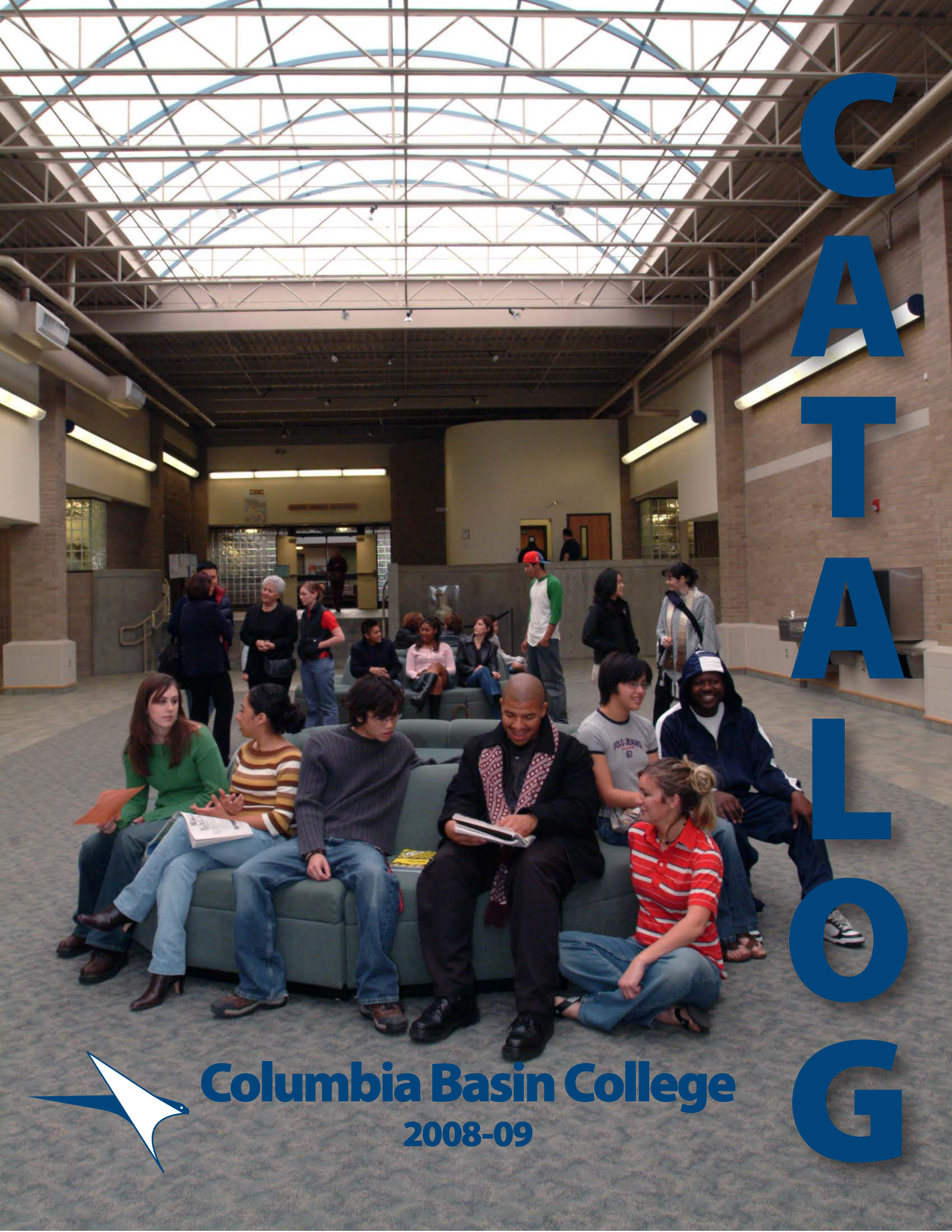


CATALOG

Columbia Basin College

2008-09

Table of Contents

Table of Contents

General Information

About Columbia Basin College

Welcome to Columbia Basin College!

Columbia Basin College is ***your*** community college. If you seek the first two years of a university education, want to pursue a two-year degree or certificate to begin a successful career, or earn your Bachelor of Applied Science degree in Applied Management, CBC is your first choice for higher education.

CBC is also your first choice to improve your English language skills, qualify for a GED certificate, increase your personal enrichment, or assist you with a business start-up.

We are here to help in many ways.

Columbia Basin College is ***your*** community college.

Richard Cummins, Ph.D., President

Columbia Basin College Foundation

Columbia Basin College is a vital economic partner in Benton and Franklin counties, providing educational, professional/technical, and workforce training and cultural programs for our region.

The Columbia Basin College Foundation was organized in 1984 to provide new sources of financial support for Columbia Basin College programs and projects which are increasingly under-funded by state tax dollars.

Financial support is needed from private foundations, individuals, and corporations in order to keep pace with facilities and program needs designed to meet community needs.

The Columbia Basin College Foundation has an ongoing priority of providing capital and funding support for new programs at the College, in addition to offering scholarships annually to outstanding high school seniors and nontraditional students who intend to enroll at Columbia Basin College.

The Columbia Basin College Foundation Board of Directors represents a broad spectrum of alumni, business, civic, and professional leaders.

College Overview

Mission and Goals Statement

Columbia Basin College exists in an environment of diversity, fairness, and equity to ensure that the people of Benton and Franklin counties have access to educational programs providing sufficient knowledge for higher educational achievement, meaningful employment, cultural enrichment, physical/emotional well-being, and basic skills development.

CBC is a comprehensive two-year college that provides quality education and effective job preparation. Because of our comprehensive mission, CBC has a powerful impact on every segment of the community. We strive to provide:

- open and easy access to the College for all citizens of Benton and Franklin counties;
- an excellent and affordable academic program for students who plan to transfer to four-year institutions;
- an effective career and workforce program to train and retrain workers for jobs in present and future industries;
- diversity in art, music, drama, and athletics that enrich the entire community;
- opportunities to obtain physical and emotional well-being;
- appropriate basic skills and gateway courses with effective support services.

Accreditation

Columbia Basin College is accredited by the Northwest Commission on Colleges and Universities, an institutional accrediting body recognized by the Council for Higher Education Accreditation and/or the Secretary of the U.S. Department of Education.

Northwest Commission on Colleges and Universities
8060 165th Avenue N.E.
Suite 100
Redmond, WA 98052

College-Wide Learning Outcomes

Students who graduate from Columbia Basin College will be able to identify and demonstrate their knowledge in a variety of general education areas. The outcome of their learning experience is demonstrable in the areas embodied in the college-wide Learning Outcomes. CBC provides the opportunity for students to successfully complete courses which incorporate knowledge in six areas. Upon completion, these students will be eligible for transfer to a Washington state-supported university or be prepared for employment.

Columbia Basin College's Learning Outcomes are:

Think Critically
- Understand, analyze, and evaluate the elements of one's environment and one's habits of thought
- Conceptualize alternatives to both

Reason Quantitatively and Symbolically
- Develop a sense of number and pattern
- Analyze, evaluate, and synthesize symbolic statements and quantitative arguments

Communicate Effectively
- Use spoken and written language to express opinions, discuss concepts, and persuade an audience
- Synthesize ideas and supporting information to create effective messages

Apply Information Tools and Resources
- Accurately assess information needs
- Select appropriate information tools and resources and use them efficiently
- Evaluate, manage, and use information effectively and responsibly

Develop Cultural Awareness
- Respect self and others
- Explore and appreciate different cultures in an increasingly diverse, global community
- Challenge culture-bound assumptions

Master Program Learning Outcomes
- Become familiar with a body of knowledge
- Demonstrate ability to know or do the stated program learning outcomes, which are developed by each department and program and assessed annually

History

Columbia Basin College has served Benton and Franklin counties for half a century.

The first classes at Columbia Basin College were authorized by the State Board of Education in May 1955. Classes began in September 1955 in temporary quarters at the former Pasco Naval Base.

The Pasco School District received title to more than 150 acres of land for the present campus site in Pasco. CBC's first permanent building was completed in 1957 and is the current V building. CBC's capital construction program has since added 18 permanent buildings.

The Community College Act of 1967 separated the College from the Pasco School District and Columbia Basin College became the 19th community college district in the state of Washington.

CBC continually expands and renovates programs and structures to meet the community's needs. The enrollment of the College has grown from 299 students in 1955 to more than 7,000 students per quarter today. The faculty includes 125 full-time instructors and 300 part-time instructors.

In 2003, Columbia Basin College received federal designation as a Hispanic Serving Institution (HSI) by the U.S. Department of Education. This designation is received when an institution has an enrollment of at least 25% Hispanic students, of which 50% are designated as low-income. As a HSI, Columbia Basin College is eligible to apply for federal grant programs designed to meet our unique needs.

CBC Richland

Columbia Basin College has operated a branch campus in Richland since 1974. In 2006, the campus underwent immense growth with a new four-story, 66,000 square foot building for health science programs. The Columbia Basin College Health Science Center opened in fall 2006. The facility is a cooperative effort between CBC and Kadlec Medical Center. The Health Science Center houses nearly all of CBC's health science programs. The old Richland campus is the site of Delta High School, the new Science, Technology, Engineering, and Mathematics high school.

The older facilities will continue to house CBC's Fire Science program. CBC Richland is located at 1011 Northgate Dr., next to the Richland Public Library.

College Schedule

Columbia Basin College's academic year is divided into four quarters: fall, winter, spring (approximately eleven weeks each), and a summer session (approximately eight weeks long).

Day classes usually meet for 60 minutes. Most classes are scheduled Monday through Thursday. Columbia Basin College offers evening, weekend, fast track, and distance learning classes. Please refer to the quarterly class schedule for days and times.

Administrative offices for the Pasco campus are open Monday through Friday, 7:30 a.m. to 4:30 p.m. Many Student Services offices offer extended hours, as does the CBC Library and Bookstore. Please refer to the quarterly class schedule for these times. Summer quarter administrative hours may change somewhat. Please refer to the CBC website.

College Costs

Costs of Attending CBC

The costs listed below are estimated expenses. Actual costs may vary depending on credits enrolled and lifestyle.

	Resident Dependent Living With Parents	Resident Living Away From Parents
One Quarter		
Tuition & Fees*	$978	$978
Books & Supplies	$308	$308
Room & Board	$866	$2,684
Transportation	$418	$366
Personal Expenses	$530	$647
Total	**$3,100**	**$4,983**
Three Quarters		
Tuition & Fees	$2,936	$2,936
Books & Supplies	$924	$924
Room & Board	$2,598	$8,052
Transportation	$1,254	$1,098
Personal Expenses	$1,590	$1,941
Total	**$9,292**	**$14,943**

*Based on 2008-2009 rates for 15 credits. *Does not include special course fees. Costs are subject to change. See quarterly schedules for specific credit costs and special fees.

* International students may be charged $2,452 per quarter.

Student Status for Tuition and Fee Purposes

Full-time student: student registered for 10 or more credits per quarter.

Part-time student: student registered for 9 or fewer credits per quarter.

Student Status for Financial Aid

Full-time student: student registered for 12 or more credits per quarter.

Three-quarter-time student: student registered for 9 to 11 credits per quarter.

Half-time student: student registered for 6 to 8 credits per quarter.

Less-than-half-time student: student registered for 1 to 5 credits.

Residency Requirements for In-State Tuition

A resident student is one who is a U.S. citizen and has met specific requirements demonstrating permanent residence in the state of Washington. Permanent residence in the state of Washington is evidenced by physical presence in the state as well as having a sufficient number of permanent Washington documents. Documentation should be dated 1 year and 1 day prior to the commencement of the quarter for which a student is applying for residency status.

These documents can include:

- Voter's Registration
- Washington State Driver's License
- Car Registration
- Bank Accounts
- Federal Tax Return (required)

Students wishing to change their residency classification must complete a residency questionnaire and provide necessary documentation. Application for reclassification prior to registration into classes is preferred. Residency reclassification must take place within 30 calendar days of the first day of the quarter.

Special tuition allowances may apply to some eligible non-citizens, Washington higher education employees, and to military personnel and their dependents stationed in the state of Washington. For further information, contact the Admissions and Registration office.

How To Get Started – Admissions

How to Enroll in a Class at CBC

Student Category	Enrollment Procedures
New students working on a degree or certificate	• Submit Application for Admission with processing fee to the New Student Center. • Take ASSET/COMPASS test. • Attend Student Orientation to Advising and Registration (SOAR).
Students working on a degree or certificate, transferring credits from another college	• Submit Application for Admission with processing fee. • Submit official transcripts from other colleges. To be official, transcript must be in a sealed envelope from the college that issued it. • If you have not completed English and math at your previous college, take the ASSET/COMPASS test. • Attend a SOAR session and/or register for classes with a counselor/advisor.
Students returning after an absence of one quarter but less than four quarters and planning to work on a degree or certificate	• Contact the Admissions/Registration office to reactivate file. • Register for courses according to dates in class schedule. • Students on academic probation must meet with a counselor to register.
Students returning after an absence of more than four quarters and planning to work on a degree	• Submit Application for Admission with processing fee. • Register for courses according to dates in class schedule. • Students on academic probation must meet with a counselor to register.
New students returning or transfer not seeking a degree or certificate	• Submit Application for Admission with processing fee. • Register for courses according to dates in class schedule. • Students on academic probation must meet with a counselor to register.
High School Completion students, new or transfer	• Submit Application for Admission with processing fee. • Meet with high school completion advisor for registration.
Students in the Running Start program	• High school juniors and seniors should contact their high school counselor or the CBC Running Start office at (509) 542-4481 for eligibility information.
High school students taking courses for High School Enrichment	• Submit an Application for Admission with processing fee. • Submit High School Enrichment form. • Submit official high school transcript. • Take ASSET/COMPASS test if required to meet prerequisite for the course. • Students may not register until the first day of the quarter on a space available basis.
Students attending English as a Second Language (ESL), Adult Basic Education (ABE), or GED preparation courses	• Students interested in these programs should contact the department at (509) 542-5501 for registration. • WorkFirst also offers GED preparation classes. Contact their office for information at (509) 542-4719.
Students planning to take Community Service, or other non-credit courses	• Students wishing to take regular college classes under the Gold Card rate may register to audit a class beginning the third day of the quarter on a space-available basis. • For other non-credit courses, students may register at the Admissions/Registration office.

If you need accommodations for ASSET/COMPASS testing based on a disability, please contact the Resource Center (509) 547-0511, ext. 2325 TDD/TTY: (509) 546-0400.

Admission Information

Columbia Basin College maintains an open door admission policy and grants admission to applicants who are at least 18 years of age and/or have graduated from high schools accredited by a regional accrediting association or have a GED Certificate. Home school graduates and graduates from non-accredited high schools are admitted based on their ASSET/COMPASS assessment scores.

Applicants who are less than 16 years of age and/or do not meet Columbia Basin College admission requirements may be admitted through a special admission process.

Contact the Admissions and Registration office for the special admissions policy and procedure.

Admission to Columbia Basin College does not guarantee admission to all degree or certificate programs. Typically, incoming students must meet minimum English and mathematics requirements before being admitted into a professional/technical program. In addition, some programs have special applications and admission procedures and limited entry dates. Students should consult the catalog for admission requirements in specific programs.

Transfer Policy

Columbia Basin College subscribes to the statewide policy on Inter-Collegiate Transfer and Articulation, as endorsed by the public and private colleges and universities of Washington and the State Board for Community and Technical Colleges as adopted by the Higher Education Coordinating Board.

The policy addresses the rights and responsibilities of students and the process for review and appeal in transfer credit disputes.

The college recognizes academic credit earned at regionally accredited collegiate institutions, providing the credit is essentially equivalent in academic level and nature to courses offered at Columbia Basin College.

For more detailed information, contact Admissions.

How to Apply for General Admission

Applicants should apply at least one month prior to the start of the quarter in which they plan to enroll. To begin the admission process, applicants must complete and submit an Application for Admission form, available at Admissions in the Student Services Center on the Pasco campus. Applicants may download an Application for Admission form from the CBC website at www.columbiabasin.edu/admissions. A non-refundable application fee must be submitted with all new applications. Students who are absent for more than four consecutive quarters from the last quarter of enrollment activity will be charged the application fee. When an applicant's file is complete, the applicant will receive notification of acceptance and registration instructions.

Applicants transferring from another college must submit an official transcript from each accredited college attended. Certain processes such as financial aid or admission to some programs may be delayed without transcripts from prior schools.

High school transcripts generally are not required from applicants 18 years of age or older. However, some degree programs require a high school transcript as part of the admission criteria and for evaluation of prerequisites. Refer to the catalog for specific program requirements.

Admission to High School Completion Program

The High School Completion program is offered for people 18 years or older and for those whose high school class has graduated. The purpose is re-entry into the educational system for individuals who desire a high school diploma.

Applicants must submit a completed Application for Admissions form and an official high school transcript and must complete the ASSET/COMPASS assessment. For general information about the High School Completion program, contact the Counseling and Student Development Center. To schedule an ASSET/COMPASS testing appointment, contact the Assessment Center.

Anyone whose high school class has not graduated, who has not earned a GED, or who is between 16 and 18 years of age, must submit a special request letter to the Admission/Graduation Committee. It must be from appropriate high school personnel and parent(s). The letter must address three specific areas:

- the student's academic ability to function in the collegiate environment;
- the student's social and emotional ability to function in the collegiate environment;
- the specific extenuating circumstances in which the student cannot complete the diploma through the high school.

Admission to High School Enrichment Program

Students enrolled in Benton or Franklin County high schools may take courses at Columbia Basin College for enrichment. The high school enrichment program is available to students 16 years of age or older who are high school seniors. Enrollment is limited to:

- a maximum of two courses per quarter;
- registration on the first day of the quarter on a space available basis.

Admission procedures require submitting the following:

- a completed Application for Admission form;
- a nonrefundable application processing fee;
- an official high school transcript;
- High School Enrichment Release form signed by parent or legal guardian and by an appropriate high school official (form available in the Admissions and Registration office).

Students with junior standing and at least 16 years of age or older may be considered for admission upon special request to the Admissions/Graduation Committee.

Enrichment students are charged regular tuition and fees per credit.

Admission to Running Start

Running Start is a program created by the Washington State Legislature to provide high school juniors and seniors an opportunity to enroll in college classes that will meet high school graduation requirements, as well as apply toward a college degree. Students are not charged tuition. They are, however, required to pay lab and comprehensive fees, books, supplies, and transportation costs.

To participate in the program, students are required to complete the ASSET/COMPASS assessment and must qualify for reading at college level and qualify for either ENG 101 or MTH 154. Running Start students may not enroll in any courses below the 100 level. Students who qualify should first meet with their high school counselors to develop their academic schedule.

Eligible Running Start students must complete and submit to the Running Start coordinator: (1) a CBC admission application, (2) a Running Start pre-enrollment form, and (3) an official high school transcript.

After the initial enrollment, students will be required to complete the pre-enrollment form each quarter prior to registration.

College in the High School

College in the High School is a cooperative program between local school districts and Columbia Basin College. It allows high school students to simultaneously earn high school and college credit for work done in one or more pre-approved advanced high school courses. The courses are taught by qualifying high school teachers who work closely with CBC faculty mentors to insure that the work the students perform in the high school course is equivalent to similar courses taught on campus.

Students can accelerate their academic studies in this dual credit program. The courses included in the program are those most often required in the freshman coursework of Washington's community colleges and universities. Classes are challenging and similar in content and rigor to the classes taught on campus. They are more intensive and often require more time and effort outside the classroom than high school students are used to. Upon successful completion, the course is transcripted with the college's course title and number, just as it appears in the catalog. Grades awarded for college credit (and posted to the college transcript) will be determined using the CBC grading scale, and may be different from the high school grade awarded. Students in the program must pay fees to CBC and purchase required textbooks.

The College in the High School program is coordinated by the Tech Prep Coordinator, Ying-Chen Milbrath. She may be contacted at (509) 542-4559 or by email at ymilbrath@columbiabasin.edu.

International Student Admission

Columbia Basin College welcomes qualified international students.

Admission procedures require submitting the following:

- a completed Columbia Basin College international student application form, filled out in the student's own handwriting;
- a completed Columbia Basin College application. An application fee must accompany the application. Funds are to be in U.S. dollars;
- official transcripts translated into English by a certified translation agency from all previous high schools, colleges, or universities;
- a Columbia Basin College certificate of financial responsibility and other supporting documents showing proof of ability to pay tuition, fees, and living expenses for the school year. A bank official's signature and bank seal is required on the certification. International students are required to pay the international tuition amounts for each term of study, regardless of their length of stay in Washington state;
- an official TOEFL (Test of English as a Foreign Language) score of 500 (paper-based testing), or 173 (computer-based testing), or above. This is only required of applicants from areas where English is not a native language.

In addition to the above requirements, international students transferring from another school in the United States must also submit the following:

- a photocopy of all previously issued I-20 forms;
- the I-94 card;
- transfer eligibility form to be completed by your current or former international student advisor.

If all the admission requirements are satisfied and the student is admitted to Columbia Basin College, an I-20 for F-1 student status will be issued.

This college has four quarters; fall, winter, spring, and summer. Students may begin any quarter. International students must enroll for 12 credits each quarter and maintain a 2.0 GPA or better. International students are allowed to take one quarter off per academic year, once they have completed three consecutive quarters.

All international students are required to have major medical insurance. Students must purchase insurance through the College or provide proof of equivalent insurance from their own country.

International students are not eligible for federal/state student financial assistance. They may be eligible for some scholarships and private loans. Opportunities for on-campus employment are extremely limited.

International students are not eligible to work off-campus except in some very special circumstances; they should assume no money or employment would be available from the College while they are attending Columbia Basin College.

Further information and appropriate forms may be obtained from: Columbia Basin College Admissions and Registration, 2600 N. 20th Ave., Pasco, WA 99301, USA.

Admission to ESL

(English as a Second Language)

The English as a Second Language (ESL) program provides six levels of English language instruction to immigrants and refugees. Depending on levels, classes are held on the Pasco campus, at the Chase Center in Pasco, and at various sites around our service district. Students must be 18 years or older and will be tested to determine their speaking, listening, reading, and writing skills prior to being placed into an appropriate class. In addition, CBC offers ESL courses that focus on workplace skills and provide support to ESL students enrolled in vocational programs. Contact the ESL registration at (509) 542-5501 for additional program and registration information. There is a $25 tuition charge per quarter.

Admission to GED

(General Educational Degree)

The GED program offers classes for people 18 years or older who left high school without receiving a diploma. The GED exam provides participants with a means to qualify for educational and employment opportunities. The GED test consists of five areas: writing skills, social studies, science, interpreting literature and arts, and mathematics. Admission to the GED program is fulfilled by:

- scheduling an orientation with ABE/GED support staff, at (509) 542-5501;
- participating in the orientation;
- taking the CASAS entry test;
- completing WABERS (Washington Adult Basic Education Reporting System) registration;
- making a payment of $25 for quarterly tuition.

Individuals with a disability can qualify for accommodations on the GED test. Contact the Resource Center (509) 542-5525 TDD/TTY: (509) 546-0400.

Admission to HEP

(High School Equivalency Program)

The HEP program is funded by the U.S. Department of Education and implemented through the Diversity Division of the college. It is a secondary migrant education program designed to meet the special needs of migrant and seasonal farm workers in pursuit of the GED, a certificate of high school equivalency. The intent of the program is to assist qualified students in preparing for the GED test and to help them establish long-range goals.

Admission to the program is open to migrant or seasonally employed agricultural workers and/or their children who:

- within the past 24 months, have worked a minimum of 75 days in migrant/seasonal farm work; or been eligible or have participated in a migrant education program or in a JTPA Section 402 program (now WIA Section 167);
- are at least 16 years of age or older;
- are not currently enrolled in high school;
- have not earned a high school diploma or its equivalent;
- demonstrate a willingness to study in preparation for the GED exam;
- demonstrate a score above 6.0 level on the entrance exam;
- demonstrate a willingness to conform to the rules of the program.

Student Orientations

All new, degree and certificate seeking students and students who have earned 30 or less quarter-based college-level credits are required to attend Student Orientation to Advising and Registration (SOAR). SOAR is offered prior to each quarter to review important information from the College catalog and quarterly schedule. Students will learn about various resources on campus, general information about CBC degrees, and how to register for classes. Students meet in small groups lead by Educational Planners and Counselors who will assist them in the registration and advising processes.

At SOAR, students will register for First Year Introduction (FYI), a 12-hour transition workshop. FYI prepares new students for academic and social success by providing them with critical knowledge and strategies to be a successful college student. As part of FYI, students will build relationships with staff, faculty, and other students --- a necessary experience for academic integration and success. As a result of attending FYI, students will be able to identify key College resources, improve critical thinking, and be able to better articulate how they learn.

Students who have earned 30 quarter-based college-level credits or more, from accredited institution and have a cumulative college-level GPA of at least 2.0 may request that the FYI requirement be waived. Please contact the Office of Student Success and Retention if you have further questions about this process.

Transfer Intent Students

Students who intend to transfer to a baccalaureate institution to complete a four-year degree are strongly recommended to work closely with Columbia Basin College Counselors and Educational Planners when planning their curricula. Additionally, students should familiarize themselves with the requirements and procedures of the institution to which they wish to transfer as soon as possible in their college experience. These are generally found in the baccalaureate institution's catalog or on their website.

The following tips may be helpful to transfer intent students:

- students should know the admission requirements for transfer;
- students should know the general graduation requirements and the recommended courses for the first two years of college in their field of interest or major;
- courses numbered 100 and above will usually transfer to most baccalaureate institutions. However, acceptance of CBC courses, non-traditional credits, credits by examination, and transfer GPA computation remain a prerogative of the receiving baccalaureate institution. Most professional-technical courses are not designated for transfer and are subject to the 15 credit limitation within the Associate in Arts and Science degree;
- any change in major or choice of baccalaureate institution may necessitate adjustment of a student's curriculum to meet the admission and/or course transfer requirements of the different baccalaureate institution. Students should meet with their CBC Counselor or Educational Planner as soon as possible to discuss the impact of any change in their curricula;
- students should attend Columbia Basin College transfer workshops when they are offered;
- students should schedule meetings with representatives of the institution to which they wish to transfer whenever they may be on the CBC campus to meet with prospective students;
- apply to the baccalaureate institution according to the institution's procedures and deadlines, and students should forward their official Columbia Basin College transcript as requested to the baccalaureate institution;
- before transferring, students should arrange to visit the campus of the baccalaureate institution which allows students to see the facilities and visit with an advisor in their major. Students should take a Columbia Basin College transcript of their grades with them to facilitate the advisory meeting.

How to Get Started – Registration

Registration

Registration precedes the beginning of each quarter. Students are not allowed to attend a class unless they are officially registered for those classes. The registration process includes selection of classes, enrollment, and payment of tuition and fees. You will find detailed instructions and procedures in the quarterly class schedule.

Registration Procedures

After completing the admissions process, registration times are assigned on a first-come, first-serve basis. Early application for admission is strongly encouraged. Currently enrolled students are assigned registration times based on cumulative credit hours earned at Columbia Basin College and/or transfer credits officially evaluated by the transcript department.

Any degree-seeking student or any student wishing to register for a math or English course or a course with a math or English prerequisite must complete an ASSET/COMPASS assessment. Contact the Assessment Center to schedule an appointment. There is a charge to take the ASSET/COMPASS assessment. Transfer students who have completed math and/or English from an accredited college will not be required to complete ASSET/COMPASS, provided an official college transcript is submitted that documents the attainment of the necessary prerequisites.

If you need accommodations for ASSET/COMPASS testing based on a disability, please contact the Resource Center (509) 542-5525 TDD/TTY: (509) 546-0400.

Student Identification Card

Students enrolled at Columbia Basin College may obtain a student identification card. It is required for checking out library materials and using the computer labs and/or the fitness lab. It also may be used to participate in college and community activities.

Gold Cards

A reduced tuition fee is available to those individuals 60 years or older who wish to take classes without credit. Applications are available for Gold Card membership at the Admissions and Registration office. Course registration for Gold Card members is on a space available basis, for audit status only, beginning the third day of the quarter.

Kiosk Information System

www.columbiabasin.edu/student

A kiosk is a computerized student information system where students may perform the following actions:

- check registration access times
- register for classes
- make schedule changes
- make student information changes
- access and print class schedules, degree audits, financial aid data, grades, Hope Scholarship information, and transcripts
- pay tuition online

Students may add a class within the first three instructional days of the fall, winter, and spring quarters. Students may drop a class through the 40th day* of the quarter. Students must complete a Schedule Change form and submit it to Admissions/Registration or use Web Registration (www.columbiabasin.edu/student). For summer session and classes scheduled for less than a full quarter, students should contact the Registration office for deadline dates.

Withdrawal Policy and Procedures

The student must initiate withdrawal from a course by submitting a Schedule Change form to the Registration office before the deadlines published in the quarterly class schedule. Students are encouraged to meet with their Counselor or Educational Planner and instructor prior to withdrawing from a class or from college. The Counselor or Educational Planner will review with the student the implications of withdrawing and other possible options.

Any student receiving financial aid is advised to speak with Financial Services staff prior to withdrawing from a class. When a student withdraws from class, they may be required to repay money received from a financial aid award. Withdrawing from a class may negatively impact the student's ability to receive financial aid in the future.

Final withdrawal deadlines based upon 75 percent of the scheduled class meetings. A student may withdraw from a full-term course with no record on the transcript if the withdrawal has been processed by the 10th day* of the quarter. A student withdrawing from a full-term course from the 11th to the 40th day* of the quarter shall have a "W" recorded on his/her transcript. For summer quarter and all alternative class schedules (i.e. Fast Track courses) call the Registration office for withdrawal deadlines.

Types of Withdrawals

Student withdrawal: Initiated by the student (refer to the quarterly schedule for deadlines). Consideration for withdrawal after the deadline requires a student to submit a Petition for Exception with supporting documentation of extenuating circumstances to Admissions/Registration. If approved, a "W" will be recorded on the transcript.

College initiated withdrawal: Initiated by the instructor and/or an administrator. This withdrawal may be the result of excessive absences or, if in the instructor's opinion, further participation in the class will be of little value to the student and/or detrimental to the best interest of the class. An instructor initiated withdrawal must be submitted to the Registrar in order to be processed by the 40th day*.

** check the quarterly schedule for dates*

Refund Policy

CBC will refund tuition and refundable fees if official withdrawal from the college or course(s) occurs within the specified time frame listed below. Certain fees are non-refundable or refundable only if withdrawal occurs prior to the first day of instruction. The first day of instruction is defined as the first day of scheduled classes for the quarter. Instruction days are Monday through Friday. Calendar days are all days including weekend days and holidays. If a deadline for refund falls on a weekend day or a holiday on which the College is closed, the deadline will be the next weekday that the College is open for business.

REFUNDS	**CBC will refund tuition & refundable fees if official withdrawal occurs:**	
Full Sessions	**up to 100% REFUND** (on or before)	**up to 50% REFUND** (on or before)
Fall, Winter, Spring	5th day of the quarter	6th day of the quarter and within first 20 calendar days
Summer	3rd day of the quarter	4th day of the quarter and within first 15 calendar days
Mini-Sessions	**up to 100% REFUND** (on or before)	**up to 50% REFUND** (on or before)
Half-quarter courses	2nd day of the session	3rd day of the session and within first 10 calendar days
Four-week courses	2nd day of the session	3rd day of the session and within first 7 calendar days
Three-week courses	1st day of the session	2nd day of the session and within first 5 calendar days
Two-week courses	1st day of the session	2nd or 3rd day of the session
One-week or less courses	Before 1st day of the session	On 1st day of the session

Refund Exceptions

Non-Refundable Fees

The Admissions application fee is non-refundable. The auditorium fee, per-credit comprehensive fee, and lab fees are not refundable unless withdrawal occurs prior to the first day of instruction.

Small Balance Refund Amount

No refund checks will be processed for credit balances that are less than $10. These refunds may be applied to future CBC charges or redeemed in cash from the Cashier's office (cash balances permitting).

Special Courses

The refund policy may not apply to contract classes, continuing education classes, workshops, or other courses on special schedules.

Title IV Federal Financial Assistance

Students receiving Title IV federal financial assistance should refer to student Financial Services for adding, dropping, and withdrawal policies. Federal regulations supersede CBC's refund policy. Warning: withdrawal may result in the student owing amounts to the Title IV and State Need Grant programs AND to CBC. Consult the student Financial Services office and the Cashier's office before withdrawing.

Financial Aid

Student Financial Services

Student Financial Services personnel assist Columbia Basin College students and their parents to find funding for basic educational costs. Consumer information is available in English and Spanish in the Student Financial Services office.

Financial aid programs at Columbia Basin College follow policies and philosophies established nationally, statewide, and institutionally. They are based on the assumption that the family is primarily responsible for paying educational costs. Financial aid is intended only to fill the gap between the family's contributions and the student's yearly academic expenses.

Eligibility Requirements

A student must fulfill all the following requirements to be eligible for financial aid:

- be a U.S. citizen or an eligible non-citizen;
- be determined to have financial need based upon congressional methodology (except for Unsubsidized Stafford Loan and PLUS);
- have a high school diploma, GED certificate; or ability to benefit;
- be seeking one of the eligible degrees or certificates available at Columbia Basin College;
- not owe a repayment on a federal student grant or be in default on a federal student loan;
- be enrolled for eligible number of credits and be maintaining satisfactory progress according to the Financial Aid Satisfactory Academic Progress Policy available in the Student Financial Services office. Previous academic progress at Columbia Basin College will be considered even if the student was not receiving financial aid at that time;
- not be receiving financial aid at another institution at the same time;
- be registered with Selective Service (if required);
- sign a statement on the Free Application for Federal Student Aid (FAFSA) stating that student aid will be used only for educational purposes;
- have a valid social security number;
- have satisfied federal guidelines regarding any conviction of illegal drug offense, if applicable.

How to Apply

The applicant must complete and submit the Free Application for Federal Student Aid (FAFSA) or Renewal Application and the CBC Financial Aid Data Sheet. Applications are available on the web at www.fafsa.ed.gov and at www.columbiabasin.edu/finaid. Applications should be made in January or February preceding the school year. Each quarterly deadline is printed in each class schedule.

Financial Aid Programs

Students will be considered for all aid programs for which they are eligible and for which funding is available. Three major forms of aid available are: gift aid, employment, and loans.

Gift Aid

Pell Grant

Federal grant program for undergraduate students.

Supplemental Education Opportunity Grant

Federal aid program for students with exceptional need. Must be enrolled in at least six credits and eligible for a Pell Grant.

State Need Grant

Washington state program for resident students who meet financial criteria and are enrolled in at least three credits.

Columbia Basin College Grant

State-funded institutional grant for resident students with demonstrated need.

Scholarships

Scholarships are awarded by organizations based on a variety of criteria. Visit www.columbiabasin.edu/finaid/scholar for details.

Employment

(refer to Career and Employment Services Center for more details)

Federal College Work Study

Program to provide jobs on campus to financially qualified students. Must be enrolled in at least six credits.

State Work Study

State program to provide career-related employment on or off campus to financially qualified students. Must be enrolled in at least six credits.

Loans

Federal Stafford Loan

Federal need-based loan program with deferred payment and low interest (rate is set annually). Must be enrolled in at least six credits. Currently, maximum amount is $3,500 for first-year students and $4,500 for second-year students.

Federal Unsubsidized Stafford Loan

Non-need-based loan for students. Must be enrolled in at least six credits. Interest is charged from the time the loan is disbursed;

Federal Plus Loan

Non-need based federal loan program for parents of undergraduate, dependent students.

Alternative Loan

Non-need based private loans based on criteria determined by individual lending institutions.

Worker Retraining

A state program for unemployed students and displaced homemakers who meet the criteria. See Career and Employment Services Center section for details.

Wage Progression Tuition Assistance

A state program for low income parents. See Career and Employment Services Center section for details.

Veterans Benefits

A veteran eligible to use educational benefits from the Department of Veterans Affairs must meet with the Veterans coordinator located in the Student Financial Services office on the Pasco campus.

Academic Policies

Attendance

Students who choose to attend Columbia Basin College also choose to participate actively in the learning process offered by the College. Students are expected to attend all class sessions; a student may be officially withdrawn from a course by the instructor for excessive absences. Please refer to the course syllabus for attendance requirements.

Attendance in online distance learning classes is determined by login records and by communication with the instructor. A student who does not log into a distance learning class during the first week of an academic term may be officially withdrawn from the class at the discretion of the instructor. A student who does not log into a class for more than one week during an academic term and who otherwise does not communicate with the instructor may also be withdrawn at the discretion of the instructor. Students should consult their course syllabi for specific attendance policies in online classes.

Credit Hours

In general, a lecture class that meets for one hour per week for one quarter will earn the successful student one credit; a lecture class that meets five hours per week for one quarter will earn the student five credits.

Laboratory and certain other courses vary from this pattern. The quarter hours of credit for each course are shown after the course titles in the Course Descriptions section of this catalog.

Students earn credit only for those courses in which they are officially registered for credit. Credit is not earned for courses in which the student enrolls on an audit basis.

Grading Policy

Grades are available on the CBC website at www.columbiabasin.edu/student approximately one week after the end of the quarter. Students may also submit a self-addressed envelope prior to the end of the quarter if they wish to receive a quarterly grade report.

Columbia Basin College uses a decimal grading system for all lecture and laboratory courses numbered 100 and above, and for MTH 95, 96, 97, and 98.

Numerical grades may be considered equivalent to letter grades as shown below.

Decimal Grades	Letter Grade
4.0 - 3.8	A
3.7 - 3.5	A-
3.4 - 3.2	B+
3.1 - 2.9	B
2.8 - 2.6	B-
2.5 - 2.3	C+
2.2 - 2.0	C
1.9 - 1.6	C-
1.5 - 1.3	D+
1.2 - 1.0	D
0.9 - 0.7	D-
0.0	F

Note: Each instructor determines individual course grading procedures. Grading information is contained in course syllabi presented at the beginning of each course.

Letter Grades

Letter grades are awarded in the following categories:

I - Incomplete - no grade points (see statement on incomplete grade policy)
N - Audit** - enrollment under non-credit status
P - Passing* - has no grade point value and is not used in grade calculations
W - Official withdrawal - not calculated in grade point average
Y - No grade reported
Z - No credit award*

**All buy-time options, cooperative work education programs, supervised employment, practica, workshops, and all courses numbered below 100 will be graded in either the P or Z category, except MTH 95, 96, 97, and 98.*

*** A student enrolled in a non-credit or audit course does not receive credit for the course and does not receive a grade. Students must pay regular tuition and fees for the non-credit or audit course and may not be required to do the assigned work or take examinations. Students may change from audit to credit on or before the 10th day of instruction. A change, however, from credit to audit requires instructor permission and must be made on or before the 40th day of instruction. Contact the Registration office for the proper procedures.*

Pass/Fail Grades

- With the exception of College Board Advanced Placement credits, Columbia Basin College does not issue pass/fail grades for college-level, academic transfer courses.
- With the exception of College Board Advanced Placement courses, no course designated as meeting the Associate of Arts and Science degree distribution requirements, the Associate of Science Transfer degree distribution requirements or the academic transfer elective requirements may be graded as pass/fail.
- A "P" grade posted to a transcript for military credit and experience, experiential learning credit, course challenge credit, CLEP, DANTES, and International Baccalaureate credit is limited to use within the restricted electives of the Associate of Arts and Science degree.
- A "P" grade will be issued for courses numbered 100 or above when performance is certified at a 2.0 grade point minimum.
- A "P" graded course may satisfy a prerequisite requirement if the performance level is certified at the established minimum defined in the course description. For certification procedures, contact the Admissions/Registration office.

Caution: ***Other colleges and universities may not accept a "P" graded course in fulfillment of graduation and program requirements.***

Incomplete Grades

An incomplete grade (I) indicates work in progress. Incomplete grades are subject to instructor's discretion. An incomplete grade will be changed to a failing grade if the work is not completed within the first 20 calendar days of the succeeding quarter. The exception is when the incomplete is given in the spring quarter. In this case, the succeeding quarter is the following fall quarter, not the summer quarter.

Computation of Grade Point Averages (GPA)

Grade point averages are calculated by dividing grade points earned at Columbia Basin College by the credit hours attempted. Classes numbered 100 and above, not graded with an I, N, P, W, Z, are included in the GPA. Credits/GPA earned at previous institutions may be factored into the evaluation of graduation requirements.

Grade Appeal Process

Students have responsibility for familiarizing themselves with Columbia Basin College's academic policies and practices as found in the College catalog and website and in course syllabi. Additionally, students are responsible for learning the content of a course of study according to the standards of performance established by the faculty as outlined in course syllabi. Evaluations shall represent instructors' professional judgments of student performance.

If a student has reason to believe that a mistake was made in the computation of a course grade or otherwise believes a problem exists in a course grade that has been assigned, a student may request an appeal of the course grade. Students should understand, however, that a grade appeal may result in a higher grade, a lower grade, or no change in a grade.

The following procedures may be initiated no later than the end of the quarter following the one wherein the course was undertaken (excluding summer quarter):

- the student should engage the instructor of record in an informal meeting to discuss the course grade. If the instructor is no longer employed by CBC or is otherwise unavailable during that quarter, the student should discuss the matter with the appropriate division dean;
- the student should be able to present copies of all assessments and other relevant coursework/materials considered in the computation of the grade that were returned to the student so that an effective review of the course grade may be undertaken;
- if an error is discovered that would change the course grade, the instructor or appropriate division dean will complete the necessary administrative process for a grade change.

