial environment. Topics include Windows operating system navigation, hardware maintenance and various industrial software interfaces. Pre/Corequisite: MATH 098, ENGL 099 or equivalents.

ERA 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.
ERA 151
Mechanical/Fluid Systems (5)
Mechanical forces, simple machines and the relationships between mass, force, and time, and those applications to mechanics. Hydraulic and pneumatic forces and component systems will also be studied and demonstrated. Prerequisite: ERA 101.

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 220
Sensors and Instruments (4)
Examination of sensors used in industrial environments. Electrical and mechanical measurement instruments will be studied and basic prototypes constructed, tested and calibrated. Prerequisite: ERA 170.

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 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.

ERA 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 control circuitry. Prerequisite: ERA 121 or equivalent knowledge of alternating current electricity.

ERA 270
Robotic III (4)
A third course in Robotics. Topics covered are: infrared range sensing, navigation principles of autonomous robots, behavior based control, and characteristics of workcell robotics. Prerequisite: ERA 230.

EMERGENCY MEDICAL

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.

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.

ENER 120
Electrical Math Concepts (5)
Basic mathematical concepts for electrical apprentices and students interested in the Energy Technology program. Review of fundamental math concepts that are all building blocks essential to all other Energy Technology courses.

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 105  
**Inside Wireman Section A (7)**

Provides introductory instruction in electrical theory, design, installation, and maintenance of electrical systems providing power, light heat, air conditioning, refrigeration, control, communication, monitoring, and automation to residential, commercial, and industrial markets.

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 203
Applied Numerical Methods (5)
Numerical solutions to engineering and science problems using modern scientific computing tools. Application of mathematical judgment in selecting computational algorithms and communicating results. Introduction to MATLAB programming for numerical computation. Prerequisite: MATH& 152 (MATH 118 recommended) or instructor permission.

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 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 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 English 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 English Lit 1616 (H) (5)
Surveys late Renaissance through Enlightenment writers
like John Donne, Ben Johnson, 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)
Present 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& 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& 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 w/2.0 or better or with instructors 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 w/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 w/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 w/2.0 or better or instructor's 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 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 w/2.0 or better or instructor's 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 (S) (5)**

An introduction to the interactions between humans and the natural world. Topics include structure and function of ecosystems; populations 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 of a Watershed (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 the 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.

FORENSIC SCIENCE

FORS 101  
Introduction to Forensic Science (S) (5)
Application of biology, chemistry, and physical science in evaluating evidence. Examine the capabilities and limitations of forensic science, the organization of the forensic science laboratory, using analytical tools, and applying science to questions of law.

FRENCH

FRCH& 121, 122, 123  
French I-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.

FRCH& 221, 222, 223  
French IV-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& 123 or permission of instructor.
GEOGRAPHIC INFORMATION 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. Pre-requisite: 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 skills 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 (5) (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.
GEOL 100
Geology for Engineering & Environ. 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.

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 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.
HIGH SCHOOL COMPLETION

HSC 002
Introduction to Literature (1-5)

The novel, with its integral parts and types, introduces the students to literature. Students read a chapter from each of ten novels, learning to analyze them for setting, plot, character, theme, and type.

HSC 003
Intro to English for Second Language Learners (1-5)

For high school level second language students, English skills will be emphasized in reading, writing, speaking, and listening development. Enrollment requires placement testing.

HSC 004
Literature - Short Story (1-5)

The short story course deepens the understanding of plot, character, and setting begun in an introductory course. Students read various short stories, learning to analyze them for setting, plot, character, theme, tone, mood, and type.

HSC 006
Creating Critical Viewers (1-5)

Course covers the impact of different media on society. Students will create media projects that demonstrate proficiency in research, communication, and creativity.

HSC 010
English for Second Language Learners I (1-5)

For high school level second language students, English skills will be emphasized in reading, writing, speaking, and listening development.