Grade Forgiveness Policy

A student may petition to set aside (forgive) grade records for courses taken at CBC. Forgiving grade records does not remove the records from a student's transcript, rather, a "set aside" notation is marked on the transcript to identify course(s) that will be disregarded when calculating a new cumulative grade point average. (Note: Federal Financial Aid regulations do not recognize grade forgiveness.)

Petitions to set aside grade records are available in the Admissions and Registration office. Students must submit petitions to the Registrar no later than one quarter before graduation. Students may petition to set aside grade records provided:

- they are enrolled at Columbia Basin College;
- the grade records to be set aside are at least three years old and the student has not attended CBC during that three-year period;
- they have earned a minimum of 30 credits consecutively with at least a 2.5 cumulative GPA at Columbia Basin College after the set-aside period.

Students may not choose specific courses or quarters to be set aside. Once the set aside has been granted, grade records may not be reinstated to satisfy graduation or prerequisite requirements. Grade records may be set aside only once toward a degree or certificate. It is important that students understand that financial aid does not recognize Grade Forgiveness.

Course Repeat Policy

Courses may be repeated to improve the grade earned. Students are required to contact the Transcript office after completing the repeat so that credit is given only once and the highest grade earned is used to compute the GPA. All courses and earned grades will remain on the transcript however. Students receiving financial aid or veterans benefits should consult the respective office prior to repeating a course as financial penalties may be imposed. Transfer students should consult with a Counselor prior to repeating a course. Courses repeated more than three times are subject to all instructional costs that are equivalent to non-resident tuition.

A student who takes a course at Columbia Basin College and subsequently repeats the course at another fully accredited college or university shall be granted a repeat, upon request, for that course with the following conditions:

- the student must be enrolled at Columbia Basin College;
- the course must be evaluated by CBC and verified as substantially equivalent in credit and content;
- all courses and earned grades will remain on the transcript. A repeat indicator will appear on the CBC transcript and the original grade will be removed from the GPA;
- a notation will be entered on the transcript indicating the course was repeated via transfer.

Quarterly Honors Designations

Students who earn 12 credits in courses 100 or above within the quarter and achieve a quarterly GPA of 3.50-3.84 will be named to the Deans' Honor Roll.

Students who earn 12 credits in courses 100 or above within the quarter and achieve a quarterly GPA of 3.85-4.00 will be named to the President's Honor Roll.

Graduation Honors Designations

Students who graduate with a cumulative GPA of 3.50-3.84 will graduate "with Honors".

Students who graduate with a cumulative GPA of 3.85-4.00 will graduate "with High Honors".

Standards of Academic Progress and Performance

A student's enrollment at Columbia Basin College is a partnership among the student, the College, and the State of Washington. Columbia Basin College has a responsibility to each student, but also to the State that helps fund each student's college education, to develop standards of academic progress and performance. SB 5135 (enacted July 2003) requires timely completion of degrees and certificates in order to make the most efficient use of instructional resources and provide capacity within colleges for additional students.

The overall objectives of Columbia Basin College's Standards of Academic Progress and Performance are to improve the performance of students having academic difficulty and to support CBC's efforts to provide sound educational programs of the highest quality. Therefore in conformance with SB 5135, the College utilizes various resources and support programs to assist students toward program completion and successful academic performance:

- the College provides detailed information about degree and certificate requirements and the College's Standards of Academic Progress and Performance at mandatory advising, registration, and orientation programs for new degree and certificate seeking students;
- the College monitors student progress and academic performance throughout enrollment and intervenes when expectations are not being met.

In complying with SB 5135, Columbia Basin College does not intend to discourage or penalize students who are sincerely trying to make good use of the College's instructional services. Nevertheless, there may be instances when the College may determine that a student is not benefiting from continued enrollment. In such cases, the College may take steps to do either of the following:

- the College may limit or deny future enrollment to that student;
- the College may continue enrollment with the student bearing more of the cost.

In order to assist students in the timely completion of degrees and certificates, Columbia Basin College monitors student progress at pivotal stages of their enrollment.

- As they begin their studies at CBC, students are provided detailed information about degree and certificate requirements. During our mandatory transition workshop for all new degree- and certificate-seeking students (FYI: First Year Introduction), students develop an educational plan that maps out a strategy to meet degree or certificate requirements.
- At approximately 65 percent of credits required for degree or certificate completion, the College will invite students to meet with Counselors to review their academic progress and to prepare a graduation application. At this time, Counselors may advise that students make changes in their educational plans as necessary to complete their degrees or certificates within a reasonable time.

In the unusual case where a student has earned more than 125 percent of the credits required for degree or certificate completion and has not yet completed a graduation application, CBC may require advisor or Counselor approval in selecting courses to ensure relevance to their educational program plan.

Academic Progress Policy

- Columbia Basin College will monitor all students indicating degree or certificate intent to ensure completion of their stated intent within a reasonable time. Only college-level credits will be monitored.
- Students are provided detailed information about degree and certificate requirements when they begin their studies at CBC. During the mandatory transition workshop for all new degree- and certificate-seeking students (FYI: First Year Introduction), students develop an educational plan that maps out a strategy to meet degree or certificate requirements.
- At approximately 65% of credits required for degree or certificate completion, students are requested to meet with counselors to review their academic progress and to prepare graduation applications. At this time counselors may advise that students make changes in their educational plans as necessary to complete their degrees or certificates within a reasonable time.
- In the unusual case where a student has earned more than 125% of the credits required for degree or certificate completion and has not yet completed a graduation application, CBC may require advisor or counselor approval in selecting courses to ensure relevance to their educational program plan.

Academic Performance Policy

Columbia Basin College's (CBC) Academic Performance Policy includes both grade performance and credit completion components. Students in a degree or certificate program must maintain a minimum cumulative, college-level grade point average (GPA) of 2.0. Additionally, excessive withdrawals from classes will be monitored.

Academic Alert - Faculty will identify and alert students in their classes who are having academic difficulty.

Early Warning - Students, not on academic probation or suspension, who receive a quarterly, college-level GPA below 2.0 will receive the following:

- Notice of the various academic resources available to them and
- Strong encouragement to meet with an advisor or counselor before subsequent registration.

Academic Sanctions - Students who have a cumulative, college-level GPA below 2.0 will be placed on academic probation that may progress to academic suspension or dismissal. In all such situations, CBC will block students' ability to register for future classes until they have met with an advisor or Counselor at which time they will receive focused advice on course selection and scheduling and assistance with the identification of appropriate resources and other academic services. CBC will remove the probation or suspension status when the student's cumulative GPA is improved to 2.0 but reserves the right to continue to monitor student progress and performance as it deems appropriate. (Please refer to "Academic Monitoring.")

- **Probation 1** – This sanction applies to the first quarter a student receives a cumulative, college-level GPA below 2.0.
- **Probation 2** – This sanction applies to the second consecutive quarter a student receives a cumulative, college-level GPA below 2.0. **WARNING**: The next academic sanction is suspension.
- **Academic Suspension** – CBC will academically suspend the student after the third consecutive quarter s/he receives a cumulative, college-level GPA below 2.0. The normal duration for suspension is one quarter, excluding summer quarter. During academic suspension, the student may not register for any courses and may not participate in any events or activities reserved for students.
- **Waiver of Academic Suspension** – A student may request the College to waive the one-quarter suspension by submitting a "Petition to Waive One-Quarter Suspension" and meeting with a Counselor prior to the first day of the quarter. If the Counselor approves the waiver, the student will be placed on conditional enrollment. If the waiver is not approved, the student will be unable to enroll for a minimum of one quarter and, upon returning to CBC, will be placed on conditional enrollment.
- **Conditional Enrollment** – A student who re-enrolls following academic suspension must obtain a minimum 2.0 in each class or obtain a minimum 2.0 cumulative, college-level GPA.
- **Academic Dismissal** – A student who has not fulfilled the performance standards while on conditional enrollment will be academically dismissed for a period of one year.
- A student may appeal the academic dismissal based on extraordinary circumstances that affected his/her performance during the quarter leading to the academic dismissal. The student must submit an "Appeal of Academic Dismissal" form to the Vice President for Student Services no later than 30 calendar days from the date of the dismissal. The appeal will be reviewed by a committee consisting of the Vice President for Student Services, the Director of Student Success and Retention, and a Counselor. A majority decision will prevail.
    - (a) If the appeal is granted, the student will be allowed to register at the start of the next quarter. Students who fail to maintain the academic standards for conditional enrollment (above) will be academically dismissed for a period of one year without the right to a second appeal.
    - (b) If the appeal is not granted, the student will not be allowed to re-enroll at CBC until a year has passed and then must petition for conditional reinstatement.
- **Conditional Reinstatement** – A student wishing to return to CBC after the one year academic dismissal must petition for reinstatement by submitting a "Petition for Reinstatement after Academic Dismissal" form to the Vice President for Student Services no later than 90 calendar days prior to the quarter in which s/he wishes to return. The student will be expected to meet with a Reinstatement Committee, consisting of the Vice President for Student Services, the Director of Student Success and Retention, a Counselor, and an instructional faculty member. The committee will determine if the student is to be reinstated. A student who is reinstated must:
    - obtain a minimum 2.0 grade in every class taken or
    - obtain a minimum 2.0 cumulative, college-level GPA.

A student who does not fulfill the performance standards while on conditional reinstatement may continue to enroll in CBC classes, but will be assessed a financial penalty due to continued unsatisfactory performance.

Academic Monitoring – A student who has previously been academically suspended or dismissed may be considered at-risk even when s/he is able to bring his/her cumulative, college-level GPA to a minimum of 2.0. Thus, at the discretion of the College, a student may be required to continue working with a counselor in order to register and to monitor his/her continued academic progress.

Non-Traditional Credit

Columbia Basin College acknowledges opportunities for mastering specific skills and competencies that can be gained outside of a formal classroom experience. Columbia Basin College recognizes various non-traditional programs and awards college credit and/or advanced placement. These programs are subject to standards established by the academic or professional/technical departments concerned.

- One-fourth of the total credits required for a CBC Associate in Arts and Science degree, Associate of Science-Transfer degree, Associate in Applied Science degree or a certificate program may be earned by non-traditional credit.
- Non-traditional credits do not count toward the minimum residency requirement.
- With the exception of a College Board Advanced Placement course, a P graded nontraditional course is limited to use within the restricted electives of the Associate of Arts and Science degree.
- Non-traditional credits may not be accepted by other educational institutions.
- For further information on non-traditional credits, contact the Admissions and Registration office.

Credit for Prior Experiential Learning

Columbia Basin College grants credit for learning that ties prior experiences to the theories, data, and skills in the discipline. Assessment of prior experiential learning for credit is the responsibility of faculty who are content specialists. Each department that offers credit for prior experiential learning establishes specific methods for evaluation.

Prior experiential learning credit is granted only for classes that are regularly offered at Columbia Basin College. No credit will be awarded if the student has earned credit in a similar course. Before a student can be granted credit for prior experiential learning, and before the credit can become part of a student's permanent record, the student must have earned 15 or more credits at Columbia Basin College with a GPA of 2.0 or better. The general guidelines for granting credit for prior experiential learning are:

- to be eligible, the student must be enrolled at Columbia Basin College during the quarter the credit is awarded;
- a non-refundable fee per each credit must be paid for the experiential learning assessment. Contact the Cashier's office;
- each request for prior experiential learning should be directed to the appropriate instructional department lead;
- credits awarded will be recorded with a "P" grade and are specifically identified as credits for prior experiential learning on the transcript.

Military Credit and Experience

Columbia Basin College recognizes learning acquired in the military by accepting the credit recommendations of the Guide to the Evaluation of Educational Experiences in the Armed Services. In addition, a student may earn credits awarded by institutions listed in the ACE National Guide to Educational Credit for Training Program and the Directory of the National Program on Non-collegiate Sponsored Instruction, provided that the courses are at the college level. Only those courses actually listed in these directories which have been approved for a specific period of time and which correspond to the actual time the student completed the course will be acceptable as college credit. Other non-collegiate training will be evaluated on a case-by-case basis.

Credits will be evaluated only from official transcripts requested by the student from the American Council on Education's Registry of Credit Recommendations from the organization that provided the training. Military credits will be evaluated only from official military documents.

A maximum of three Physical Education credits will be awarded for physical conditioning and all other military credit is limited to a 15-credit maximum in the restricted electives for the Associate of Arts and Science degree. Credits awarded for military training and education are recorded with a pass or fail grade.

Course Challenge

Certain courses at Columbia Basin College may be challenged for credit through the process of a departmental challenge examination. Individual departments will determine which, if any, of their courses may be challenged. Contact Admissions and Registration to obtain an application and the procedure for credit by examination.

The general guidelines for a course challenge are:

- the student must be enrolled at Columbia Basin College during the term the course is challenged;
- if the student is enrolled in the course, it must be challenged within the first week of the course;
- the course being challenged must be offered during the term in which it is being challenged unless otherwise specified by the department policy;
- the student has never received college credit(s) for the course or for one similar to the course being challenged;
- a course may only be challenged once;
- an examination fee per credit (non-refundable) must be paid prior to the examination (contact cashiering);
- only full-time Columbia Basin College instructors or adjunct instructors with permission of department lead or division dean can administer challenge examinations. In the Math/Science division, lab courses cannot be challenged;
- challenge examinations can be given any time before grades are due at the end of the quarter, except as noted;
- credit(s) and grade earned will be recorded on the transcript

College Level Examination Program (CLEP)

A score of 50 in the subject examination will be equated to the specific course and credit. Students must submit their score report to the Transcript office for evaluation.

DANTES Subject Test

A score of 500 will earn credit for a specific course and credit.

College Board Advanced Placement

A score of 3 or higher will earn five credits. A score of 4 or 5 on a World Languages advanced placement test will earn ten credits. For further information on AP credits, contact the Transcript office.

International Baccalaureate

Students may receive college credit for the International Baccalaureate higher level subjects when a score of 4 or higher is earned in selected subjects. No credit is awarded for:

- English as a Second Language (English B);
- any science course with a lab, unless a score of 5 or higher has been attained;
- foreign language B (if language is the student's native language);
- music and art (see department).

Records and Transcripts

Education Records

Confidentiality of Student Records

The Family Educational Rights and Privacy Act (FERPA) afford students and the College certain rights with respect to education records.

They are:

1. **The right of the student to inspect and review their education records within 45 days of the day Columbia Basin College (hereinafter referred to as "the College") receives a request for access.**

Students should make a written request to the College Registrar, identifying the records they wish to inspect. The Registrar will notify the student of the time and place where the records may be inspected. If the records the student wishes to inspect are not maintained by the Registrar, the Registrar will forward the request to the appropriate College official who will notify the student of the time and place where the records may be inspected.

Student records will be maintained according to the retention policy set out by the State Board for Community and Technical Colleges.

The College reserves the right to refuse to permit the inspection and review of:

- financial statements of the student's parents;
- confidential letters and confidential statements of recommendation placed in the education record if the student has waived his or her right to inspect and review those letters and statements and the letters and statements related to the student's admission to a program, an application for employment, or receipt of an honor or honorary recognition;
- confidential letters and statements placed in the education record except when these documents have been used for any purpose other than that for which they were originally intended;
- records that contain information about other students;
- documents excluded from the FERPA definition of education records.

2. **The right of the student to request the amendment of their education records that the student believes is inaccurate, misleading, or otherwise in violation of the student's privacy or other rights.**

Students may request that the College amend a record that they believe is inaccurate, misleading, or otherwise inappropriate. They should submit their request in writing to the appropriate College official responsible for the record, clearly identifying the part of the record they want changed and specifying why the record is inaccurate, misleading, or otherwise inappropriate.

The College will provide a written response to student requests, either demonstrating the change in the record which has been made or the decision not to amend the record as requested. In the latter case, the College will notify the student of his/her right to a hearing regarding the request for the amendment as well as provide additional information regarding the hearing procedures.

3. **The right of the College to release personally identifiable information contained in a student's education records, except to the extent that FERPA authorizes disclosure without consent (section 4).**

One exception, which permits disclosure without consent, is disclosure to College officials with legitimate educational interests. College officials include parties who contract with the College or are required by law to provide services to the College and have a legitimate educational interest in a student's education records.

A College official has a legitimate educational interest if the official is:

- performing a task or service specified in the official's position description or contract;
- performing an instructional task directly related to the student's education;

- performing a task related to the discipline of a student;
- performing as a faculty advisor, program director, or dean;
- providing a service or benefit related to the student or student's family, such as healthcare, counseling, job placement, financial aid, or health and safety emergency.
- providing legal services to the College.

4. The right of the College to release directory information without student consent.

The College considers the following to be directory information that may be disclosed without consent if it is determined the party requesting the information has a legitimate need for the information: name, address, telephone number, date of birth, email address, dates of attendance, degrees/awards received, previously attended educational institutions, participation in activities or sports, and weight and height of members of athletic teams. Additionally, the College is required to provide military recruiters with the following additional information: student's telephone listing and number of credits earned.

Columbia Basin College may disclose personally identifiable information designated as directory information from a student's education records without prior consent, unless the student informs the Registration and Records office in writing that directory information should not be released without their written approval. This request will prevent any release of information to a third party without a signed release from the student. In addition, the electronic record will be annotated preventing the electronic release of information, with the words "privacy block" in the student records. This certification does not preclude the verification of degrees awarded for graduation purposes.

5. The right of the College to release educational records without student consent.

Institutions may disclose to parents or legal guardians the educational records or components thereof without written consent by the student if it is determined that the student violated any federal, state, or local law or any institutional policy or rule governing the use of alcohol or controlled substances (refer to Article X of the CBC Code of Student Rights and Responsibilities) and the student is under the age of 21 at the time of the disclosure to the parent.

6. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Columbia Basin 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 20202-4605

Transcripts

An official transcript is a record of a student's permanent academic work at Columbia Basin College. It bears the College seal and the Registrar's signature. In compliance with the Family Education Rights and Privacy Act of 1974 (FERPA), a transcript of grades will be sent to a college, university, or other agency only upon the student's written request. Students may order an official transcript through Enrollment Services by submitting a written request by fax, mail, or in person or with a signed Transcript Order Form available on the College's website at www.columbiabasin.edu/transcripts. Please allow 7 business days for processing. Transcripts will not be released to a third party without written permission of the student. Unofficial transcripts are available at no cost on the college's website at www.columbiabasin.edu/kiosk. Holds on permanent records resulting from non-payment of financial obligations, or failure to return College-owned material, must be cleared by the student before transcripts will be released. Columbia Basin College does not release transcripts from high schools or other educational institutions. Transcripts submitted during the admissions process are part of the student's official file and will not be returned to the student. For additional information on ordering transcripts, call (509) 542-4524.

Record Retention

Columbia Basin College academic records will be maintained according to the state retention guidelines. For further information, contact the Registrar.

General Policies

Student Rights and Responsibilities

All students at Columbia Basin College are expected to comply with College policies, procedures, and regulations. Students are also provided with certain rights, including due process. These rights and responsibilities are fully outlined in the Code of Student Rights and Responsibilities. The Code is administered by the Vice President for Student Services and is available in the Library, the Office of the Vice President for Student Services, the ASCBC offices, and on the Columbia Basin College website at www.columbiabasin.edu/rights & responsibilities. For further information, please contact the Vice President for Student Services.

Drug and Alcohol Abuse Prevention

In compliance with the Drug Free Schools and Communities Act Amendment of 1989, Columbia Basin College has adopted and implemented a program to prevent the unlawful possession, use, or distribution of illicit drugs or alcohol by students and employees. The Columbia Basin College Code of Student Rights and Responsibilities specifically prohibits the possession, use, and distribution of drugs and alcohol where prohibited by law. Violation of these policies may result in mandatory referral for evaluation or treatment for substance/alcohol abuse and/or may be cause for disciplinary action.

Sexual Harassment Policy

By upholding the requirements of Title VII of the Civil Rights Act of 1964, as amended, Columbia Basin College is committed to maintaining a college environment free from all forms of discrimination, including sexual harassment. This commitment applies to all levels and areas of Columbia Basin College operations and programs, to students, faculty, staff, and all other personnel. Sexual relationships between Columbia Basin College employees and students are deemed unwise.

Any Columbia Basin College employee or student who believes he or she has been subjected to sexual harassment, or who believes he or she has been charged wrongfully with a sexual harassment complaint, may utilize Columbia Basin College's sexual harassment complaint procedures by contacting any of the following:

- Title IX Officer
- Affirmative Action Officer
- Sexual Harassment Ombudsman
- Any Columbia Basin College administrator or supervisor.

Student Resources

Assessment Center

The Assessment Center provides a wide variety of testing services to assist students in the following areas:

ASSET/COMPASS: Assessment of skills in English, reading and math for appropriate college course placement.

CLEP (College Level Examination Program): College credits may be earned by taking exams in a variety of subjects.

GED Testing: Adults who have not graduated from high school may obtain a Certificate of Educational Competency by passing the GED test. Refer to Admissions Information section.

The Center also serves as the test site for a number of standardized educational exams, certification exams, and proctored exams for other colleges.

If you need accommodations for assessment based on a disability, please contact the Resource Center at (509) 542-5525 (509) 546-0400.

Bookstore

The Columbia Basin College Bookstore is located in the Hawk Union Building (HUB). Store hours during fall, winter, and spring quarters are 7:30 a.m. - 7:00 p.m. Monday through Thursday and 7:30 a.m. – 1:00 p.m. on Friday. The bookstore is closed weekends and student holidays. Please call for hours during student non-attendance breaks (i.e. summer, winter, spring).

The bookstore is owned and operated as a service by Columbia Basin College for our students and the community. The store sells required and recommended textbooks, as well as general reading materials and study aids, school supplies, art and engineering supplies, emblematic clothing, greeting cards, and gift items. We welcome opportunities to serve you.

There are established refund, exchange, and buyback policies. These are available in the bookstore and at our website. Current quarter textbook information is available online http://www.cbcbookstore.com.

Career and Employment Services

Counseling/Advising Center

Career Counseling - Counselors help students and members of the community identify educational interests and assist in career exploration. They interpret interest and personality inventories to aid individuals who are making career and educational decisions or are undecided about a major or program. Career, transfer, job search, and personal/professional development workshops are scheduled throughout the year. They provide information and referrals to a wide range of resources both on and off campus.

Student Employment Services

Students are referred to job openings throughout the Tri-Cities area. Interviews are scheduled on campus and resumes are mailed for specific career opportunities. Job openings and student resumes are posted on the Internet at http://jobs.columbiabasin.edu. Students may be referred through the Student Employment office at any time during the year.

Student Employment

The Student Employment office provides employment information to Columbia Basin College students, graduates, and the community. Students may find part-time, full-time, temporary, and summer work through the office. The range of positions varies from unskilled, part-time work to highly skilled technical positions.

Workshops

Workshops are held throughout the year to provide opportunities for students to meet with professionals in their career fields, design job-search strategies, and learn of future career opportunities.

Career Expo

Career Expo is an annual event. Nearly 100 employers are invited on campus to meet with students, answer questions, and share job opportunities.

State Work Study

Career-oriented opportunities throughout the Tri-Cities are available to students who qualify for financial aid. Students are placed in jobs that allow them to gain experience in their field of study.

Job Search Assistance

The Student Employment office helps students with job search strategies, resume writing, interviewing techniques, and how and where to look for employment.

WorkFirst

Located in the Career and Employment Services Center (CESC) in the Hawk Union Building (HUB), WorkFirst programs provide services and funds to eligible, low-income working parents to support some educational plans. WorkFirst programs offer:

- training specialists ready to assist you with career and educational planning;
- registration assistance;
- financial assistance for tuition, fees, and books for vocational, technical, and professional training programs;
- year-round WorkFirst, Work Study, for TANF recipients;
- customized, short-term training for TANF recipients designed in partnership with businesses ready to give hiring consideration to training completers;
- referral assistance for Working Connection Child Care services.

For more information, please contact WorkFirst, (509) 542-4719.

Worker Retraining

Are you unemployed? Is your occupation or industry in decline? Are your skills no longer in demand? If you are unemployed, through no fault of your own, with limited opportunity to return to your previous occupation, receiving Washington State unemployment insurance or have exhausted your unemployment benefits within the last two years, you may be eligible for Worker Retraining program under Dislocated Worker.

Have you been a homemaker for the past two years and have lost your source of support? You may qualify for Worker Retraining as a Displaced Homemaker.

You may also qualify under the Expanded Eligibility if you are currently employed and meet two of the three following requirements: 1. your current job is a job not in demand, 2. your current employer requires that you take courses in order for you to keep your job or move up, 3. you have under 45 college credits.

Financial assistance for training in technical or vocational programs may be available if you qualify for any of the above categories.

For more information about program eligibility, call Columbia Basin College Worker Retraining office at (509) 542-4446.

College Assistance Migrant Program (CAMP)

The College Assistance Migrant Program is a unique educational program designed to help students from migrant and seasonal farm worker backgrounds succeed in college. The program is funded by the U.S. Department of Education and is administered through the Office of Diversity and Outreach at Columbia Basin College.

Our mission is to provide students with the academic foundation they need to successfully reach their educational and career goals. CAMP will provide students with intensive academic, career, financial, and support services during their first year of college. For more information, please contact the CAMP office at (509) 542-4602.

Counseling and Advising Center

The primary responsibility of the Counseling and Advising Center is to assist students in their personal, educational, and professional growth and planning. The Center provides a variety of services:

Educational Planning - Educational Planners assist students in their transition into CBC by providing information about the College's processes, procedures, and policies. They participate in College orientation and initial registration activities and, most importantly, assist students in developing educational plans to meet individual goals.

Academic and Transfer Advising - Although a variety of individuals at CBC provide academic advice to students, faculty counselors are primarily responsible for assisting students in making decisions about academic or occupational goals. They provide specific information about Columbia Basin College courses and programs, as well as specialized training options and transfer requirements for other educational institutions.

Career Counseling - Counselors help students and members of the community identify educational interests and assist in career exploration. They interpret interest and personality inventories to aid individuals who are making career and educational decisions or are undecided about a major or program. Career, transfer, job search, and personal/professional development workshops are scheduled throughout the year. They provide information and referrals to a wide range of resources both on and off campus.

Personal Counseling - Faculty Counselors are registered by the state of Washington to provide personal counseling and assist students with issues that may affect their academic performance or progress in meeting their educational goals. They offer workshops and other interventions aimed at improving student educational success and personal development. Counselors refer students wanting prolonged counseling to community mental health professionals.

To schedule an appointment with a Faculty Counselor or Educational Planner, please call the Counseling and Advising Center at (509) 542-5505.

High School Equivalency Program (HEP)

The High School Equivalency Program (HEP) is a federally funded program that assists migrant and seasonal farm workers to earn their General Education Development (GED) Certificate.

The goal of HEP is to help students enhance their survival skills and knowledge so that they may qualify for more rewarding employment or for entry into vocational or technical schools, two-year community colleges, four-year universities, or the military service. Classes are offered in both English and Spanish. For more information call, (509) 542-4775.

International Student Services

International Student Services coordinates with students and the Admissions and Registration office to ensure all admission requirements are met and students are in compliance with international student guidelines.

Services we provide include:

- class advising;
- college transfer assistance;
- assisting students with questions and concerns;
- ensuring students are in compliance with international student guidelines.

For more information, please contact the International Student Services office at (509) 542-5500.

Library Services

Students, faculty, staff, and other interested individuals are encouraged to use the resources available at the Columbia Basin College Library, located in the L building on the Pasco campus.

The Library provides access to numerous computerized resources for educational purposes including databases that index periodicals, with more than 6,700 titles in full text. The Library has approximately 60,000 books; an excellent collection of more than 2,400 sound recordings on compact discs and LPs; more than 3,000 instructional videos, and other audiovisual materials. The Library has study space for individuals, rooms for group study, and a large computer lab for instruction.

The Benton-Franklin County Regional Law Library is located in the northwest corner of the CBC library. The Columbia Basin Regional Medical Library, a branch library for Columbia Basin College, is located on the third floor of the CBC Health Science Center in Richland. The medical library provides resources, services, training, and professional assistance to students, faculty, physicians, and other healthcare professionals in Benton and Franklin counties.

Reference librarians are available during library hours to provide assistance to library users. Library orientation sessions are available upon request at the main library and the medical library or through remote access, providing information on effective use of the library resources.

The Columbia Basin College student identification card serves as a library card. Students are encouraged to stop by the Library to fill out a registration form so they may borrow material from the Library and access specialized computer resources. The College catalog and several of the computerized resources can be accessed remotely at www.columbiabasin.edu. Current students may request passwords and user information at the Library or library@columbiabasin.edu. The quarterly password is also available through student WebCT accounts.

The main campus library hours for fall, winter, and spring quarters are Monday through Thursday from 7:30 a.m. to 9:00 p.m., Friday 7:30 a.m. to 5:00 p.m., and Saturday from 9:00 a.m. to 5:00 p.m. Contact the Library regarding hours for the medical library, interim, and summer quarter hours at (509) 542-4887 or TDD/TTY (509) 546-0400.

Office of Diversity & Outreach

In July 2001, in an effort to provide educational access and support to all of the residents of Benton and Franklin counties, particularly those traditionally underserved by the higher education system, CBC established the Office of Diversity. Through this office, the College's goal is to make CBC a more open and inviting place for students, faculty, and staff. CBC values and respects diversity as a necessary foundation for a healthy learning and working community and is committed to diversity in its curricula, student body, faculty, staff, architecture, art, and activities.

The Office of Diversity actively pursues opportunities that will ensure diversity in all aspects of campus life, including developing relationships with external partners in education, government, and the community. The College initiates special programs to assist traditionally underserved students and/or students with limited access to higher education. These special programs include:

- High School Equivalency Program, to help local farm workers obtain a GED;
- College Assistance Migrant Program, to help migrant farm workers and children of farm workers achieve success in college;
- Title V Developing Hispanic-Serving Institutions Cooperative Grant, to improve online advising and at-risk student success in math and science;
- Community Based Job Training Grant, to develop a radiologic sciences training program;
- Upward Bound, to assist low-income and potential first-generation college students from local high schools prepare for and pursue higher education; and
- Student Support Services, to support low-income and first-generation college students succeed in college.

Given that diversity is integral to all dimensions of the CBC Mission, the College believes that it is important for strategies that promote diversity be embedded in all CBC programs. Therefore, diversity initiatives are integrated and supported within programs and services described throughout this catalog.

Office of Student Success and Retention

The Office of Student Success and Retention develops programs to assist students in completing their educational goals in a timely and efficient fashion. The office coordinates the First Year Introduction (FYI) workshops, as well as, the Tutor Center.

First Year Introduction – FYI

First Year Introduction is a 12-hour mandatory college transition workshop for all new degree and certificate seeking students. FYI assists new students by providing a thorough introduction to college and to CBC. Students are required to complete the workshop prior to enrollment in their second quarter of classes at Columbia Basin College. Students register for this workshop while registering for their first quarter classes. Students who have more than 30 transfer credits with a minimum of a 2.0 GPA, students who are taking less than 15 credits at CBC prior to transferring to another institution, students who are taking courses for personal enrichment only, and/or students in short-term certificate programs, are exempt from taking FYI.

Tutor Center

The Tutor Center provides free help with studies for Columbia Basin College students for most departments on campus. Drop-in help is available for math, science, writing, and other subjects for which their is generally high demand during regular Tutor Center hours. Please visit the Tutor Center located in the Math/Science Building (TD-434) on the Pasco Campus or refer to the Tutor Center website for current hours and drop-in subject availability.

Private tutoring is also available in subjects for which there is no drop-in tutoring or in other extraordinary circumstances upon approval by the Tutor Center Staff.

e-Tutoring is available to all CBC students in a variety of subjects. e-Tutoring provides both synchronous and asynchronous instructional support for students enrolled in live and online courses at CBC. Students may access e-tutoring from the Tutor Center website or at www.etutoring.org

For writing assistance, students bring in assignments or drafts and tutors offer suggestions on how to develop ideas, revise, and edit. Writing tutors will assist students with essays, science lab reports, summaries, term research papers, book reviews/reports, letters of application and inquiry, short stories, and other forms of writing. Students can drop in during the regular hours or they can send essay drafts to the writing tutors via email to cbcwriting@columbiabasin.edu.

For more information, please contact the Tutor Center at (509) 542-4676 or visit the website at www.columbiabasin.edu/tutor.

Research and Instructional Assessment

Columbia Basin College's commitment to its mission and goals requires conducting regular evaluations of progress in achieving those goals. Testing and surveying at various points in students' educational journeys are essential parts of this evaluation process. In addition, students may be asked to cooperate in various surveys, interviews, focus groups, and other data collection efforts by the College.

Since the goals of Columbia Basin College are directed to the education of the whole person, student achievement can be measured only by evidence concerning the whole person. To protect confidentiality of data, the Office of Institutional Research never releases personal information about individuals and, wherever possible, avoids attaching names to personal data during analysis.

Resource Center

The Resource Center is dedicated to assisting students and community members in reaching their personal and professional goals. The Resource Center is open to those who want to begin college but are not sure how to get started, as well as, to currently enrolled students who need assistance to overcome obstacles that make reaching their educational goals more difficult.

The Center offers counseling and advising, as well as, services in three major areas:

Family Services

- childcare reimbursement*
- Don't Quit Workshop
- community referrals
- Holiday Program*
- support groups

Disability Services

- test accommodations, including ASSET/COMPASS, GED, CASAS
- sign language interpreters
- adaptive equipment
- academic accommodations

Student Assistance

- short-term emergency tuition and book loans*
- travel/bus passes*
- fee waivers*
- Learning Needs Assessments
- student networking

To schedule an appointment, call (509) 542-5525 TTY (509) 546-0400.

**Income guidelines apply*

Campus Security

Columbia Basin College strives to provide a safe and secure environment for students, staff, and visitors. The College has a Campus Security Department whose staff also enforces College parking and traffic regulations, provides escorts, jump-starts vehicles, retrieves keys locked in vehicles, maintains lost and found articles, and assists local, state, and federal law enforcement agencies.

In an emergency, 911 is called. On-campus emergency assistance is available by calling (509) 542-4819 or TDD/TTY (509) 546-0400. To call after hours, dial the evening and weekend cell phone (509) 521-4599. At least one parking or security officer routinely patrols CBC facilities and parking lots and provides emergency assistance as necessary. Security officers have authority to request identification and to determine whether individuals have lawful business at Columbia Basin College.

Coordination With Law Enforcement

CBC maintains close coordination with local law enforcement agencies at all CBC locations and activities. CBC's security officers have the same arrest capability as a citizen. Criminal incidents are referred to the local police who have jurisdiction on the CBC campus. All College personnel and students should immediately report any crime, suspicious circumstance/person, or emergency to the 911 Dispatch Center or to the CBC Security Department (509) 542-4819 or via the Crime Incident Report Form located on the CBC Website at http://columbiabasin.edu/asafercbc. Prompt reporting will assure timely warning notices on campus and timely disclosure of crime statistics.

Contact Campus Security if you:

- are a victim of a crime that has occurred on campus;
- see a suspicious activity or a suspicious vehicle on campus;
- have information about a theft of property;
- have been involved in an auto accident or have witnessed one;
- smell smoke or fumes inside a building;
- see smoke or flames inside a building;
- have been injured and/or need first aid;
- notice any other safety or security related problems.

Campus Security Act

The Department of Education and the Jeanne Clery Act require all colleges to provide information to students and employees about its campus safety policies, procedures, and statistics on certain crimes. CBC has developed a protocol with area law enforcement agencies to report and obtain data for the annual crime statistical report that is required for both on-campus and off-campus locations owned or operated by the College and occurring on adjacent public property. These statistics can be located at the following website: www.columbiabasin.edu/safety.

Printed copies of the above report are available in the Admissions/Registration office at CBC. The report on safety and crime statistics also is available by contacting: Columbia Basin College, Camilla Glatt, Vice President for Human Resources & Legal Affairs, 2600 North 20th Avenue, MS-A2, Pasco, WA, 99301, (509) 542-5548, or cglatt@columbiabasin.edu.

Safety Alerts

In the event that a situation arises, either on or off-campus, that, in the judgment of the President's Cabinet and the Campus Security Office, constitutes an ongoing or continuing threat, a campus wide "timely warning" will be issued. The notification could be in the form of posters, flyers, email, text messages, and/or notices in the student bulletin.

Disciplinary Action

Any student or College personnel who commit an act in College facilities, which is punishable as a misdemeanor or a felony, such as sexual assault, under Washington state law, may be subject to appropriate disciplinary process procedures. These proceedings may include the opportunity of the accused and accuser to have others present during a disciplinary proceeding and notification of the final determination resulting from the proceeding.

Sexual Offender Notification

Sexual offenders (includes kidnappers), Level I, II, & III, are required by law to register with the county sheriff in the county where they reside. The law requires that they also inform the county sheriff if they register for school. The county sheriff, in turn, is required to notify the school of any Level II or III sex offender who may have registered to attend classes. These notifications are intended to inform the campus community and to promote personal safety rather than create panic.

CBC is bound by state law to be an open door admission institution and only in those situations where a prospective or enrolled student is determined to be disruptive to the educational environment or would not benefit from enrollment will admission be denied or revoked.

Notifications of sex offenders enrolling at CBC are received from the Franklin or Benton County Sheriff's Department and are sent to CBC's Campus Security office who will provide notification to the College's Vice President for Student Services or Vice President for Human Resources and Legal Affairs as appropriate. Notification to the college community will be made pursuant to the CBC's Sexual Offender Notification Procedure which can be located at the following website: www.columbiabasin.edu/safety.

Personal Safety Information:

If you are being followed:

- change your direction, cross the street;
- keep looking back so the person knows you can't be surprised;
- go to a well-lighted area, such as a classroom, office, or library, anywhere there are people;
- notice and remember as much as possible about the person so you can give a good description;
- at night, walk with someone; there is safety in numbers;
- report anything suspicious to campus security or the police.

Sexual Assault

CBC is aware of the growing occurrence of sexual assault, including acquaintance/date rape. All members of the College community are encouraged to follow standard crime prevention practices such as locking their motor vehicles, parking and walking in well-lighted areas, and being aware of the people and surroundings around them. The College offers information and referral for victims of sexual assault. Victims of sexual assault on any College-owned or leased facility are encouraged to report the incident as soon as possible to a College official or the College Security department through the normal security procedures, as well as to local law enforcement authorities.

Student Activities

Student Programs Office

Participation in student activities and programs is a valuable part of the educational experience at CBC. The Student Programs office works with student groups to develop and plan cultural, social, recreational, and educational events to meet the needs of the College community. Student funded activities include intercollegiate athletics, intramural sports, music, drama, and various interest clubs. For information about activities and how to get involved, call the Student Programs office at (509) 542-4823.

Student Government

The Associated Students of CBC, also known as ASCBC, is a self-governing body that allocates funds for student activities and programs. They determine the policies under which all ASCBC clubs and organizations operate. This group, led by the ASCBC Executive Council, also provides information to the administration on a variety of issues affecting students. Students can become involved with ASCBC by becoming an officer or a Senator, serving on the Program Board, serving on various campus committees, or by simply attending the programs ASCBC sponsors. The ASCBC offices are located on the upper level of the Hawk Union Building (HUB).

Organizations and Clubs

Students are encouraged to take advantage of the honorary, professional, religious, and social clubs available at CBC. Student clubs sponsor and plan many campus student activities. The clubs also involve themselves with the ASCBC Congress by sending a representative to meetings throughout the school year. All clubs have a staff advisor who helps members plan their activities. Clubs focus on arts, sports, diversity, politics, career/vocation, religion, and various other interests. Some past clubs have included:

- African American Association
- Anthropology Club
- Automotive Performance Club
- Northwest Collegiate Ministries
- Queer Coalition
- Phi Theta Kappa (Honor Society)
- Japanese Culture Club
- Table Tennis Club
- Speech Debate Team
- Student Art Club
- Associated Student Nurses

Intramurals

CBC offers various intramural programs sponsored by ASCBC. Several activities are planned each quarter for both men and women. Past activities have included flag football, three-on-three basketball, golf, bowling, and other activities according to student interest.

Athletics

CBC is a member of the Northwest Athletic Association of Community Colleges. Men's teams represent Columbia Basin College in intercollegiate competition in baseball, basketball, golf, and soccer. Women's teams compete in basketball, soccer, softball, golf, and volleyball.

Athletic scholarships are available for participants. Participants must be enrolled in at least 12 credits per quarter. In addition, an athlete must have a 1.5 grade point average the quarter preceding competition. Second year participants must maintain a 2.0 grade point average.

Performing Groups

The Music department offers a number of vocal and instrumental groups that students are encouraged to participate in. Some of the ensembles are: Jazz Ensemble, Concert Band, CBC Symphony Orchestra, FreeForm (a vocal jazz group), Concert Choir and Chamber Choir. Participation in these groups may require an audition. For more detailed information, please contact the Music department at (509) 542-4772.

The Theatre Arts department presents several plays during the school year. All students are encouraged to try out for parts in the plays or for positions on the production staff.

Student Support Services

Student Support Services is a federally funded project to help students finish college. Students may be eligible for Student Support Services if they have a documented disability, are financially limited, or neither parent has a four-year degree. Student Support Services provides the following support:

- career planning;
- transfer planning/educational counseling;
- financial aid information and monitoring;
- academic advising and campus visits;
- coordination with the Resource Center;
- individual tutoring in math and science;
- cultural events.

Graduation Requirements

Application for Graduation

Candidates for degrees, certificates, and diplomas should meet with their counselor, educational planner, or program advisor at least two quarters prior to the anticipated completion date. During the last quarter in which all requirements are being completed, students must formally apply to graduate. Graduation applications for all transfer degrees are available from a Counselor or Educational Planner in the Counseling and Advising Center. Graduation applications for the Associate in Applied Science degrees and certificates are available from program department advisors. Students may graduate at the end of any quarter. To be approved for graduation, students must have:

- completed all degree/certificate program requirements and must have complied with the requirements of the college catalog (See Catalog Option section);
- earned a minimum of 30 credits of applicable course work at Columbia Basin College;
- earned a minimum cumulative grade point average of 2.0 or above in all college-level courses taken at Columbia Basin College;
- earned a minimum combined cumulative grade point average of 2.0 or above in all college-level courses taken at Columbia Basin College and transferred from other colleges.

Catalog Option

Students applying for graduation must comply with the requirements of the College catalog. Students may apply for graduation under the catalog in effect at the time of enrollment or any subsequent catalog, provided the student does not drop out for a period of more than four consecutive quarters (including summer quarter). Students who drop out for a period of more than four consecutive quarters (including summer quarter) have the option of applying for graduation under the catalog in effect at the time of re-enrollment or any subsequent catalog. They may not apply for graduation under any catalog that was in effect prior to the re-enrollment.

Degrees

General Description

The liberal arts have played an important role in the academic life of Columbia Basin College since the founding of the College. The Associate in Arts and Science degree is a direct transfer degree (DTA) designed for students who plan to transfer to a four-year institution after completing the first two years of study at Columbia Basin College. This degree meets the Inter-college Relations Commission (ICRC) guidelines for direct transfer degrees. If admitted to an institution subscribing to these guidelines, the degree holder will be granted junior status and will have fulfilled most of the lower-division general education requirements of baccalaureate degree programs offered by many public and independent colleges and

universities in Washington state. Students are encouraged to meet with their advisors early in their academic planning to review the degree options listed below and design a plan that best fits their educational and transfer goals.

As a result of the work by members of the washington community and technical college system and the public baccalaureate institutions, the Major Related Program agreements (MRP) were developed. These direct transfer agreements place transfer students from community colleges on comparable footing with direct entry counterparts at four-year institutions within Washington state. Students who complete the requirements for a Washington community college qualifying Transfer Associate degree, Major Related Program will have satisfied the lower division general education (or core) requirements and lower division math and science requirements to the same extent as direct-entry university students pursuing similar goals.

The Associate in Science Transfer degree (AS-T) is based upon an agreement between Columbia Basin College and many colleges and universities in the state of Washington. This degree is an efficient pre-designed educational path for students who wish to complete a baccalaureate program in several of the science fields. The Associate in Science Transfer degree will not substitute for many of the general university requirements, but will allow CBC students to enter a participating four-year college or university with 90 credits, junior standing and the majority of major prerequisites completed. Students completing the degree must be prepared to complete any remaining general education requirements along with remaining program or graduation requirements during their junior or senior year of academic study. The Associate in Applied Science degree is earned by students who complete a prescribed two-year professional/technical program with a cumulative GPA of 2.0 or above. The Associate in Applied Science degree is not designed for transfer, although some classes may be accepted for transfer by baccalaureate degree institutions.

Direct Transfer Agreements

All degree requirements are listed below. It is important that students refer to the specific degree outlines located in this catalog and work closely with a Counselor, Faculty Advisor, or Educational Planner at Columbia Basin College to assist in choosing the appropriate degree to meet their educational goals.

Associate in Arts and Science Degree (DTA)

Minimum 90 Credits

An Associate in Arts and Science degree (DTA) is recommended for students who have not yet decided the field they will enter or the four-year institution they will attend. It gives students the broad background they need before beginning more specialized, upper-division courses and indicates to the transfer institution that a student has completed a two-year liberal arts program. The degree requires a minimum core of 66 credits, including 13 credits in communications, 15 credits in social science/behavioral science, 15 credits in science/mathematics, 15 credits in humanities, five credits in quantitative/symbolic reasoning skills, and three credits in health/physical education. The degree requires 24 elective credits, with a total of 90 quarter credits and a cumulative GPA of 2.0 or above. To receive this degree from Columbia Basin College, students must earn 30 of the degree credits at CBC. Substitutions of graduation requirements must be recommended by departmental faculty and the divisional dean and be approved by the Graduation/Admissions Committee. Refer to the specific degree outline located in the "Degree Offerings" section within the catalog. Students are advised to work closely with an advisor from Columbia Basin College. (Option A)

For students who have selected a major and identified the four-year institution they plan to attend, the Associate in Arts and Science degree (DTA) is also recommended and may be tailored to fulfill most pre-program, lower-division requirements. This option provides students an opportunity to prepare for a specific professional area of study, such as architecture, education, art, or music, and, thereafter, transfer to a specific college, university, or state college. The degree requires a minimum core of 66 credits, including 13 credits in communications, 15 credits in social science/ behavioral science, 15 credits in science/mathematics, 15 credits in humanities, five credits in quantitative/symbolic reasoning skills, and three credits in health/ physical education. The degree requires 24 elective credits, with a total of 90 quarter credits and a cumulative GPA of 2.0 or above. As above, students must earn 30 of the degree credits at Columbia Basin College. Students are required to complete all of the Associate of Arts and Science degree requirements (DTA) listed above and are strongly advised to work closely with an advisor from Columbia Basin College and an advisor from the transfer baccalaureate institution to ascertain limits on transferability of community college credits and appropriate course selection for the major. (Option B)

Associate in Arts and Science Degree (DTA) - With Emphasis

Minimum 90 Credits

An Associate in Arts and Science degree (DTA) with an emphasis is recommended for students who have decided on a major but have not identified the four-year institution they will attend. The is degree is designed to satisfy most or all of the specific pre-program major requirements of most baccalaureate institutions. The degree requires a minimum core of 66 credits, including 13 credits in communications, 15 credits in social science/behavioral science, 15 credits in science/mathematics, 15 credits in humanities, five credits in quantitative/symbolic reasoning skills, and three credits in health/physical education. The degree requires 24 elective credits, with a minimum total of 90 quarter credits and a cumulative GPA of 2.0 or above. Students must earn 30 of the degree credits at Columbia Basin College. Please refer to the specific degree outlines located alphabetically within the catalog and work closely with an advisor from Columbia Basin College. (Option C)

Associate in Math Education (DTA)

Minimum of 90 Credits

The Associate in Math Education degree (DTA) is a direct transfer agreement and was created to aid students interested in careers as secondary math or science teachers. Future secondary teachers must pursue a major in their field as well as fulfill entrance requirements into a school of education. As a result, there is little room for electives. This degree is intended to insure that graduates of Columbia Basin College are as well prepared as their counterparts at four-year colleges. The transferability of this degree is backed by a statewide articulation agreement with teacher-training universities. This degree will fulfill the general education requirements at the public Washington state transfer institutions. Apart from the requirements embedded within the degree, it is recommended that students check specific requirements of their intended transfer schools. This is especially true of the area of field experience, since teacher certification institutions vary in terms of the quality and quantity of experience required. To earn this degree, students must complete 90 quarter credits in courses numbered 100 or above from approved distributions and must attain a cumulative grade point average of at least 2.0. Students must earn 30 of the degree credits at Columbia Basin College. Please refer to the specific degree outline located alphabetically within the catalog and work closely with an advisor from Columbia Basin College and the transfer baccalaureate institution.

Major Related Programs (DTA/MRP)

Minimum 90 credits

The Major Related Program degrees (DTA/MRP) are recommended for students who have identified a major and wish to transfer to a four-year institution within Washington state. As a result of the work by members of the Washington community and technical college system and the public baccalaureate institutions, the following transfer agreements were jointly approved. These direct transfer agreements place transfer students from community colleges on comparable footing with direct entry counterparts at four-year institutions within Washington state. Students who complete the requirements for a Washington community college qualifying Major Related Program degree will have satisfied the lower-division general education (or core) requirements and lower-division math and science requirements to the same extent as direct-entry university students pursuing similar goals.

Associate in Elementary Education Degree (DTA/MRP)

Minimum 90 Credits

The Associate in Elementary Education (DTA/MRP) is a direct transfer degree that is intended for all future elementary school teachers. It provides students a broad foundation in liberal arts and beginning coursework in teacher education that is needed upon transfer to teacher certification programs at Washington state colleges and universities. It is designed to provide early experiences in teacher education, including opportunities for hands-on work in local classrooms and specific courses for elementary teachers. The transferability of this degree is backed by a January 2006 statewide articulation agreement between the following baccalaureate institutions offering Elementary Education bachelor's degrees and the community and technical colleges system. The baccalaureate institutions party to this agreement are: CWU, EWU, WSU, WWU, City University, Gonzaga, Heritage, PLU, SMU, SPU, WWU, and Whitworth.

The degree requires 13 credits in communications, five credits in quantitative/symbolic reasoning, 15 credits in humanities, 15 credits in social/behavioral sciences, 15 credits in mathematical/natural sciences, and three credits in health/physical education. In addition, the degree requires 28 elective credits including 10 credits in mathematics, five credits in psychology, eight credits in education, and five credits in computer science, for a minimum total of 94 quarter credits. To receive this degree from Columbia Basin College, students must earn a minimum of 30 degree credits at CBC. Students must earn a cumulative grade point average of at least 2.0, but students should be advised that most teacher preparation programs require a GPA of 2.5 to 3.0 for admission. A minimum of 30 hours of K-8 classroom experience must be included during the degree program and students should be able to demonstrate computer literacy in software programs including word processing, PowerPoint, and spreadsheets, in addition to being proficient on the Internet. These skills should be demonstrated through a portfolio of files gathered during their educational course work. Although not required for this degree, students should be advised they must take the WEST-B before completing their community college course work in order to apply to teacher preparation programs.

Associate in Business Degree (DTA/MRP)

Minimum 106 Credits

The Associate in Business degree (DTA/MRP) is a direct transfer degree and is generally pursued by students who plan to transfer to a four-year university as a business major after completing their first two years at Columbia Basin College. It is designed to meet the distribution requirements at four-year institutions in Washington state, by fulfilling the general requirements taken by freshman and sophomores. The degree also indicates that a student has completed a two-year business program, which may be of value to career or lifetime goals. To earn this degree, students must complete a minimum of 90 quarter credits in courses numbered 100 or above from an approved distribution list and meet specific distribution requirements. In addition, students must earn 30 of the degree credits at Columbia Basin College. Please refer to the degree outline located alphabetically within the catalog and work closely with an advisor from Columbia Basin College and the transfer baccalaureate institution.

Associate in Science – Transfer Degree (AS-T)

Minimum 90 credits

For most students majoring in engineering and science, the associate degree, based on the statewide agreement called the Associate in Science – Transfer degree, works best. The Associate in Science Transfer degree (AS-T) is not a Direct Transfer Agreement and therefore does NOT guarantee that the student has met the general education requirements at the receiving institution. Provided proper courses are taken, the degree holder should be ready to enter his or her program with junior standing at the transfer institution.

There are two tracks to this degree. One track is for students majoring in biological sciences, chemistry, environmental science, geology. or earth science. The second track is designed for students majoring in engineering, computer science, physics, or atmospheric sciences. Both tracks are part of a transfer agreement, which includes priority admission for resident transfer students to any of the state-funded baccalaureate institutions. Students are advised to work closely with an advisor from Columbia Basin College and the transfer baccalaureate institution.

Associate in Applied Science Degree - Transfer (AAS-T)

Minimum credits vary by program

In general, our technical degree programs are not designed for transfer to other colleges or universities. However, several four-year colleges and universities have specific degree programs that accept the Associate in Applied Science-T degree in Office Assistant Technology and the Associate degree in Applied Science-T Criminal Justice/Forensic Science degree. It is expected that the number of AAS-T degree options for career programs will increase in the future. Students seeking to transfer to degree programs other than those specifically designed for the AAS-T are urged to consider the DTA or AS-T in preparation for transfer. Institutions and majors outside the specifically designed degrees listed above (and others added in the future) likely will accept very few of the credits in the AAS degree. English composition, college-level math, and other general education courses will transfer. Please refer to the specific degree outlines located alphabetically within the catalog and work closely with an advisor from Columbia Basin College.

Associate In Applied Science Degree

The Associate in Applied Science degree is earned by students who complete a prescribed two-year professional/technical program with a cumulative GPA of 2.0 or above. Thirty-three percent of required degree credits must be earned at Columbia Basin College. The Associate in Applied Science degree is not designed for transfer, although some classes may be accepted for transfer by baccalaureate degree institutions.

Certificates/Programs

The Certificate Program is designed to provide recognition for students who do not plan to complete an Associate in Applied Science degree program but are interested in training and instruction in specialized areas.

Certificate of General Studies

Minimum 90 credits

The Certificate of General Studies is earned by students who have successfully completed 90 or more quarter credits in courses numbered 100 or above with a minimum of 2.0 grade point average and do not qualify for a degree. A minimum of 30 credits must be earned at Columbia Basin College. Substitutions of program and graduation requirements must be recommended by departmental faculty and the divisional dean and be approved by the Admissions/Graduation Committee.

Short-term Certificates

Minimum credits vary by program

Short-term certificates recognize students' mastery of information and skills important to employment and career advancement.

Students who have earned short-term certificates do not participate in the commencement ceremony.

Specialized Transfer Assistance

Cougar Connection at Columbia Basin College

The Cougar Connection Office (CCO) is a one-stop location for CBC students and staff seeking information about transferring to Washington State University Tri-Cities through the BRIDGES program.

BRIDGES is a coordinated bachelor's degree program partnership between CBC and WSU Tri-Cities offering students a continuous pathway to one of 17 bachelor degree programs. An important component of this program is the integrated advising that occurs between CBC students, counselors, and WSU Tri-Cities academic advisors utilizing Plans of Study to keep students on track toward a bachelor's degree.

On the CBC campus, CCO staff share transfer information via office visits, campus information tables, "Future Cougs" FYI modules, collaborative workshops, and in participation in SOAR and the Hawk-Cougar Day events.

To contact the Cougar Connection Coordinator, Christina Davis, call 372-7247 or email cmdavis@tricity.wsu.edu

Heritage University at Columbia Basin College

Heritage University offers rigorous, relevant, and responsive academic programs in the Tri-Cities through a convenient evening and weekend model. With a strong liberal arts environment that stresses academic excellence, cross-cultural learning, and the development of the whole person, Heritage University provides professional and career-oriented programs to prepare students for life and work.

For more information:

Paul B. Dowdy, Regional Director

(509) 546-1438 or dowdy_p@heritage.edu

CBC Office: Student Services Center in the HUB, Pasco campus

Main Office: 719 Jadwin Ave., Richland

Undergraduate Degrees

Bachelor of Arts in Education

Elementary Education (K-8)

ESL Endorsement

Bilingual Endorsement

Bachelor of Social Work

Graduate Degrees

Master of Education

Professional Studies in Teaching & Learning

Professional Studies with Professional Certification

Educational Administration

Counseling (School or Mental Health in the Community)

Master in Teaching (K-8)

For individuals with a bachelor's degree seeking a teaching certificate

www.heritage.edu • 1.888.272.6190

Degree/Certificate Requirements

ASSOCIATE IN ARTS & SCIENCE (AA) DEGREE REQUIREMENTS

A. COMMUNICATIONS (13 credits)

(10 credits in English plus a minimum of 3 credits in Communication Studies)

ENGL& 101; **ENGL&** 102 **or ENGL&** 235; **or CMST&** 210, 220, **or CMST** 101, 110, **or** 260;

MATH PROFICIENCY

Intermediate Algebra Proficiency requirement:
Must do one of the following:
Pass Intermediate Algebra (**MATH** 095 **or MATH** 098) with a 2.0 or higher.
Pass a math class that has an Intermediate Algebra prerequisite.
Place into any **MATH** course 113 **or** above via Placement Test.

B. QUANTITATIVE/SYMBOLIC REASONING (5 credits)

Choose one class from the Quantitative Reasoning or Symbolic Reasoning courses.

Quantitative Reasoning:

MATH& 107 **or** any **MATH** course 122 **or** higher **or**

Symbolic Reasoning:

CS& 131, **CS** 102, 162, 202 **or PHIL** 121;

C. HUMANITIES (15 credits)

Complete at least one course from any two of the following groups.
Courses must be selected from three different subject areas.

Group 1

ART& 100, **ART** 116, 117, 118, 119, 120, 121; **MUSC&** 105, **MUSC** 116;

Group 2

CMST 221, 246; **DRMA&** 101, **DRMA** 215; **ENGL&**111, 220,236, 237, 244, 245, 246, 254, 255, 256, **ENGL** 140, 160, 180, 195, 203, 257, 264, 265, 266, 280;

Group 3

CC 201, 202, 203; **ENGL** 210; **HIST&** 126, 127, 128, 219; **ICS** 120, 130, 222; **PHIL&** 101, 106, **PHIL** 131, 150; **WS** 155, 160;

Group 4

World Languages: ARAB 121, 122, 123; **CHIN&** 121, 122, 123; **FRCH&** 121, 122, 123, 221, 222, 223, **FRCH** 260, 261, 262; **GERM&** 121, 122, 123, 221, 222, 223 **GERM** 260, 261, 262; **HEB** 121, 122, 123; **JAPN&** 121, 122, 123, 221, 222, 223; **RUSS&** 121, 122, 123; **SPAN&** 121, 122, 123, 221, 222, 223, **SPAN** 104, 110, 111, 112,205, 206, 207, 260, 261, 262; *all World Languages courses count as a single subject area.* **EFL** 101, 111;

D. SOCIAL & BEHAVIORAL SCIENCE (15 credits)

Complete at least one course from each one of the following two groups.
Courses must be selected from three different subject areas.

Group 1

PSYC& 100, 200, 220, **PSYC** 103, 201, 205; **SOC&** 101, 201, **SOC** 150, 269;

Group 2

ANTH& 100, 204, 206, 234; **ECON&** 201,202, **ECON** 110, 291; **GEO** 150; **HIST&** 136, 137, 220, **HIST** 107, 108, 110, 111, 112, 113, 115, 116, 117, 233; **ICS** 255; **POLS&** 201, 202, 203, 204, **POLS** 104, 205; **SSCI** 290/2901;

E. MATHEMATICAL & NATURAL SCIENCE (15 credits)

At least 10 credits need to be from science courses. Courses must be selected from two different subject areas. One course must be a laboratory science. A single math course cannot count for both a mathematical and natural science course and a quantitative skill course.

ANTH& 205; **ASTR&** 101/ 101L; **BIOL&** 100/ 100L, 160/ 160L, 175/ 175L, 211/ 211L, 212/ 212L, 213/ 213L, 241/ 241L, 242/ 242L, 260/ 260L; **BIOL** 120, 140/ 140L, 148/ 148L, 186/ 186L, 201/ 201L, 240/ 240L, 250/ 250L, 252/ 252L, 253/ 253L, 254/ 254L; **CHEM&** 110/ 110L, 121/ 121L, 122/ 122L, 123/ 123L, 131/ 131L, 140/ 140L, 161/ 161L, 162/ 162L, 163/ 163L, 241/ 251, 242/ 252, 243/ 253, **CHEM** 254/ 264, 255/ 265, 2861-2869, 2901-2909; **ENVS&** 101/ 101L, **ENVS** 174; **GEOL&** 101/ 101L, 103/ 103L, 110/ 110L, **GEOL** 102/ 102L; **GEO** 101, 120/ 1201; **MATH&** 107, 141, 142, 144, 146, 148, 151, 152, 153, 254, **MATH** 113, 121, 122, 123, 147, 243, 246, 255; **NUTR&** 101; **PHYS&** 100/ 101, 121/ 131, 122/ 132, 123/ 133, 221/ 231, 222/ 232, 223/ 233; **SCI** 110/ 1101;

F. HEALTH & PHYSICAL EDUCATION (3 credits)

Health lecture or PE activity courses

HE 110, 160, 161, 1611, 170, 171/ 1711, 210, 215/ 2151, 220, 230, 232, 240, 250; **or PE** 1101, 1111, 1121, 1131, 1141, 1151, 1161, 1171, 1181, 1191, 1201, 1211, 1221, 1271, 1281, 1291, 1321, 1331, 1351, 1401, 1411, 1421, 1451, 1461, 1471, 1481, 1491, 1501, 1601, 1611, 1621, 1631, 1641, 1651, 180/ 1801, 1811, 1871, 1881, 1891, 1901, 2011

G. ELECTIVES (24 credits)

Courses must be numbered 100 and above. A maximum of 15 credits from restricted electives may be applied. Please consult with your advisor or counselor.

Note:
**Required minimum credits 90.*
**Required cumulative GPA 2.0.*
**A minimum of 30 credits CBC courses.*
**Depending on your major, some course choices may be more appropriate than others.*
**Consult with your counselor or faculty advisor.*
**Maximum 6 credits of PE activity may be applied.*
**3 credits in Health and PE and 3 credits included in restricted electives.*

2008-2009 ASSOCIATE IN SCIENCE TRANSFER DEGREE

Biological Sciences/Chemistry/Environmental or Resources Sciences/Geology & Earth Sciences

A. Communications (5 credits)

ENGL& 101, 102;

B. Math (10 credits)

(Two courses at or above Calculus)

MATH& 151, 152, 153, 254, **MATH** 243, 255;

C. Humanities & Social/Behavioral Science (15 credits)

Complete at least one course from each of the following groups.
Courses must be selected from three different subjects.

1. **ART&** 100, **ART** 116, 117, 118, 119, 120, 121; **CC** 201, 202,203; **CMST** 221, 246; **DRMA&** 101, **DRMA** 215; **ENGL&** 111, 220, 236, 237, 244, 245, 246, 254, 255 256, **ENGL** 140, 160, 180, 195, 203, 210, 257, 264, 265, 266, 280; **HIST&** 126, 127, 128, 219; **ICS** 120, 130, 222; **MUSC&** 105, **MUSC** 116; **PHIL&** 101, 106, **PHIL** 131, 150; **WS** 155, 160; **World Languages 121 & above**, *(excluding conversational classes) all World Languages courses count as a single subject area.* **EFL** 101, 111
2. **ANTH&** 100, 204, 206, 234; **ECON&** 201,202, **ECON** 110, 291; **GEO** 150; **HIST&** 136, 137, 220, **HIST** 107, 108, 110, 111 112, 113, 115, 116, 117, 233; **ICS** 255; **POLS&** 201, 202, 203, 204, **POLS** 104, 205; **PSYC&** 100, 200, 220, **PSYC** 103, 201, 205; **SOC&** 101, 201, **SOC** 150, 269; **SSCI** 290/2901

D. Pre Major (45-50 credits)

1. **CHEM&** 161/ 161L, 162/ 162L, 163/ 163L
2. **MATH&** 146 **or MATH&** 153
3. **BIOL&** 211/ 211L, 212/ 212L, 213/ 213L **or PHYS&** 121/ 131, 122/ 132, 123/ 133 **or PHYS&** 221/ 231, 222/ 232, 223/ 233
4. Additional requirements:10-15 quarter credits in Physics, Geology, Organic Chemistry, Biology, or Mathematics, consisting of courses normally taken for Science majors (not for general education), preferably in a 2-3 quarter sequence.

E. Program Specific Under Advisement (10-15 credits)

Sufficient additional college-level credits so that total credits earned are at least 90 quarter credits. These remaining credits may include prerequisites for major courses (e.g., pre-calculus), additional major coursework, or specific general education or other university requirements, as approved by the advisor.

Some baccalaureate programs require Physics with Calculus.
****A single course cannot count in two areas.***
Select courses based on the requirements or the specific discipline at the baccalaureate institution you plan to attend.
*Note: *Required minimum credits 90.*
**Required cumulative GPA 2.0 or higher.*
**A minimum of 30 credits CBC courses.*
**Depending on your major, some course choices may be more appropriate than others.*
**Consult with your counselor or faculty advisor.*
The Associate of Science Degree does NOT guarantee that a student has met the general education requirements at the transfer baccalaureate institution.

2008-2009 ASSOCIATE IN SCIENCE TRANSFER DEGREE

Engineering/Computer Science/ Physics/Atmospheric Sciences

A. Communications (5 credits)

ENGL& 101, 102

B. Math (10 credits)

(Two courses at or above Calculus)

MATH& 151, 152, 153, 254, **MATH** 243, 255;

C. Humanities & Social/Behavioral Science (15 credits)

Complete at least one course from each of the following groups.
Courses must be selected from three different subjects.

1. **ART&** 100, ART 116, 117, 118, 119, 120, 121; **CC** 201, 202,203; **CMST** 221, 246; **DRMA&** 101, **DRMA** 215; **ENGL&** 111, 220, 236, 237, 244, 245, 246, 254, 255, 256, **ENGL** 140, 160, 180, 195, 203,210, 257, 264, 265, 266, 280; **HIST&** 126, 127, 128, 219; **ICS** 120, 130, 222; **MUSC&** 105, **MUSC** 116; **PHIL&** 101, 106, **PHIL** 131, 150; **WS** 155,160; **World Languages 121 & above**, *(excluding conversational classes) all World Languages courses count as a single subject area*. **EFL** 101, 111
2. **ANTH&** 100, 204, 206, 234; **ECON&** 201,202, **ECON** 110, 291; **GEO** 150; **HIST&** 136, 137, 220, **HIST** 107, 108, 110, 111 112, 113, 115, 116, 117, 233; **ICS** 255; **POLS&** 201, 202, 203, 204, **POLS** 104, 205; **PSYC&** 100, 200, 220, **PSYC** 103, 201, 205; **SOC&** 101, 201, SOC 150, 269; **SSCI** 290/2901

D. Pre Major (30 credits)

1.Science (5 credits)

Any Science based on program requirements **or**
CHEM& 161 and **CHEM&** 161L - Engineering majors

2. Math (5 credits)

MATH& 146 **or MATH&** 153

3. Computer Programming Language (5 credits)

As advised for specific discipline/institution.

4. Physics 15 (credits) Choose one of the following sequences:

PHYS& 121/ 131, 122/ 132, 123/ 133 **or**
PHYS& 221/ 231, 222/ 232, 223/ 233

E. Program Specific Under Advisement (30 credits)

The remaining 30 quarter credits should be planned with the help of an advisor based on the requirements of the specific discipline at the baccalaureate institution the student selects to attend. For Engineering disciplines, these credits should include a design component consistent with ABET accreditation standards.

***Some baccalaureate programs require Physics with Calculus.*
****A single course cannot count in two areas.*
Sequences of courses should be completed at one institution.
Select courses based on the requirements or the specific discipline at the baccalaureate institution you plan to attend.
*Note: *Required minimum credits 90.*
**Required cumulative GPA 2.0 or higher.*
**A minimum of 30 credits CBC courses.*
**Depending on your major, some course choices may be more appropriate than others.*
**Consult with your counselor or faculty advisor.*
The Associate of Science Degree does NOT guarantee that a student has met the general education requirements at the transfer baccalaureate institution.

2008-2009 GENERAL STUDIES CERTIFICATE

A. Communications (8 credits)

ENGL& 101, (Required 5 credits)

Choose 3 additional credits from the following:

ENGL& 102 or **ENGL&** 235;
CMST& 210, 220, **CMST** 101, 110, 260;

B. Humanities (10 credits)

Complete at least 10 credits from any of the following courses.

ARAB 121, 122, 123; **ART&** 100, **ART** 116, 117, 118, 119, 120, 121; **CC** 201, 202, 203; **CHIN&** 121, 122, 123; **CMST** 221, 246; **DRMA&** 101, **DRMA** 215; **EFL** 101, 111; **ENGL&** 111, 220,236, 237, 244, 245, 246, 254, 255, 256, **ENGL** 140, 160, 180, 195, 203,210, 257, 264, 265, 266, 280; **FRCH&** 121, 122, 123, 221, 222, 223, **FRCH** 260, 261, 262; **GERM&** 121, 122, 123, 221, 222, 223 **GERM** 260, 261, 262; **HEB** 121, 122, 123; **HIST&** 126, 127, 128, 219; **ICS** 120, 130, 222; **JAPN&** 121, 122, 123, 221, 222, 223; **MUSC&** 105, **MUSC** 116; **PHIL&** 101, 106, **PHIL** 131, 150; **RUSS&** 121, 122, 123; **SPAN&** 121, 122, 123, 221, 222, 223, **SPAN** 104, 110, 111, 112, 205, 206, 207, 260, 261, 262; **WS** 155, 160;

C. Social & Behavioral Science (10 credits)

Complete at least 10 credits from any of the following courses.

ANTH& 100, 204, 206, 234; **ECON&** 201,202, **ECON** 110, 291; **GEO** 150; **HIST&** 136, 137, 220, **HIST** 107, 108, 110, 111 112, 113, 115, 116, 117, 233; **ICS** 255; **POLS&** 201, 202, 203, 204, **POLS** 104, 205; **PSYC&** 100, 200, 220, **PSYC** 103, 201, 205; **SOC&** 101, 201, **SOC** 150, 269; **SSCI** 290/2901

D. Mathematical & Natural Science (10 credits)

Complete at least 10 credits from any of the following courses.

ANTH& 205; **ASTR&** 101/101L; **BIOL&** 100/100L, 160/160L, 175/175L, 211/ 211L, 212/212L, 213/213L, 241/241L, 242/242L, 260/260L; **BIOL** 120, 140/140L, 148/148L, 186/186L, 201/201L, 240/ 240L, 250/250L, 252/252L, 253/253L, 254/254L; **CHEM&** 110/ 110L, 121/ 121L, 122/ 122L, 123/ 123L, 131/ 131L, 140/ 140L, 161/ 161L, 162/ 162L, 163/ 163L, 241/251, 242/252, 243/253, **CHEM** 254/264, 255/265, 2861-2869, 2901-2909; **ENVS&** 101/101L, **ENVS** 174; **GEOL&** 101/101L, 103/103L, 110/110L, **GEOL** 102/102L; **GEO** 101, 120/1201; **MATH&** 107, 141, 142, 146, 144, 148, 151, 152, 153, 254, **MATH** 113 121, 122, 123, 147, 243, 246, 255; **NUTR&** 101; **PHYS&** 100/101, 121/131, 122/132, 123/133, 221/231, 222/232, 223/233; **SCI** 110/1101;

G. Electives (50-52 credits)

Courses must be numbered 100 and above. Please consult with your advisor or counselor.

Note:
**Required minimum credits 90.*
**Required cumulative GPA 2.0 or higher.*
**A minimum of 30 credits CBC courses.*

Program Offerings

Accounting Common Course

http://www.columbiabasin.edu/accounting

Department Overview: Columbia Basin College offers transfer accounting courses, a two-year occupational degree, and a one-year occupational certificate in accounting. The Accounting Associate program is designed to provide students with knowledge in accounting, business, computers, and general education to become employed in entry-level accounting positions. The main goal of the program is to provide students with both the theory of accounting and practical experience to perform computerized accounting functions.

At the end of the program, successful students will be able to:

- apply fundamental accounting process to properly record ordinary business transactions;
- use practical skills and knoweledge to understand and prepare basic accounting and business reports for internal and external users;
- apply accounting and/or business concepts in a variety of business situations and business structures including corporations, partnerships, and small businesses;
- apply information tools and resources within business organizations;
- develop an understanding of the regulatory environment of business;
- demonstrate proficiency in communication skills necessary in a business environment.

Associate in Applied Science in Accounting

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
ACCT&	201	Principles of Accounting I	5
ACCT&	202	Principles of Accounting II	5
ACCT&	203	Principles of Accounting III	5
Select 4 courses from the following options:			
BUS	105	Business and Payroll Tax Accounting	5
BUS	107	Federal Income Taxes	5
BUS	111	Computerized Accounting	5
BUS	250	Management Information Systems	5
BUS	264	Fraud and Accounting Information Systems	5
		Subtotal	**35**

Major Support (a minimum of 35 credits are required)

Course	No.	Course Title	Credits
AOT	124	Intermediate Spreadsheet Applications	5
BUS&	101	Intro to Business	5
BUS	120	Personal Finance	5
BUS	130	Project Management	5
BUS	165	Investments	5
BUS	220	Advanced Personal Finance	5
BUS&	201	Business Law	5
POLS&	200	Introduction to Law	5
BUS	2952	Supervised Employment	1-5
CA	100	Introduction to Microcomputers	4
CS	101	Introduction to Computers and Information Technology	5
CS	106	Database Systems	5
ECON&	202	Macro Economics	5
ECON&	201	Micro Economics	5
MATH&	146	Introduction to Stats	5
MATH	147	Finite Math	5
MATH&	148	Business Calculus	5
AOT		Keyboarding	2-4
		Subtotal	**35**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	235	Technical Writing	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology **or**	5
PSYC	201	Social Psychology **or**	5
SOC&	101	Intro to Sociology	5
Speech (select 3 credits)			
CMST	101	Speech Essentials **or**	3
CMST	110	Communication Behavior	3
		Subtotal	**23**
		Total Credits Required	**93**

Accounting

PROFESSIONAL TECHNICAL

ONE-YEAR CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
ACCT&	201	Principles of Accounting I	5
ACCT&	202	Principles of Accounting II	5
Select 2 courses from the following options:			
BUS	105	Business and Payroll Tax Accounting	5
BUS	111	Computerized Accounting	5
BUS	250	Management Information Systems	5
		Subtotal	**20**

Major Support (a minimum of 15 credits are required)

Course	No.	Course Title	Credits
AOT	124	Intermediate Spreadsheet Applications	5
BUS&	101	Intro to Business	5
BUS	107	Federal Income Taxes	5
BUS	120	Personal Finance	5
BUS	130	Project Management	5
BUS	220	Advanced Personal Finance	5
ACCT&	203	Principles of Accounting III	5
BUS&	201	Business Law	5
POLS&	200	Introduction to Law	5
BUS	264	Fraud and Accounting Information Systems	5
BUS	2952	Supervised Employment	1-5
AOT		Keyboarding	2-4
CA	100	Introduction to Microcomputers	4
CS	101	Introduction to Computers and Information Technology	5
CS	106	Database Systems	5
ECON&	202	Macro Economics	5
ECON&	201	Micro Economics	5
MATH&	146	Introduction to Stats	5
MATH	147	Finite Math	5
MATH&	148	Business Calculus	5
		Subtotal	**15**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology **or**	5
PSYC	201	Social Psychology **or**	5
SOC&	101	Intro to Sociology	5
Speech (select 3 credits)			
CMST	101	Speech Essentials **or**	3
CMST	110	Communication Behavior	3
		Subtotal	**18**
		Total Credits Required	**53**

Administrative Office Technology

http://www.columbiabasin.edu/AOT

Department Overview: The Administrative Office Technology Department (located in the W building) builds strong business partnerships with area employers to promote student preparedness for the diverse and dynamic responsibilities of new economy office professionals. The partnerships include job shadowing, supervised employment, an advisory committee comprised of members from office-related fields, and individual periodic consultations and meetings focusing on curriculum relevancy to employment trends and student accountability and success.

The department's mission of educating students seeking to prepare for future employment through either completing certificates or degrees or by immediately updating skills is verified by the success of its students and graduates. A sampling of positions held by recent Administrative Office Technology students and graduates includes: marketing assistant, medical office manager, insurance biller, software trainer, program analyst, receptionist, instructional aide, administrative assistant or program assistant with governmental agency, accounting office receptionist, health unit coordinator, and secretary senior. Acquiring technical and interpersonal skills needed to function as an office professional may merit enrollment in Columbia Basin College's Administrative Office Technology courses.

Prospective students should attend the First Year Introduction seminar offered by AOT to discuss program entry, individual placement, sequence, scheduling, and program planning. (To locate AOT, consult the maps provided elsewhere in the catalog.) This progressive department offers:

- individualized advising;
- distance learning;
- course challenge opportunities;
- short-term courses and certificates;
- work-based learning;
- Tech Prep articulation;
- current software availability;
- advanced placement in keyboarding and word processing;
- vocationally and software certified faculty;
- software certification preparation.

All Administrative Office Technology (AOT) students are afforded the opportunity to integrate classroom learning with a work-based learning experience through involvement in Supervised Employment (AOT 1952) at a supervised work site in a program-specific discipline. Some disciplines require criminal history background checks that must be satisfactorily met.

The Associate in Applied Science degree and several Administrative Office Technology certificates are offered for students whose goals are immediate employment. Additionally, students may enroll in classes without working toward a certificate or degree. Lastly, the department offers an Associate in Applied Science-Transfer degree for transferring to selected state institutions. The AOT degrees and certificates are different from the Associate degree in Arts and Science, which is described elsewhere in the catalog.

Graduate Competencies

Graduates of the program have been afforded opportunities to:

- demonstrate an ability to use appropriate software;
- explore and self-assess career-development techniques;
- perform duties related to specialty content in a supervised employment capacity;
- assess and apply appropriate societal and work ethics in the global environment;
- develop critical-thinking and problem-solving abilities.

Other Information: Degree Programs

Associate in Applied Science Degrees:

- Administrative Assistant
- Transfer

Certificate Programs (*require a minimum of 45 credits*):

- Agricultural Business Office (offered in conjunction with CBC's Agriculture department)
- Bookkeeping Clerk
- Health Unit Coordinator
- Legal Office Clerk
- Medical Office Receptionist
- Medical Billing Clerk
- Receptionist

Proficiency and Short-term Certificates (*2-quarter programs*):

- Health Unit Coordinator Proficiency
- Office Aide Proficiency
- Office Software Proficiency

All programs require students to:

- Complete ASSET test
- Earn a minimum grade of 2.0 in all required Administrative Office Technology courses

Associate in Applied Science in Administrative Assistant

PROFESSIONAL TECHNICAL

The following assumes the student enters the program college-ready and has completed AOT 101/AOT 102/AOT 109 **or** *ability to test out/challenge. Eligibility for MATH 106 and ENGL& 101.*

Recommended: students purchase a USB storage drive.

Major Courses

Course	No.	Course Title	Credits
CA	100	Introduction to Microcomputers	4
AOT	114	Editing	5
AOT	117	Office Orientation	3
AOT	124	Intermediate Spreadsheet Applications	5
AOT	142	General Office Procedures	5
AOT	172	Word Processing I	5
AOT	270	Business Correspondence	5
AOT	290	Professional Development	3
		Subtotal	**35**

Support Courses

Available Emphases: General, Legal, Billing and Posting, and Human Resources.

Choose one Available Emphasis from below:

General:

Course	No.	Course Title	Credits
AOT	125	Database Applications	5
AOT	126	Presentation Applications	3
AOT	128	Web Page Maintenance	5
AOT	129	Accounting Software	3
AOT	130	Practical Accounting	5
AOT	132	Payroll for the Office Professional	4
AOT	1952*	Supervised Employment	3
AOT	243	Administrative Office Management	2
AOT	272	Word Processing II	4
AOT	276	Integrated Word Processing	5
		Subtotal	**39**
		General Major and Support Subtotal	**74**

** AOT 1952-Supervised Employment site must meet intended emphasis requirement.*

AOT 109 is a prescribed course to facilitate keyboarding and 10-key speeds. Degree completion requires keyboarding speed of 60 wpm and 10-key speed of 100 cpm. To achieve these speeds, AOT 109 may be taken three times for credit.

Legal:

Course	No.	Course Title	Credits
AOT	129	Accounting Software	3
AOT	130	Practical Accounting	5
AOT	132	Payroll for the Office Professional	4
AOT	146	Legal Terminology	5
AOT	1952*	Supervised Employment	3
AOT	244	Legal Administrative Office Procedures	5
AOT	272	Word Processing II	4
PL	101	Introduction to Paralegalism	5
PL	105	Law Office Management	3
		Subtotal	**37**
		Legal Major and Support Subtotal	**72**

** AOT 1952-Supervised Employment site must meet intended emphasis requirement.*

AOT 109 is a prescribed course to facilitate keyboarding and 10-key speeds. Degree completion requires keyboarding speed of 60 wpm and 10-key speed of 100 cpm. To achieve these speeds, AOT 109 may be taken three times for credit.

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
PSYC&	100	General Psychology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	103	Workplace Communication **or**	3
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total General Credits Required	**92-94**
		Total Legal Credits Required	**90-92**

Associate in Applied Science Administrative Assistant

PROFESSIONAL TECHNICAL

TRANSFER DEGREE TO CWU

To be eligible for ENGL& 101 **or** *ENGL 103 and the required math, the student may need to complete ENGL 098/ENGL 099 and MATH 095. Certificate entry keyboarding of 25 net wpm in 3' timing required. To achieve this, the student may need to complete AOT 101/AOT 102. Also AOT 114 or COMPASS Reading 82 & Writing 87.*

Recommended: students purchase a USB storage drive.