HSC 011
English for Second Language Learners II (1-5)

For high school level second language students, English skills will be emphasized in reading, writing, speaking, and listening development.

HSC 012
Introduction to Writing (1-5)

Writing sentences and paragraphs in proper English form while encouraging the student to be thoughtfully creative is the emphasis of this basic grammar course. Parts of speech are reviewed in depth as well.

HSC 014
English Grammar and Writing (1-5)

Writing paragraphs and essays in proper English form while encouraging the student to be thoughtfully creative is the emphasis of this writing course. Parts of speech and sentence structure are reviewed as well.

HSC 020
Health (1-5)

Preventive health care, nutrition, mental health, sexual health, and basic anatomy form the curriculum in this course. Students will be expected to do a final project with in-depth self-analysis and problem solution components.

HSC 021
Independent Health Research (1-5)

Students research and write papers on ten health topics decided on an individual basis with the instructor. Topic areas include disease, epidemic control, nutrition, and exercise. Two research projects are included.

HSC 022
Secondary Science I (1-5)

This beginning life science focuses on learning the basic scientific method, microscope use, cell biology, human body processes, and ecology. Labs are required.

HSC 023
Sexual Health (1-5)

Students explore anatomy and sexual health in cultural and scientific contexts, including sexuality and relationship health issues.

HSC 024
Discovery Science I: Physical Science (1-5)

Science Discovery is a highly interactive computerized course designed to provide high school level science instruction. Students develop scientific reasoning and process skills concerning the physical world. Lab experiments and activities are included.

HSC 025
TEEN Fitness & Exercise (1)

Students study and practice proper nutrition and exercise for pregnant and parenting teenagers and their children.

HSC 030
Science II (1-5)

This beginning physical science focuses on learning the basic scientific method, introducing the periodic table, applying work and force formulas, using electricity and sound waves, and observing space phenomenon. Labs are required.

HSC 032
Discovery Science II: Plant Science (1-5)

Discovery Science II offers students a chance for hands-on learning in a scientific discipline. Reading material is minimal, but videos are required, as is a five week botanical lab project.
**HSC 034**  
*Introduction to Physical Geography (1-5)*

This physical geography course offers advanced high school students a chance for in-depth learning in a scientific discipline. It teaches geographical terminology and the interactions of land masses, water bodies, and atmospheric phenomena.

**HSC 040**  
*United States Government (1-5)*

Course explores history and development of the government of the United States and our national relationships in context of that development.

**HSC 042**  
*United States History I (1-5)*

This course is for high school completion students. It surveys pre-colonial history through 1876 with a concentration on major issues, events, and people in the development of the American nation.

**HSC 044**  
*United States History II (1-5)*

This course is designed for the high school completion students. It surveys American history from 1876 through the present, concentrating on major issues and events in the development of the American nation.

**HSC 046**  
*Washington History (1-5)*

This Washington history course presents the physical, economical, and social evolvement of the Pacific Northwest, beginning with the Ice Age and ending with present times.

**HSC 048**  
*Introduction to Social Studies (1-5)*

Course teaches basic writing, researching, and test-taking skills while presenting information about diverse societies and global issues.

**HSC 050**  
*Contemporary World Problems (1-5)*

Contemporary World Problems promotes exploration of global problems in health, environment, and politics. Students choose topics to research within the three required areas.

**HSC 052**  
*World Geography I (1-5)*

Course features study of the physical and cultural geography of the Western Hemispher. Research and reading enhancement assignments feature regional current issues.

**HSC 054**  
*World Geography II (1-5)*

Course features study of the physical and cultural geography of the Eastern Hemisphere. Research and reading enhancement assignments feature regional current issues.

**HSC 060**  
*Basic Arithmetic with Critical Thinking (1-5)*

This basic mathematics course features computer practice in the basic arithmetic skills and coursework that teaches students how to think about math problems, relating numbers closely to real life situations.