Major Courses

Course	No.	Course Title	Credits
CA	100	Introduction to Microcomputers	4
AOT	102	Keyboarding II	2
AOT	1091	Keyboarding/Skillbuilding	3
AOT	117	Office Orientation	3
AOT	124	Intermediate Spreadsheet Applications	5
AOT	125	Database Applications	5
AOT	129	Accounting Software	3
AOT	142	General Office Procedures	5
AOT	172	Word Processing I	5
AOT	243	Administrative Office Management	2
AOT	270	Business Correspondence	5
AOT	272	Word Processing II	4
AOT	290	Professional Development	3
		Subtotal	**49**

Major Support

Course	No.	Course Title	Credits
AOT	126	Presentation Applications	3
AOT	128	Web Page Maintenance	5
AOT	276	Integrated Word Processing	5
AOT	294	Software Teaching Methods	5
		Subtotal	**18**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	121	Structure of Elementary Math **or** above **or**	5
CS	102	Visual Basic 1	5
Economics (select 5 credits)			
ECON&	202	Macro Economics **or**	5
ECON&	201	Micro Economics	5
English (select 5 credits)			
ENGL&	102	Composition II **or**	5
ENGL&	235	Technical Writing	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	103	Workplace Communication **or**	3
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
Social Sciences or Humanities			***10***
		Subtotal	**33-35**
		Total Credits Required	**100-102**

Medical Billing Clerk

PROFESSIONAL TECHNICAL

ONE-YEAR CERTIFICATE

The following assumes the student enters the program college-ready and has completed AOT 101/AOT 102/AOT 109 **or** *ability to test out/challenge. Eligibility for MATH 106 and ENGL& 101.*

Recommended: students purchase a USB storage drive.

Major Courses

Course	No.	Course Title	Credits
CA	100	Introduction to Microcomputers	4
AOT	117	Office Orientation	3
AOT	129	Accounting Software	3
AOT	130	Practical Accounting	5
AOT	172	Word Processing I	5
AOT	1952*	Supervised Employment	3
AOT	290	Professional Development	3
HIT	147	Medical Terminology	5
HIT	118	Legal Aspects of the Medical Office III	3
HIT	153	Medical Reimbursement	4
HIT	155	Introduction to Medical Coding	4
HIT	156	Intermediate Medical Coding	4
		Subtotal	**46**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
PSYC&	100	General Psychology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	103	Workplace Communication **or**	3
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**64-66**

**Supervised Employment site must meet intended emphasis requirement.*

AOT 109 is a prescribed course to facilitate keyboarding and l0-key speeds. Degree completion requires keyboarding speed of 30 wpm and 10-key sped of 100 cpm. To achieve these speeds, AOT 109 may be taken three times for credit.

Medical Secretary

PROFESSIONAL TECHNICAL

ONE-YEAR CERTIFICATE

The following assumes the student enters the program college-ready and has completed AOT 101/AOT 102/AOT 109 **or** *ability to test out/challenge. Eligibility for MATH 106 and ENGL& 101.*

Recommended: students purchase a USB storage drive.

Major Courses

Course	No.	Course Title	Credits
CA	100	Introduction to Microcomputers	4
AOT	117	Office Orientation	3
AOT	172	Word Processing I	5
AOT	1952*	Supervised Employment	6
HIT	147	Medical Terminology	5
HIT	118	Legal Aspects of the Medical Office III	3
HIT	155	Introduction to Medical Coding	4
		Subtotal	**30**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
PSYC&	100	General Psychology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	103	Workplace Communication **or**	3
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**48-50**

**Supervised Employment site must meet intended emphasis requirement.*

AOT 109 is a prescribed course to facilitate keyboarding and 10-key speeds. Degree completion requires keyboarding speed of 30 wpm and 10-key speed of 100 cpm. To achieve these speeds, AOT109 may be taken three times for credit.

Medical Secretary

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

The following assumes the student enters the program college-ready and has completed AOT 101/AOT 102/AOT 109 **or** *ability to test out/challenge.*

Recommended: students purchase a USB storage drive.

Major Courses

Course	No.	Course Title	Credits
AOT	117	Office Orientation	3
AOT	1952*	Supervised Employment	1
HIT	118	Legal Aspects of the Medical Office III	3
HIT	147	Medical Terminology	5
HIT	155	Introduction to Medical Coding	4
CMST	101	Speech Essentials **or**	3
CMST	103	Workplace Communication	3
		Subtotal	**19**
		Total Credits Required	**19**

**Supervised Employment site must meet intended emphasis requirement.*

AOT 109 is a prescribed course to facilitate keyboarding and 10-key speeds. Degree completion requires keyboarding speed of 30 wpm and 10-key speed of 100 cpm. To achieve these speeds, AOT109 may be taken three times for credit.

Office Clerk

PROFESSIONAL TECHNICAL

ONE-YEAR CERTIFICATE

The following assumes the student enters the program college-ready and has completed AOT 101/AOT 102/AOT 109 **or** *ability to test out/challenge. Eligibility for MATH 106 and ENGL& 101.*

Recommended: students purchase a USB storage drive.

Major Courses

Course	No.	Course Title	Credits
CA	100	Introduction to Microcomputers	4
AOT	114	Editing	5
AOT	117	Office Orientation	3
AOT	124	Intermediate Spreadsheet Applications	5
AOT	142	General Office Procedures	5
AOT	172	Word Processing I	5
AOT	1952*	Supervised Employment	3
AOT	270	Business Correspondence	5
AOT	290	Professional Development	3
		Subtotal	**38**

Support Courses

Available Emphases: General, Legal, or Billing and Posting.

Choose one Available Emphasis from below:

General:

Course	No.	Course Title	Credits
AOT	125	Database Applications	5
AOT	272	Word Processing II	4
		Subtotal	**9**

**AOT 1952-Supervised Employment site must meet intended emphasis requirement.*

AOT 109 is a prescribed course to facilitate keyboarding and 10-key speeds. Degree completion requires keyboarding speed of 50 wpm and 10-key speed of 100 cpm. To achieve these speeds, AOT109 may be taken three times for credit.

Legal:

Course	No.	Course Title	Credits
AOT	146	Legal Terminology	5
AOT	244	Legal Administrative Office Procedures	5
		Subtotal	**10**

**AOT 1952-Supervised Employment site must meet intended emphasis requirement.*

AOT 109 is a prescribed course to facilitate keyboarding and 10-key speeds. Degree completion requires keyboarding speed of 50 wpm and 10-key speed of 100 cpm. To achieve these speeds, AOT109 may be taken three times for credit.

Billing and Posting:

Course	No.	Course Title	Credits
AOT	129	Accounting Software	3
AOT	130	Practical Accounting	5
AOT	132	Payroll for the Office Professional	4
		Subtotal	**12**

**AOT 1952-Supervised Employment site must meet intended emphasis requirement.*

AOT 109 is a prescribed course to facilitate keyboarding and 10-key speeds. Degree completion requires keyboarding speed of 35 wpm and 10-key speed of 175 cpm. To achieve these speeds, AOT109 may be taken three times for credit.

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
PSYC&	100	General Psychology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	103	Workplace Communication **or**	3
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total General Credits Required	**65-67**
		Total Legal Credits Required	**66-68**
		Total Billing and Posting Credits Required	**68-70**

Receptionist

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

AOT Prerequisites: AOT 101/AOT 102/AOT 109 or Challenge/AP (Advanced Placement).

Recommended: students purchase a USB storage drive.

Major Courses

Course	No.	Course Title	Credits
CA	100	Introduction to Microcomputers	4
AOT	117	Office Orientation	3
AOT	142	General Office Procedures	5
AOT	172	Word Processing I	5
AOT	1952*	Supervised Employment	2
		Subtotal	**19**
		Total Credits Required	**19**

**AOT 1952-Supervised Employment site must meet intended emphasis requirement.*

AOT 109 is a prescribed course to facilitate keyboarding and 10-key speeds. Degree completion requires keyboarding speed of 30 wpm and 10-key speed of 100 cpm. To achieve these speeds, AOT109 may be taken three times for credit.

Retail Operations Short-Term Certificate

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
RO	100	Introduction to Retail	10
		Subtotal	**10**
		Total Credits Required	**10**

Adult Basic Education/General Education Development (GED)

http://www.columbiabasin.edu/ABE

Department Overview: Adult Basic Education consists of two main areas of focus: ABE and GED preparation. These classes serve the adult community and are available at the Learning Opportunities Center (LOC), on the Pasco campus and at the Kennewick WorkSource. Professional staff members provide individualized instruction as well as small group instruction.

Adult Basic Education classes in reading, writing, and math serve the needs of the adult student, 18 years or older, who lacks these basic skills. Each person is tested and diagnosed for reading, writing, and math levels and is provided with appropriate materials for instruction.

The second option available under Adult Basic Education is the GED preparation program. Completion of this program prepares the student for the General Education Development (GED) test. Again, each person is tested and diagnosed for reading, writing and math levels. Instruction may be individualized or in a classroom.

The Adult Basic Education program also offers a family literacy program which works with parents to improve their literacy and basic skills so that they are better prepared to support their children's success. These courses are conducted in collaboration with the local school district and other agencies and usually integrate parenting, early childhood education, and home visits into the ABE/GED prep instruction. Many of these courses are supported through Federal Even Start funds and are limited to parents with children up to seven years old. Registration into these courses is based on the family's qualification through a school district or partner agency.

Agriculture

http://www.columbiabasin.edu/agriculture

Department Overview: Agriculture is the science of the food and fiber industry. Courses are designed to provide the student with a deeper understanding of the foundational science of modern agriculture. Students will develop their ability to think critically and communicate through both spoken and written media. See also Horticulture, Agricultural Food Systems, and Animal Science for courses required to earn an Associates of Arts and Science with an Emphasis in Agri-Business.

Associate in Arts & Science with an Emphasis in Agri-Business

TRANSFER DEGREE

Option C

A. Communication (15 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
CMST&	220	Public Speaking	5

Math Proficiency X

B. Quantitative/Symbolic Reasoning (5 credits)

Course	No.	Course Title	Credits
MATH&	146	Introduction to Stats	5

C. Humanities (15 credits)

Course	No.	Course Title	Credits
ICS	120	Survey of Hispanic Culture	5
SPAN	110	Beginning Spanish for Professionals **or**	5
CHIN&	121	Chinese I	5
CMST	221	Communication Skills for Conflict Resolution	5

D. Social & Behavioral Science (15 credits)

Course	No.	Course Title	Credits
PSYC&	100	General Psychology	5
SOC&	101	Intro to Sociology	5
ECON&	202	Macro Economics	5

E. Mathematical & Natural Science (15 credits)

Course	No.	Course Title	Credits
CHEM&	161	General Chemistry I w/Lab	5
CHEM&	161L*	General Chemistry I Lab	0
CHEM&	162	General Chemistry II w/Lab	5
CHEM&	162L*	General Chemistry II Lab	0
BIOL&	211	Majors Cellular w/Lab	5
BIOL&	211L*	Majors Cellular Lab	0

F. Health and Physical Education (3 credits)

Course	No.	Course Title	Credits
HE	230	First-Aid Safety	3

G. Electives (33 credits)

Course	No.	Course Title	Credits
AFS	101	Introduction to Agricultural Systems	3
AFS	201	Agricultural and Food Systems	4
AFS	2011	Agricultural and Food Systems Lab	1
AG	201	Soils	4
AG	2011	Soils Lab	1
AG	102	Introduction to Animal Science	4
AG	1021	Introduction to Animal Science Lab	1
ACCT&	201	Principles of Accounting I	5
CHEM&	163	General Chemistry III w/Lab	5
CHEM&	163L*	General Chemistry III Lab	0
HORT	202	Cultivated Plants	4
HORT	2021	Cultivated Plants Lab	1

Total Credits Required . . . 101

Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.

Agricultural Food Systems

Department Overview: Agri-Food Systems gives a broad, interdisciplinary understanding of agriculture systems and allows you to develop specialized knowledge of business management in agriculture and related areas. The program prepares not only aspiring growers of crops, but also students who are interested in related industries, such as global marketing, direct marketing, or food production to contribute to the changing field of agriculture.

Agricultural and Industrial Equipment Technology

http://www.columbiabasin.edu/agriculture

Department Overview: The Agriculture and Industrial Equipment Technology program prepares students to become technicians for agriculture and construction equipment dealers who sell such brands as AGCO, CASE IH, Caterpillar, Kubota, and New Holland products. The program is two years in length and includes courses in hydraulics, electronics, diesel, mobile air conditioning, and diagnostics. The Agriculture and Industrial Equipment department intends to meet the following goals:

- upgrade the technical competency and professional level of incoming AG and industrial equipment service technicians;
- train students to analytically diagnose, service, and maintain agriculture and industrial products using recommended procedures, special tools, and service information;
- develop technicians with strong communications and customer service skills including listening, interpersonal communication, conflict resolution, and teamwork;
- provide content that will enable successful graduates to advance in position after additional experience, and to understand new systems and components as they are introduced.

To enter the program, students must be sponsored by an equipment dealership and meet the dealership hiring requirements. Students are encouraged to do a pre-internship at an equipment dealership prior to entering the program. Students complete six sessions of courses at Columbia Basin College (109-111 credits/ 1694-1716 hours) and four sessions of paid internships at sponsoring dealerships (20 credits/1000 hours). An Associate of Applied Science in Agriculture and Industrial Equipment Technology is awarded to students who complete all required and related coursework, general education requirements, and internship credits.

Associate in Applied Science in AG and Industrial Equipment Technology

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
AGET	110	Fundamentals of Maintenance	7
AGET	112	Pre-Delivery & Maintenance	7
AGET	117	Internship 1	5
AGET	120	Power Train	7
AGET	122	Mobile Air Conditioning	7
AGET	127	Internship 2	5
AGET	130	Hydraulic Principles	7
AGET	132	Wiring Circuits, Charging & Starting Systems.	7
AGET	210	Hydraulic Systems	7
AGET	212	Electronic Systems	7
AGET	217	Internship 3	5
AGET	220	Engines and Fuel Systems	7
AGET	227	Internship 4	5
AGET	232	Precision Ag and Construction	5
AGET	234	Diagnostics	7
AGET	238	Capstone.	2
		Subtotal.	**97**

Major Support

Course	No.	Course Title	Credits
AMT	207	Material Science of Automotive Technology	3
BUS&	101	Intro to Business	5
FYI	103	First Year Introduction for Skilled Trades	1
		Subtotal.	**9**

General Education

Course	No.	Course Title	Credits
MATH	111	Automotive Math.	5
English (select 5 credits)			
ENGL&	101	English Composition Ior	5
ENGL	103	Writing in the Workplace (preferred)	5
Human Relations (select 5 credits)			
PSYC&	100	General Psychology **or**	5
PSYC	201	Social Psychology **or**	5
BUS	271	Human Relations Business (preferred)	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	103	Workplace Communication (preferred) **or**	3
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal.	**18-20**
		Total Credits Required.	**124-126**

Equipment Electronics

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
AGET	132	Wiring Circuits, Charging & Starting Systems.	7
AGET	212	Electronic Systems	7
		Subtotal.	**14**
		Total Credits Required.	**14**

Hydraulics

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
AGET	130	Hydraulic Principles	7
AGET	210	Hydraulic Systems	7
		Subtotal.	**14**
		Total Credits Required.	**14**

Anthropology

http://www.columbiabasin.edu/home/index.asp?page=639

Department Overview: The department features introductory courses in Anthropology designed to acquaint students with the study of humans, their natural history, their present day variation, and their cultural development. Students are expected to develop an understanding of human biological and sociocultural evolution through research, critical thinking, and writing.

Associate in Arts & Science with an Emphasis in Anthropology

TRANSFER DEGREE

Option C

A. Communication (13 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
CMST	3		

Math Proficiency X

B. Quantitative/Symbolic Reasoning (5 credits)

Course	No.	Course Title	Credits
MATH&	146	Introduction to Stats	5

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree.

Course	No.	Course Title	Credits
Humanities Electives (see Anthropology advisor for appropriate selection)			15

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral Science distribution requirements for the AA degree.

Course	No.	Course Title	Credits
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5
ANTH&	206	Cultural Anthropology	5
Social Science Elective (see Anthropology advisor for appropriate selection)			5

E. Mathematical & Natural Science (15 credits)

Course selections must also meet the Mathematical & Natural Science distribution requirements for the AA degree.

Course	No.	Course Title	Credits
ANTH&	205	Biological Anthropology	5
Mathematical & Natural Science Electives (see Anthropology advisor for appropriate selection)			10

F. Health and Physical Education (3 credits)

Selected from PE activity classes **or** Health (HE) classes 3

G. Electives (24 credits)

Course	No.	Course Title	Credits
ANTH&	204	Archeology (Required)	5
ANTH&	234	Religion & Culture (Recommended)	5
Electives (see Anthropology advisor for appropriate selection)			19

Total Credits Required . . . 90

Arabic

Department Overview: Our Arabic classes offer student-centered instruction that focuses on communicating effectively in Arabic, appreciating the culture of Arab countries of the Middle East and Northern Africa, and recognizing linguistic and cultural connections between Arabic-speaking parts of the world and the United States.

Art, Visual

http://www.columbiabasin.edu/visualarts

Department Overview: The Art Department offers a wide range of learning opportunities so students can:

- satisfy degree requirements;
- transfer to four-year colleges or universities;
- develop professionally;
- find personal enrichment;
- enhance their appreciation of the visual arts.

The visual arts curriculum is designed to prepare the artists or arts educator with a foundation of skills for further growth and to provide continuing education opportunities for local artists.

The initial emphasis is on drawing and design skills including studies of line and tonal control, perspective theories, spatial concerns, and building an understanding of the elements and principles of form that constitute the basic language of the visual artists. Various media areas of the arts and crafts are emphasized in specific courses representing all the major two and three-dimensional media as well as art history. Emphasis is also placed on the thematic nature of the visual arts. Teaching strategies are designed to cultivate an understanding of the various themes and issues that the visual arts has the potential to articulate. This content-based approach to art-making further enriches the art education the student will experience. For art majors this affords an opportunity to build a significant portfolio of work in a variety of media areas.

This curriculum is recommended for students preparing for transfer into programs in the fine arts, art education, art history, graphic design, architecture, computer art, illustration or other commercial art areas, museum studies, or arts management.

Associate in Arts & Science with an Emphasis in Visual Arts

TRANSFER DEGREE

Option C

A. Communication (13 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
CMST	101	Speech Essentials **or**	3
CMST	110	Communication Behavior	3

Math Proficiency X

B. Quantitative/Symbolic Reasoning (5 credits). 5

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree.

Course	No.	Course Title	Credits
ART&	100	Art Appreciation	5
Humanities Electives			10

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral Science distribution requirements for the AA degree.

Social & Behavioral Science Electives 15

E. Mathematical & Natural Science (15 credits)

Course selections must also meet the Mathematical & Natural Science distribution requirements for the AA degree.

Mathematical & Natural Science Electives 15

F. Health and Physical Education (3 credits)

Selected from PE activity classes **or** Health (HE) classes 3

G. Electives - 46 required electives

Course	No.	Course Title	Credits
ART	111	Design I	5
ART	1121	3D Design II	5
ART	1131	Drawing I	3
ART	1141	Drawing II	3

Select 10 credits from the following courses:

ART	116	Art History Ancient World	5
ART	117	Art History Medieval-Baroque	5
ART	118	Art History Modern Times	5
ART		Elective Studio Courses (see faculty advisor)	20

Total Credits Required. . . 112

It is understood a visual arts major will complete more electives than the minimum 24 required for an AA degree. In addition to the above required coursework, it is extremely important to stay in close contact with your faculty advisor. It is possible your faculty advisor will recommend additional coursework within the Art Department.

Astronomy Common Course

http://www.columbiabasin.edu/astronomy

Department Overview: The Astronomy program is offered to give science students a choice in how they integrate and apply math and science skills in their learning process. Currently, Introductory Astronomy is taught as the primary astronomy class. This includes understanding the basics of observational astronomy, the solar system, stars, galaxies, and the universe. Our Robert and Elisabeth Moore Observatory gives students the opportunity for hands-on learning by observing in a research-grade facility right on campus. The use of the scientific process, math skills, and critical thinking are emphasized as the basis for moving forward in a technologically challenging world.

Autobody Collision Repair

http://www.columbiabasin.edu/autobody

Department Overview: This two-year program provides training in the two main areas of collision repair: body work and painting.

The first year of the program focuses on basic collision repair and complete car refinishing. The second year of the program focuses on structural repair, mechanical repair, and advanced refinishing including tinting and blending of paint. Other advanced training includes the repair techniques of aluminum and composite structure components. Students divide their time between lecture and lab classes to ensure they get theoretical training as well as employable skills.

Autobody repair is a rapidly changing field and CBC's Autobody Repair program aims to keep students updated on new materials being used in the auto industry and the techniques necessary to repair them. Students who complete the program will be prepared for entry-level employment in collision repair shops.

For more information, call (509) 544-2269.

The department requires students achieve a minimum grade of 2.0 to be able to continue enrollment in major courses. The Associate of Applied Science degree also requires a minimum grade of 2.0 for each major course. A student who achieves a grade of 1.9 or lower in any required major courses may repeat that course once to attempt to achieve a grade of 2.0 or higher. Exceptions to this policy must be approved by the Dean of the program prior to enrollment and must be based on extenuating circumstances.

Associate in Applied Science in Autobody Collision Repair

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
ABT	111	Basic Repair	5
ABT	1111	Basic Repair Lab	9
ABT	121	Subassembly Repair	5
ABT	1211	Subassembly Repair Lab	9
ABT	131	Principles of Painting	5
ABT	1311	Painting Lab.	9
ABT	211	Repair Methods.	5
ABT	2111	Repair Methods Lab	9
ABT	221	Body Rebuilding I	5
ABT	2211	Body Rebuilding I Lab	9
ABT	231	Body Rebuilding II	5
ABT	2311	Body Rebuilding II Lab.	9
		Subtotal.	**84**

Major Support

Course	No.	Course Title	Credits
WT	100	Basic Welding	1
WT	1001	Basic Welding Lab	2
BUS&	101	Intro to Business	5
FYI	103	First Year Introduction for Trades	1
		Subtotal.	**9**

General Education

Course	No.	Course Title	Credits
English (select 5 credits)			
ENGL&	101	English Composition I **or**	5
ENGL	103	Writing in the Workplace	5
Human Relations (select 3-5 credits)			
PSYC	103	Applied Psychology **or**	3
PSYC&	100	General Psychology **or**	5
PSYC	201	Social Psychology **or**	5
BUS	271	Human Relations Business	5
Math (select 4-5 credits)			
MATH	100+	MATH 100 **or** above	4-5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	103	Workplace Communication **or**	3
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal.	**15-20**
		Total Credits Required.	**108-113**

Autobody Collision Repair

PROFESSIONAL TECHNICAL

Certificate

Major Courses

Course	No.	Course Title	Credits
ABT	111	Basic Repair	5
ABT	1111	Basic Repair Lab	9
ABT	121	Subassembly Repair	5
ABT	1211	Subassembly Repair Lab	9
ABT	131	Principles of Painting	5
ABT	1311	Painting Lab.	9
		Subtotal.	**42**

Major Support

Course	No.	Course Title	Credits
WT	1001	Basic Welding Lab	2
		Subtotal.	**2**
		Total Credits Required.	**44**

Automotive Technology

http://www.columbiabasin.edu/automotive

Department Overview: The Automotive Technology program is a comprehensive two-year program combining classroom instruction and hands-on training. The program is based on the eight Automotive Service Excellence (A.S.E.) topics in the National Technicians Certification Program to prepare students for the A.S.E. mechanic certification tests.

CBC's Automotive faculty aim to bring innovative technology into the classroom and the lab. Automotive Tech students learn the basics of computer diagnosis as well as traditional tool usage as they participate in the entire repair process, evaluating, repairing, and maintaining vehicles.

For more information, call (509) 542-4746.

The department requires students achieve a minimum grade of 2.0 to be able to continue enrollment in major courses. The Associate of Applied Science degree also requires a minimum grade of 2.0 for each major course. A student who achieves a grade of 1.9 or lower in any required major courses may repeat that course once to attempt to achieve a grade of 2.0 or higher. Exceptions to this policy must be approved by the Dean of the program prior to enrollment and must be based on extenuating circumstances.

Associate in Applied Science in Automotive Technology

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
AMT	110	Introduction to Automotive Technology	4
AMT	1101	Introduction to Automotive Technology Lab	10
AMT	120	Basic Electrical and Electronics	2
AMT	1201	Basic Electrical and Electronics Lab	5
AMT	123	Brakes/Suspension I	2
AMT	1231	Brakes/Suspension I Lab	5
AMT	130	Engine Performance	2
AMT	1301	Engine Performance Lab	5
AMT	133	Engine Repair and Rebuild	2
AMT	1331	Engine Repair and Rebuild Lab	5
AMT	1402	Automotive Internship	7
AMT	207	Material Science of Automotive Technology	3
AMT	220	Advanced Electrical and Electronics	2
AMT	2201	Advanced Electrical and Electronics Lab	5
AMT	223	Brakes/Suspension II	2
AMT	2231	Brakes/Suspension II Lab	5
AMT	230	Automatic Transmission	2
AMT	2301	Automatic Transmission Lab	4
AMT	233	Manual Transmission	2
AMT	2331	Manual Transmission Lab	5
AMT	240	Drivability Diagnostics	2
AMT	2401	Drivability Diagnostics Lab	5
AMT	243	Heating Ventilation and Air Conditioning Systems	2
AMT	2431	Heating Ventilation and Air Conditioning Systems Lab	5
		Subtotal	**93**

Major Support

FYI	103	First Year Introduction for Trades	1
		Subtotal	**1**

General Education

Course	No.	Course Title	Credits
ENGL	103	Writing in the Workplace	5
MATH	111	Automotive Math	5
CMST	103	Workplace Communication	3
Psychology (select 3-5 credits)			
PSYC	103	Applied Psychology **or**	3
PSYC&	100	General Psychology	5
		Subtotal	**16-18**
		Total Credits Required	**110-112**

Automotive Technology Certificate

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
AMT	110	Introduction to Automotive Technology	4
AMT	1101	Introduction to Automotive Technology Lab	10
AMT	120	Basic Electrical and Electronics	2
AMT	1201	Basic Electrical and Electronics Lab	5
AMT	123	Brakes/Suspension I	2
AMT	1231	Brakes/Suspension I Lab	5
AMT	130	Engine Performance	2
AMT	1301	Engine Performance Lab	5
AMT	133	Engine Repair and Rebuild	2
AMT	1331	Engine Repair and Rebuild Lab	5
		Subtotal	**42**
		Total Credits Required	**42**

Biology

http://www.columbiabasin.edu/home/index.asp?page=671

Department Overview: The Life Sciences Department offers courses in Biology & Science to:

- prepare students for BIOL& 211/BIOL& 211L and/or fulfill graduation requirements for the non-science major to obtain an Associate degree in Arts and Sciences or Certificate of General Study (BIOL& 100/BIOL& 100L, BIOL& 160/BIOL& 160L, BIOL& 175/BIOL& 175L, ENVS& 101/ENVS& 101L, BIOL 140/BIOL 140L, SCI 110/SCI 1101;
- meet the entrance or support course requirements for the Health Sciences (Nursing, Dental Hygiene, Physical & Occupational Therapy, Paramedic/EMT, etc.) programs (BIOL& 160/BIOL& 160L, BIOL& 211/BIOL& 211L, BIOL& 241/BIOL& 241L, BIOL& 242 /BIOL& 242L, BIOL& 260/BIOL& 260L);
- prepare the science major and pre-professional (pre-med, pre-vet, pre-chiropractic, pre-optometry, pre-pharmacy, etc.) transfer student for upper-level biology courses (BIOL& 211/BIOL& 211L, BIOL& 212/BIOL& 212L, BIOL& 213/BIOL& 213L) and;
- meet the need for elective and/or general interest to the community (BIOL 120, BIOL 140/BIOL 140L, BIOL 186/BIOL 186L, BIOL 201/BIOL 201L, BIOL 240/BIOL 240L, BIOL 250/BIOL 250L, BIOL 252/BIOL 252L, BIOL 253/BIOL 253L, BIOL 254/BIOL 254L, SCI 110/SCI 1101).

Lab and lecture must be taken concurrently in all class offerings.

Blueprint Reading

http://www.columbiabasin.edu/home/index.asp?page=126

Department Overview: Columbia Basin College offers several blueprint reading classes. They are tailored specifically for the following programs:

Machine Technology

BPR 204: This class is designed to lead the Machine Technology student into reading Machine Shop blueprints. Students will also be introduced to Computer Aided Drafting (CAD) software and will create blueprints of machining projects using the software.

Welding Technology

BPR 106 and BPR 206: These classes are designed to teach students to interpret blueprints used on structural projects (BPR 106) along with utility and process piping projects (BPR 206). Students learn to create a materials list from reading blueprints in both BPR 106 and BPR 206.

Business

http://www.columbiabasin.edu/home/index.asp?page=744

Department Overview: The variety of business courses offered are designed to meet many different needs. Students can complete the AA in Business, complete business prerequisites to transfer to a four-year college, can choose among the courses to build specific skills, and/or can select courses that will lead to a certificate or two-year degree in Accounting or Business Administration.

Associate in Arts & Science in Business

TRANSFER DEGREE

A. Communication (13 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
CMST	101	Speech Essentials **or**	3
CMST&	220[1]	Public Speaking	5

Math Proficiency X

B. Quantitative/Symbolic Reasoning (5 credits)

Course	No.	Course Title	Credits
MATH&	148	Business Calculus	5

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree.

Humanities Electives[2] 15

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral Science distribution requirements for the AA degree.

Course	No.	Course Title	Credits
ECON&	202	Macro Economics	5
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5
Social Science Elective (see advisor for appropriate selection)[3]			5

E. Mathematical & Natural Science (15 credits)

Course selections must also meet the Mathematical & Natural Science distribution requirements for the AA degree.[4]

Course	No.	Course Title	Credits
		Lab Science	5
		Science	5
MATH&	146	Introduction to Stats	5

F. Health and Physical Education (3 credits)

Selected from PE activity classes **or** Health (HE) classes 3

G. Electives (40-55 credits)

Course	No.	Course Title	Credits
ECON&	201	Micro Economics	5
ACCT&	201	Principles of Accounting I	5
ACCT&	202	Principles of Accounting II	5
ACCT&	203	Principles of Accounting III	5
BUS&	201[5]	Business Law **or**	5
POLS&	200[5]	Introduction to Law	5
MATH	147	Finite Math	5
MATH&	141	Precalculus I	5
BUS	250	Management Information Systems	
		Business Elective[6]--Computer Science course	0-5
		World Languages[2]	0-10

Total Credits Required. . 106-121

1 *For WSU, choose a 5-credit CMST& 220*

2 *Students intending the international business major should consult their potential transfer institutions regarding the level of world languages required for admission to the major—only five credits in world languages may apply to the Humanities requirement*

3 *For WSU, choose a Political Science course*

4 *Students intending the manufacturing management major at WWU should consult WWU regarding the selection of natural science courses required for admission to the major*

5 *Check with your chosen four-year college for appropriate choice, CBC does not have an equivalent required course for University of Washington*

6 *Four institutions have requirements for admission to the business major that go beyond those specified above that students can meet by careful selection of the elective course:*

WSU Management Information Systems MIS that can be satisfied by CBC's BUS 250, this course is required to certify for major; Gonzaga, PLU, and SPU have other computer course expectations, see advisor for information

Business Administration

http://www.columbiabasin.edu/busadmin

Program Overview: The Business Administration program prepares students for success in many areas of business that can lead to management. Each student gains practical experience while taking courses based upon contemporary business practices.

Upon successful completion of the program, students will be able to:

- use critical thinking skills to analyze business problems;
- communicate effectively and apply interpersonal skills and cultural awareness to business situations;
- understand how human resources are organized into systems and solve problems within those systems;
- apply information tools and resources within organizations;
- reason quantitatively and apply accounting and financial knowledge to business practices.

Associate in Applied Science in Business Administration

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
BUS&	101	Intro to Business	5
ACCT&	201	Principles of Accounting I	5
ACCT&	202	Principles of Accounting II	5
BUS&	201	Business Law	5
ECON&	202	Macro Economics	5
ECON&	201	Micro Economics	5
Computer Science/Computer Applications (select 4-5 credits)			
CA/CS	100+	Computer Course(s)	4-5
		Subtotal	**34-35**

Major Support

Select 35 credits. Options: you may pick optional classes from prepared lists of courses. See advisor to make your course selections.

Subtotal . . . 35

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II **or**	5
ENGL&	235	Technical Writing	5
MATH	106+	MATH 106 **or** above	5
Science Course (Natural Science with lab)			5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**28-30**
		Total Credits Required	**97-100**

Business Administration

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
BUS&	101	Intro to Business	5
ACCT&	201	Principles of Accounting I	5
BUS&	201	Business Law	5
BUS	271	Human Relations Business	5
Computer Science/Computer Applications (select 4-5 credits)			
CA/CS	100+	Computer Course(s)	4-5
		Subtotal	**24-25**

Major Support

(Select 23 credits) Options: you may pick optional classes from prepared lists of courses. See advisor to make your course selections.

Subtotal . . . 23

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology courses (select 5 credits)			
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavioror	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**65-68**

Chemistry

http://www.columbiabasin.edu/home/index.asp?page=809

Department Overview: CHEM& 110/CHEM& 110L fulfills the chemistry requirement for the AAS degree in Nursing, Fire Science, and certain career tracks in Agriculture. It is also ideal for non-science majors who want a lab science course that gives a good introduction to chemical topics important in our technological society.

CHEM& 140/CHEM& 140L is intended for science majors who have not had chemistry in high school and need the chemical and mathematical preparation required for the CHEM& 161, CHEM& 162, CHEM& 163 series. It can also be used to fulfill the lab science requirement for other majors.

CHEM& 121, CHEM& 122, CHEM& 123 is the allied health sequence and is required for Respiration Therapy, Dental Hygiene programs at Yakima and Spokane colleges, and certain agriculture career tracks. This course is also suitable for nursing, particularly for those seeking the four-year baccalaureate degree in Nursing or other allied health fields. Only CHEM& 121 is a pre-admission requirement for the CBC Dental Hygiene program.

CHEM& 161, CHEM& 162, CHEM& 163 sequence is intended for science and engineering majors and pre-professional majors such as pre-med, pre-dental, pre-veterinary, pre-optometry, pre-pharmacy, medical technology, physical therapy, and forensic science.

CHEM& 131 provides an overview of organic chemistry and biochemistry for students that do not need the level of detail provided by CHEM& 122 and CHEM& 123. This course is accepted for the baccalaureate degree in Nursing at some four-year institutions.

The Chemistry Department also provides a full array of second-year chemistry courses, including the organic chemistry sequence (CHEM& 241, CHEM& 242, CHEM& 243) and accompanying laboratory for chemistry, chemical engineering, biochemistry, biology, environmental science, and the pre-professional majors listed above; quantitative analysis, instrumental analysis, and laboratory (CHEM 254, CHEM 255) for chemistry, biochemistry, environmental chemistry, forensic science, and certain other majors; and the unique opportunity to take undergraduate research (CHEM 286 and CHEM 290) as a technical elective. Students must enroll in both the lecture and the lab unless special arrangements are made with the instructor.

Chinese Common Course

http://www.columbiabasin.edu/home/index.asp?page=826

Program Overview: Our Chinese classes offer student-centered instruction that focuses on communicating effectively in Chinese, appreciating the Chinese culture, and recognizing linguistic and cultural connections between the Chinese-speaking part of the world and the United States.

Communication Studies

http://www.columbiabasin.edu/communication

Department Overview: Communication Studies offerings at Columbia Basin College are designed to provide students with communication skills that enhance their professional and personal relationships. These classes are open to all CBC students.

Career opportunities include the fields of teaching, film/television, public relations, advertising, and other careers where speaking or performing for the public is important.

Communication Studies Common Course

http://www.columbiabasin.edu/communication

Department Overview: Communication Studies offerings at Columbia Basin College are designed to provide students with communication skills that enhance their professional and personal relationships. These classes are open to all CBC students.

Career opportunities include the fields of teaching, film/television, public relations, advertising, and other careers where speaking or performing for the public is important.

Community Education

http://www.columbiabasin.edu/home/index.asp?page=607

Program Overview: Columbia Basin College offers the Evergreen Flagger Training Certification, which is the most recognized course for flagger training for Washington state. This flagger card is accepted in Oregon and Idaho as well. The handbook and instructor's manual are constantly updated and contain all the timely information and requirements.

This is the premier flagger training course offered in Washington state. It is offered by Evergreen-certified instructors through Columbia Basin College.

- This program is approved by the Washington State Traffic Control Oversight Committee (membership includes Departments of Transportation, Labor and Industries, and boards for colleges, business, and labor).
- Certified instructors are authorized to issue the Washington State Flagger Certification card, recognized in Washington, Oregon, and Idaho.
- Flaggers working on WSDOT construction projects are required to have the Washington State Flagger Certification card, which is approved for distribution through this program.
- Meets Department of Labor & Industries requirements for WAC 296-155-305, "Flagger Training Requirements" for Washington state.

This is a one-day class in which a Washington State Certified Flagging card will be issued upon successful completion of the class and test. (CBC does not refer positions.) Classes are held at the Pasco campus in the V building in room V 121 located at 2600 North 20th Avenue, Pasco, Wash., from 8:30 a.m. to 4:00 p.m.

The cost for this class is $46. Pre-registration is required and students are asked to bring their payment receipt to class.

Computer Applications

http://www.columbiabasin.edu/computerscience

Department Overview: These courses are offered cooperatively by the Administrative Office Technology and Computer Science departments and are available for students wishing to enhance their knowledge of current software programs. These classes are currently part of the requirements of some of the Professional Technical programs on campus.

Computer Science

http://www.columbiabasin.edu/computerscience

Department Overview:

Computer Applications

Computer Applications courses are currently offered cooperatively by the Administrative Office Technology and Computer Science departments and are available for students wishing to enhance their knowledge of current basic software programs.

Computer Science

Computer Science courses are offered by the Computer Science department. The department is committed to provide students and the community with the training, academic studies, and valuable hands-on experience necessary for employment in the Information Technology industry. To ensure current and relevant curriculum in this dynamic field and further its commitment to excellence, the department actively pursues partnerships with state and area employers, other colleges and baccalaureate institutions, and advisory committee members from IT-related fields.

Students may earn a two-year Associate in Applied Science (AAS) degree, which has six options: Internet Specialist, Database Administrator, Network Administrator, Programmer, Helpdesk Tech, and Multimedia. Furthermore, students may earn a one-year programming certificate in VB.Net, C#.Net, or C++.

Students may also take classes that will transfer to a four-year degree program. For students pursuing a four-year degree, the Computer Science department has direct articulation agreements with WSU, City University, CWU, EWU, and the University of Phoenix. Students may optionally choose to pursue a two-year AST degree, which will be honored at any Washington state baccalaureate institution. (The details of the AST degree are available in the Degrees & Certificates section in the front of the CBC catalog.)

Students may also take individual classes for finding immediate employment, retraining, or maintaining and updating existing IT skills. In addition, students may take Computer Science classes to help prepare for various IT industry certifications. The certification classes may be taken in conjunction with one of the degree programs, or on an individual basis.

Many of the Computer Science classes are designed to help students prepare for industry certification such as the MCP, MCSE, and MCSA certifications. There are also Computer Science classes that will help prepare students for CompTIA A+ and Network+, and Microsoft MOUS certifications. (Please note that the certification exams are difficult to pass. The Computer Science classes provide students with an opportunity to obtain technical knowledge and product experience, but passing any certification exam requires extra study, work, and initiative on the student's part.)

The Computer Science instructors bring a diverse set of talents and expertise to the classroom. Instructors for certification classes are themselves certified; and the part-time instructors are subject matter experts who generally work full-time in the field they are teaching.

New students may apply to CBC and begin taking Computer Science classes any quarter of the year. Classes are offered in the traditional format, day and night, and online.

The Columbia Basin College Computer Science department acknowledges that students may have mastered specific skills and competencies outside of the formal classroom experience. For example, you may have gained work-place experience or may be self taught. Both CBC and the Computer Science department recognize various nontraditional programs and will possibly award a student college credit and/or placement in advanced classes. In accordance with the CBC Nontraditional Credit Policy, the Computer Science department provides two methods for earning nontraditional credit and/or placement: passing a challenge test or presenting proof of a current industry certification, A+, MCP/MCSE, etc.

The Computer Science program has also developed articulation agreements with several of the local school districts. These articulation agreements grant students college credit for taking relevant high school classes. Students in the local K-12 school districts should check with their advisors for the availability of these classes.

Associate in Applied Science in Database Administrator

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
CS	101	Introduction to Computers and Information Technology	5
CS	102*	Visual Basic 1 (minimum grade 2.5)	5
CS	106	Database Systems	5
CS	109	PC Hardware 1	5
CS	110	Windows Operating Systems	5
CS	122	PC Hardware 2	5
CS	224	Networking Essentials	5
		Subtotal	**35**

Major Support

Course	No.	Course Title	Credits
CS	114	HTML (Internet Publishing 1)	5
CS	202	Visual Basic 2	5
CS	206	Database Design	5
CS	219	Active Server Pages (ASP) Internet Publishing	5
CS	221	SQL Server Administration	5
CS	225	SQL Server Programming	5
CS	228	Windows Server	5
CS	229	Webmaster	5
		Subtotal	**40**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**93-95**

Note: ****MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.0 in all CS courses, except as noted above.***

Associate in Applied Science in Help Desk Technician

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
CS	101	Introduction to Computers and Information Technology	5
CS	102*	Visual Basic 1 (minimum grade 2.5)	5
CS	106	Database Systems	5
CS	109	PC Hardware 1	5
CS	110	Windows Operating Systems	5
CS	122	PC Hardware 2	5
CS	224	Networking Essentials	5
		Subtotal	**35**

Major Support

Course	No.	Course Title	Credits
CS	107	Intermediate Word Processing	2
CS	108	Intermediate Spreadsheets	2
CS	114	HTML (Internet Publishing 1)	5
CS	150	Computer Security	5
CS	1952	Work-Based Learning 1	1-5
CS	207	Word Implementation	5
CS	208	Advanced Spreadsheets	5
CS	244	Digital Graphics & Design 2	5
Computer Science Options (select 5 credits)			
CS	227	Windows Administration **or**	5
CS	223	Unix/Linux.	5
Select 10 credits from the following courses:			
CS	202	Visual Basic 2 **or**	5
CS	203	Digital Graphics & Design 1 **or**	5
CS	206	Database Design	5
		Subtotal	**45-49**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology.	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**98-104**

Note: **MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.0 in all CS courses, except as noted above.*

Associate in Applied Science in Internet Specialist

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
CS	101	Introduction to Computers and Information Technology	5
CS	102*	Visual Basic 1 (minimum 2.5 grade)	5
CS	106	Database Systems	5
CS	109	PC Hardware 1	5
CS	110	Windows Operating Systems	5
CS	122	PC Hardware 2	5
CS	224	Networking Essentials	5
		Subtotal	**35**

Major Support

Course	No.	Course Title	Credits
CS	114	HTML (Internet Publishing 1)	5
CS	115	JavaScript/CSS (Internet Publishing 2)	5
CS	203	Digital Graphics & Design 1	5
CS	218	ASP.NET **or**	5
CS	219	Active Server Pages (ASP) Internet Publishing	5
CS&	131	Computer Science I C++ **or**	5
CS	216	XML (Internet Publishing III)	5
CS	243	Web Animation	5
Select 10 credits from the following courses:			
CS	213	Advanced Internet	5
CS	223	Unix/Linux.	5
CS	228	Windows Server	5
CS	229	Webmaster	5
CS	244	Digital Graphics & Design 2	5
		Subtotal	**40**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology.	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**93-95**

Note: **MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.0 in all CS courses, except as noted above.*

Associate in Applied Science in Multimedia

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
CS	101	Introduction to Computers and Information Technology	5
Select any 6 of the following courses:			
CS	102*	Visual Basic 1	5
CS	110	Windows Operating Systems	5
CS	114	HTML (Internet Publishing 1)	5
CS	115	JavaScript/CSS (Internet Publishing 2)	5
CS	203	Digital Graphics & Design 1	5
CS	218	ASP. Net	5
CS	243	Web Animation	5
CS	244	Digital Graphics & Design 2	5
		Subtotal	**35**

Major Support

Art Courses (39-40 credits)

Course	No.	Course Title	Credits
ART&	100	Art Appreciation	5
ART	111*	Design 1	5
ART	1121	3D Design II	5
ART	1131	Drawing 1	3
ART	211	Graphic Design I	5
ART	212	Graphic Design II	5
ART	2411	Illustration I	3
ART	2421	Illustration II	3
Select 2 of the following courses:			
ART	2011	Photography I	3
ART	2021	Photography II	3
ART	2081	Digital Photography	2
		Subtotal	**39-40**

Business Administration (6-20 credits)

Course	No.	Course Title	Credits
BUS	27I	Human Relations Business	5
BUS	267	Marketing Special Projects	1-15

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Human Relations (select 5 credits)			
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**98-115**

Note: ***MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.0 in all CS courses, except as noted above.***

Associate in Applied Science in Network Administrator

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
CS	101	Introduction to Computers and Information Technology	5
CS	102*	Visual Basic 1 (minimum grade 2.5)	5
CS	106	Database Systems	5
CS	109	PC Hardware 1	5
CS	110	Windows Operating Systems	5
CS	122	PC Hardware 2	5
CS	224	Networking Essentials	5
		Subtotal	**35**

Major Support

Course	No.	Course Title	Credits
CS	150	Computer Security	5
CS	222	Novell	5
CS	223	Unix/Linux	5
CS	228	Windows Server	5
CS	230	Active Directory	5
Select 15 credits from the following courses:			
CS	227	Windows Administration	5
CS	231	Network Infrastructure	5
CS	232	Network Security	5
CS	233	UNIX Administration	5
CS	221	SQL Server Administration	5
CS	225	SQL Server Programming	5
CS	229	Webmaster	5
		Subtotal	**40**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**93-95**

Note: ***MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.0 in all CS courses, except as noted above.***

Associate in Applied Science in Programmer

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
CS	101	Introduction to Computers and Information Technology	5
CS	102*	Visual Basic 1 (minimum grade 2.5)	5
CS	106	Database Systems	5
CS	109	PC Hardware 1	5
CS	110	Windows Operating Systems	5
CS	122	PC Hardware 2	5
CS	224	Networking Essentials	5
		Subtotal	**35**

Major Support

Select 45 credits from the following courses:

Course	No.	Course Title	Credits
CS&	131*	Computer Science I C++	5
CS	162*	C++2	5
CS	171	C# 1	5
CS	172	C# 2	5
CS	202	Visual Basic 2	5
CS	206	Database Design	5
CS	212	Visual Basic 3	5
CS	221	SQL Server Administration	5
CS	223	Unix/Linux	5
CS	260	Data Structures in C++	5
CS	261	Visual C++	5
CS	262	Game Programming Design	5
CS	270	Data Structures in C#	5
		Subtotal	**45**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology or	5
SOC&	101	Intro to Sociology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**98-100**

Note: ***MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.0 in all CS courses, except as noted above.***

C++ Programming

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
CS&	131	Computer Science I C++	5
CS	162	C++2	5
CS	260	Data Structures in C++	5
CS	261	Visual C++ **or**	5
CS	262	Game Programming Design	5
		Subtotal	**20**

Major Support

Course	No.	Course Title	Credits
CS	106	Database Systems	5
CS	206	Database Design	5
CS	221	SQL Server Administration **or**	5
CS	223	Unix/Linux	5
		Subtotal	**15**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**53-55**

C# .Net Programming

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
CS	171	C# 1	5
CS	172	C# 2	5
CS	262	Game Programming Design	5
CS	270	Data Structures in C#	5
		Subtotal	**20**

Major Support

Course	No.	Course Title	Credits
CS	106	Database Systems	5
CS	206	Database Design	5
CS	221	SQL Server Administration **or**	5
CS	223	Unix/Linux	5
		Subtotal	**15**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**53-55**

VB.Net Programming

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
CS	102*	Visual Basic 1	5
CS	202	Visual Basic 2	5
CS	212	Visual Basic 3	5
		Subtotal	**15**

Major Support

Course	No.	Course Title	Credits
CS	106	Database Systems	5
CS	206	Database Design	5
CS	221	SQL Server Administration	5
CS	110	Windows Operating Systems **or**	5
CS	223	Unix/Linux	5
		Subtotal	**20**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**53-55**

Note: **MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.0 in all CS courses, except as noted above.*

Contemporary Civilization

http://www.columbiabasin.edu/home/index.asp?page=827

Department Overview: Introduces students to a wide range of issues of public and academic significance including reading involving various traditions of argument with a focus on selected European traditions of moral, political, religious, and social thought.

Criminal Justice and Forensics

http://www.columbiabasin.edu/criminaljustice

Department Overview: This program focuses on the need for a broad background of educational experience. The highly complex and constantly changing lifestyle of our society demands that the criminal justice person understands the principles of human behavior and communication, as well as the nature of law enforcement's function.

The Associate degree program is designed to prepare the individual for a career in criminal justice by providing students with the background necessary to function at the entry level and to advance to the limits of their ability. A large number of related criminal justice career fields and programs are open to graduates of this program.

Students must obtain an overall average GPA of 2.3 or higher in the criminal justice Major Course section of the degree, and students must also obtain an overall average GPA of 2.0 or higher for successful degree completion.

Students not expressly interested in careers in law enforcement, but interested in learning more about individual rights, the law, and the criminal justice system are encouraged to examine the Introduction to Criminal Justice, Criminal Law, and Constitutional Law classes.

At the end of the program, successful students will be able to:

- compete for entry-level jobs in criminal justice;
- apply criminal justice theories to contemporary policy and practice;
- resolve conflict in a variety of situations;
- identify cultural differences and how those differences affect decisions and behavior;
- apply high ethical standards to criminal justice case studies and simulations;
- apply criminal laws as a criminal justice worker in a variety of case studies or simulations.

CBC's Criminal Forensic Science program combines both the field of science and the field of criminal justice. The Forensic Science degree prepares the student for a career as a scientist in a forensic laboratory. CBC's Forensic Science program offers a two-year degree for students who plan to obtain a chemistry or bio/chemistry degree from a four-year university. The Forensic Science degree combines courses of investigation, evidence, criminal law, and procedures with science courses of chemistry, calculus, analytic geometry, and quantitative analysis. Upon completion of a four-year degree in chemistry or bio/chemistry from an accredited university, the student will be able to apply for entry-level positions in forensic laboratories that specialize in both criminal and civil evidence analysis.

Degrees:

Associate in Applied Science in Forensics

Associate in Applied Science in Criminal Justice

Associate of Applied Science in Criminal Justice

The program prepares students for a career in criminal justice by providing them with the background needed to function in entry-level positions, develop professionally, or continue their education at a four-year institution. Instruction includes traffic control, criminal investigation, criminal justice, criminal law, organization and administration, constitutional law, alcohol/drug pharmacology, criminal evidence, delinquent behavior, and administration of justice.

Transferability: The Associate degree in Applied Arts and Sciences is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions in Washington state. Selected universities maintain agreements providing for full credit transfer of some AAS degrees.

Associate in Applied Science in Criminal Justice

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
CJ&	101	Intro to Criminal Justice	3
CJ&	110	Criminal Law	5
CJ	134	Organization/Administration	5
CJ	135	Traffic Control	5
CJ	136	Delinquent Behavior/Youth	3
CJ	137	Constitutional Law	5
CJ	232	Criminal Investigation	5
CJ	234	Criminal Evidence	3
CJ&	240	Intro to Forensic Science	5
CJ	222	Alcohol/Drug Pharmacology/Physiology	3
		Subtotal	**42**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
English (select 5 credits)			
ENGL&	102	Composition II **or**	5
ENGL&	235	Technical Writing	5
Social Science Courses			15
*MATH	106+	MATH 106 **or** above	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
CA/CS	100+	Computer Science course(s)	4-5
Science (10 credits)			
Humanities (15 credits)			

*To be approved by department

Subtotal	**62-65**
Total Credits Required	**104-107**

Associate in Applied Science in Forensic Science

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
CJ&	110	Criminal Law	5
CJ	137	Constitutional Law	5
CJ	232	Criminal Investigation	5
CJ	234	Criminal Evidence	3
CJ&	240	Intro to Forensic Science	5
		Subtotal	**23**

Major Support

Course	No.	Course Title	Credits
MATH&	144	Precalculus I and II **or**	5
MATH&	141 & 142	Precalculus I and II (both courses must be completed)	10
MATH&	151 & 152	Calculus I & II	10
MATH&	146	Introduction to Stats	5
CHEM&	140/140L*	General Chemistry Prep w/Lab (If not completed in high school)	5
CHEM&	161	General Chemistry I w/Lab	5
CHEM&	161L*	General Chemistry I Lab	0
CHEM&	162	General Chemistry II w/Lab	5
CHEM&	162L*	General Chemistry II Lab	0
CHEM&	163	General Chemistry III w/Lab	5
CHEM&	163L*	General Chemistry III Lab	0
CHEM	254	Quantitative Analysis	2
CHEM	264	Quantitative Analysis Lab	3
CHEM	255	Instrumental Analysis	2
CHEM	265	InstrumentalAnalysisLab	3
		Subtotal	**45-55**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	235	Technical Writing	5
MATH		(See degree Major Courses above)	
CS&	131	Computer Science I C++	5
Humanities, Social Science, Natural Science			15
		(No more than 10 credits from any one department)	

Speech (select 3-5 credits)

CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communications Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**33-35**
		Total Credits Required	**106-118**

Important: *you must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.

Culinary and Food Services

http://www.columbiabasin.edu/home/index.asp?page=747

Department Overview: Students who begin their technical training in Culinary Arts at Tri-Tech Skills Center and successfully earn the equivalent Tech Prep college credits have the opportunity to complete a certificate program at Columbia Basin College. To earn the equivalent college credits, one must enroll in the CBC Tech Prep Dual Credit program while attending the year-long high school Tri-Tech class and attain a B (85 percent) or better grade for the class. The certificate courses help to prepare students for entry level culinary positions in the food industry and/or preparation for further education in the fields of food science or hospitality.

Upon completion of the general education and elective requirement courses at CBC, students are eligible to apply for a certificate through CBC. Questions concerning this certificate should be directed to the CBC Tech Prep Coordinator at (509) 542-4559.

Dental Assisting

Department Overview: The Dental Assisting program is a one-year certificate that prepares students to work in the dynamic world of dentistry. Students will learn such things as patient management, dental materials, and assisting skills during dental procedures. The General Education Requirements are coordinated with the Dental Hygiene Associate of Applied Science degree allowing students to smoothly continue their education toward increased dental career opportunities. The major courses for Dental Assisting are available through the Tech Prep program at Tri-Tech Skills Center and Clark County Skills Center. For more information on the certificate program, please contact the Health Sciences Division office.

Dental Hygiene

http://www.columbiabasin.edu/home/index.asp?page=788

Department Overview: The Dental Hygiene program is a two-year Associate degree program of full-time classroom and clinical instruction. The program will enroll 18 students per year. The educational objective of the program is to prepare the student who, upon graduation and successful completion of the National Written Examination Board and Western Regional Clinical examination, will be able to serve the community within the state of Washington, and are able to be licensed to practice Dental Hygiene in 11 western states. For more information, contact (509) 542-4571.

Program Costs

Including standard student fees, the program requires an expenditure of approximately $12,000 during the two-year program. These figures are estimates and subject to change. Approximately $6,000 will be needed at the beginning of the first quarter. During the last year of the program, students are eligible to take both the National written Dental Hygiene Board exam and the Western Regional Board Exams in clinical dental hygiene, restorative, and the delivery of local anesthesia which have additional costs, prior to being licensed to practice as a Dental Hygienist. Prior to being accepted into the program, students must complete all of the 46 credits of prerequisite college courses with a minimum GPA of 2.6 or higher:

- Intro to Sociology, SOC& 101
- Nutrition, NUTR& 101
- Human A&P 1, BIOL& 241
- Human A&P 1 Lab, BIOL& 241L
- Human A&P 2, BIOL& 242
- Human A&P 2 Lab, BIOL& 242L
- Microbiology, BIOL& 260
- Microbiology Lab, BIOL& 260L
- English Composition, ENGL& 101
- Introduction to Stats, MATH& 143
- General Psychology, PSYC& 100
- Speech Essentials/Communication Behavior, CMST 101/CMST 110

Pre-admission Requirement: Fall 2007 and later

Students applying for admission into the Dental Hygiene program for Fall 2007 or later will have the pre-admission requirement of CHEM& 121/CHEM& 121L. CHEM& 110/110L will no longer be accepted as an alternative pre-admission course. Satisfactory physical exam, required immunization records, current CPR Health Care Provider card, and a satisfactory Washington State Patrol criminal history background check must be on file before the beginning of Dental Hygiene classes. Students must complete an application to the program. Applications are accepted by January 31st every year for the following September class enrollment.

Priority Admissions Systems for the Qualified Applicants to the Program:

- College cumulative GPA
- College science GPA
- Dental experience
- Health Occupations Basic Education Test (HOBET) results
- Special considerations (previous degree, volunteer experience, additional chemistry classes).

Associate in Applied Science in Dental Hygiene

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
DHYG	110	Dental Anatomy	1
DHYG	111	Histology/Embriology	1
DHYG	112	Oral Radiology I	1
DHYG	1121	Oral Radiology I Lab	1
DHYG	113	Clinical Dental Hygiene Techniques I	2
DHYG	1131	Clinical Dental Hygiene Techniques I Lab	3
DHYG	114	Dental Health Education	1
DHYG	115	Dental Materials	1
DHYG	1151	Dental Materials Lab	1
DHYG	116	Head and Neck Anatomy	2
DHYG	120	Medical Emergencies in Dentistry	2
DHYG	121	General Pathology	1
DHYG	122	Oral Radiology II	1
DHYG	1221	Oral Radiology II Lab	1
DHYG	123	Clinical Dental Hygiene Techniques II	1
DHYG	1231	Clinical Dental Hygiene Techniques II Lab	4
DHYG	125	Restorative Dentistry I	1
DHYG	1251	Restorative Dentistry I Lab	1
DHYG	126	Pain Control in Dentistry	2
DHYG	1261	Pain Control in Dentistry Lab	2
DHYG	127	Pharmacology	2
DHYG	131	Oral Pathology	2
DHYG	132	Periodontics I	2
DHYG	134	Clinical Dental Hygiene Techniques III	1
DHYG	1341	Clinical Dental Hygiene Techniques III Lab	4
DHYG	135	Restorative Dentistry II	1
DHYG	1351	Restorative Dentistry II Lab	2
DHYG	136	Patient Management	2
DHYG	144	Clinical Dental Hygiene Techniques IV	1
DHYG	1441	Clinical Dental Hygiene Techniques IV Lab	5
DHYG	246	Restorative Dentistry III	1
DHYG	2461	Restorative Dentistry III Lab	2
DHYG	211	Nutrition in Dentistry	1
DHYG	212	Advanced Clinical Topics	1
DHYG	214	Clinical Dental Hygiene Techniques V	1
DHYG	2141	Clinical Dental Hygiene Techniques V Lab	6
DHYG	215	Ethics and Jurisprudence, Practice Management	2
DHYG	221	Community Oral Health I	2
DHYG	2211	Community Oral Health I Lab	2
DHYG	222	Periodontics II	2
DHYG	224	Clinical Dental Hygiene Techniques VI	1
DHYG	2241	Clinical Dental Hygiene Techniques VI Lab	6
DHYG	234	Clinical Dental Hygiene Techniques VII	1
DHYG	2341	Clinical Dental Hygiene Techniques VII Lab	8
		Subtotal	**88**

Major Support

Course	No.	Course Title	Credits
SOC&	101	Intro to Sociology	5
NUTR&	101	Nutrition	5
BIOL&	241	Human A&P 1 w/Lab	6
BIOL&	241L*	Human A&P 1 Lab	0
BIOL&	242	Human A&P 2 w/Lab	6
BIOL&	242L*	Human A&P 2 Lab	0
BIOL&	260	Microbiology w/Lab	6
BIOL&	260L*	Microbiology Lab	0
		Subtotal	**28**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH&	146	Introduction to Stats	5
PSYC&	100	General Psychology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**134-136**

Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.

Diagnostic Ultrasound Technology

Department Overview: Diagnostic medical sonographers use high-frequency sound waves (ultrasound) to create body images that show the shape and composition of body tissues. These images assist physicians in diagnosing disease, injury, or other physical conditions. Although many sonographers are trained to use ultrasound on all body parts, CBC plans to offer other specialty certificates including vascular sonography, echocardiography, abdominal and small parts sonography, obstetrics/gynecological sonography, and breast sonography.

The certificate programs would have common course requirements and module specialties areas. Certificates offered would include: Abdomen and Small Parts, OB/GYN, Breast Sonography, Breast Sonography for Mammographers, Adult Echocardiography, and/or Cardiovascular sonography options. The Cardiovascular Sonography option would also be available to current Registered Diagnostic Medical Sonographer (RDMS) credentialed individuals.

For additional information, contact the Health Sciences Division at (509) 544-8300.

Abdomen and Small Parts Sonography

Certificate

Major Courses

General Sonography Core Courses

Course	No.	Course Title	Credits
DUTEC	105	Pathophysiology I	3
DUTEC	106	Pathophysiology II	3
DUTEC	107	Human Cross-Sectional Anatomy	7
DUTEC	170	Ultrasound Physics & Instrumentation I	3
DUTEC	171	Ultrasound Physics & Instrumentation II	3
DUTEC	135	Ultrasound Equipment I	3
DUTEC	145	Ultrasound Equipment II	4
DUTEC	165	Ultrasound Equipment III	3
		Subtotal	**29**

Support Courses

Abdomen and Small Parts Sonography Support Courses

Course	No.	Course Title	Credits
DUTEC	110	Ultrasound I: Abdominal Scanning & Techniques	4
DUTEC	130	Ultrasound III: Small Parts/Intraoperative Techniques	3
		Subtotal	**7**

Practicum Courses

Course	No.	Course Title	Credits
DUTEC	210	Clinical Practicum I	10
DUTEC	220	Clinical Practicum II	10
DUTEC	230	Clinical Practicum III	10
		Subtotal	**30**

General Education

English (select 5 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I **or**	5
ENGL	103	Writing in the Workplace	5
MATH	100+	Above MATH 100	5

Psychology or Sociology (select 3-5 credits)

Course	No.	Course Title	Credits
PSYC	103	Applied Psychology **or**	3
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5

Speech (select 3-5 credits)

Course	No.	Course Title	Credits
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**16-20**
		Total Credits Required	**82-86**

Adult Echocardiography Sonography

Certificate

Major Courses

General Sonography Core Courses

Course	No.	Course Title	Credits
DUTEC	107	Human Cross-Sectional Anatomy	7
DUTEC	170	Ultrasound Physics & Instrumentation I	3
DUTEC	171	Ultrasound Physics & Instrumentation II	3
DUTEC	135	Ultrasound Equipment I	3
DUTEC	145	Ultrasound Equipment II	4
DUTEC	165	Ultrasound Equipment III	3
		Subtotal	**23**

Support Courses

Adult Echocardiography Sonography Support Courses

Course	No.	Course Title	Credits
DUTEC	150	Basic Echocardiography	3
DUTEC	155	Ultrasound IV: Echocardiography	3
DUTEC	112	Pathophysiology III	3
DUTEC	113	Pathophysiology IV	3
DUTEC	181	Advanced Studies: Echo-Vascular	3
		Subtotal	**15**

Practicum Courses

Course	No.	Course Title	Credits
DUTEC	210	Clinical Practicum I	10
DUTEC	220	Clinical Practicum II	10
DUTEC	230	Clinical Practicum III	10
		Subtotal	**30**

General Education

English (select 5 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I **or**	5
ENGL	103	Writing in the Workplace	5
MATH	100+	Above MATH 100	5

Psychology or Sociology (select 3-5 credits)

Course	No.	Course Title	Credits
PSYC	103	Applied Psychology **or**	3
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5

Speech (select 3-5 credits)

Course	No.	Course Title	Credits
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**16-20**
		Total Credits Required	**84-88**

Associate in Applied Science in Diagnostic Ultrasound

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
DUTEC	101	Concepts of Patient Care	3
DUTEC	105	Pathophysiology I	3
DUTEC	106	Pathophysiology II	3
DUTEC	107	Human Cross-Sectional Anatomy	7
DUTEC	110	Ultrasound I: Abdominal Scanning & Techniques	4
DUTEC	112	Pathophysiology III	3
DUTEC	113	Pathophysiology IV	3
DUTEC	120	Ultrasound II: Obstetrics & Gynecological Techniques	5
DUTEC	130	Ultrasound III: Small Parts/Intraoperative Techniques	3
DUTEC	135	Ultrasound Equipment I	3
DUTEC	145	Ultrasound Equipment II	4
DUTEC	150	Basic Echocardiography	3
DUTEC	155	Ultrasound IV: Echocardiography	3
DUTEC	160	Ultrasound V: Peripheral Vascular Scanning Techniques	3
DUTEC	165	Ultrasound Equipment III	3
DUTEC	170	Ultrasound Physics & Instrumentation I	3
DUTEC	171	Ultrasound Physics & Instrumentation II	3
DUTEC	180	Advanced Studies: General Ultrasound (general ultrasound students only) **or**	3
DUTEC	181	Advanced Studies: Echo-Vascular (echocardiography and vascular students only)	3
DUTEC	210	Clinical Practicum I	10
DUTEC	220	Clinical Practicum II	10
DUTEC	230	Clinical Practicum III	10
DUTEC	240	Clinical Practicum IV	10
		Subtotal	**102**

Support Courses

Course	No.	Course Title	Credits
BIOL&	241	Human A&P 1 w/Lab	6
BIOL&	241L*	Human A&P 1 Lab	0
BIOL&	242	Human A&P 2 w/Lab	6
BIOL&	242L*	Human A&P 2 Lab	0
HIT	147	Medical Terminology	5
PHYS&	100	Physics Non-Sci Majors	4
PHYS&	101	Physics Lab Non-Sci Majors	1
		Subtotal	**22**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	Math 106 **or** above	5
PSYC	100+	PSYC 100 **or** above	3-5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**16-20**
		Total Credits Required	**140-144**

Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.

Breast Sonography for Mammographers

PROFESSIONAL TECHNICAL

Short-Term Certificate

Eligibility requirements: current American Registry of Radiologic Technologist (ARRT) Mammography certification.

Major Courses

Course	No.	Course Title	Credits
DUTEC	250	Ultrasound Physics for Mammographers	3
DUTEC	251	Breast Ultrasound for Mammographers	3
DUTEC	252	Ultrasound Equipment/Knobology for Mammographers	2
		Subtotal	**8**

Practicum Courses

Course	No.	Course Title	Credits
DUTEC	210	Clinical Practicum I	10
DUTEC	220	Clinical Practicum II	10
		Subtotal	**20**
		Total Credits Required	**28**

Breast Sonography

PROFESSIONAL TECHNICAL

Short-Term Certificate

Admission to program: prospective students must have completed a two-year allied health program that is patient-care related. Allied health occupations include, but are not limited to, diagnostic medical sonographer, radiologic technologist, respiratory therapist, radiation therapist, occupational therapist, physical therapist, nuclear medicine technologist, and registered nurse, or a bachelor's degree and successfully completed human anatomy and physiology courses with a 2.0 grade or better.

Major Courses

Course	No.	Course Title	Credits
DUTEC	250	Ultrasound Physics for Mammographers	3
DUTEC	251	Breast Ultrasound for Mammographers	3
DUTEC	252	Ultrasound Equipment/Knobology for Mammographers	2
		Subtotal	**8**

Practicum Courses

Course	No.	Course Title	Credits
DUTEC	210	Clinical Practicum I	10
DUTEC	220	Clinical Practicum II	10
		Subtotal	**20**
		Total Credits Required	**28**

OB/GYN Sonography Certificate

Major Courses

General Sonography Core Courses

Course	No.	Course Title	Credits
DUTEC	105	Pathophysiology I	3
DUTEC	106	Pathophysiology II	3
DUTEC	107	Human Cross-Sectional Anatomy	7
DUTEC	170	Ultrasound Physics & Instrumentation I	3
DUTEC	171	Ultrasound Physics & Instrumentation II	3
DUTEC	135	Ultrasound Equipment I	3
DUTEC	145	Ultrasound Equipment II	4
DUTEC	165	Ultrasound Equipment III	3
		Subtotal	**29**

Support Courses

OB/GYN Sonography Support Courses

Course	No.	Course Title	Credits
DUTEC	120	Ultrasound II: Obstetrics & Gynecological Techniques	5
DUTEC	180	Advanced Studies: General Ultrasound	3
		Subtotal	**8**

Practicum Courses

Course	No.	Course Title	Credits
DUTEC	210	Clinical Practicum I	10
DUTEC	220	Clinical Practicum II	10
DUTEC	230	Clinical Practicum III	10
		Subtotal	**30**

General Education

English (select 5 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I **or**	5
ENGL	103	Writing in the Workplace	5
MATH	100+	Above MATH 100	5

Psychology or Sociology (select 3-5 credits)

PSYC	103	Applied Psychology **or**	3
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5

Speech (select 3-5 credits)

CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**16-20**
		Total Credits Required	**83-87**

Vascular Sonography Certificate

Major Courses

General Sonography Core Courses

Course	No.	Course Title	Credits
DUTEC	107	Human Cross-Sectional Anatomy	7
DUTEC	170	Ultrasound Physics & Instrumentation I	3
DUTEC	171	Ultrasound Physics & Instrumentation II	3
DUTEC	135	Ultrasound Equipment I	3
DUTEC	145	Ultrasound Equipment II	4
DUTEC	165	Ultrasound Equipment III	3
		Subtotal	**23**

Support Courses

Vascular Sonography Support Courses

Course	No.	Course Title	Credits
DUTEC	160	Ultrasound V: Peripheral Vascular Scanning Techniques	3
DUTEC	112	Pathophysiology III	3
DUTEC	113	Pathophysiology IV	3
DUTEC	181	Advanced Studies: Echo-Vascular	3
		Subtotal	**12**

Practicum Courses

Course	No.	Course Title	Credits
DUTEC	210	Clinical Practicum I	10
DUTEC	220	Clinical Practicum II	10
DUTEC	230	Clinical Practicum III	10
		Subtotal	**30**

General Education

English (select 5 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I **or**	5
ENGL	103	Writing in the Workplace	5
MATH	100+	Above MATH 100	5

Psychology or Sociology (select 3-5 credits)

PSYC	103	Applied Psychology **or**	3
PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5

Speech (select 3-5 credits)

CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**16-20**
		Total Credits Required	**81-85**

Early Childhood Education

http://www.columbiabasin.edu/ece

Department Overview: Early Childhood Education (ECE) is a vocational program designed to prepare students for employment in a variety of early childhood settings. Course content focuses on the educational and developmental needs of children from birth to age eight. The ECE program combines theory and practical experience with emphasis placed on active student involvement. Course work includes participation, observation and practical experience.

Students may enroll in the ECE program at the beginning of any quarter on either a full or part-time basis. Most courses are offered in the evenings or on Saturdays to accommodate the varied schedules of working students.

Degrees and Certificates Offered

- Associate Degree of Applied Science in Early Childhood Education (AAS) - 92-94 credits
- Early Childhood Education Certificate - 47 credits
- Early Childhood Education Child Care Certificate of Completion - 15 credits
- Child Development Associate (CDA) - Certificate of Completion - 10 credits
- State Training and Registry System (STARS) - Certificate of Completion - variable credits

Program Goals

By the end of the program successful students will be able to use both practical skills and ECE knowledge when working in an early childhood setting to:

- implement basic principles of child growth and development;
- apply current ECE concepts to plan curriculum activities;
- use appropriate child guidance techniques;
- use appropriate first aid, health and safety techniques;
- demonstrate sensitivity to multi-cultural and special needs issues;
- respond ethically and professionally.

Associate in Applied Science in Early Childhood Education

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
ECE	101	Issues and Trends in ECE	3
ECE	102	Introduction to Curriculum	3
ECE	103	Art	3
ECE	104	Child Guidance & Communications Techniques	3
EDUC&	114	Child Development	3
EDUC&	203	Exceptional Child	3
ECE	120	Children's Literature	3
ECE	122	Math & Science	3-5
ECE	126	Literacy and Language	3
ECE	127	Early Childhood Music, Movement & Motor Activity	3
ECE	151	Supervised Practicum	3
ECE	1511	Supervised Practicum Lab	1
ECE	202	Curriculum Development	3
ECE	205	Infant &Toddler Education	3
ECE	209	Parent Involvement	3
ECE	230	First Aid, Health, Safety & Nutrition	3
		Subtotal	**46-48**

Major Support

*A total of 28 credits required in the major support area. A minimum of 10 credits must be from ECE courses. *A maximum of 5 credits of ECE Special Studies Lab will be accepted. Other electives may include ECE, Education, Humanities or Social and Behavioral Science courses approved by the ECE faculty advisor. These classes could include:*

Course	No.	Course Title	Credits
ECE	105	Physical Education	3
ECE	113	STARS 20 Hour Basic Training	2
ECE	114	STARS 10 Hour Continuing Education	1
ECE	116	ECE Special Topics Symposium	1-3
ECE	117	ECE Seminar	1-3
ECE	1172	Preschool Seminar	1-3
ECE	118	Skills Training	1-3
ECE	119	Workshop	1-3
ECE	125	Instructional Media	3
ECE	141	Child Development Associate **or**	10
ECE	1412-1419	Child Development Associate	1-10
ECE	201	Multicultural Education	3
ECE	213	Materials Construction	3
ECE	215	Child Care Administration	3
ECE	216	Advanced Special Topics	1-3
ECE	217	Advanced Seminar	1-3
ECE	218	Advanced Skills Training	1-3
ECE	219	Advanced Workshop	1-3
ECE	221	Strategies for Teaching Special Needs	3
ECE	222	Sign Language Level 1	3
ECE	223	Sign Language Level 2	3
ECE	224	Sign Language Level 3	3
ECE	289	Special Studies	1-15
ECE	2892-2891	Special Studies Lab*	1-3
ECE	2899	Special Studies Lab*	1-15
EDUC	101	Intro to Education	4
		Subtotal	**28**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
PSYC&	100	General Psychology	5
MATH	108	Math for Early Childhood Education	5
Speech (select 3 credits)			
CMST	101	Speech Essentials **or**	3
CMST	110	Communication Behavior	3
		Subtotal	**18**
		Total Credits Required	**92-94**

It is important to stay in close contact with your ECE advisor. More information can be obtained from the Early Childhood Education office at 542-4640.

Early Childhood Education

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
ECE	102	Introduction to Curriculum	3
ECE	104	Child Guidance & Communications Techniques	3
EDUC&	114	Child Development	3
EDUC&	203	Exceptional Child	3
ECE	151	Supervised Practicum	3
ECE	1511	Supervised Practicum Lab	1
ECE	230	First Aid, Health, Safety & Nutrition	3
		Subtotal	**19**

Major Support

*Choose 10 credits from the following classes. *A maximum of 5 credits of ECE Special Studies Lab will be accepted. ECE or EDUC elective credits could include:*

Course	No.	Course Title	Credits
ECE	101	Issues and Trends in ECE	3
ECE	103	Art	3
ECE	105	Physical Education	3
ECE	113	STARS 20 Hour Basic Training	2
ECE	114	STARS 10 Hour Continuing Education	1
ECE	116	ECE Special Topics Symposium	1-3
ECE	117	ECE Seminar	1-3
ECE	1172	Preschool Seminar	1-3
ECE	118	Skills Training	1-3
ECE	119	Workshop	1-3
ECE	125	Instructional Media	3
ECE	126	Literacy and Language	3
ECE	127	Early Childhood Music, Movement & Motor Activity	3
ECE	141	Child Development Associate **or**	10
ECE	1412-1419	Child Development Associate	1-10
ECE	201	Multicultural Education	3
ECE	202	Curriculum Development	3
ECE	205	Infant & Toddler Education	3
ECE	209	Parent Involvement	3
ECE	213	Materials Construction	3
ECE	215	Child Care Administration	3
ECE	216	Advanced Special Topics	1-3
ECE	217	Advanced Seminar	1-3
ECE	218	Advanced Skills Training	1-3
ECE	219	Advanced Workshop	1-3
ECE	221	Strategies for Teaching Special Needs	3
ECE	222	Sign Language Level 1	3
ECE	223	Sign Language Level 2	3
ECE	224	Sign Language Level 3	3
ECE	289	Special Studies	1-15
ECE	2891	Special Studies Lab*	1-3
ECE	2892-2899	Special Studies Lab*	1-15
EDUC	101	Introduction to Education	4
		Subtotal	**10**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	108	Math for Early Childhood Education	5
PSYC&	100	General Psychology	5
Speech (select 3 credits)			
CMST	101	Speech Essentials **or**	3
CMST	110	Communication Behavior	3
		Subtotal	**18**
		Total Credits Required	**47**

It is important to stay in close contact with your ECE advisor. More information can be obtained from the Early Childhood Education office at 542-4640.

Early Childhood Education Child Care

PROFESSIONAL TECHNICAL

Certificate of Completion

Major Courses

Course	No.	Course Title	Credits
ECE	102	Introduction to Curriculum	3
ECE	104	Child Guidance & Communication Techniques	3
EDUC&	114	Child Development	3
EDUC&	203	Exceptional Child	3
ECE	230	First Aid, Health, Safety & Nutrition	3
		Subtotal	**15**
		Total Credits Required	**15**

Child Development Associate (CDA)

PROFESSIONAL TECHNICAL

Short-Term Certificate

Major Courses

Course	No.	Course Title	Credits
ECE	141	Child Development Associate	10
		Subtotal	**10**
		Total Credits Required	**10**

Economics

http://www.columbiabasin.edu/home/index.asp?page=748

Department Overview: Economics is the science which studies how societies use limited resources to meet unlimited wants. It is because of the broad nature of this social science that it is subdivided into macroeconomics and microeconomics. Macroeconomics is concerned with the use of fiscal and monetary policy to stabilize the national economy. Microeconomics tries to understand the behavior of the individual components of the economy.

Education

Elementary Education

The Associate in Elementary Education DTA/MRP is a direct transfer degree that is intended for future elementary school teachers. It provides students a broad foundation in liberal arts and beginning coursework in teacher education that is needed upon transfer to teacher certification programs at Washington state colleges and universities. It is designed to provide early experiences in teacher education, including opportunities for hands-on work in local classrooms and specific courses for elementary teachers.

Students may enroll in the Elementary Education program at the beginning of any quarter on either a full or part-time basis. Most courses are offered in the evenings or on Saturdays to accommodate the varied schedules of working students.

Associate in Arts & Science in Elementary Education (DTA/MRP)

TRANSFER DEGREE

A. Communication (13 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking	5

Math Proficiency *(Refer to Placement Test)*

1. Intermediate Algebra Proficiency requirement. Must do one of the following:

*Pass Intermediate Algebra (MATH 095 or MATH 098) with a 2.0 or better.

*Pass a Math class that has an Intermediate Algebra prerequisite.

*Place into any Math course MATH 113 or above via COMPASS.

B. Quantitative/Symbolic Reasoning (5 credits)

Course	No.	Course Title	Credits
MATH	123	Algebra, Probability and Statistics for Elementary Teachers	5

C. Humanities (15 credits)

15 credits in Humanities required including 5 credits of World Civilization, 5 credits of Diversity, and 5 credits of Other.

World Civilization (5 credits):

Course	No.	Course Title	Credits
HIST&	126	World Civilizations I **or**	5
HIST&	127	World Civilizations II **or**	5
HIST&	128	World Civilizations III	5

Diversity (5 credits):

Course	No.	Course Title	Credits
ICS	120	Survey of Hispanic Culture **or**	5
HIST&	219	Native American History **or**	5
ENGL	160	Women's Literature **or**	5
ENGL	180	Multicultural Literature **or**	5
ENGL	280	Gay and Lesbian Studies **or**	5
WS	155	Women's Cultural Heritage **or**	5
WS	160	Women in Literature and Art	5

Other (5 credits):

Course	No.	Course Title	Credits
ART&	100	Art Appreciation **or**	5
MUSC&	105	Music Appreciation **or**	5
DRMA&	101	Intro to Theatre	5

D. Social & Behavioral Science (15 credits)

15 credits in Social & Behavioral Sciences required including 5 credits of Psychology, 5 credits of U.S. History, and 5 credits from Economics, Geography or Political Science.

Psychology (5 credits):

Course	No.	Course Title	Credits
PSYC&	100	General Psychology	5

U. S. History (5 credits):

Course	No.	Course Title	Credits
HIST&	136	U.S. History I **or**	5
HIST&	137	U.S. History II	5

Economics, Geography, Political Science (5 credits)

Course	No.	Course Title	Credits
ECON&	202	Macro Economics **or**	5
ECON&	201	Micro Economics **or**	5
GEO	150	Cultural Geography **or**	5
POLS&	202	American Government **or**	5
POLS	104	State and Local Government	5

E. Mathematical & Natural Science (15 credits)

15 credits in Natural Science required, including 5 credits of Biological sciences, 5 credits Geology or Earth Science and 5 credits of Physical sciences. Two (2) courses must be a laboratory science.