**HSC 062**  
*Basic Applied Math (1-5)*

Designed to review, strengthen, and utilize basic arithmetic skills. Provides an introduction to number lines, algebra, statistics, and geometry. Prerequisite: mastery of addition, subtraction, multiplication, and division in whole numbers, fractions, and decimals, determined by pretesting.

**HSC 064**  
*Consumer Finance (1-5)*

Can be used either as an elective or a math requirement in the high school completion program. Topics and skills necessary for personal money management as well as national and global economic issues. Recommendation: Basic mathematics mastery.

**HSC 066**  
*Independent Math Projects (1-5)*

This is a hands-on math class. Students must have understanding of basic math through fractions and decimals, as the class includes much work with percents and measurements. Projects will include budgeting, payroll, home building, and area planning.

**HSC 070**  
*Geometry 1 (1-5)*

Introduces geometric and algebraic skills required by the State of Washington for high school graduation. Prerequisite: completion of Integrated 1/Algebra 1 or instructor permission.

**HSC 071**  
*Geometry 2 (5)*

Expands the geometric and algebraic concepts required by the State of Washington for high school graduation. Prerequisite: completion of integrated 1/algebra 1 or instructor permission.

**HSC 080**  
*Driver’s Education Handbook (1-5)*

Prepares adults (over 18) for the written portion of the Washington State driver’s licensing exam. It will not qualify students under 18 because the class doesn’t incorporate the behind-the-wheel driving practice.
HSC 082
**Occupational Education (1-5)**
Students will research career information such as education requirements, pay scale, and future demand for the career field. They will learn job search, resume preparation, and professional ethics skills.

HSC 084
**Computer Literacy (1-5)**
Students use the Macintosh computer to learn the history and uses of computer, and then they use several applications in the computer lab, such as word processing and spreadsheets.

HSC 099
**Independent Study (1-5)**
Individually developed with each HSC 099 student, this course is intended to fill high school needs not met by the courses offered in the program.

**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, 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 prehistory 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 281-286**  
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 (4)

This course provides an introduction to programming using Microsoft Visual Studio. Course focus is on building basic Windows Forms graphical applications.

**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 (4)

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 (5)

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 (4)

This is a first course based on CompTIA A+ and Linux+ certification materials. Material covered includes Virtualization, Vocabulary, OS Installation, Configuration, Customization and Usage Basics of the current popular Desktop Operating Systems.
I T 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 to the command line. Prerequisite: IT 123 or CNT 123.

I T 125
Desktop OS 3 (4)
This is a third course based on CompTIA A+ and Linux+ certification materials. Material covered includes advanced troubleshooting, more advanced systems configuration and cmd/shell scripting. Prerequisite: IT 124 or CNT 124.

I T 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.

I T 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.

I T 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.

I T 201
Network Technology 1 (4)
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.

I T 202
Network Technology 2 (4)
A second course in Network Technology focusing on configuring, managing and troubleshooting Cisco devices using Cisco IOS. Prerequisite: IT 201 or CNT 201.

I T 203
Network Technology 3 (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 or CNT 201, 202.

I T 205
PHP/SQL (4)
An introduction to web application development using PHP and SQL. Coverage includes an introduction into server side programming using PHP, SQL database design, querying, and use from PHP. Prerequisite: IT 121 or CST 121.

I T 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.

I T 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.

I T 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.

I T 224
JAVA 1 (5)
Introduction to Java programming. Concepts including procedural programming (methods, parameters, and primitive variables), control structures and logic (if/else, for and while loops), arrays, and an introduction to object oriented programming. Prior computer knowledge recommended.

I T 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.
INTENSIVE ENGLISH PROGRAM

IEP 084, 088, 092, 096
Intensive English Speaking I-IV (1-5)

Multi-level language course with emphasis on communicative oral proficiency. Instruction includes use of multimedia to enhance the learning of the English language and American culture.

IEP 085, 089, 093, 097
Intensive English Listening I-IV (1-5)

This course provides students with reciprocal listening training. They will also be introduced to non-reciprocal listening tasks both in a formal and non-formal method of communication.