Biological Science (5 credits)

Course	No.	Course Title	Credits
BIOL&	100	Survey of Biology w/Lab	5
BIOL&	100L*	Survey of Biology Lab	0
BIOL&	175	Human Biology w/Lab	5
BIOL&	175L*	Human Biology Lab	0

Geology or Earth Science (5 credits)

Course	No.	Course Title	Credits
ENVS&	101	Intro to Environmental Science w/Lab	5
ENVS&	101L*	Intro to Environmental Science Lab	0
GEOL&	101	Intro to Physical Geology w/Lab	5
GEOL&	101L*	Intro to Physical Geology Lab	0
GEO	101*	Physical Geography (*No Lab)	5

Physical Science (5 credits):

Course	No.	Course Title	Credits
ASTR&	101	Intro to Astronomy w/Lab	5
ASTR&	101L*	Intro to Astronomy Lab	0
CHEM&	110	Chemical Concepts w/Lab	5
CHEM&	110L*	Chemical Concepts Lab	0
CHEM&	121	Intro to Chemistry w/Lab	5
CHEM&	121L*	Intro to Chemistry Lab	0
PHYS&	100	Physics Non-Sci Majors	4
PHYS&	101	Physics Lab Non-Sci Majors	1

F. Health and Physical Education (3 credits)

Course	No.	Course Title	Credits
HE	230	First-Aid Safety	3

G. Electives (28 credits)

Course	No.	Course Title	Credits
CS	101	Introduction to Computer & Information Technology	5
EDUC	101	Introduction to Education	4
EDUC	1972	Field Experience	1-2
EDUC	201	Introduction to Multicultural Education	3
MATH	121	Structure of Elementary Math	5
MATH	122	Informal Geometry/Elementary Teachers	5
PSYC&	200	Lifespan Psychology	5

Total Credits Required . . . 94-97

Important:

**Required minimum 94 credits*

**Required cumulative GPA 2.0*

**A minimum of 30 credits CBC*

**You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.*

Notes:

1. *The Associate in Elementary Education DTA/MRP will be issued only to students who have earned a cumulative grade point average of at least 2.0.*
2. *Students should be advised that most teacher prep programs require a GPA of 2.5 to 3.0 for admission.*
3. *A minimum of 30 hours of K-8 classroom experience must be included during the degree program (EDUC 1972).*
4. *Students should be able to demonstrate computer literacy in software programs including Word Processing, PowerPoint, spreadsheets, in addition to being proficient on the Internet. These skills should be demonstrated through a portfolio of files gathered during their educational course work (CA 100).*
5. *Although not required for this degree, students should be advised they must take the WEST-B before completing their community college course work in order to apply to teacher preparation programs.*

Emergency Medical Services-CPR

http://www.columbiabasin.edu/home/index.asp?page=789

Department Overview: The field of Emergency Medical Services (EMS) is built upon foundational levels that begin with basic CPR/First Aid and end with the advanced care provided by a paramedic. Throughout EMS you will find various levels of education that all focus toward the "chain of survival". This chain is a theoretical ideal of how patients can best be treated, whether suffering a heart attack or being involved in a motor vehicle accident.

The Cardiopulmonary Resuscitation course is the first course provided among several options within the Emergency Medical Services training provided by Columbia Basin College.

Emergency Medical Technician

http://www.columbiabasin.edu/home/index.asp?page=789

Department Overview: The field of Emergency Medical Services (EMS) is built upon foundational levels that begin with basic CPR/First Aid and end with the advanced care provided by a paramedic. Throughout EMS you will find various levels of education that all focus toward the "chain of survival". This chain is a theoretical ideal of how patients can best be treated, whether suffering a heart attack or being involved in a motor vehicle accident.

EMT-B is the certification level that comprises the largest population of EMS responders, and is often considered the backbone of EMS. EMT's perform basic life saving skills which include: control of bleeding, stabilizing fractures, assisting patients with medications, providing oxygen and other necessities to avoid the development/progression of shock, as well as transport to the Emergency Room.

Entrance into the EMT course is contingent upon the successful completion of the application and acceptance process.

For Emergency Medical Technician courses see EMT 101 and EMT 102.

EMT-Intermediate is an additional course that is offered on an as-needed basis. This need is determined by the EMS Officers and Fire Chiefs from rural departments. EMT-I is approximately 40-50 hours of additional training beyond EMT-B, and equips the responder with the skills to start IV's, control the airway with invasive procedures, and administer some medications to patients.

More information is available from either the Paramedic Program or the Health Sciences Division office at (509) 544-8300.

The following are required for the first day of class:

- Criminal History Background Check
- Current list of required immunizations
- Signed Confidentiality Statement
- Malpractice Insurance

EMT-Basic

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
EMT	101	Emergency Medical Technician-Basic	10
		Subtotal	**10**
		Total Credits Required	**10**

Engineering Technology

http://www.columbiabasin.edu/home/index.asp?page=810

Department Overview: The Engineering Technology curriculum prepares the technician to assume a place on the engineering team as an assistant to the professional engineer. The program is two years in length and includes courses in engineering science, drafting and related academic subjects. Skills are learned by completing projects in a variety of settings including campus labs, the computer-aided drafting (CAD) lab and in the field completing projects in surveying.

It is the intent of the Engineering Technology Department to:

- generate an understanding of the basic principles of science and engineering and utilize that knowledge in the solution of problems;
- provide a basic education that will allow future educational growth, and;
- develop confidence in those skills needed for employment in the field of engineering technology.

A Computer-Aided Drafting Certificate is also available. The certificate emphasizes the CAD classes, preparing students for entry into the work force.

Associate in Applied Science in Engineering Technology

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
ENT.	111.	Introduction to Engineering	5
ENT.	1161	Basic Drafting	5
ENT.	121.	Engineering Fundamentals	3
ENT.	1211	Engineering Fundamentals Lab	1
ENT.	122.	Materials	3
ENT.	1261	Graphical Analysis	5
ENT.	134.	Surveying	3
ENT.	1341	Surveying Lab.	3
ENT.	135.	Statics	5
ENT.	1361	Advanced Drafting	4
ENT.	214.	Strength of Materials	5
ENT.	2161	Mechanical Drafting & Design	5
ENT.	2191	Construction Estimating.	1
ENT.	224.	Structures	5
ENT.	2261	Architectural/Structural Drafting.	5
ENT.	229.	Construction Specifications	2
ENT.	2361	Design	5
ENT.	238.	Electricity	5
		Subtotal.	**70**

Major Support

Course	No.	Course Title	Credits
PHYS&.	121.	General Physics I	4
PHYS&.	131.	General Physics Lab I.	1
PHYS&.	122.	General Physics II.	4
PHYS&.	132.	General Physics Lab II	1
Physics/English (5 credits)			
PHYS&.	123.	General Physics III &	4
PHYS&.	133.	General Physics Lab III **or**	1
ENGL&.	235.	Technical Writing	5
Computer Science Elective (as approved by ENT Dept.)			5
		Subtotal.	**20**

General Education

Course	No.	Course Title	Credits
ENGL&.	101.	English Composition I	5
MATH	113.	Geometry/Trigonometry **or**	5
MATH&	141.	Precalculus I.	5
MATH&	142.	Precalculus II	5
		Subtotal.	**15**

Students should select one class from each of the following areas to meet the program requirement:

Course	No.	Course Title	Credits
Human Relations (3-5 credits)			
PSYC	103.	Applied Psychology **or**	3
PSYC&	100.	General Psychology **or**	5
PSYC	201.	Social Psychology **or**	5
BUS	271.	Human Relations Business	5
Speech (select 3-5 credits)			
CMST.	101.	Speech Essentials **or**	3
CMST&.	220.	Public Speaking **or**	5
CMST.	110.	Communication Behavior **or**	3
CMST&.	210.	Interpersonal Communication **or**	3
CMST.	260.	Multicultural Communications	5
		Subtotal.	**6-10**
		Total Credits Required.	**111-115**

Computer Aided Drafting

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
ENT.	1711	Technical Drafting	3
ENT.	267	AutoCAD I &	2
ENT.	2671	AutoCAD I Lab.	1
ENT.	268	AutoCAD II &	2
ENT.	2681	AutoCAD II Lab	1

ENT Electives: 20 credits required, a minimum of 9 credits must be CAD electives and a maximum of 6 credits may be other designated ENT classes.

CAD: (select a minimum of 9 credits)

Course	No.	Course Title	Credits
ENT.	269	Visual LISP &	2
ENT.	2691	Visual LISP Lab	1
ENT.	270	3-D &	2
ENT.	2701	3-D Lab	1
ENT.	271	Drawing Production &	2
ENT.	2711	Drawing Production Lab.	1
ENT.	272	Advanced 3-D &	2
ENT.	2721	Advanced 3-D Lab	1
ENT.	273	Advanced AutoCAD Applications &.	2
ENT.	2731	Advanced AutoCAD Applications Lab	1
ENT.	274	Architectural Residential Drawing &.	2
ENT.	2741	Architectural Residential Drawing Lab	1
ENT.	281	MicroStation I for the AutoCAD User &	2
ENT.	2811	MicroStation I for the AutoCAD User Lab	1
ENT.	282	MicroStation II for the AutoCAD User &	2
ENT.	2821	MicroStation II for the AutoCAD User Lab	1

Other ENT electives: (must meet course prerequisites.)

Course	No.	Course Title	Credits
ENT.	111	Introduction to Engineering	5
ENT.	121	Engineering Fundamentals &.	3
ENT.	1211	Engineering Fundamentals Lab	1
ENT.	122	Materials	3
ENT.	134	Surveying &	3
ENT.	1341	Surveying Lab.	3
ENT.	1721	Technical Drafting	3
ENT.	2191	Construction Estimating.	1
ENT.	229	Construction Specifications	2
ENT.	238	Electricity	5
		Subtotal.	**29**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	113	Geometry/Trigonometry	5

Human Relations (select 3-5 credits)

PSYC&	100	General Psychology **or**	5
PSYC	103	Applied Psychology **or**	3
PSYC	201	Social Psychology **or**	5
BUS	271	Human Relations Business	5

Students should select one class from each of the following areas to meet the program requirement:

Speech (select 3-5 credits)

CMST.	101	Speech Essentials **or**	3
CMST.	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST&	220	Public Speaking **or**	5
CMST.	260	Multicultural Communications	5
		Subtotal.	**16-20**
		Total Credits Required.	**45-49**

English

http://www.columbiabasin.edu/home/index.asp?page=714

Department Overview: The English department offers a wide range of writing courses designed to meet the needs of all who enroll. Offerings include review/developmental grammar and writing; expository, research and work-related writing; creative writing; and linguistics.

Career opportunities include the fields of teaching, law, speech writing, technical communication and editing, journalism and public relations, among others. In general, these courses give students the reading, writing and critical thinking skills to prepare for success in life.

English As A Foreign Language

http://www.columbiabasin.edu/home/index.asp?page=583

Department Overview: The English as a Foreign Language program offers developmental and academic language instruction for non-native speakers of English. These courses provide support and preparation for future coursework in academic and occupational programs. Courses are designed to provide advanced practice in academic reading and writing, vocabulary development and speaking, grammar, and spelling skills.

English As A Second Language

http://www.columbiabasin.edu/home/index.asp?page=583

Department Overview: The English as a Second Language program at CBC offers English language instruction to non-native English speaking residents of Benton and Franklin counties. Courses help students to develop or improve their English language skills and awareness of American culture from basic literacy to an advanced level. Instruction focuses on developing language and communication skills through an integration of academic, interpersonal and problem-solving activities. ESL courses coded below 090 are tuition free with non-transferable credits. A $25 tuition fee per quarter is required for registration in ESL classes up to 18 credits.

Environmental Science

http://www.columbiabasin.edu/home/index.asp?page=1076

Department Overview: Environmental Science offers both science and non science students the necessary background to understand the environmental problems that have arisen due to human activities. Courses deal with the interrelationships of soil, air, and water as they are affected by human activities. Students are challenged to think critically about their lifestyle choices and how these choices affect their immediate environment in the short term and the biosphere in the long run. Education of students is the key that opens their minds to the possibility that humans do, in fact, cause changes to their environment by using resources at rates that exceed the systems ability to replenish them.

Fire Protection Technology

http://

Department Overview: No job in the world commands more respect than that of the firefighter, and with it comes a good salary and strong benefits. The competition is strong, and more and more candidates are getting special training and certification to improve their chances. This program is designed to give students the competitive edge to obtain a career position within an emergency agency. Career opportunities include Structural Firefighters, Wildland Firefighter, Fire Investigator, and Fire Prevention Officers.

The program offers an Associate in Applied Science degree in Fire Protection Technology. Graduates of the program will be qualified to test for the International Fire Service Accreditation Congress (IFSAC) Firefighter I Certification and will have successfully completed the Emergency Medical Technician-Basic course.

General education courses are included in the program to provide students with an opportunity to explore industrial, social, political, and economic concepts relating to the field of fire science.

Associate in Applied Science in Fire Protection Technology

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
FPT	110	Fire Behavior and Fire Ground Tactics	5
FPT	120	Fire Protection Systems/Fire Prevention	5
FPT	130	Fire Service Hydraulics/E.V.A.P.	5
FPT	205	Fire Academy I	8
FPT	210	Building Construction	5
FPT	215	Fire Academy II	8
FPT	220	Fire Inspection/Fire Codes	5
FPT	225	Fire Academy III	8
FPT	230	Fire Investigation	5
EMT	101	Emergency Medical Technician-Basic	10
		Subtotal	**64**

Major Support

Course	No.	Course Title	Credits
CA	100	Introduction to Microcomputers or	4
CS	101	Introduction to Computers and Information Technology	5
CHEM&	110	Chemical Concepts w/Lab	5
CHEM&	110L*	Chemical Concepts Lab	0
ENGL&	102	Composition II **or**	5
ENGL&	235	Technical Writing	5
PE (select 5 credits)			
PE	1271	Fitness Center I	1-2
PE	1281	Fitness Center II	1-2
PE	1291	Fitness Center III	1-2
Political Science (select 5 credits)			
POLS&	202	American Government **or**	5
POLS	104	State and Local Government	5
		Subtotal	**24-25**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
PSYC	100+	PSYC 100 **or** above	3-5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**16-20**
		Total Credits Required	**104-109**

Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.

Fire Science

http://www.columbiabasin.edu/home/index.asp?page=790

Department Overview: The evening Fire Science program is for individuals who are presently firefighters in either career or volunteer-based systems.

General education courses are included in the program to provide the opportunity to explore industrial, social, political, and economic concepts relating to the field of Fire Science. Many of the general education requirements will be available in regular day and distance learning format options. The courses specific to the Fire Science degree are generally offered evenings and rotated each year. Students should meet with the program faculty to develop an academic plan that will meet the student's needs.

Associate in Applied Science in Fire Science

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
FS	111	Fire Administration	3
FS	121	Fire Tactics	3
FS	131	Introduction to Fire Inspections	3
FS	141	Hazardous Materials I	3
FS	151	Hazardous Materials II	3
FS	211	Building Construction	3
FS	222	Fire Tactics II	3
FS	231	Fire Protection Equipment	3
FS	241	Fire Investigation	3
		Subtotal	**27**

Major Support

Course	No.	Course Title	Credits
ENGL&	235	Technical Writing	5
Political Science (select 5 credits)			
POLS&	202	American Government **or**	5
POLS	104	State and Local Government	5
Business Administration (select 5 credits)			
BUS	262	Management Principles **or**	5
BUS	271	Human Relations Business	5
		Subtotal	**15**

Restrictive Electives

EMT-Emergency Medical Technician	10
Promotional Exams - Maximum	9
Special Experience - 1 credit per yr - Maximum (Training Officer, Fire Marshall, Inspection, Paramedic, etc.)	5
Fire Training Classes - 1 credit/16 hours - Maximum	15
Work Experience - Maximum (Career 2 credit/yr & Volunteer 1 credit/yr)	10
Correspondence - Maximum	5
Subtotal	**28-32**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
PSYC	100+	PSYC 100 **or** above	3-5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication	5
		Subtotal	**16-20**
		Total Credits Required	**90-94**

Firefighter I

http://www.columbiabasin.edu/home/index.asp?page=790

Department Overview: No job in the world commands more respect than that of the firefighter, and with it comes a good salary and strong benefits. The competition is keen, and more and more candidates are getting special training and certification to improve their chances. This program is designed to give you that edge. Career opportunities include Structural Firefighters, Wildland Firefighter, Fire Investigator, and Paramedic.

The program is divided into two options:The first option is a Fire Science Certificate and an Associate in Applied Science degree. The Fire Science Certificate option involves all the core classes (71 credits) and is designed for those students who wish to postpone completing the Firefighter Level I Academy. The second option includes the Firefighter I Academy, and successful students will qualify to take the certification test. Graduates of the day program will be Firefighter I Certified, EMT Certified, and will receive an Applied Fire Science degree.

General education courses are included in the program to provide you with an opportunity to explore industrial, social, political. and economic concepts relating to the field of fire science.

To earn the Associate in Applied Science degree, the candidate must accumulate 94 credit hours based on the amount of credit through credit transfer, course challenge, required curriculum, and electives.

First Year Introduction (FYI)

http://www.columbiabasin.edu/home/index.asp?page=437

Department Overview: The purpose of FYI is to introduce new students to the academic culture, expectations, resources, procedures, and policies at Columbia Basin College. Students will attend seminars where topics like college terminology, study skills, and learning styles will be discussed. There are also a number of diverse modules they will choose from ranging from career planning to computer survival skills to time management. Students will also have the opportunity to explore the campus, meet CBC faculty, and interact with students who are also new to the college experience.

Desired FYI Outcomes:

- Educate new students on college expectations
- Identify "high risk" students and provide earlier interventions
- Develop educational plans for every student
- Create a stronger sense of responsibility among students for their education
- "Warm up" students' critical thinking skills
- Build relationships with peers, staff, and faculty
- Improve the socialization process for new students at CBC
- Reduce the number of students on academic probation and suspension
- Increase retention rates

First Year Introduction for Trades

Department Overview: The First Year Introduction for Trades assists students in transitioning into the following trade programs at CBC: Ag and Industrial Equipment Technology, Autobody/Collision Repair, Automotive, Machine, and Welding Technology. The program emphasizes such topics as safety, industry expectations, program expectations, student success, campus resources, time management, and career planning. Completion of this course satisfies CBC's First Year Introduction (FYI) requirement for all degree and certificate seeking students. CBC's FYI program is nationally recognized by the National Council of Student Development for improving the acclimation of students to the college environment and improving student persistence in college. Students who are not in trades programs should take the FYI workshop - WKSP 090.

French

http://www.columbiabasin.edu/home/index.asp?page=830

Department Overview: Our French classes offer student-centered instruction that focuses on communicating effectively in French, appreciating the French culture, and recognizing linguistic and cultural connections between the French-speaking parts of the world and the United States.

General Engineering

http://www.columbiabasin.edu/home/index.asp?page=1077

Department Overview: General Engineering courses are required for various engineering degrees and fulfill the requirements for transfer to four-year institutions.

Geography

http://www.columbiabasin.edu/home/index.asp?page=828

Department Overview: The geography offerings through CBC's Math/Science Division provide transfer science credits to science majors, science requirements, and electives toward graduation with an Associates degree in Arts and Sciences, and personal interest opportunities for the community. The current geography courses explore relationships between Earth's natural environments; including the atmosphere, solid earth, oceans and streams, and between the environment and humans. Course offerings also include in-depth study of the atmosphere, including meteorology. The courses promote extensive skillbuilding opportunities in communication through the spoken and written word, skills in the use of technology as a learning/research tool, and emphasis on critical thinking skills (also see Cultural Geography).

Cultural Geography

CBC's course in Cultural Geography provides an introduction to the ways in which human groups think about, arrange, and modify their physical habitats. This geographic knowledge is a basic means to understanding one's own world and the worlds of others.

Geology

http://www.columbiabasin.edu/home/index.asp?page=812

Department Overview: The geology offerings through CBC's Math/Science Division provide transfer science credits to science majors, science requirements and electives toward graduation with an Associate's degree in Arts and Sciences, and personal interest opportunities for the community.

Physical Geology I is an introductory geology course which introduces students to Earth's processes and the relationships between the processes and Earth's physical/chemical properties. Physical Geology II is an introductory study in geomorphology-a study of Earth's landforms through processes that build them. Environmental Geology is a study of the relationships between the physical features of the earth and the human population. Historical Geology is the study of Earth's continents, oceans, and life forms through time. The geology offerings promote extensive skillbuilding opportunities in communication through the spoken and written word, skills in the use of technology as a learning and research tool, and emphasis on critical thinking skills.

German

http://www.columbiabasin.edu/home/index.asp?page=831

Department Overview: Our German classes offer student-centered instruction that focuses on communicating effectively in German, appreciating the Germanic culture, and recognizing linguistic and cultural connections between German-speaking parts of the world and the United States.

Health Education

http://www.columbiabasin.edu/home/index.asp?page=777

Department Overview: The Health Education department offers a variety of classes designed to enhance students' knowledge about a healthy lifestyle, and/or help the student learn first-aid skills and accident prevention.

Health Information Technology

http://

Department Overview: The Medical Reimbursement and Coding degree will prepare students to become specialists in this field. Students develop an understanding of coding and classification systems. Students will use ICD-9-CM (International Classification of Diseases-9th Revision-Clinical Modification) and CPT (Current Procedural Terminology) to assign valid diagnostic and/or procedural codes. Students gain a knowledge base for the validation of coded clinical information and case mix/severity of illness data. Students are also able to perform claims processing and electronic billing procedures for different healthcare settings. Courses in coding, reimbursement, study of diseases, and surgical procedures will prepare the students to work in clinical or hospital settings. The use of actual health records, coding and reimbursement software, medical office simulation, and supervised employment in a health information setting will allow the students to gain the hands-on experience needed for successful employment. This program will prepare students to take entry-level national coding certification examinations for both physician and hospital coding.

Associate in Applied Science in Health Information Technology

PROFESSIONAL TECHNICAL

The following assumes the student enters the program college-ready and has completed AOT 101/AOT 102/AOT 109 or ability to test out/challenge. Eligibility for MATH 106 and ENGL& 101. Recommended: students purchase a USB storage drive.

Major Courses

Course	No.	Course Title	Credits
CA	100	Introduction to Microcomputers	4
AOT	117	Office Orientation	3
AOT	129	Accounting Software	3
AOT	130	Practical Accounting	5
AOT	172	Word Processing I	5
AOT	290	Professional Development	3
HIT	118	Legal Aspects of the Medical Office III	3
HIT	147	Medical Terminology	5
HIT	154	Anatomy and Physiology for Health Information Technology	4
HIT	152	Pharmacotherapy for Health Information Technology	2
HIT	158	Pathophysiology for Health Information Technology	4
		Subtotal	**41**

Available Emphases: Medical Reimbursement and Coding and Medical Transcription.

Choose one available emphasis from below:

Support Courses

Medical Reimbursement and Coding:

Course	No.	Course Title	Credits
AOT	142	General Office Procedures	5
AOT	1952*	Supervised Employment	4
HIT	153	Medical Reimbursement	4
HIT	155	Introduction Medical to Coding	4
HIT	156	Intermediate Medical Coding	4
HIT	157	Advanced Medical Coding	4
HIT	159	Advanced Hospital Coding and CCS Prep	4
HIT	245	Medical Office Procedures	2
		Medical Reimbursement and Coding Subtotal	**72**

**Supervised Employment site must meet intended emphasis requirement. Prior to Supervised Employment in a hospital setting: required immunizations and WSP background check must be on file. Requires keyboarding speed of 30 wpm and 10-key speed of 100 cpm.*

Medical Transcription:

Course	No.	Course Title	Credits
AOT	272	Word Processing II	4
AOT	114	Editing	5
AOT	1952*	Supervised Employment	10
HIT	283	Medical Transcription I	4
HIT	284	Medical Transcription II	4
HIT	285	Medical Transcription III	4
		Medical Transcription Subtotal	**72**

**Supervised Employment site must meet intended emphasis requirement. Prior to Supervised Employment in a hospital setting: required immunizations and WSP background check must be on file. Requires keyboarding speed of 30 wpm and 10-key speed of 100 cpm.*

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
PSYC&	100	General Psychology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	103	Workplace Communication **or**	3
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Medical Reimbursement and Coding Total Credits Required	**90-92**
		Medical Transcription Total Credits Required	**90-92**

Health Sciences

http://

Department Overview: The Health Sciences courses provide both specialized multi-healthcare education and certification as well as general courses to meet a broad spectrum of healthcare program needs.

Hebrew

http://

Department Overview: Our Hebrew classes offer student-centered instruction that focuses on communicating effectively in Hebrew, appreciating the Israeli and Jewish culture, and recognizing linguistic and cultural connections between the Hebrew-speaking parts of the world and the United States.

History

http://www.columbiabasin.edu/home/index.asp?page=832

Department Overview: The History department is comprised of instructors with a wide variety of specialties, representing most of the major regions of the world. Offerings include a variety of general and more specialized courses in American and World History. The department's goal is to broaden the student's historical knowledge and to cultivate an historical consciousness that allows the student to think and write critically about human society. In addition, CBC now offers a two-year degree in history.

Associate in Arts & Science with an Emphasis in History

TRANSFER DEGREE

Option C

A. Communication (13 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
CMST			3

Math Proficiency X

B. Quantitative/Symbolic Reasoning (5 credits)

Course	No.	Course Title	Credits
MATH&	146	Introduction to Stats	5

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree.

Course	No.	Course Title	Credits
HIST&	126	World Civilizations I	5
ENGL		(see advisor for appropriate selection)	5
Humanities Elective (see advisor for appropriate selection)			5

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral Science distribution requirements for the AA degree.

Course	No.	Course Title	Credits
SOC&	101	Intro to Sociology	5
HIST&	136	U.S. History I	5
Social Science Elective (see advisor for appropriate selection)			5

E. Mathematical & Natural Science (15 credits)

Course selections must also meet the Mathematical & Natural Science distribution requirements for the AA degree.

Mathematical & Natural Science Electives (see advisor for appropriate selection) 15

F. Health and Physical Education (3 credits)

Selected from PE Activity Classes or Health (HE) Classes 3

G. Electives (25 credits)

Course	No.	Course Title	Credits
HIST&	127	World Civilizations II	5
HIST&	128	World Civilizations III	5
HIST&	137	U.S. History II	5

Select 10 credits from the following courses:

HIST	110	History of Modern East Asia	5
HIST	112	Modern Latin America	5
HIST	115	History of Modern Middle East	5

Total Credits Required . . . 91

Horticulture

http://www.columbiabasin.edu/home/index.asp?page=813

Department Overview: Horticulture is the science and art of growing plants for food, personal enjoyment, and environmental enhancement. Horticulture includes the production, marketing, and utilization of fruit and vegetable products that improve health and well-being, shade trees that reduce the urban heat island effect, bedding plants that increase business profits, and interior plants that reduce stress and enhance productivity. See also Agriculture, Agricultural Food Systems, and Animal Science for courses required to earn an Associates of Arts and Science with an Emphasis in Agri-Business.

Human Services

http://www.columbiabasin.edu/home/index.asp?page=833

Department Overview: The Human Services program is designed to provide the necessary education and skills for the person interested in joining the helping profession or that is currently in a helping profession and looking to supplement their skills. Students could expect to obtain jobs through a large spectrum of human service organizations working with different populations. Students can focus their course electives towards Criminal Justice, Early Childhood Education, Physical and Mental Health, Intercultural Studies, Political Science, Sociology, or transfer degree requirements. The course structure will provide essential theory and practice of helping skills for providing services to clients, consumers, and students most effectively and efficiently.

Available through the Human Services program is a two-year Associate's degree in Human Services and a two-year Associate's degree in Chemical Dependency Counseling.

The two-year Associate's degree in Human Services is a Professional/Technical degree program that trains the student to work in a large variety of Human Service positions and agencies. This Associate's degree in Human Services includes: courses to train the student in effective interviewing, professional ethics, crisis intervention, community resources, theory, and practice of counseling.

The two-year Associate's degree in Chemical Dependency Counseling can be used to qualify for the Washington State Chemical Dependency Professional (CDP) credential with the Washington State Department of Health. Students entering the field of Chemical Dependency Counseling must complete an HIV/AIDS course and be a Registered Counselor. For additional information, please contact the Human Services coordinator at (509) 542-4439.

Associate in Applied Science in Human Services

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
HS	101	Introduction to Social Work	5
HS	102	Counseling: Theory & Practice	5
HS	103	Ethical & Legal Issues in Human Services/ Chemical Dependency	3
HS	104	Community Resources	3
HS	105	Crisis Intervention	3
HS	202	Therapeutic Approaches & Techniques	5
SOC	160	Gender Studies	5
SOC&	201	Social Problems	5
Multicultural Elective (5 credits)			
Please choose one from the following courses:			
CMST	260	Multicultural Communications **or**	5
ICS	120	Survey of Hispanic Culture **or**	5
HIST&	219	Native American History **or**	5
HIST	110	History of Modern East Asia **or**	5
		Instructor Pre-Approved Multicultural Elective Course	5
		Subtotal	**39**

Major Support

Student select 30 credits of college courses 100 or above. See advisor to make your course selections.

Subtotal . . . 30

General Education

Course	No.	Course Title	Credits
MATH	106+	MATH 106 **or** above	5
ENGL&	101	English Composition I	5
PSYC&	100	General Psychology	5
PSYC&	200	Lifespan Psychology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication	5
		Subtotal	**23-25**
		Total Credits Required	**92-94**

Associate in Applied Science in Chemical Dependency

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
HS	103	Ethical & Legal Issues in Human Services/Chemical Dependency	3
HS	120	Drug/Alcohol Counseling Techniques	3
HS	122	Alcohol/Drug Group Process	5
HS	124	Case Management of Chemically Dependent Client	3
HS	222	Alcohol/Drug Pharmacology/Physiology	3
HS	224	Chemical Dependency in the Family	5
HS	231	Adolescent Chemical Dependency Assessment & Counseling Techniques.	3
HS	232	Relapse Prevention.	3
HS	233	Chemical Dependency and the Law	3
HS	240	Survey of Chemical Dependency	3
HS	2972	Alcohol/Drug Practicum	6

Advanced Counseling Elective (5 credits)

Please choose from one of the following courses:

HS	220	Advanced Counseling or	5
HS	241	Advanced Adolescent Chemical Dependency Assessment & Counseling Techniques.	5

Multicultural Elective (select 5 credits)

Please choose from one of the following courses:

HIST	110	History of Modern East Asia or	5
ICS	120	Survey of Hispanic Culture or	5
HIST&	219	Native American History or	5
CMST	260	Multicultural Communications or	5
		Instructor Pre-Approved Multicultural Elective Course	5

Subtotal. . . . 50

Major Support

Select 20 credits. Students may select college courses 100 or above. See advisor to make your course selections.

Subtotal. . . . 20

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 or above.	5
PSYC&	100	General Psychology	5
PSYC&	220	Abnormal Psychology	5
PSYC&	200	Lifespan Psychology	5

Speech (select 3-5 credits)

CMST	101	Speech Essentials or	3
CMST&	220	Public Speaking or	5
CMST	110	Communication Behavior or	3
CMST&	210	Interpersonal Communication	5

Subtotal. . . 28-30

Total Credits Required. . 98-100

Industrial Drawing

http://www.columbiabasin.edu/home/index.asp?page=810

Department Overview: Columbia Basin College offers two Industrial Drawing classes. They are tailored specifically for the following programs:

Machine Technology

This course is designed to lead the Machine Technology student into reading basic machine shop blueprints. Students will also be introduced to Computer Aided Drawing (CAD) software.

Welding Technology

The course is designed to teach sketching and drawing for welding shop fabrication along with an introduction to blueprint reading.

Intercultural Studies

http://www.columbiabasin.edu/home/index.asp?page=835

Department Overview: The courses in this area offer students the opportunity to do in-depth studies of the major issues and aspects of other cultures, thus broadening their global awareness and also encouraging a better understanding of their own culture.

International Studies

http://

Department Overview: The Associate of Arts & Science with an emphasis in International Studies combines social sciences and humanities to examine international problems and change. Using a diverse, multidisciplinary approach, the emphasis encourages students to look at our increasingly interdependent world in order to learn how to study it and understand its politics, societies, economies, and cultures.

Associate in Arts & Science with an Emphasis in International Studies

TRANSFER DEGREE

Option C

A. Communication (10 credits in English, plus 3 credits in Speech)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5

Math Proficiency X

1. Intermediate Algebra Proficiency requirement: must do one of the following:

Pass Intermediate Algebra (MATH 095 or MATH 098).

Pass a math class that has an Intermediate Algebra prerequisite.

Place into any math course MATH 113 or above via Placement Test.

B. Quantitative/Symbolic Reasoning (5 credits)

1. Quantitative Reasoning:

Course	No.	Course Title	Credits
MATH&	146	Introduction to Stats	5

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree.

Course	No.	Course Title	Credits
HIST&	128	World Civilizations III	5
Humanities Electives			10

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral distribution requirements for the AA degree.

Course	No.	Course Title	Credits
GEO	150	Cultural Geography.	5
POLS&	204	Comparative Government **or**	5
POLS&	203	International Relations	5
SOC&	201	Social Problems.	5

E. Mathematical & Natural Science (15 credits)

Course	No.	Course Title	Credits
ENVS&	101	Intro to Environmental Science w/Lab.	5
ENVS&	101L*	Intro to Environmental Science Lab	0
Other course selections must meet the Mathematical & Natural Science distribution requirements for the AA degree..			10

F. Health and Physical Education (3 credits) 3

Health lecture or PE activity courses will satisfy this three-credit requirement.

G. Required Electives (Select 24 credits from the following list:)

Language (15 credits of World Languages). 15

This requirement may also be met by demonstrating the ability to speak and read at sophomore level. If this requirement is met without taking the courses, the 15 credits may be taken as electives. (See advisor for class selections.)

Additional Electives

A class can only be used to fulfill one requirement.

Course	No.	Course Title	Credits
ANTH&	206	Cultural Anthropology	5
ECON&	202	Macro Economics	5
HIST	110	History of Modern East Asia.	5
HIST	111	Colonial Latin America.	5
HIST	112	Modern Latin America	5
HIST	113	Mexico Since Independence	5
HIST	115	History of Modern Middle East	5
HIST	116	History of Africa.	5
HIST	117	History of India	5
HIST	100	Cultural and Historical Linked to Travel	1-3
ICS	120	Survey of Hispanic Culture	5
ICS	255	Race and Ethnic Relations.	5
POLS&	204	Comparative Government	5
POLS&	203	International Relations	5
SOC	269	Sociology of World Cinema	5

Total Credits Required. . . . 90

Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits. In addition to the above required coursework, it is extremely important to stay in close contact with your faculty advisor.

Japanese Common Course

http://www.columbiabasin.edu/home/index.asp?page=836

Department Overview: Our Japanese classes offer student-centered instruction that focuses on communicating effectively in Japanese, appreciating the Japanese culture, and recognizing linguistic and cultural connections between Japanese-speaking parts of the world and the United States.

Latino and Latin American Studies

Department Overview: In our increasingly multi-ethnic and global society it is important to learn about and understand the people and cultures of the many places around the world. The growing presence of people of Hispanic/Latino descent in the United States as well as our country's continued economic, political, and cultural connection with Spanish speaking countries makes it imperative to learn about this region and its people.

An Associate of Arts & Science degree with an emphasis in Latino and Latin American Studies is valuable for students who would like to transfer to a four-year college with expertise from a specific region and culture. Students who intend to pursue majors in history, international relations, international business, education, foreign service, as well as anyone who sees themselves working in Latin America or with people of Latin American descent in the United States would benefit greatly by pursuing this degree.

Associate in Arts & Science with an Emphasis in Latino & Latin American Studies

TRANSFER DEGREE

Option C

A. Communication (10 credits in English, plus 3 credits in Speech)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II **or**	5
ENGL&	235	Technical Writing	5
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5

Math Proficiency X

1. Intermediate Algebra Proficiency requirement: must do one of the following:

Pass Intermediate Algebra (MATH 095 or MATH 098).

Pass a math class that has an Intermediate Algebra prerequisite.

Place into any math course MATH 113 or above via placement test.

B. Quantitative/Symbolic Reasoning (5 credits)

1. Quantitative Reasoning:

Course	No.	Course Title	Credits
MATH&	146	Introduction to Stats (Recommended)	5

2. OR Symbolic Reasoning:

CS 102, CS& 131 CS 162, CS 202, or PHIL 121

C. Humanities (15 credits)

Course	No.	Course Title	Credits
ICS	120	Survey of Hispanic Culture	5
Humanities Electives			10

(Course selections must also meet the Humanities distribution requirements for the AA degree.)

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral distribution requirements for the AA degree.

Course	No.	Course Title	Credits
HIST	111	Colonial Latin America **or**	5
HIST	107	Chicano History	5
POLS&	203	International Relations **or**	5
ANTH&	206	Cultural Anthropology	5

Psychology or Sociology (See advisor for appropriate selection) 5

PSYC	201	Social Psychology **or**	5
SOC&	201	Social Problems	5

E. Mathematical & Natural Science (15 credits) 15

Course selections must also meet the Mathematical & Natural Science distribution requirements for the AA degree.

F. Health and Physical Education (3 credits) 3

Health lecture or PE activity courses will satisfy this three-credit requirement.

G. Required Electives (Select 24 credits from the following list:) 9

Language (Fifteen credits of Spanish language classes.) 15

This requirement may also be met by demonstrating the ability to write and read at one-year language level. If this requirement is met without taking the courses, the 15 credits may be taken as electives. (See advisor for class selections.)

Additional Electives

A class can only be used to fulfill one requirement.

Course	No.	Course Title	Credits
ANTH&	206	Cultural Anthropology	5
ART	120	Art History of Americas	5
HIST	107	Chicano History	5
HIST	108	History of Immigration in the United States	5
HIST	111	Colonial Latin America	5
HIST	112	Modern Latin America	5
HIST	113	Mexico Since Independence	5
HIST	100	Cultural and Historical Linked to Travel	1-3
ICS	255	Race and Ethnic Relations	5
ENGL	180	Multicultural Literature	5
ENGL&	254	World Literature I	5
ENGL&	255	World Literature II	5
PHIL	131	World Religions	5
PL	210	Immigration Law	3
POLS&	204	Comparative Government	5
POLS&	203	International Relations	5
SOC&	201	Social Problems	5
SPAN	260	Spanish Literature Readings	3
SPAN	261	Spanish Literature Readings	3
SPAN	262	Spanish Literature Readings	3
CMST	260	Multicultural Communications	5

Total Credits Required . . . 90

In addition to the above required coursework, it is extremely important to stay in close contact with your faculty advisor.

Learning Opportunity Center

http://www.columbiabasin.edu/home/index.asp?page=733

Department Overview: The Learning Opportunities Center, Pasco campus, is a large classroom where many courses are offered simultaneously in a lab format. Instruction is provided one-on-one with faculty, through textbooks, and through the use of computers. The developmental education courses offered are as follows:

ENGL 086, ENGL 087, ENGL 088 Writing Skills

- ENGL 091 Grammar Skills
- MATH 080 Whole Numbers
- MATH 081 Fractions
- MATH 082 Measurements, Decimals & Percents
- MATH 083 Review Basics
- MATH 084 Algebra/Geometry
- RDG 079 Spelling
- RDG 080, RDG 081, RDG 082 Study Techniques
- RDG 083, RDG 084, RDG 085 Vocabulary Improvement
- RDG 086, RDG 087, RDG 088 Reading Skills
- RDG 089 Speed Reading
- The LOC also offers courses at college-level which are designed to improve college success. Those courses are as follows:
- RDG 105 Speed Reading
- RDG 110 Study Techniques
- RDG 115 Vocabulary Improvement

To find out more about the courses offered by the LOC, find a detailed description in the CBC Catalog.

The LOC, WorkSource, located in Kennewick, offers a limited number of developmental education courses in a modularized format.

Machine Technology

http://www.columbiabasin.edu/home/index.asp?page=762

Department Overview: From the airplane's wings to a toy alligator's computer chip, it was a machinist who made the first product, made the prototype of the product and made the machine technology and computers now a part of the machinist's day-to-day process, the industry is expanding, creating more job opportunities for skilled employees.

The CBC Machine Technology curriculum includes trade support theory courses in conjunction with laboratory training and general education courses. For more information call (509) 544-2267.

At the end of the program successful students will be able to:

- demonstrate manual machining skills, (operation of lathes, milling machines and surface grinders, tool), grinding skills and blueprint reading skills;
- operate high tech equipment, such as electrical discharge machines and computerized numerical control machine;
- demonstrate skills in computer-aided drafting, solid modeling, and computer-aided manufacturing;
- use math and problem-solving skills.

The department requires students achieve a minimum grade of 2.0 to be able to continue enrollment in major courses. The Associate of Applied Science degree also requires a minimum grade of 2.0 for each major course. A student who achieves a grade of 1.9 or lower in any required major courses may repeat that course once to attempt to achieve a grade of 2.0 or higher. Exceptions to this policy must be approved by the Dean of the program prior to enrollment and must be based on extenuating circumstances.

Associate in Applied Science in Machine Technology

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
MT	102	Solidworks for Machine Technology	5
MT	111	Basic Machine Technology I	5
MT	1111	Basic Machine Technology I Lab	9
MT	121	Basic Machine Technology II	5
MT	1211	Basic Machine Technology II Lab	9
MT	131	Basic Machine Technology III	5
MT	1311	Basic Machine Technology III Lab.	9
MT	211	Advanced Machine Technology I	5
MT	2111	Advanced Machine Technology I Lab	9
MT	221	Advanced Machine Technology II.	5
MT	2211	Advanced Machine Technology II Lab	9
MT	231	Advanced Machine Technology III	5
MT	2311	Advanced Machine Technology III Lab.	9
		Subtotal.	**89**

Major Support

A.A.S. degree candidates must complete all of the core curriculum plus the following courses:

Course	No.	Course Title	Credits
BPR	204	Blueprint Reading II (MT)	3
FYI	103	First Year Introduction for Trades	1
		Subtotal.	**4**

General Education

Course	No.	Course Title	Credits
MATH	112	Machinist Math	5
English (select 5 credits)			
ENGL&	101	English Composition I **or**	5
ENGL	103	Writing in the Workplace **or**	5
ENGL&	235	Technical Writing	5
Human Relations (select 3-5 credits)			
PSYC	103	Applied Psychology **or**	3
PSYC&	100	General Psychology **or**	5
PSYC	201	Social Psychology **or**	5
BUS	271	Human Relations Business	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal.	**16-20**
		Total Credits Required.	**109-113**

Mathematics

http://www.columbiabasin.edu/home/index.asp?page=814

Department Overview: Mathematics courses are required by a vast number of technical, occupational, and academic disciplines. The Math department seeks to support these needs by providing a full range of courses for students seeking associate degrees and certificates and students seeking to transfer to baccalaureate institutions. Additionally, courses are provided for students who require developmental math.