IEP 086, 090, 094, 098
Intensive English Reading I-IV (1-5)

Multi-level reading course for non-native English Speakers that emphasizes the acquisition of reading skills at a post-secondary level, including vocabulary, comprehension, reading rate, and study skills.

IEP 087, 091, 095, 099
Intensive English: Writing and Grammar Level I-IV (1-5)

This is a multi-level class to prepare non-native English students for writing in college level academic and technical courses. Difficulty and length of writing assignments increase with each level. Students write about themselves, their culture or other familiar topics, discuss and write about American and world culture, and academic topics. Writing fluency is stressed, and correction focuses on structural and grammatical errors appropriate to each level. Paragraph development and short essay organization are emphasized. Writing includes description, narration, comparison/contrast, with some analysis and summarizing of short reading passages. Students keep a daily journal.

JOURNALISM

JOUR 106
Introduction to News Writing I (H) (5)

Learn the difference between news writing and other types of writing. Practice writing a variety of kinds of news articles.

JOUR 107
Introduction to News Writing II (H) (3)

Start, develop and polish hard news and soft news stories. Practice gathering information from a variety of sources. Prerequisite: JOUR 106.

JOUR 111
Newspaper Staff I (1-5)

Help produce the college’s online student newspaper. Editors, reporters, photographers, videographers, page designers, and advertising sales people needed. Prerequisite: JOUR 106

JOUR 112
Newspaper Staff II (1-5)

Help produce the college’s online student newspaper. Editors, reporters, photographers, videographers, page designers, and advertising sales people needed. Prerequisite: JOUR 106, 111

JOUR 113
Newspaper Staff III (1-5)

Help produce the college’s online student newspaper. Editors, reporters, photographers, videographers, page designers, and advertising sales people needed. Prerequisite: JOUR 106, 111, 112.

JOUR 180
Issues in Mass Media (2)

Discuss and interpret issues as they relate to the media. Learn to evaluate media messages critically.

JOUR 206
News Reporting and Writing (5)

Write a variety of in-depth and extended coverage news articles concentrating on enterprise and package projects. Practice writing editorials, columns and reviews. Learn the basics of broadcast and public relations writing. Prerequisite: JOUR 106, 107, 111, ENGL 101

JOUR 208
Copy Editing and Newspaper Design (5)

Learn newspaper copy editing and page design. Edit copy for the student newspaper. Design and layout pages of the student newspaper. Prerequisite: ENGL 101, JOUR 106, 107, 111, 206
JOUR 211  
Newspaper Staff IV (1-5)  
Help produce the college’s online student newspaper. Editor, reporters, photographers, videographers, page designers, and advertising sales people needed. Prerequisite: JOUR 106, 111, 112, 113.

JOUR 212  
Newspaper Staff V (1-5)  
Help produce the college’s online student newspaper. Editors, reporters, photographers, videographers, page designers, and advertising sales people needed. Prerequisite: JOUR 106, 111, 112, 113, 211.

JOUR 213  
Newspaper Staff VI (1-5)  
Help produce the college’s online student newspaper. Editors, reporters, photographers, videographers, page designers, and advertising sales people needed. Prerequisite: JOUR 106, 111, 112, 113, 211, 212.

LIBRARY

LIBR 180  
Research in the 21st Century (5)  
Students examine various strategies for locating, evaluating, and applying information resources in the research process. Attention is paid to information issues like intellectual property, censorship, and freedom of information. Prerequisite: eligibility for ENGL& 101.

LIBR 182  
Research Skills (2)  
Student will learn how to use the tools of research, including both traditional library resources and those accessed over the internet. They will discover how information is organized and indexed for retrieval, the appropriate search syntax for a variety of databases, and the underlying search patterns that remain constant from resource to resource. Students will demonstrate acquisition of these skills through the creation of a topic pathfinder and individual weekly assignments. Prerequisite: ENGL 099 or equivalent.