Associate in Arts & Science with an Emphasis in Mathematics

TRANSFER DEGREE

Option C

A. Communication (13 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II **or**	5
ENGL&	235	Technical Writing	5
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	260	Multicultural Communications	5

Math Proficiency *(Refer to Placement Test)*

1. Intermediate Algebra Proficiency requirement. Must do one of the following:

*Pass Intermediate Algebra (MATH 095 or MATH 098) with a 2.0 or better.

*Pass a math class that has an Intermediate Algebra prerequisite.

*Place into any math course MATH 113 or above via ASSET.

B. Quantitative/Symbolic Reasoning (5 credits)

Course	No.	Course Title	Credits
MATH&	151	Calculus I	5

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree. Complete at least one course from any three of the following groups. Courses must be selected from three different subject areas.

Art . . . 5
English . . . 5
History . . . 5
World Languages (Excluding conversational classes.) All count as a single subject area. . . . 5

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral distribution requirements for the AA degree.

Social & Behavioral Science Electives . . . 15

E. Mathematical & Natural Science (15 credits)

Course selections must also meet the Mathematical & Natural Science distribution requirements for the AA degree.

Course	No.	Course Title	Credits
MATH&	152	Calculus II	5
MATH&	153	Calculus III	5
PHYS&	221	Engineering Physics I	4
PHYS&	231	Engineering Physics Lab I	1

F. Health and Physical Education (3 credits)

Selected from PE Activity Classes or Health (HE) Classes . . . 3

Maximum 6 credits of PE activity may be applied: 3 credits in Health & PE and 3 credits included in restricted electives.

G. Emphasis Courses (25 credits required electives)

A minimum cumulative 2.0 GPA is required for a Mathematics emphasis. Additional electives require departmental approval.

Course	No.	Course Title	Credits
MATH&	254	Calculus IV	5
PHYS&	222	Engineering Physics II	4
PHYS&	232	Engineering Physics Lab II	1
MATH	243	Linear Algebra	5
MATH	255	Differential Equations	5
Additional elective with departmental approval			5
		Total Credits Required	**91**

Additional Notes:

***Required minimum credits 90.**

***Required cumulative 2.0 GPA is required for a Mathematics Emphasis.**

***A minimum of 30 credits must be CBC courses.**

***Depending on your major, some course choices may be more appropriate than others.**

***Consult with your counselor or faculty advisor. Maximum 6 credits of PE activity may be applied: 3 credits in Health and PE and 3 credits included in restricted electives.**

Associate in Arts & Science in Math Education-DTA

TRANSFER DEGREE

A. Communication (13 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking.	5

Math Proficiency (Refer to Placement Test)
1. Intermediate Algebra Proficiency requirement. Must do one of the following:
*Pass Intermediate Algebra (MATH 095 or MATH 098) with a 2.0 or better.
*Pass a math class that has an Intermediate Algebra prerequisite.
*Place into any math course MATH 113 or above via ASSET.

B. Quantitative /Symbolic Reasoning (5 credits)

Course	No.	Course Title	Credits
MATH&	151	Calculus I	5

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree. 15

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral distribution requirements for the AA degree.

Social & Behavioral Science Electives

Course	No.	Course Title	Credits
PSYC&	100	General Psychology	5

E. Mathematical & Natural Science (15 credits)

Course selections must also meet the Mathematical & Natural Science distribution requirements for the AA degree. One course must be a laboratory science.

Course	No.	Course Title	Credits
MATH&	152	Calculus II	5
		Physics & Lab	5
		Physics & Lab	5

F. Health and Physical Education (3 credits)

Selected from PE Activity Classes or Health (HE) Classes 3

Maximum 6 credits of PE activity may be applied: 3 credits in Health & PE and 3 credits included in restricted electives.

G. Emphasis Courses (24 credits required electives)

A minimum cumulative 2.0 GPA is required for a Mathematics emphasis. Additional electives require departmental approval.

Course	No.	Course Title	Credits
MATH&	153	Calculus III	5
MATH&	254	Calculus IV	5
MATH	243	Linear Algebra	5
Additional electives with departmental approval.			9

Total Credits Required. . . . 90

Additional Notes:

Required minimum credits 90.

Required cumulative 2.0 GPA is required for a Mathematics Emphasis.

A minimum of 30 credits must be CBC courses.

Depending on your major, some course choices may be more appropriate than others.

Consult with your counselor or faculty advisor. Maximum 6 credits of PE activity may be applied: 3 credits in Health and PE and 3 credits included in restricted electives.

Medical Assistant

http://www.columbiabasin.edu/home/index.asp?page=792

Department Overview: The Medical Assistant program prepares a student to work within the medical office with skills in office administrative tasks as well as clinical and patient care skills. The program provides a two-year Associate of Applied Science degree as well as a One-Year Certificate in Medical Assistant.

Students must meet minimum entrance standards and be accepted for enrollment after application to the department. The major courses for the Medical Assistant program are offered over a four-quarter sequence, beginning in fall quarter of each year. The fourth quarter of the program will be offered in the summer in which students will be active in externships throughout the healthcare community.

Students may complete general education requirements and major support courses flexibly, either before or after completion of the Medical Assistant major courses.

Prerequisites that must be fulfilled prior to application to the Medical Assistant program include:

- Prepared for MATH 083 or higher
- Reading ability at the RDG 099 level or higher
- Able to type a minimum of 25 words per minute
- Current healthcare provider CPR card
- Current first-aid card
- Completed a minimum of seven documented hours of HIV education.

A Medical Assistance application is required for consideration into the program. More information is available from the Health Sciences Division office at (509) 544-8300.

The following are required for the first day of class:

- Criminal History Background Check
- Current list of required immunizations
- Signed Confidentiality Statement
- Malpractice Insurance

Associate in Applied Science in Medical Assistant

Curriculum (First and Second Year)**
PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
MA	111	Pharmacology I	5
MA	114	Human Body Structure, Function, and Diseases I	4
MA	115	Clinical Procedures Theory I	4
MA	1151	Clinical Procedures Lab I	4
MA	140	Administrative Medical Assistant Office Procedures I	5
MA	141	Career Development for Medical Assistants	2
MA	211	Pharmacology II	5
MA	214	Human Body Structure, Function, and Diseases II	4
MA	215	Clinical Procedures Theory II	4
MA	2151	Clinical Procedures Lab II	4
MA	240	Administrative Medical Assistant Office Procedures II	5
MA	241	Externship Seminar	1
MA	2413	Externship	6
		Subtotal	**53**

Major Support

Electives (select 15 credits)

Course	No.	Course Title	Credits
	+100	Humanities, Social Science, Behavioral Science, **or** Natural Science Distribution List	15
HIT	115	Legal Aspects of the Medical Office I	2
HIT	147	Medical Terminology	5
		Subtotal	**22**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above (except MATH 109)	5
PSYC&	100	General Psychology	5

Speech (select 3-5 credits)

CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking	5
		Subtotal	**18-20**
		Total Credits Required	**93-95**

Students who complete the Associate of Applied Science may be able to license as a Category F Health Care Assistant (WAC 246-826-180).

Medical Assistant

Curriculum (First Year)*

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
MA	111	Pharmacology I	5
MA	114	Human Body Structure, Function, and Diseases I	4
MA	115	Clinical Procedures Theory I	4
MA	1151	Clinical Procedures Lab I	4
MA	140	Administrative Medical Assistant Office Procedures I	5
MA	141	Career Development for Medical Assistants	2
MA	211	Pharmacology II	5
MA	214	Human Body Structure, Function, and Diseases II	4
MA	215	Clinical Procedures Theory II	4
MA	2151	Clinical Procedures Lab II	4
MA	240	Administrative Medical Assistant Office Procedures II	5
MA	241	Externship Seminar	1
MA	2413	Externship	6
		Subtotal	**53**

Major Support

Course	No.	Course Title	Credits
HIT	115	Legal Aspects of the Medical Office I	2
HIT	147	Medical Terminology	5
		Subtotal	**7**

General Education

Course	No.	Course Title	Credits
PSYC&	100	General Psychology	5
ENGL&	101	English Composition I	5
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking	5
		Subtotal	**13-15**
		Total Credits Required	**73-75**

**Students who complete only the One-Year Certificate may be able to license as a Category E Health Care Assistant (WAC 246-826-170).*

Medical Imaging Technology

http://

Department Overview: The IMAGE courses are designed to prepare students for advanced level ARRT certification examinations in the following three areas:

- Computed Tomography (CT)
- Magnetic Resonance Imaging (MRI)
- Mammography

For additional information, see the program specialty information.

Computed Tomography (CT)

The Computed Tomography certificate program is designed to address competency development required by the American Registry of Radiologic Technologists (ARRT) for the advanced level certification exam in Computed Tomography (CT). In addition to clinical competency, academic coursework is offered to prepare the student for the exam administered by the ARRT. Coursework includes sectional anatomy, physics, and instrumentation of CT scanning machines. Additional work experience may be needed to satisfy the minimum number of exams necessary to qualify for the ARRT advanced level exam in CT. The program is designed for certified technologists registered by the ARRT in Radiography, Nuclear Medicine, or Radiation Therapy.

Magnetic Resonance Imaging (MRI)

The Magnetic Resonance Imaging (MRI) certificate program is designed to address competency development required by the American Registry of Radiologic Technologists (ARRT) for the advanced level certification exam in Magnetic Resonance Imaging (MRI). In addition to clinical competency, academic coursework is offered to prepare the student for the exam administered by the ARRT. Coursework includes sectional anatomy, physics, and instrumentation of MRI scanning machines. Additional work experience may be needed to satisfy the minimum number of exams necessary to qualify for the ARRT advanced level exam in MRI. The program is designed for certified technologists registered by the ARRT in Radiography, Nuclear Medicine, or Radiation Therapy.

Mammography

The Mammography short-term certificate program is designed to prepare radiologic technologists certified by the ARRT in Radiography [R.T. (R)] in the specialized emerging area of mammography. Lecture, lab, and academic coursework are offered to prepare students for the advanced level certification exam offered by the ARRT in Mammography. Students may need additional work experience to satisfy the minimum number of exams to be accomplished under supervision to qualify for the exam.

Bone Densitometry

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
IMAGE	100	Bone Densitometry	4
IMAGE	110	Bone Densitometry Clinical Practicum	4
		Subtotal	**8**
		Total Credits Required	**8**

Program Prerequisites: current enrollment in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.

Computed Tomography (CT) Technology

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
IMAGE	250	Cross Sectional Anatomy	3
IMAGE	251	Advanced Sectional Anatomy	2
IMAGE	265	Body Pathophysiology	3
IMAGE	266	Neuropathophysiology	3
IMAGE	270	CT Clinical Practicum I	12
IMAGE	280	CT Instrumentation	3
		Subtotal	**26**
		Total Credits Required	**26**

Magnetic Resonance Imaging (MRI) Technology

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
IMAGE	250	Cross Sectional Anatomy	3
IMAGE	251	Advanced Sectional Anatomy	2
IMAGE	265	Body Pathophysiology	3
IMAGE	266	Neuropathophysiology	3
IMAGE	271	MRI Clinical Practicum II	12
IMAGE	281	MRI Instrumentation and Procedures	3
		Subtotal	**26**
		Total Credits Required	**26**

Mammography

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
IMAGE	225	Mammography	4
IMAGE	229	Mammography Clinical	4
		Subtotal	**8**
		Total Credits Required	**8**

Multi-Occupational Trades

The Associate of Applied Science in Multi-Occupational Trades provides a two-year degree option for students in registered apprenticeship programs through Columbia Basin College. Current apprenticeship programs that would quality for this program include carpenters, electricians, millwrights, sheet metal, and plumbers & pipefitters.

Students obtain the "major" course work from a minimum of 5,200 OJT and 450 related training hours from their apprenticeship program. The general education requirements and one elective course, 20 – 23 credits/220 – 253 hours, are completed at Columbia Basin College.

For apprentices, this degree program allows them an opportunity to strengthen their resume. Additional education benefits apprentices in future career progressions such as foreman or above. Each career progression is a pay increase of 5 to 15 percent depending on the trade. It also allows individuals the potential access to other employment opportunities in the future like management, teaching, or full time safety coordinator positions.

Associate in Applied Science in Multi-Occupational Trades

PROFESSIONAL TECHNICAL

Major Courses

1. Completion of an apprenticeship program of at least 5,200 (equivalent to 95 credit hours) OJT hours certified by JATC.

2. Completion of 450 hours (equivalent to 34 credit hours) of related training certified by JATC.

Subtotal 5650 hours. . . 129

Major Support

Select one of the following with approval from JATC:

Course	No.	Course Title	Credits
BUS&	101	Intro to Business	5
BUS	130	Project Management	5
BUS	262	Management Principles	5
CA	100	Introduction to Microcomputers	4
SPAN&	121+	Spanish 121 **or** above	5
		Subtotal. . . .4-5	

General Education

Course	No.	Course Title	Credits
MATH	106+	Math 106 **or** above	5
English (select 5 credits)			
ENGL&	101	English Composition I **or**	5
ENGL	103	Writing in the Workplace	5
Human Relations (select 3-5 credits)			
PSYC	103	Applied Psychology **or**	3
PSYC&	100	General Psychology **or**	5
BUS	271	Human Relations Business **or**	5
CMST	260	Multicultural Communications	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	103	Workplace Communication **or**	3
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication	5
		Subtotal. . .16-20	

Total hours: 5870-5925 Equivalent Credit Hours. . 149-154

Music

http://www.columbiabasin.edu/home/index.asp?page=713

Department Overview: Music offerings at Columbia Basin College meet the requirements for the first two years of Bachelor of Arts or Bachelor of Science degrees in music at most four-year institutions; enhance the musical knowledge and performance ability of students wishing to enter the professional field with an Associate in Arts degree; and provide general leisure activity.

Music majors should choose a major instrument or voice for performance emphasis and register for appropriate applied music courses. Music majors should also register for the music theory sequence beginning with the fall quarter of their freshman year. All students in the college are encouraged to participate in the performance groups. Students planning to major in music must participate in at least one large performing group per quarter.

Career opportunities include the fields of music performance, teaching (public and private), composition, music ministry, music industry, music library studies, ethnomusicology, systematic musicology, music history, and music therapy.

Associate in Arts & Science with an Emphasis in Instrumental Music

TRANSFER DEGREE

Option C

A. Communication (13 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
CMST	101	Speech Essentials **or**	3
CMST	110	Communication Behavior	3

Math Proficiency X

B. Quantitative/Symbolic Reasoning (5 credits). 5

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree.

Course	No.	Course Title	Credits
MUSC&	105	Music Appreciation	5
Humanities Electives			10

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral Science distribution requirements for the AA degree.

Social & Behavioral Science Electives 15

E. Mathematical & Natural Science (15 credits)

Course selections must also meet the Mathematical & Natural Science distribution requirements for the AA degree.

Mathematical & Natural Science Electives 15

F. Health and Physical Education (3 credits)

Selected from PE Activity Classes or Health (HE) Classes 3

G. Electives (48-50 required electives)

Course	No.	Course Title	Credits
MUSC&	141	Music Theory I	5
MUSC&	142	Music Theory II	5
MUSC&	143	Music Theory III	5
MUSC&	241	Music Theory IV	5
MUSC&	242	Music Theory V	5
MUSC&	243	Music Theory VI	5
MUSC	236	Class Piano/Music Majors or	2
MUSC	134	Piano Class **or**	2
MUSC	135	Piano Class **or**	2
MUSC	136	Piano Class	2
MUSC	171	Ear Training Fundamentals	1
MUSC	172	Ear Training Fundamentals	1
MUSC	173	Ear Training Fundamentals	1
MUSC	274	Advanced Ear Training	1
MUSC	275	Advanced Ear Training	1
MUSC	276	Advanced Ear Training	1
MUSC	118	Band - must be enrolled for six quarters **or**	6
MUSC	123	Applied Music - must be enrolled for six quarters **or**	6
MUSC	124	Applied Music-must be enrolled for six quarters **or**	6
MUSC	125	Orchestra-must be enrolled for six quarters	6

Total Credits Required. . 114-116

It is understood an instrumental music major will complete more electives than the minimum 24 required for an AA degree. In addition to the above required coursework, it is extremely important to stay in close contact with your faculty advisor. It is possible your faculty advisor will recommend additional coursework within the Music department.

Associate in Arts & Science with an Emphasis in Vocal Music

TRANSFER DEGREE

Option C

A. Communication (13 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
CMST	101	Speech Essentials **or**	3
CMST	110	Communication Behavior	3

Math Proficiency X

B. Quantitative/Symbolic Reasoning (5 credits). 5

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree.

Course	No.	Course Title	Credits
MUSC&	105	Music Appreciation	5
Humanities Electives			10

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral Science distribution requirements for the AA degree.

Social & Behavioral Science Electives 15

E. Mathematical & Natural Science (15 credits)

Course selections must also meet the Mathematical & Natural Science requirements distribution for the AA degree.

Mathematical & Natural Science Electives 15

F. Health and Physical Education (3 credits)

Selected from PE Activity Classes or Health (HE) Classes 3

G. Electives (48-50 required electives)

Course	No.	Course Title	Credits
MUSC&	141	Music Theory I	5
MUSC&	142	Music Theory II	5
MUSC&	143	Music Theory III	5
MUSC&	241	Music Theory IV	5
MUSC&	242	Music Theory V	5
MUSC&	243	Music Theory VI	5
MUSC	236	Piano Class/Music Majors **or**	2
MUSC	134	Piano Class or	2
MUSC	135	Piano Class or	2
MUSC	136	Piano Class	2
MUSC	171	Ear Training Fundamentals	1
MUSC	172	Ear Training Fundamentals	1
MUSC	173	Ear Training Fundamentals	1
MUSC	274	Advanced Ear Training	1
MUSC	275	Advanced Ear Training	1
MUSC	276	Advanced Ear Training	1
MUSC	181	Chorus - must be enrolled for six quarters **or**	6
MUSC	281	Advanced Chorus -must be enrolled for six quarters	6
MUSC	123	Applied Music - must be enrolled for six quarters **or**	6
MUSC	124	Applied Music - must be enrolled for six quarters **or**	6
MUSC	125	Orchestra - must be enrolled for six quarters	6

Total Credits Required. . 114-116

It is understood a vocal music major will complete more electives than the minimum 24 required for an AA degree. In addition to the above required coursework, it is extremely important to stay in close contact with your faculty advisor. It is possible your faculty advisor will recommend additional coursework within the Music department.

Non-Destructive Testing

http://

Department Overview: Non-destructive testing is a method of testing equipment and materials which does not destroy them or effect their future performance or properties. Non-destructive testing is used to detect abnormalities in physical, chemical, or electrical characteristics.

Nuclear Medicine Technology

http://

Department Overview: Nuclear medicine is the medical specialty that utilizes the nuclear properties of radioactive and stable nuclides to make diagnostic evaluations of the physiologic and/or anatomic conditions of the body and to provide therapy with unsealed radioactive sources. The Nuclear Medicine Technologist is an allied health professional who, under the direction of an authorized user, is committed to applying the art and skill of diagnostic evaluation and therapeutics through the safe and effective use of radionuclides. Responsibilities include, but are not limited to: preparation, quality control testing and administration of radioactive compounds; execution of patient imaging procedures including computer processing and image enhancement; laboratory testing; patient interviews; instruction and preparation for administration of prescribed radioactive compounds for therapy; quality control; and radiation safety.

This is an 18-month, full-time Nuclear Medicine Technology program leading to an Associate of Arts in Nuclear Medicine Technology at Bellevue College. It is offered through a cooperative effort between Columbia Basin College and Bellevue College. The curriculum prepares students in all aspects of nuclear medicine technology. In addition to performing a wide variety of imaging and therapeutic procedures, students learn to prepare and administer radiopharmaceuticals, explain the procedures and their risks, take patient histories, and analyze the results of each study. Students work with a number of radiation detection systems, including gamma cameras and positron emission tomography systems. They also work with computers that analyze data from imaging studies in addition to those used for administrative tasks. Most importantly, students work directly with patients helping to ease their anxiety as well as provide important test result information for physician diagnosis of their ailments. Through the use of distance education and interactive television courses, Bellevue College will deliver course content to students at Columbia Basin College. Students will be able to complete the clinical portion of the degree at clinical facilities in the Tri-City area. Upon successful program completion, students are eligible for national certification exams as well as Washington State licensure.

Students are required to attend a Nuclear Medicine Information Session at CBC prior to applying for the program through Bellevue College. The prospective student would then apply to BCC for the program which is a selective and competitive admissions process. Tuition and fees for the entire program are approximately $8,000; books are approximately $500, most of which are purchased at the beginning of the program.

Nursing

http://www.columbiabasin.edu/home/index.asp?page=656

Department Overview: Columbia Basin College offers a National League for Nursing Accredited Career Ladder Nursing program. The curriculum is designed to utilize individual and group teaching strategies. Instruction takes place on campus as well as in local healthcare facilities. A lab is provided on campus to learn and practice clinical skills. For more information call (509) 544-8309.

Two major entry points are offered. The first is at the beginning level for individuals with no experience in nursing education. A new class is admitted each fall quarter. Secondly, LPNs may enter the Advanced Placement program without having to repeat course material they have already mastered. Transfer students are accommodated, as there is space available. Placement is based upon individual evaluation of past education.

An exit avenue is provided at the end of each year of the Nursing program. Following successful completion of the first year (4 quarters), students receive a Practical Nurse Certificate and are eligible to take the LPN Licensure exam. Following successful completion of the second year (7 quarters), students receive an Associate in Applied Science degree and are eligible to take the RN State Board Licensure exam.

Entrance Requirements

PRE-NURSING

Students are strongly encouraged to complete as many nursing support courses as possible before entering the Nursing program. These courses provide points for the Admission Index Score. It is especially helpful to have the science classes completed before entry. Students should contact the Admissions department to work with an advisor after attending a pre-nursing information session. Students apply to the Nursing program in January prior to planned entry year. For additional information, please see Entrance Requirements. Nursing support courses that may be completed prior to entry include the following:

- Human A&P 1, BIOL& 241/BIOL& 241L
- Human A&P 2, BIOL& 242/BIOL& 242L
- English Composition I, ENGL& 101
- General Psychology, PSYC& 100
- Lifespan Psychology, PSYC& 200
- Microbiology, BIOL& 260/BIOL& 260L
- Math, MATH above 100
- Speech Essentials, CMST 101

Entrance Requirements

Students are admitted based on their Admission Index Score, which utilizes three elements within the entrance requirements for program admission. Those elements include (A) cumulative grade point average among four selected courses, (B) pre-nursing assessment score (TEAS), and (C) departmental course completion score index. Students with the highest Admission Index Score will be admitted first. Admission to the program is limited and completion of entrance requirements does not ensure admission to the program. For further information please refer to the Nursing department on the CBC website. Students preparing for Nursing admission must meet the minimum program requirements:

- Demonstrate completion of high school with a GPA of 2.0 or GED certificate.
- Eligible to enter ENGL& 101 (English Composition I) based on COMPASS exam scores.
- Qualify for a five-credit Math class above 100 level based on COMPASS exam score.
- Complete one year of high school chemistry within the past five years or a five-credit college level introductory chemistry course, with a grade of 2.0 or higher. Demonstrate proof of high school course on submitted high school transcript.
- Eligible to enter BIOL& 241/BIOL& 242L (Human A&P 1 and Human A&P 2) or BIOL& 260/BIOL& 260L (Microbiology).
- Complete application to Columbia Basin College. Have all previous college transcripts transferred to CBC.
- Submit Nursing program application to Admissions in January of each year for the fall class.

Once admitted into the program, each student will be responsible for the following:

- Required immunization records.
- Current CPR card for Healthcare Provider.
- Satisfactory criminal history background check.

A minimum GPA of 2.0 per course must be obtained for the successful completion of the One-Year Certificate (Practical Nursing) and Associate Degree in Nursing departmental offerings. This 2.0 requirement is required for major courses, major support courses, and general education requirements.

Associate in Applied Science in Nursing (ADN)

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
NRS	111	Nursing I	7
NRS	1111	Nursing I Lab	4
NRS	121	Nursing II	5
NRS	1211	Nursing II Lab	5
NRS	131	Nursing III	5
NRS	1311	Nursing III Lab	5
NRS	1351	Nursing Trends Lab (2 credits per quarter)	6
NRS	211	Nursing IV	5
NRS	2111	Nursing IV Lab	5
NRS	221	Nursing V	5
NRS	2211	Nursing V Lab	5
NRS	222	Professional Issues I	1
NRS	231	Nursing VI	5
NRS	2311	Nursing VI Lab	8
NRS	232	Professional Issues II	1
NRS	2351	Nursing Trends Lab (1 credit per quarter)	3
		Subtotal	**75**

Major Support

Course	No.	Course Title	Credits
BIOL&	241	Human A&P 1 w/Lab	6
BIOL&	241L*	Human A&P 1 Lab	0
BIOL&	242	Human A&P 2 w/Lab	6
BIOL&	242L*	Human A&P 2 Lab	0
BIOL&	260	Microbiology	6
BIOL&	260L*	Microbiology Lab	0
PSYC&	200	Lifespan Psychology	5
NRS	101	Basic Pharmacology	1
NRS	201	Pharmacology	1
		Subtotal	**25**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above (except MATH 109)	5
CMST	101	Speech Essentials	3
PSYC&	100	General Psychology	5
		Subtotal	**18**
		Total Credits Required	**118**

*Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.*

LPN Curriculum One-Year Certificate

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
NRS	111	Nursing I	7
NRS	1111	Nursing I Lab	4
NRS	121	Nursing II	5
NRS	1211	Nursing II Lab	5
NRS	131	Nursing III	5
NRS	1311	Nursing III Lab	5
NRS	141	Practical Nursing	5
NRS	1411	Practical Nursing Lab	6
NRS	1351	Nursing Trends Lab (2 credits per quarter)	6
		Subtotal	**48**

Major Support

Course	No.	Course Title	Credits
BIOL&	241	Human A&P 1 w/Lab	6
BIOL&	241L*	Human A&P 1 Lab	0
BIOL&	242	Human A&P 2 w/Lab	6
BIOL&	242L*	Human A&P 2 Lab	0
PSYC&	100	General Psychology	5
NRS	101	Basic Pharmacology	1
		Subtotal	**18**

General Education

Course No.		Course Title	Credits
ENGL&	101	English Composition I	5
		Subtotal	**5**
		Total Credits Required	**71**

*Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.*

Pre-Nursing Requirements

Students should consult the catalog or the pre-nursing academic advisor for course prerequisites prior to pursuing this suggested sequence of pre-nursing classes.

Fall Quarter

Course	No.	Course Title	Credits
BIOL&	160	General Biology w/Lab &	5
BIOL&	160L*	General Biology Lab **or**	0
BIOL&	211	Majors Cellular w/Lab &	5
BIOL&	211L*	Majors Cellular Lab	0
CHEM&	110	Chemical Concepts w/Lab	5
CHEM&	110*L	Chemical Concepts Lab	0
CMST	101	Speech Essentials	3
		Subtotal	**13**

Winter Quarter

Course	No.	Course Title	Credits
BIOL&	241	Human A&P 1 w/Lab	6
BIOL&	241L*	Human A&P 1 Lab	0
PSYC&	100	General Psychology	5
ENGL&	101	English Composition I	5
		Subtotal	**16**

Spring Quarter

Course	No.	Course Title	Credits
BIOL&	242	Human A&P 2 w/Lab	6
BIOL&	242L*	Human A&P 2 Lab	0
PSYC&	200	Lifespan Psychology	5
MATH	106+	MATH 106 **or** above (except MATH 109)	5
		Subtotal	**16**

Summer Quarter

Course	No.	Course Title	Credits
BIOL&	260	Microbiology w/Lab	6
BIOL&	260L*	Microbiology Lab	0
		Subtotal	**6**
		Total Credits Required	**51**

*Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.*

Nursing Assistant

http://www.columbiabasin.edu/home/index.asp?page=657

Department Overview: The Nursing Assistant course is designed to prepare candidates for the Nursing Assistant Certification in Washington. This course is designed to comply with the Nursing Home Reform Act (OBRA 1987). The purpose of the National Nurse Aide Assessment Program (NNAAP) examination is to make sure that you understand and can safely perform the job of an entry-level Nursing Assistant. The NNAAP examination is a measure of Nursing Assistant-related knowledge, skills, and abilities that includes testing by both a written examination and a skills evaluation.

In order for students to successfully complete the Columbia Basin College Nursing Assistant (NA 100) course work, they will have to pass the class and the State Certificate test. Students that successfully complete the course work and testing will receive a Certification of Completion from the Department of Social and Health Services.

Course Lecture Requirements

In order to complete the NA 100 class lecture hours, students are required to meet 3 to 4 days a week and attendance is mandatory.

Course Clinical Requirements

Students are required to complete 50 clinical hours during the quarter. These hours will include a minimum of 36 shift hours. These shift hours will be held at various facilities in locations throughout the Tri-Cities. Students will be required to complete these hours during shifts that may start as early as 7:00 a.m. These hours will be arranged by the instructor with the facility. Students need to make arrangements to attend these required shifts, attendance is mandatory.

More information can be obtained from the Health Sciences Division office at (509) 544-8300.

The following are required for the first day of class:

- Criminal History Background Check
- Current list of required immunizations
- Signed Confidentiality Statement
- Malpractice Insurance

Nursing Assistant

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
NA	100	Nursing Assistant	4
NA	1001	Nursing Assistant Lab	4
		Subtotal	**8**
		Total Credits Required	**8**

Nutrition [M/S]

http://www.columbiabasin.edu/home/index.asp?page=678

Department Overview: Nutrition and Food Sciences currently offer a course designed to introduce students to the concept of food and nutrition to maintenance of a healthy life. Students will learn the principles of nutrition as they apply to macro-nutrients and metabolic pathways. Application of vitamins, minerals, and special nutritional requirements at different stages of the live cycle, as well as current issues in nutrition will be considered.

Paralegal

http://www.columbiabasin.edu/home/index.asp?page=763

Department Overview: The Paralegal program is a two-year equivalent program for those interested in obtaining the necessary training to qualify as legal assistants or paralegals and be employed in various aspects of the legal profession in attorneys' offices or legal departments. This program is currently being offered as an evening program only, and the students should expect to take three to four courses per quarter to complete the program in a timely manner. It should be noted that a class load of 12 credits per quarter will require a minimum of eight quarters to complete the program. At the end of the program successful students will be able to:

- prepare professional quality legal documents;
- conduct research relating to legal cases and judgments;
- conduct interviews of clients and witnesses;
- prepare probate inventories;
- maintain a professional office by organizing and indexing documents;
- prepare clients for court hearing; and
- assist lawyers preparing for litigation.

Associate in Applied Science in Paralegal

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
PL	101	Introduction to Paralegalism	5
PL	103	Civil Procedures	3
PL	104	Criminal Procedures	3
PL	105	Law Office Management	3
PL	107	Interview/Investigation	3
PL	121	Beginning Contract Law	3
PL	122	Intermediate Contract Law	3
PL	123	Advanced Contract Law	3
PL	131	Introduction to Torts	3
PL	132	Intermediate Torts	3
PL	133	Advanced Torts	3
PL	146	Paralegal Ethics	3
PL	147	Computers in a Law Environment	1
PL	1471	Computers in a Law Environment Lab	1
PL	150	Introduction to Legal Writing	3
PL	151	Legal Research & Writing	5
PL	152	Advanced Legal Writing	5
		Subtotal	**53**

Major Support

Students must choose at least 24 credits from the following:

Course	No.	Course Title	Credits
AOT	146	Legal Terminology	5
AOT	244	Legal Administrative Office Procedures	5
CJ&	101	Intro to Criminal Justice	3
CJ	137	Constitutional Law	5
CJ	232	Criminal Investigation	5
CJ	234	Criminal Evidence	3
PL	108	Administrative Law	3
PL	1172	Paralegal Seminar	1-3
PL	141	Probate Procedures	3
PL	142	Community Property Law	3
PL	143	Trial Preparation	3
PL	145	Family Law	5
PL	1972	Internship	1-3
PL	201	Commercial Law	3
PL	210	Immigration Law	3
PL	212	Real Estate & Personal Property	3
PL	213	Insurance Law	3
PL	214	Criminal Law	3
PL	215	Bankruptcy Law	3
PL	216	Corporate Law	3
PL	219	Environmental Law	3
PL	220	Employee Benefits Law	3
PL	221	Labor Law	3
PL	222	Personal Injury	3
PL	2972	Advanced Internship	1-3
		Subtotal	**24**

Electives: (choose 4-5 credits)

Course	No.	Course Title	Credits
CA	100	Introduction to Microcomputers	4
CA	172	Word Processing	5
CS	106	Database Systems	5
AOT	101	Keyboarding I	2
AOT	102	Keyboarding II	2
AOT	1091	Keyboarding/Skillbuilding	3
AOT	172	Word Processing I	5
		Subtotal	**4-5**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5

Psychology or Sociology (select 5 credits)

PSYC&	100	General Psychology **or**	5
SOC&	101	Intro to Sociology	5

Speech (select 3-5 credits)

CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**99-102**

Paramedic

http://www.columbiabasin.edu/home/index.asp?page=796

Department Overview: Beyond EMT-B and Intermediate is Paramedic. Paramedic requires substantially more training than EMT-B and represents the advanced life support side of EMS. Paramedic is approximately 18-24 months in duration and equips the student with the skills necessary to provide advanced life saving care in the out-of-hospital setting. Entrance in to the Paramedic program is contingent upon successful completion of all following prerequisites, application, and an oral interview.

Applicants to both the Certificate and AAS program must meet the following criteria:

Paramedic Program Entrance Requirements

- Current EMT-Basic certification for at least one year
- Successful waiver or completion of the PreParamedic Short-Term Certificate
- Proof of ASSET testing
- Application to the CBC Paramedic program and completion of acceptance interview
- Completion of the following classes with a minimum 2.0 GPA:
- BIOL& 241 Human A&P 1 w/Lab
- BIOL& 241L Human A&P 1 Lab
- BIOL& 242 Human A&P 2 w/Lab
- BIO 242L Human A&P 2 Lab

The EMS department also provides various continuing education opportunities for certified paramedics in the Southeastern Washington Region and Oregon. A 48-hour refresher is provided as deemed necessary by community need, according to the requirements for National Registry Paramedic Certification. Workshops will also provide various Advanced Life Support continuing education opportunities as required or requested by community officials. (Fees for these courses will vary by time, subject material, and number of individuals attending.)

PreParamedic Short-Term Certificate

(Maximum of 4 quarters for completion)

PMD	100	PreParamedic Lecture	2 credits
PMD	1002	PreParamedic Practicum	2 credits

(This course can be repeated for a maximum of 6 credits.)These courses are intended to be taken concurrently with other technical support courses.

The Paramedic program is accredited by the Joint Review Committee on Educational Programs for the EMT-Paramedic. The goal of the Paramedic program is to prepare graduates having the skills and knowledge necessary for entry level Paramedic positions in agencies providing pre-hospital emergency services.

A Washington state background check must be completed prior to admittance into this program. More information is available from the Health Sciences Division office at (509) 544-8300.

Associate in Applied Science in Paramedicine

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
PMD	201	Paramedic I	6
PMD	2013	Paramedic I Lab	2
PMD	202	Paramedic II	6
PMD	2023	Paramedic II Lab	3
PMD	203	Paramedic III	6
PMD	2033	Paramedic III Lab	3
PMD	204	Paramedic IV	6
PMD	2043	Paramedic IV Lab	3
PMD	205	Paramedic V	6
PMD	2053	Paramedic V Lab	3
PMD	206	Paramedic VI	6
PMD	2063	Paramedic VI Lab	3
PMD	235	Professional Issues for the Paramedic	2
		Subtotal	**55**

Major Support

Course	No.	Course Title	Credits
BIOL&	241	Human A&P 1 w/Lab	6
BIOL&	241L*	Human A&P 1 Lab	0
BIOL&	242	Human A&P 2 w/Lab	6
BIOL&	242L*	Human A&P 2 Lab	0
HE	240	Stress Management	3
BUS	271	Human Relations Business	5
CA	100	Introduction to Microcomputers	4
HIT	147	Medical Terminology	5
		Subtotal	**29**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	235	Technical Writing	5
PSYC&	100	General Psychology	5
MATH	106+	MATH 106 **or** above (except MATH 109)	5
Speech (select 3 credits)			
CMST	101	Speech Essentials **or**	3
CMST	110	Communication Behavior	3
		Subtotal	**23**
		Total Credits Required	**107**

Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.

Paramedic

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
PMD	201	Paramedic I	6
PMD	2013	Paramedic I Lab	2
PMD	202	Paramedic II	6
PMD	2023	Paramedic II Lab	3
PMD	203	Paramedic III	6
PMD	2033	Paramedic III Lab	3
PMD	204	Paramedic IV	6
PMD	2043	Paramedic IV Lab	3
PMD	205	Paramedic V	6
PMD	2053	Paramedic V Lab	3
PMD	206	Paramedic VI	6
PMD	2063	Paramedic VI Lab	3
PMD	235	Professional Issues for the Paramedic	2
		Subtotal	**55**

Major Support

Course	No.	Course Title	Credits
BIOL&	241	Human A&P 1 w/Lab	6
BIOL&	241L*	Human A&P 1 Lab	0
BIOL&	242	Human A&P 2 w/Lab	6
BIOL&	242L*	Human A&P 2 Lab	0
		Subtotal	**12**
		Total Credits Required	**67**

*Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.*

Pre-Paramedic

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

(Maximum of 4 quarters for completion)

Course	No.	Course Title	Credits
PMD	100	Pre-Paramedic Short-Term Certificate	2
PMD	1002	Pre-Paramedic Short-Term Certificate Practicum	2
		Subtotal	**2**
		Total Credits Required	**2**

(This course can be repeated for a maximum of 6 credits.)

These courses are intended to be taken concurrently with other technical support courses.

Parent Education

http://www.columbiabasin.edu/parented

Department Overview: The Parent Education program incorporates positive parenting skills with a child development knowledge base that promotes strong and healthy families. Participation offers an opportunity for parents to become directly involved in the education of their young children and to be involved in their own education as parents. We offer classes for parents of infants, toddlers, and preschoolers. The program enables parents through observation, involvement and discussion to enhance their parenting skills while the children experience a quality hands-on early learning environment. Families may enroll any time from September through May.

Philosophy

http://www.columbiabasin.edu/home/index.asp?page=837

Department Overview: Philosophy is the attempt to think rationally and critically about the most important questions of life. The course examines normative issues of good and evil, the nature and purpose of human life, what is reality, the existence of God, and the adequacy of scientific materialism as a world view.

Phlebotomy

http://www.columbiabasin.edu/home/index.asp?page=797

Department Overview: This is a two-quarter sequence of classes that prepares technicians for testing by the (ASCP) American Society of Clinical Pathologists and employment into the medical laboratory field. The two-quarter sequence of classes focus on the knowledge and skills necessary to function as a member of the laboratory healthcare team in a variety of settings.

Phlebotomy classes are scheduled for two consecutive quarters. During the first quarter, lecture classes are normally held two afternoons a week. During the second quarter, students will complete 120 hours of supervised clinical experience in 14 various medical facilities throughout the Tri-Cities area. These 120 clinical hours will be arranged by the instructor. Students will need to accommodate the hours of the facility and complete these hours.

In order for students to successfully complete the Phlebotomy course work, they must achieve a 70 percent average or higher on the testing during the first quarter in order to go on to the second quarter of clinical course work. Students that successfully complete both quarters will receive a Certification of Completion from CBC with academic credit and will be prepared to test with the American Society of Clinical Pathologists (ASCP). This additional licensing test is not included and will be an additional cost to the student.

More information can be obtained from the Health Sciences Division office at 544-8300.

The following are required for the first day of class:

- Criminal History Background Check
- Current list of required immunizations
- Signed Confidentiality Statement
- Malpractice Insurance

Phlebotomy

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
PHLEB	100	Phlebotomy I	4
PHLEB	1001	Phlebotomy I Lab	5
		Subtotal	**9**
		Total Credits Required	**9**

Physical Education

http://www.columbiabasin.edu/home/index.asp?page=778

Department Overview: The Physical Education department offers a variety of classes that can expose the student to leisure activity skills and fitness activities.

Associate in Arts & Science with an Emphasis in Health & Physical Education

TRANSFER DEGREE

Option C

A. Communication (10 credits in English, plus 3 credits in Speech)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II **or**	5
ENGL&	235	Technical Writing	5
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5

Math Proficiency X

1. Intermediate Algebra Proficiency requirement: must do one of the following:

Pass Intermediate Algebra (MATH 095 or MATH 098).

Pass a math class that has an Intermediate Algebra prerequisite.