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& 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 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.

### MEDIA STUDIES

**M ST 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.

**M ST 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.

**M ST 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.

**M ST 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.

**M ST 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.

**M ST 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.

**M ST 190**

**Cooperative Work Experience (1-12)**

See description under COOP 190 for additional information.

**M ST 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.

**M ST 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.

**M ST 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.

**M ST 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.

**M ST 260**

**Intro to TV & Video Production for 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.

**M ST 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.
M ST 262
Television Production (5)

Students will write, direct, produce and edit video packages and participate as crew members in producing classmate's video projects.

M ST 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.

M ST 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.

M ST 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.

M ST 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.

M ST 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**

M A 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.

M A 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.

M A 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. Prerequisite: MA 139 with a 2.5 GPA.

M A 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.

M A 241
MA Clinical Procedures I (10)

Overview of physical examinations, procedures, and testing that a medical assistant would assist a health care provider with in an ambulatory care setting. Prerequisite: MA 130, 139, 140, BIOL& 170.

M A 242
Medication Administration (6)

An overview of pharmacology and medication administration as it applies to the medical assistant's responsibilities in ambulatory care. Prerequisite: MA 241, MA 249 with a 2.5 GPA or higher.

M A 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.

M A 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.

M A 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.

M A 246
MA Laboratory Procedures (5)

Overview of laboratory procedures and regulations for the ambulatory health care setting, including phlebotomy training. Prerequisite: MA 241, MA 249 with a 2.5 GPA or higher.
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 (2)
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 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 technical study of musical architecture. Emphasis on aural and written skill of signatures, chords, intervals, musical notation. Piano proficiency of basic scales and five-finger patterns. Finale is used for computer generated manuscript. Prerequisite: music reading skill.

MUSC& 142  
Music Theory II (5)  
Designed for music majors and minors. Emphasis on aural and written skill of part-writing, harmonization of melody and harmonic analysis. Piano proficiency of grade three piano studies. Finale is used for computer generated manuscript. Prerequisite: MUSC& 141.

MUSC& 143  
Music Theory III (5)  
Designed for music majors and minors. Emphasis on aural and written skill of seventh chords, secondary dominant and secondary seventh chords. Piano proficiency of Bach two-part Inventions. Finale is used for computer generated manuscript. Prerequisite: MUSC& 142.

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  
Functional Piano I (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 152  
Functional Piano II (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 153  
Functional Piano 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. Corequisite: 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. Corequisite: MUSC& 233.

MUSC 234, 235, 236, 237, 238, 239
Jazz Band I-VI (2)
Jazz ensemble consisting of the following instrumentation: saxophone, trumpet, trombone, piano, bass, guitar and percussion. Perform both on and off campus. Participation in one evening concert is mandatory. Auditions held on first day of class. Prerequisite: by audition only.

MUSC& 241
Music Theory IV (5)

MUSC& 242
Music Theory V (5)
An advanced technical study of music including aural skill and analysis of late 19th century western music. Piano proficiency of chromatic chord progressions and beginning score reading. Prerequisite: MUSC& 241.

MUSC& 243
Music Theory VI (5)
An advanced technical study of music including aural skill and analysis of late 20th century music. Piano performance skill of score reading, four-part choral accompaniments, and level four piano. 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 100**  
Introduction to Nursing (1)  
The definition, function, responsibilities, and current and historical roles of the nurse and other health care personnel are presented. Nursing theory, educational requirements, law, and ethics of nursing practice are included.

**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 105**  
Ancillary Off Campus Lab Opportunity (1)  
An opportunity to spend off-campus time in a variety of ancillary sites; MD offices, clinics, home health agencies, specialty acute care areas, assisted living facilities. Corequisite: NURS 102, NURS 103 or NURS 104; permission of Nursing Director.

**NURS 106**  
Ancillary Off Campus Lab Opportunity (0.5)  
An opportunity to spend off-campus lab time in a variety of ancillary sites; MD offices, clinics, home health agencies, specialty acute care areas, assisted living facilities. Corequisite: NURS 102, NURS 103, or NURS 104; permission of Nursing Director.

**NURS 107**  
Ancillary Off Campus Lab Opportunity (0.5)  
An opportunity to spend off-campus time in a variety of ancillary sites; MD offices, clinics, home health agencies, specialty acute care areas, assisted living facilities. Corequisite: NURS 102, NURS 103, or NURS 104; permission of Nursing Director.

**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 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 121
Intro to Healthcare (2)
The complexity of health care, health care provider certifications and team concepts will be introduced. Professionalism, safe patient handling, physical/emotional changes with aging, and specific infection control issues for all care givers will be explored.

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.

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.
PHYSICAL EDUCATION

P E 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.

P E 103
Basketball (1)

This course will cover the basic skills and techniques of basketball. Includes team defense and team offense.

P E 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.

P E 109
Golf (1)

Instructions for beginners, fundamentals, rules, and etiquette. Off campus but first class will meet in HWC 103.

P E 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.

P E 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.

P E 115
Volleyball (1)

This course will cover the fundamental skills and techniques of beginning volleyball. Includes basic rules, scoring and strategy.

P E 123
Basic Weight Training/Conditioning (HF) (1)

Designed to condition the musculature of the body using machine and free weights.

P E 125
Free Weights (HF) (1)

Designed to develop muscle fitness through lifting free weights, Olympic lifts, plyometrics and power lifting. Students need prior weight training experience.

P E 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.

P E 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.

P E 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.

P E 140
Boot Camp Basics (HF) (1)

A high-impact exercise class designed to improve muscle strength, endurance, flexibility and aerobic capacity.

P E 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.

P E 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.

P E 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 fastpitch 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 fastpitch.

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 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, team offense, and team defense. Prerequisite: PE 103 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 fastpitch 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.
P. E. 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 fastpitch. Prerequisite: P. E. 164.

P. E. 265
Softball Applications II (3)
Learn how to apply the advanced techniques of softball in game-like situations. Prerequisite: P. E. 165 or instructor permission.

P. E. 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: P. E. 166 or instructor permission.

P. E. 267
Advanced Basketball Fundamentals (1)
More advanced skills practiced. Prerequisite: P. E. 167 or instructor permission.

P. E. 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: P. E. 169.

P. E. 271
Physical Education 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.

P. E. 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: P. E. 271 or instructor permission.

P. E. 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: P. E. 272 or instructor permission.

P. E. 275
Prevention and Care of Athletic Injuries (3)
The prevention, recognition, and care of athletic injuries.

PHYSICS

P. HYS& 110
Phys: Non-Sci Majrs 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.

P. HYS& 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.

P. HYS& 115
GENERAL PHYS II w/Lab (S) (5)

P. HYS& 116
General Phys III w/Lab (S) (5)

P. HYS& 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

P. HYS& 222
Engineering Physics II (S) (5)
Wave motion, thermodynamics, and electrostatics. Includes sound, heat transfer, law of thermodynamics, and electric fields. Prerequisite: P. HYS& 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 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 or instructor permission.

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 though 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
Spanish for Public Service (3)
Basic Spanish to meet the needs of working professionals who wish to communicate with Spanish speaking persons.

SPAN 106, 107
Spanish for Social Services (3)
Basic Spanish to meet the needs of working professionals who wish to communicate with Spanish speaking persons.

SPAN& 121
Spanish I (H) (5)
First class in 100 level sequence. Learn the fundamental skills of listening comprehension, speaking, reading and writing. Develop an awareness of Spanish speaking countries and their cultures.

SPAN& 122
Spanish II (H) (5)
Second class in sequence. Learn the fundamental skills of listening comprehension, speaking, reading and writing. Develop an awareness of Spanish speaking countries and their cultures. Prerequisite: SPAN& 121 or instructor permission.

SPAN& 123
Spanish III (H) (5)
Third class in sequence. Learn the fundamental skills of listening comprehension, speaking, reading and writing. Develop an awareness of Spanish speaking countries and their cultures. Prerequisite: SPAN& 122 or instructor permission.

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
Heritage Spanish I (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 202
Heritage Spanish II (5)
Introduction to academic Spanish for heritage/native speakers. Course is second in sequence designed to prepare speakers for more advanced study. Areas of focus include grammar terminology, spelling, accentuation, reading, writing and discussion of cultural topics. Prerequisite: Native or heritage speaker of Spanish, Instructor permission required.

SPAN& 221, 222, 223
Spanish IV (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.

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  
**GTAW and Welding (11)**

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 (11)**

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  
**MIG Welding (10)**

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 265  
**Advanced Arc Welding (11)**

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 (11)**

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 (10)

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.
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)

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 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. 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 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 Dean 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

Katie Dailey
Program Specialist, Baccalaureate Programs
360-736-9391, ext. 608
bachelors@centralia.edu
Walton Science Center, Room 120
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

**PURPOSE:** The BAS-AM 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 Analytics**  
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 & 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**  
Apply financial management theory and tools in the strategic planning process.  
Use economic theory to explain the influence of local, national, and global economic issues in strategic planning.  
Apply project management concepts to develop a project plan and manage and track a project.  
Demonstrate the value of adjusting marketing strategies based on the analysis of company/product strengths to drive products and/or improve customer service.  
Use economic theory to explain the influence of local, national, and global economic issues in strategic planning.

**Tax & Audit**  
Report financial performance in accordance with accounting principles required in tax, commercial, or government conceptual frameworks.  
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

<table>
<thead>
<tr>
<th>Fall Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 300 Foundations of Mgmt ..................</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 370 Practicum in Management .............</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 380 Marketing for Managers* .............</td>
<td>OR</td>
</tr>
<tr>
<td>ACCT BAS-AM Accounting Elective* .............</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong> ..................................................</td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 315 Ethics .......................................</td>
<td>5</td>
</tr>
<tr>
<td>CMST 330 Pro. &amp; Org. Communication ...........</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 310 Acctng Principles for Managers ......</td>
<td>OR</td>
</tr>
<tr>
<td>ACCT BAS-AM Accounting Elective* .............</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong> ..................................................</td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 320 Leadership &amp; Org Behavior ..........</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 420 Mgmt of Human Resources .............</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 325 Legal Issues ............................</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong> ..................................................</td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 440 Environment Issues</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 340 Applied Financial Mgmt ..............</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 360 Business Princ. Plan &amp; Strat .......</td>
<td>OR</td>
</tr>
<tr>
<td>ACCT BAS-AM Accounting Elective* .............</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong> ..................................................</td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 350 Managerial Statistics ...............</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 490 Strategic Mgmt &amp; Policy .............</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 410 Project Management ..................</td>
<td>OR</td>
</tr>
<tr>
<td>ACCT BAS-AM Accounting Elective* .............</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong> ..................................................</td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 435 Operations Management ...............</td>
<td>OR</td>
</tr>
<tr>
<td>ACCT BAS-AM Accounting Elective* .............</td>
<td>5</td>
</tr>
<tr>
<td>ECON 305 Managerial Economics ................</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 470 Applied Mgmt Internship .............</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong> ..................................................</td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

* 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.
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
Acctg Prin for Mgrs (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
Prof & Org 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.

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 Prin, Plnng & 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  
Mgmt 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 by 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.
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**
- ENVS& 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
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.
- 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)

<table>
<thead>
<tr>
<th>Fall Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET 300 Applied Management</td>
<td>5</td>
</tr>
<tr>
<td>DET 430 Shop/Fleet Management</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220 Pubic Speaking</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 101 English Composition</td>
<td>5</td>
</tr>
<tr>
<td>College level MATH, if not met</td>
<td>5</td>
</tr>
<tr>
<td><strong>15-20</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET 330 Hydraulics II</td>
<td>5</td>
</tr>
<tr>
<td>DET 340 Combustions Engine Fuels</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 100 General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 110 Physics: Non Sci Major w/lab</td>
<td>5</td>
</tr>
<tr>
<td><strong>20</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, First Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET 310 Electrical III</td>
<td>5</td>
</tr>
<tr>
<td>DET 360 Power Gen &amp; Maintenance</td>
<td>5</td>
</tr>
<tr>
<td>HUM 315 Ethics</td>
<td>5</td>
</tr>
<tr>
<td>DET 450 Internship</td>
<td>5</td>
</tr>
<tr>
<td><strong>20</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET 320 Emissions Control</td>
<td>5</td>
</tr>
<tr>
<td>DET 400 Material Science of Fluids</td>
<td>5</td>
</tr>
<tr>
<td>ENVS&amp; 100 Survey of Env. Science</td>
<td>5</td>
</tr>
<tr>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET 350 Applied Failure Analysis</td>
<td>5</td>
</tr>
<tr>
<td>DET 410 Regulatory Issues</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 235 Technical Writing***</td>
<td>5</td>
</tr>
<tr>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter, Second Year</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET 420 Metalwork &amp; Fabrication</td>
<td>5</td>
</tr>
<tr>
<td>DET 440 Hybrid Drives Electric/Hydraulic</td>
<td>5</td>
</tr>
<tr>
<td>ECON&amp; 201 Microeconomics***</td>
<td>5</td>
</tr>
<tr>
<td>ECON&amp; 202 Macroeconomics***</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>5</td>
</tr>
<tr>
<td><strong>20</strong></td>
<td></td>
</tr>
</tbody>
</table>

*** Must meet GURs (General Education Requirements/ Distribution Requirements) as listed under the Associate in Arts Degree (DTA).
BAS DIESEL TECHNOLOGY COURSE DESCRIPTIONS

**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 by 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 by 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 by 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 by 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 by 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 by 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 by 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 (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 by 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 by 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.

**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.
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

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.

**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

**MATH & STATISTICS**
- 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

Emphasis: Application Development
Degree: Bachelor of Applied Science

PURPOSE: The Bachelor of Applied Science in Information Technology: Application Development (BAS-IT: AD) program has been designed to ensure graduates have a strong technical foundation in application and software development and are prepared to work in teams to participate as application designers and to manage IT projects, and to prepare software documentation. Course objectives are aligned with the following general learning themes and program outcomes.

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 of Self and Others – An awareness of the values, beliefs, customs, and contributions of persons 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.

PROGRAM OUTCOMES:
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.

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:

Fall Quarter, First Year
IT 310 Advanced Web Applications .................. 5
IT 320 Application Development Methodologies ... 5
Humanities elective ........................................... 5
15

Winter Quarter, First Year
CMST 330 Professional and Organizational Communications .......... 5
IT 330 Applications/Software Engineering I ...... 5
Social Science elective ....................................... 5
15

Spring Quarter, First Year
IT 340 Application/Software Engineering II ...... 5
IT 350 Advanced database Design and Implementation ............... 5
HUM 315 Ethics ............................................. 5
15

Fall Quarter, Second Year
IT 410 Advanced Data Access Techniques .......... 5
IT 440 BAS-IT: AD Internship I .................................. 5
MATH 228 Discrete Mathematics ................................... 5
15

Spring Quarter, Second Year
IT 420 Business Intelligence Applications .......... 5
IT 450 BAS-IT: AD Internship II................................. 5
Natural Science elective ......................................... 5
15

Winter Quarter, Second Year
IT 430 Information Security for Developers ........ 5
IT 460 BAS-IT: AD Capstone ..................................... 5
General education elective ................................... 5
15

Course outlines for upper division (300-400) courses are still in development. Outlines will be published and available before the start of the fall quarter 2016.