Place into any math course MATH 113 or above via placement test.

B. Quantitative/Symbolic Reasoning (5 credits). 5

Choose one class from the Quantitative Reasoning or Symbolic Reasoning courses.

1. Quantitative Reasoning:

MATH& 107 or any MATH course 122 or above

2. OR Symbolic Reasoning:

CS 102, CS& 131, CS 162, CS 202, or PHIL 121

C. Humanities (15 credits). 15

Course selections must also meet the Humanities distribution requirements for the AA degree.

D. Social & Behavioral Science (15 credits) 15

Course selections must also meet the Social & Behavioral distribution requirements for the AA degree.

E. Mathematical & Natural Science (15 credits)

Course selections must also meet the Mathematical & Natural Science distribution requirements for the AA degree.

Course	No.	Course Title	Credits
CHEM&	121	Intro to Chemistry w/Lab &	5
CHEM&	121L*	Intro to Chemistry Lab **or**	0
CHEM&	161	General Chemistry I w/Lab &	5
CHEM&	161L*	General Chemistry I Lab	0
BIOL&	160	General Biology w/Lab &	5
BIOL&	160L*	General Biology Lab **or**	0
BIOL&	211	Majors Cellular w/Lab &	5
BIOL&	211L*	Majors Cellular Lab	0
BIOL&	241	Human A&P 1 w/Lab &	6
BIOL&	241L*	Human A&P 1 Lab	0

F. Health and Physical Education (3 credits)

One of the required electives will satisfy this 3 credit requirement.

G. Required Electives (33-45 credits of the following list:)

Not every course is required. Please consult the department advisor for more information.

Course	No.	Course Title	Credits
BIOL&	242	Human A&P 2 w/Lab &	6
BIOL&	242L*	Human A&P 2 Lab	0
PEC	180	Care & Prevention of Athletic Injuries	3
PEC	182	Care & Prevention of Athletic Injuries II	2
PEC	1821	Care & Prevention of Athletic Injuries II Lab	1
PEC	183	Athletic Training Internship	2
PEC	1831	Athletic Training Internship Lab	1
HE	160	Diet, Exercise and Weight Control	2
HE	170	Health and Wellness	3
HE	171	Exercise Prescription	2
(Recommended-BIOL& 241/BIOL& 241L and BIOL& 242/BIOL& 242L)			
HE	1711	Exercise Prescription Lab	1
PE	180	Adaptive Physical Education	2
(Recommended-BIOL& 241/BIOL& 241L and BIOL& 242/BIOL& 242L)			
PE	1801	Adaptive Physical Education Lab	1
HE	210	Sports Nutrition	3
HE	215	Health and Fitness for Life	2
HE	2151	Health and Fitness for Life Lab	1
HE	220	Drugs and Health	3
HE	230	First-Aid Safety	3
HE	232	Sports Psychology	3
HE	240	Stress Management	3
HE	250	Sports Management	3

Total Credits Required. . 99-111

*Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits. In addition to the above required coursework, it is extremely important to stay in close contact with your faculty advisor within the Health Education department.*

Physical Education Professional

http://www.columbiabasin.edu/home/index.asp?page=778

Department Overview: These courses are designed for the PE major or students interested in a coaching career.

Physics Common Course

http://www.columbiabasin.edu/home/index.asp?page=816

Department Overview: Physics courses are required by vast number of technical, occupational, and academic disciplines because the Laws of Physics form a foundation for engineering, health sciences and other physical sciences. The Physics department supports these needs by providing Conceptual Physics, Algebra/Trigonometric-based Physics (Intermediate Physics), and Calculus-based Physics (Engineering Physics). The courses fulfill the requirement for the transfer to four-year institutions and various technical programs.

Political Science

http://www.columbiabasin.edu/home/index.asp?page=838

Department Overview: Political science examines the institutional means through which scarce societal resources are allocated and the processes that make determinations regarding the moral fabric of community life. It combines both normative and descriptive analyses: how power is distributed and for what values or purposes it should be employed. This includes the study of the types and branches of government, means of representation, as well as issues of policy formation. In addition, CBC now offers a two-year degree in Political Science.

Associate in Arts & Science with an Emphasis in Political Science

TRANSFER DEGREE

Option C

A. Communication (13 credits)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
CMST			3

Math Proficiency X

B. Quantitative/Symbolic Reasoning (5 credits)

Course	No.	Course Title	Credits
MATH&	146	Introduction to Stats	5

C. Humanities (15 credits)

Course	No.	Course Title	Credits
HIST&	128	World Civilizations III	5
ENGL		(see advisor for appropriate selection)	5
PHIL&	101	Intro to Philosophy **or**	5
PHIL	150	Introduction to Ethics	

D. Social & Behavioral Science (15 credits)

Course	No.	Course Title	Credits
SOC&	101	Intro to Sociology **or**	5
SOC&	201	Social Problems	
ECON&	202	Macro Economics	5
POLS&	202	American Government	5

E. Mathematical & Natural Science (15 credits)

Course selections must also meet the Mathematical & Natural Science distribution requirements for the AA degree.

Mathematical & Natural Science Electives 15
(see advisor for appropriate selection)

F. Health and Physical Education (3 credits)

Selected from PE Activity Classes or Health (HE) Classes 3

G. Electives (24 credits)

Course	No.	Course Title	Credits
POLS&	204	Comparative Government	5
POLS&	203	International Relations	5
POLS	104	State and Local Government	5
POLS&	201	Intro to Political Theory **or**	5
POLS	205	American Political Thought	5
Elective (see advisor for appropriate selection)			4

Total Credits Required . . . 90

Psychology

http://www.columbiabasin.edu/home/index.asp?page=839

Department Overview: Psychology is the scientific study of human behavior and mental processes. General Psychology (PSYC& 100) provides an overview of different perspectives held by psychologists. Major topics include: research methods, learning theory, neuropsychology, memory, consciousness, and motivation. General psychology is a prerequisite for many 200 level classes. Applied Psychology (PSYC 103) is an alternative for those who are seeking an Associate degree in one of the vocation-technical disciplines. Here the emphasis is on the practical application of psychological principles in the work-place and everyday life.

Race, Ethnicity & Immigration

Department Overview: The United States is a nation made of people of various racial and ethnic backgrounds and whose ancestors, or themselves, migrated to the nation in order to create a new and better life for themselves and their families. The program in Race, Ethnicity, and Immigration provides students an opportunity to examine these aspects of American society through a combination of courses in history, anthropology, political science, and sociology. They will also examine how the U.S. experience in race, ethnicity, and immigration compares to that of other areas of the world.

Associate in Arts & Science with an Emphasis in Race, Ethnicity & Immigration

TRANSFER DEGREE

Option C

A. Communication (10 credits in English, plus 3 credits in Speech)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II **or**	5
ENGL&	235	Technical Writing	5
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5

Math Proficiency X

1. Intermediate Algebra Proficiency requirement: must do one of the following:

Pass Intermediate Algebra (MATH 095 or MATH 098).

Pass a math class that has an Intermediate Algebra prerequisite.

Place into any math course MATH 113 or above via placement test.

B. Quantitative/Symbolic Reasoning (5 credits)

1. Quantitative Reasoning:

Course	No.	Course Title	Credits
MATH&	146	Introduction to Stats (Recommended)	5

2. OR Symbolic Reasoning:

CS 102, CS& 131, CS 162, CS 202, or PHIL 121

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree.

Choose one from the following:

Course	No.	Course Title	Credits
ICS	120	Survey of Hispanic Culture **or**	5
HIST&	219	Native American History **or**	5
ICS	130	Survey of Asian American Culture	5
Humanities Electives			10

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral distribution requirements for the AA degree.

Course	No.	Course Title	Credits
HIST&	220	African American History **or**	5
HIST	107	Chicano History **or**	5
HIST	108	History of Immigration in the United States	5
ICS	255	Race and Ethnic Relations	5
Psychology or Sociology (See advisor for appropriate selection)			***5***
PSYC	201	Social Psychology **or**	5
SOC&	201	Social Problems	5

E. Mathematical & Natural Science (15 credits) 15

Course selections must also meet the Mathematical & Natural Science distribution requirements for the AA degree.

F. Health and Physical Education (3 credits) 3

Health lecture or PE activity courses will satisfy this three-credit requirement.

G. Required Electives (Select 24 credits from the following list:)

Additional Electives

A class can only be used to fulfill one requirement.

Course	No.	Course Title	Credits
ANTH&	206	Cultural Anthropology	5
ART	120	Art History of the Americas	5
HIST&	220	African American History	5
HIST	107	Chicano History	5

HIST	108	History of Immigration in the United States	5
HIST	110	History of Modern East Asia	5
HIST	111	Colonial Latin America	5
HIST	112	Modern Latin America	5
HIST	116	History of Africa	5
HIST	117	History of India	5
HIST	100	Cultural and Historical Linked to Travel	1-3
ICS	120	Survey of Hispanic Culture	5
HIST&	219	Native American History	5
ICS	130	Survey of Asian American Culture	5
ICS	255	Race and Ethnic Relations	5
ENGL	180	Multicultural Literature	5
ENGL&	254	World Literature I	5
ENGL&	255	World Literature II	5
PHIL	131	World Religions	5
PL	210	Immigration Law	3
SOC&	201	Social Problems	5
CMST	260	Multicultural Communications	5

Total Credits Required . . . 90

In addition to the above required coursework, it is extremely important to stay in close contact with your faculty advisor.

Radio Broadcasting

Department Overview: Students who begin their technical training in Radio Broadcasting at Tri-Tech Skills Center and successfully earn the equivalent Tech Prep college credits have the opportunity to complete a certificate program at Columbia Basin College. To earn the equivalent college credits, one must enroll in the CBC Tech Prep Dual Credit program while attending the year-long Tri-Tech class and attain a B (85 percent) or better grade for the class. The Radio Broadcasting certificate courses help prepare students for entry-level employment in the field of radio broadcasting and further education in communication.

Upon completion of the general education and elective requirement courses at CBC, students are eligible to apply for a certificate through CBC. Questions concerning these certificates should be directed to the CBC Tech Prep Coordinator at (509) 542-4559.

Radiologic Technology

http://www.columbiabasin.edu/home/index.asp?page=660

Department Overview: The Radiologic Technology program at Columbia Basin College is an eight-quarter program preparing students to be eligible to become certified by taking the National Registry Examination offered by the American Registry of Radiology Technologists. Radiology Technologists work directly with the patient and physician performing sophisticated diagnostic x-ray procedures including radiation safety, radiographic exposures, image and film processing, operating many types of technological equipment. The Radiology Technologist also provides professional handling and care of patients. The program requires a series of credit courses directly related to Radiologic Sciences. The program also requires students have completed major support and general education courses prior to admission. For additional information, please refer to the Associate of Applied Science in Radiologic Technology degree requirements. The Radiologic Technology program admits students annually during summer quarter for this eight-quarter program.

Associate in Applied Science in Radiologic Technology

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
RATEC	101	Introduction to Radiologic Technology	1
RATEC	102	Radiographic Physics	5
RATEC	103	Principles of Radiographic Exposure	3
RATEC	104	Advanced Radiographic Procedures	4
RATEC	105	Introduction to Radiographic Technique	2
RATEC	106	Computed Imaging	2
RATEC	107	Positioning and Related Anatomy I	2
RATEC	108	Positioning and Related Anatomy II	3
RATEC	109	Positioning and Related Anatomy III	3
RATEC	1103	Clinical Education I	3
RATEC	1113	Clinical Education II	5
RATEC	1123	Clinical Education III	5
RATEC	1133	Clinical Education IV	5
RATEC	120	Nursing Procedures	2
RATEC	121	Patient Care	2
RATEC	125	Medical Terminology	1
RATEC	127	Introduction to Sectional Anatomy	2
RATEC	207	Concept Integration	2
RATEC	2103	Clinical Education V	13
RATEC	2113	Clinical Education VI	8
RATEC	2123	Clinical Education VII	8
RATEC	2133	Clinical Education VIII	8
RATEC	220	Pathology I	3
RATEC	221	Pathology II	2
RATEC	230	Quality Assurance	2
RATEC	240	Radiation Biology and Protection	3
RATEC	296	Special Topics in Radiology	2
		Subtotal	**101**

Major Support

Course	No.	Course Title	Credits
BIOL&	241	Human A&P 1 w/Lab	6
BIOL&	241L*	Human A&P 1 Lab	0
BIOL&	242	Human A&P 2 w/Lab	6
BIOL&	242L*	Human A&P 2 Lab	0
		Subtotal	**12**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH&	146	Introduction to Stats	5
PSYC&	100	General Psychology	5
CMST	260	Multicultural Communications	5
		Subtotal	**20**
		Total Credits Required	**133**

Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.

Reading

Department Overview: The Basic Skills Division offers reading classes at several levels for students who wish to improve spelling, vocabulary, reading comprehension and/or speed, study techniques, and strategies for college success. Classes are offered in the Learning Opportunities Center (LOC) where instruction is a lab format, the classroom, and online (Study Techniques 110).

Real Estate

http://www.columbiabasin.edu/home/index.asp?page=749

Department Overview: The Real Estate program provides several foundational courses on an as-needed basis for the community.

Retail Associate

Department Overview: The Retail Associate program prepares students to work in a variety of customer service and cashiering positions in the retail wholesale and/or grocery industry. Students will learn workplace skills along with the ability to provide excellent customer service and effectively handle monetary transactions.

Retail Operations

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
RO	100	Introduction to Retail	10
		Subtotal	**10**
		Total Credits Required	**10**

Russian Common Course

http://www.columbiabasin.edu/home/index.asp?page=840

Department Overview: Our Russian classes offer student-centered instruction that focuses on communicating effectively in Russian, appreciating the Russian culture, and recognizing linguistic and cultural connections between the Russian-speaking parts of the world and the United States.

Social Science

http://www.columbiabasin.edu/home/index.asp?page=1141

Department Overview: The Social Science program is designed to provide students with a basic foundation and overview of the social sciences.

Sociology

http://www.columbiabasin.edu/home/index.asp?page=841

Department Overview: The Sociology department is dedicated to offering courses which concern the scientific study of the social group aspect of human life. Courses range from concentrating on small groups (social psychology) to institutions (marriage and family) to large-scale issues (social problems). SOC& 101 provides an introduction to each of these areas.

Spanish

http://www.columbiabasin.edu/home/index.asp?page=842

Department Overview: Spanish classes offer student-centered instruction that focuses on communicating effectively in Spanish, appreciating the Hispanic culture, and recognizing linguistic and cultural connections between the Spanish-speaking parts of the world and the United States. Native or partial native speakers are strongly encouraged to enroll in SPAN 205, SPAN 206, or SPAN 207.

Surgical Technology

http://www.columbiabasin.edu/home/index.asp?page=661

Department Overview: The Surgical Technology program prepares students to work as an effective surgical team member. Students learn a variety of skills in lecture, experiential lab, and practical settings. These skills include: aseptic technique, surgical procedures, surgical instrumentation, and surgical conscience. Clinical practice locations include: hospitals, surgical centers, and physician-owned surgery centers.

Admission eligibility requirements are successful completion of the following pre-requisite courses:

- BIOL& 241 Human A&P 1 w/Lab
- BIOL& 241L Human A&P 1 Lab
- BIOL& 242 Human A&P 2 w/Lab
- BIOL& 242L Human A&P 2 Lab
- HIT 147 Medical Terminology

Application to the Surgical Technology program is submitted through the Health Sciences Division. Required immunization records and current CPR Healthcare Provider and First Aid cards must be completed as part of the application process.

The program provides a One-Year Operating Room Aide Certificate and a Two-Year Associate in Science degree in Surgical Technology.

The following are required for the first day of class:

- Criminal History Background Check
- Current list of required immunizations
- Signed Confidentiality statement
- Malpractice Insurance

Associate in Applied Science in Surgical Technology

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
SRGT	101	Introduction to Surgical Technology	4
SRGT	1011	Introduction to Surgical Technology Lab	2
SRGT	102	Disease Transmission and Control	3
SRGT	103	Ethics and Professionalism	2
SRGT	104	Pharmacology for the Surgical Technologist	5
SRGT	110	Operating Room Aide	3
SRGT	1101	Operating Room Aide Lab	2
SRGT	120	Central Service	1
SRGT	1201	Central Service Clinical	1
SRGT	130	Human Anatomy for the Surgical Technician	4
SRGT	1301	Human Anatomy for the Surgical Technician Lab	2
SRGT	1411	Operating Room Practicum I Lab	6
SRGT	150	Surgical Procedures I	4
SRGT	1501	Surgical Procedures I Lab	2
SRGT	160	Perioperative Patient Care	2
SRGT	1601	Perioperative Patient Care Lab	1
SRGT	240	Surgical Seminar	3
SRGT	2411	Operating Room Practicum II	10
SRGT	250	Surgical Procedures II	4
SRGT	2501	Surgical Procedures II Lab	2
		Subtotal	**63**

Major Support

Course	No.	Course Title	Credits
BIOL&	241	Human A&P 1 w/Lab	6
BIOL&	241L*	Human A&P 1 Lab	0
BIOL&	242	Human A&P 2 w/Lab	6
BIOL&	242L*	Human A&P 2 Lab	0
HIT	147	Medical Terminology	5
		Subtotal	**17**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above (except MATH 109)	5
PSYC&	100	General Psychology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking	5
		Subtotal	**18-20**
		Total Credits Required	**98-100**

Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.

Operating Room Aide

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
SRGT	101	Introduction to Surgical Technology	4
SRGT	1011	Introduction to Surgical Technology Lab	2
SRGT	102	Disease Transmission and Control	3
SRGT	103	Ethics and Professionalism	2
SRGT	110	Operating Room Aide	3
SRGT	1101	Operating Room Aide Lab	2
		Subtotal	**16**

Major Support

Course	No.	Course Title	Credits
BIOL&	241	Human A&P 1 w/Lab	6
BIOL&	241L*	Human A&P 1 Lab	0
BIOL&	242	Human A&P 2 w/Lab	6
BIOL&	242L*	Human A&P 2 Lab	0
HIT	147	Medical Terminology	5
MA	111	Pharmacology I	5
		Subtotal	**22**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above (except MATH 109)	5
PSYC&	100	General Psychology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking	5
		Subtotal	**18-20**
		Total Credits Required	**56-58**

Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.

Theatre

http://www.columbiabasin.edu/home/index.asp?page=716

Department Overview: Theatre offerings at Columbia Basin College are designed:

- to meet the requirements for the first two years of a Bachelor of Arts degree in theatre at four-year institutions;
- to enhance the theatre knowledge and performance ability of students wishing to enter the professional field;
- to provide extracurricular, leisure activity;
- to enrich the appreciation of the theatre going public.

The department attempts to provide a production schedule that will encourage both students and community participation as either audience members or production personnel.

Career opportunities include teaching theatre, professional acting, directing, designing, stage management, and working in the dramatic/film arts. Theatre classes may also better prepare students for careers in law, public relations, advertising, teaching effectiveness, and other careers where speaking or performing for the public is important. It is not necessary to be a theatre major to take theatre classes or to participate in CBC shows.

Associate in Arts & Science with an Emphasis in Acting & Directing

TRANSFER DEGREE

Option C

A. Communication (10 credits in English, plus 3 credits in Speech)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II **or**	5
ENGL&	235	Technical Writing	5
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5

Math Proficiency X

1. Intermediate Algebra Proficiency requirement: must do one of the following:

Pass Intermediate Algebra (MATH 095 or MATH 098) with 2.0 or better.

Pass a math class that has an Intermediate Algebra prerequisite.

Place into any math course MATH 113 or above via placement test.

B. Quantitative/Symbolic Reasoning (5 credits). 5

Choose one class from the Quantitative Reasoning or Symbolic Reasoning courses.

1. Quantitative Reasoning:

MATH& 107 **or** any MATH course 122 **or** higher **or**

Course	No.	Course Title	Credits
MATH	147	Finite Math (Recommended)	5

2. OR Symbolic Reasoning:

CS 102, CS& 131, CS 162, CS 202, or PHIL 121

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree.

Required:

Course	No.	Course Title	Credits
DRMA&	101	Intro to Theatre **or**	5
DRMA	215	Survey of Theatre History	5
And 10 additional credits selected from other Humanities electives..			10

Recommended:

ENGL&	220	Intro to Shakespeare	5
CMST	246	Oral Interpretation	5

D. Social & Behavioral Science (15 credits)

Course selections must also meet the Social & Behavioral distribution requirements for the AA degree.

Recommended:

Course	No.	Course Title	Credits
PSYC&	100	General Psychology	5
SOC&	101	Intro to Sociology	5
ANTH&	206	Cultural Anthropology	5

E. Mathematical & Natural Science (15 credits)

At least 10 credits need to be from science courses. Courses must be selected from two different subject areas. One course must be a laboratory science. A single math course cannot count for both a mathematical and natural science course and a quantitative skill course.

Recommended to include:

Course	No.	Course Title	Credits
GEOL&	101	Intro to Physical Geology w/Lab &	5
GEOL&	101L*	Intro to Physical Geology Lab	0
BIOL&	100	Survey of Biology w/Lab &	5
BIOL&	100L*	Survey of Biology Lab	0
NUTR&	101	Nutrition	5

F. Health and Physical Education (3 credits)

Recommended:

Course	No.	Course Title	Credits
HE	230	First-Aid Safety **or**	3
HE	240	Stress Management	3

G. Required Electives (26-38 credits)

Course	No.	Course Title	Credits
DRMA	1051-1071	Rehearsal and Performance (3 credits required in any combination)	1-3
DRMA	120	Acting-Beginning	3
DRMA	121	Acting-Intermediate	3
DRMA	122	Acting-Advanced	3
DRMA	244	Stage Makeup	2
DRMA	1261-1281	Stagecraft (3 credits required in any combination)	1-3
DRMA	2201-2221	Acting Studio (3 credits required in any combination)	1-3
DRMA	2251	Touring Children's Theatre (offered fall only)	1-3
DRMA	2271	Touring Rep Part I (2 qtr. commitment)-winter	1-3
DRMA	2281	Touring Rep Part II (2 qtr. commitment)-spring	1-3
DRMA	250	Directing for the Stage (offered odd years)	3

Select 6 credits from the following:

DRMA	130	Stage Movement	2
DRMA	248	Stage Management	2
DRMA	216	Acting for the Camera (offered even years)	2
DRMA	2301	Stage Combat	2
DRMA	217	Classical Acting	1-3

Total Credits Required. . 89-101

It is understood that a theatre major will acquire more credits than are transferable to complete this degree.

Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits. It is extremely important to stay in close contact with your faculty advisor.

Associate in Arts & Science with an Emphasis in Technical Theatre & Design

TRANSFER DEGREE

Option C

A. Communication (10 credits in English, plus 3 credits in Speech)

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
ENGL&	102	Composition II **or**	5
ENGL&	235	Technical Writing	5
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5

Math Proficiency X

1. Intermediate Algebra Proficiency requirement: must do one of the following:

Pass Intermediate Algebra (MATH 095 or MATH 098) with 2.0 or better.

Pass a math class that has an Intermediate Algebra Prerequisite.

Place into any math course MATH 113 or above via placement test.

B. Quantitative/Symbolic Reasoning (5 credits). 5

Choose one class from the Quantitative Reasoning or Symbolic Reasoning courses.

1. Quantitative Reasoning:

MATH& 107 **or** any MATH course 122 **or** higher **or**

Course	No.	Course Title	Credits
MATH	147	Finite Math (Recommended)	5

2. OR Symbolic Reasoning:

CS 102, CS& 131, CS 162, CS 202, or PHIL 121

C. Humanities (15 credits)

Course selections must also meet the Humanities distribution requirements for the AA degree.

Required:

Course	No.	Course Title	Credits
DRMA&	101	Intro to Theatre **or**	5
DRMA	215	Survey of Theatre History	5

Recommended:

ART	116	Art History Ancient World **or**	5
ART	117	Art History Medieval-Baroque	5
And 10 additional credits selected from other Humanities Electives.			10

D. Social & Behavioral Science (15 credits)

Course selections must meet the Social & Behavioral distribution requirements for the AA degree.

E. Mathematical & Natural Science (15 credits)

At least 10 credits need to be from science courses. Courses must be selected from two different subject areas. One course must be a laboratory science. A single math course cannot count for both a mathematical and natural science course and a quantitative skill course.

Recommended to include:

PHYS&	100	Physics Non-Sci Majors &	4
PHYS&	101	Physics Lab Non-Sci Majors	1

F. Health and Physical Education (3 credits)

Selected from PE Activity Classes or Health (HE) Classes

Course	No.	Course Title	Credits
HE	230	First-Aid Safety	3

G. Required Electives (22-36 credits)

Courses must be numbered 100 & above.

A maximum of 15 credits may be approved professional technology.

Course	No.	Course Title	Credits
DRMA	1261-1281	Stagecraft	1-3
DRMA	244	Stage Makeup	2
DRMA	2461	Stage Lighting	3
DRMA	248	Stage Management	2
DRMA	2451	Sound Design	3
DRMA	242	Design Essentials	3

Acting Classes

Select 3 credits minimum from the following:

DRMA	120	Acting-Beginning	3
DRMA	2251	Touring Children's Theatre (offered fall only)	1-3
DRMA	2271	Touring Rep Part I (2 qtr. commitment)-winter	1-3
DRMA	2281	Touring Rep Part II (2 qtr. commitment)-spring	1-3

Recommended Electives

DRMA	2431	Stage Costuming	1-3
ENT	1161	Basic Drafting	5

Total Credits Required . . 88-102

It is extremely important to stay in close contact with your faculty advisor. It is understood that a theatre major will acquire more credits than are transferable to complete this degree.

Tri-Tech Program Completion Certificates

Department Overview: Students who begin their technical training in Culinary, Dental, or Radio Broadcasting at Tri-Tech Skills Center have the opportunity to complete a certificate program at Columbia Basin College. The completion program is available to students who have successfully completed courses at Tri-Tech Skills Center in one of these three areas and enrolled in the Tech Prep Dual Credit program while still attending Tri-Tech. Upon completion of the additional electives and general education requirements, students are eligible to apply for a certificate through CBC. Questions regarding these certificates should be directed to the Tech Prep Director at CBC (509) 542-4559. See Culinary and Food Services, Dental Assisting, and Radio Broadcasting for certificate requirements and course descriptions.

Culinary & Food Services

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
CUL	101	Culinary/Food Services I	8
CUL	102	Culinary/Food Services II	8
CUL	103	Culinary/Food Services III	8
		Subtotal	**24**

Major Support

Course	No.	Course Title	Credits
BUS&	101	Intro to Business	5
NUTR&	101	Nutrition	5
		Subtotal	**10**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH	106+	MATH 106 **or** above	5
Psychology or Sociology (select 5 credits)			
PSYC&	100	General Psychology **or**	5
PSYC	201	Social Psychology **or**	5
SOC&	101	Intro to Sociology	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**18-20**
		Total Credits Required	**52-54**

Dental Assisting

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
DEN	101	Dental Assisting I	8
DEN	102	Dental Assisting II	8
DEN	103	Dental Assisting III	8
		Subtotal	**24**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
MATH&	146	Introduction to Stats	5
NUTR&	101	Nutrition	5
PSYC&	100	General Psychology	5
SOC&	101	Intro to Sociology	5
Biology (select 5 credits)			
BIOL&	160	General Biology w/Lab &	5
BIOL&	160L*	General Biology Lab **or**	0
BIOL&	211	Majors Cellular w/Lab &	5
BIOL&	211L*	Majors Cellular Lab	0
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication	5
		Subtotal	**33-35**
		Total Credits Required	**57-59**

Important: *You must sign up for both lecture and lab courses to receive combined lecture and lab credits. Lab credits will display zero as they are included in the lecture credits.

Radio Broadcasting

PROFESSIONAL TECHNICAL

One-Year Certificate

Major Courses

Course	No.	Course Title	Credits
RBR	101	Radio Broadcasting 1	8
RBR	102	Radio Broadcasting 2	8
RBR	103	Radio Broadcasting 3	8
		Subtotal	**24**

Major Support

Course	No.	Course Title	Credits
BUS	150	Advertising Principles	5
BUS	271	Human Relations Business	5
CA	100	Introduction to Microcomputers	4
Choose one of the following:			
CMST&	102	Intro to Mass Media **or**	5
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**19**

General Education

Course	No.	Course Title	Credits
ENGL&	101	English Composition I	5
CMST&	220	Public Speaking.	5
MATH	106+	MATH 106 **or** above	5
		Subtotal	**15**
		Total Credits Required	**58**

Welding Technology

http://www.columbiabasin.edu/home/index.asp?page=766

Department Overview: Welding Technology is a two-year program that includes both theoretical and practical training in basic and advanced welding techniques. Areas covered include, shield metal arc welding, gas flu and cored arc welding, metal arc welding, gas tungsten arc welding, structural welding, pipe welding, and fabrication.

Welding has become a very sophisticated and technical science that requires mental application as well as hands-on abilities. Students who complete the AAS degree will learn welding skills, but also basic math, English, and other communication skills. CBC's Welding training, plus general education requirements, prepare graduates for careers in today's construction trades and fabrications shops. For more information call (509) 544-4924.

The department requires students achieve a minimum grade of 2.0 to be able to continue enrollment in major courses. The Associate of Applied Science degree also requires a minimum grade of 2.0 for each major course. A student who achieves a grade of 1.9 or lower in any required major courses may repeat that course once to attempt to achieve a grade of 2.0 or higher. Exceptions to this policy must be approved by the Dean of the program prior to enrollment and must be based on extenuating circumstances.

Associate in Applied Science in Welding Technology

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
WT	101	Oxy-Acetylene Process	1
WT	1011	Oxy-Acetylene Process Lab	3
WT	1021*	Introduction to Shield Metal Arc Welding	10
WT	103*	Fundamentals of Major Processes and Their Consumables	5
WT	1031*	Advanced Shield Metal Arc Welding	10
WT	1041*	Shield Metal Arc Welding Certification **or**	10
WT	1051*	Gas Metal Arc Welding (MIG) Certificate	10
WT	108	Fabrication Technique I	1
WT	1081	Fabrication Technique I Lab	3
WT	201*	Weldability of Metals	5
WT	2011*	Introduction to Pipe Welding	10
WT	202*	Welding Inspection	5
WT	2021*	Gas Tungsten Arc Welding (TIG)	10
WT	2031*	Pipe Welding Certification.	10
WT	208	Fabrication Technique II	1
WT	2081	Fabrication Technique II Lab	3
		Subtotal	**87**

Major Support

Course	No.	Course Title	Credits
BPR	106	Blueprint Reading I (WT)	3
BPR	206	Blueprint Reading II (WT)	3
DRW	106	Mechanical Drawing for Vocational Application	3
FYI	103	First Year Introduction for Trades	1
		Subtotal	**10**

General Education

Course	No.	Course Title	Credits
MATH	100+	MATH 100 or above(100/102/109)-are preferred	8-10
English (select 5 credits)			
ENGL&	101	English Composition I **or**	5
ENGL	103	Writing in the Workplace	5
Human Relations (select 3-5 credits)			
PSYC	103	Applied Psychology **or**	3
PSYC&	100	General Psychology **or**	5
PSYC	201	Social Psychology **or**	5
BUS	271	Human Relations Business	5
Speech (select 3-5 credits)			
CMST	101	Speech Essentials **or**	3
CMST&	220	Public Speaking **or**	5
CMST	110	Communication Behavior **or**	3
CMST&	210	Interpersonal Communication **or**	5
CMST	260	Multicultural Communications	5
		Subtotal	**19-25**
		Total Credits Required	**116-122**

These are variable credit classes, but the maximum number of credits is required for a degree or certificate.

Welding Technology Certificate

PROFESSIONAL TECHNICAL

Major Courses

Course	No.	Course Title	Credits
WT	101	Oxy-Acetylene Process	1
WT	1011	Oxy-Acetylene Process Lab	3
WT	1021*	Introduction to Shield Metal Arc Welding	10
WT	1031*	Advanced Shield Metal Arc Welding	10
WT	1041*	Shield Metal Arc Welding Certification **or**	10
WT	1051*	Gas Metal Arc Welding (MIG) Certificate	10
WT	108	Fabrication Technique I	1
WT	1081	Fabrication Technique I Lab	3
		Subtotal	**38**

Major Support

Course	No.	Course Title	Credits
BPR	106	Blueprint Reading I (WT)	3
DRW	106	Mechanical Drawing for Vocational Application	3
		Subtotal	**6**
		Total Credits Required	**44**

**These are variable credit classes, but the maximum number of credits is required for a degree or certificate.*

Wine Tasting Room Attendant

Department Overview: Wine courses are offered to support the needs of the local wine industry. Individual courses are developed in response to input from local vintners and wineries. Some courses may lead to Short Term Certificates that will aid students in finding employment in a variety of wine industry settings.

Wine Tasting Room Attendant

PROFESSIONAL TECHNICAL

SHORT-TERM CERTIFICATE

Major Courses

Course	No.	Course Title	Credits
WINE	100	Wine Tasting Room Attendant	7
		Subtotal	**7**
		Total Credits Required	**7**

Women's Studies

http://www.columbiabasin.edu/home/index.asp?page=843

Department Overview: CBC offers students courses in Women's Studies that focus specifically on women's issues. Students will learn various theories to help analyze and explore women's issues historically, economically, and across cultures, and how women's perspectives contribute to art, literature, and culture.

Course Offerings

Accounting Common Course

ACCT& 201
Principles of Accounting I . . . . . 5.0 Credits
Fundamentals of accounting as applied to actual business situations. Introduction to the accounting cycle for service and merchandising firms controlling to purchases and sales with business papers, special journals, and subsidiary ledgers. (Previously BA 251.)

ACCT& 202
Principles of Accounting II . . . . . 5.0 Credits
The theory and practice of accounting, including financial statements. Emphasis on partnership and corporate accounting. Prerequisite: ACCT& 201 or instructor's permission. (Previously BA 252.)

ACCT& 203
Principles of Accounting III . . . . . 5.0 Credits
A continuation of ACCT& 202. Introduction of manufacturing and cost accounting. Analysis of financial statements, budgeting and cost volume analysis. Prerequisite: ACCT& 202. (Previously BA 253.)

Administrative Office Technology

AOT 101
Keyboarding I . . . . . 2.0 Credits
Introduces the fundamentals of touch typing of letters, numbers, symbols, and operational keys using a computer. It is recommended that a student take CA 100 in the same quarter as AOT 101.

AOT 102
Keyboarding II . . . . . 2.0 Credits
Reinforces keyboarding skills. Introduces appropriate formatting of business letters, personal letters, memos, reports, and tables using word processing software. Prerequisites: AOT 101 and CA 100 or advanced placement for comparable skills.

AOT 1091
Keyboarding/Skillbuilding . . . . . 3.0 Credits
Improves keyboarding speed and accuracy through a carefully planned program stressing skill development of alphabetic and numeric keys as well as efficient use of the service keys. Develops 10-key proficiency using 10-key pad. Student may enroll once in AOT 1091, AOT 1092, and AOT 1093 for a maximum of six credits. Prerequisite: AOT 101 or instructor's permission.

AOT 1092
Keyboarding/Skillbuilding . . . . . 3.0 Credits
Improves keyboarding speed and accuracy through a carefully planned program stressing skill development of alphabetic and numeric keys as well as efficient use of the service keys. Develops 10-key proficiency using 10-key pad. Student may enroll once in AOT 1091, AOT 1092, and AOT 1093 for a maximum of six credits. Prerequisite: AOT 101, AOT 1091 or instructor's permission.

AOT 1093
Keyboarding/Skillbuilding . . . . . 3.0 Credits
Improves keyboarding speed and accuracy through a carefully planned program stressing skill development of alphabetic and numeric keys as well as efficient use of the service keys. Develops 10-key proficiency using 10-key pad. Student may enroll once in AOT 1091, AOT 1092, and AOT 1093 for a maximum of six credits. Prerequisite: AOT 101, AOT 1092, or instructor's permission.

AOT 114
Editing . . . . . 5.0 Credits
Develops competency to proofread and edit business documents for correct usage of grammar, punctuation, sentence construction, parallelism, and use of numbers. Introduction to machine transcription. Develops competency to produce transcribed business documents in timely manner. Waiver considered for students achieving COMPASS scores of Writing 87 and Reading 82, or 10 credits of college English writing courses with 2.0 or above. Prerequisites: AOT 102 and eligibility for ENGL 099.

AOT 117
Office Orientation . . . . . 3.0 Credits
Encompasses business ethics, personal values, human relations, and effective communication in an office environment. Focuses on attaining and retaining entry-level employment. Provides an opportunity to shadow an office professional.

AOT 124
Intermediate Spreadsheet Applications . . . . . 5.0 Credits
Develops employable application skills using a spreadsheet software, currently Microsoft Excel. Emphasizes creation and design of spreadsheets including formulas, projections, charting, Web pages, lists, macros, and multiple workbooks as needed for effective presentations in the business/office environment. Preparation for Microsoft Office User Specialist, Microsoft Excel Certification. Prerequisites: CA 100 and eligibility for MATH 106.

AOT 125
Database Applications . . . . . 5.0 Credits
Develops employable application skills using a database software, currently Microsoft Access. Emphasis is on creating the structure, the data file, queries, and the forms and reports needed for effective presentations in a business/office environment. Includes creating an application system using macros, wizards, and switchboard. Prerequisite: CA 100.

AOT 126
Presentation Applications . . . . . 3.0 Credits
This class introduces the fundamentals of presentation software, currently Microsoft PowerPoint. Students will learn how to create and modify a slide presentation, insert clip art, add slide transition and animation effects, create graphic objects, and prepare a presentation for publishing to the Web using PowerPoint. Preparation for Microsoft Office User Expert PowerPoint Certification. Prerequisite: CA 100.

AOT 128
Web Page Maintenance . . . . . 5.0 Credits
Introduces fundamental concepts and techniques of maintaining and updating Web page content. Students learn fundamental elements of design using HTML, FrontPage, and a Web browser. Prerequisite: CA 100.

AOT 129
Accounting Software . . . . . 3.0 Credits
Introduction to accounting software, currently QuickBooks Pro, includes establishing a business, journalizing, and preparation of financial statements. Set up new company and make entries to existing accounting records. Prerequisites: CA 100 and concurrent enrollment in AOT 130 or instructor's permission.

AOT 130
Practical Accounting . . . . . 5.0 Credits
Applies fundamentals of accounting theory and bookkeeping procedures covering the accounting cycle, use of special journals, and financial statements. Provides practical training in the use of bookkeeping procedures, forms, and systems using manually prepared solutions for a service business. Prerequisites: eligibility for MATH 106 or higher or COMPASS Pre-Algebra 59 or Algebra 26-32 or higher; and COMPASS Reading 82 or higher.

AOT 131
Practical Accounting II . . . . . 5.0 Credits
Covers accounting controls and systems; presents a more in-depth study of the end-of-period adjustments and procedures for a merchandising business using accounting software. Prerequisites: AOT 129 and AOT 130.

AOT 132
Payroll for the Office Professional . . . . . 4.0 Credits
Applies bookkeeping procedures and accounting concepts using manual methods and accounting software to establish or maintain the records of a sole proprietorship or partnership form of business organization. Uses Quickbooks Pro to create correspondence and reports to clients, customers, vendors using Word templates; export data to Excel. Prerequisites: AOT 129 and AOT 130 (2.0 minimum grade.)

AOT 142
General Office Procedures . . . . . 5.0 Credits
Bridges the gap between the classroom and the office by prioritizing work and managing time, preparing realistic office assignments, filing office documents; managing personal information (PIM software); and conducting online research. Enroll in either AOT 243, AOT 244 or AOT 245 concurrently. Prerequisites: AOT 117, AOT 172, or AOT 173, and Internet proficiency.

AOT 146
Legal Terminology . . . . . 5.0 Credits
Provides a basic background of legal terminology for the legal office using multiple word processing software for transcribing legal text and documents, creating up/downloadable files using appropriate software. Prerequisites: AOT 114 or machine transcription experience and AOT 172.

AOT 172
Word Processing I . . . . . 5.0 Credits
Develops employable word processing skills and implements effective application in a business environment using a word processing software, currently Microsoft Word. Topics covered include all major functions of Word, including margins, tabs, tables, columns, document enhancement, graphics, styles, outline, tables of contents, and templates. Preparation for Microsoft Office User Certification. Specialist or Expert level. Prerequisite: AOT 102.

AOT 173
Word Processing . . . . . 5.0 Credits
Develops employable word processing skills and implements effective application in a business environment using Corel WordPerfect software. Topics covered include: margins, tabs, tables, columns, styles, document enhancement, graphics, merge, and other advanced features. Prerequisite: AOT 102.

AOT 1952
Supervised Employment . . . . . 1.0 - 15.0 Credits
A supervised work experience involving the application and practice of skills and principles learned in the classroom. Supervised Employment site must meet degree or certificate specialty requirement. One credit equals 33 work hours. May be repeated for credit and experience. Prerequisites: AOT 102, AOT 117, and instructor's permission.

AOT 243
Administrative Office Management . . . . . 2.0 Credits
Integrates application of technical skills while assisting executives in carrying out management responsibilities; applies managerial and leadership skills while completing a simulated executive office simulation. Emphasis on problem-solving, decision-making processes, responsibilities, and implementation. Includes conducting online research. Prerequisites: AOT 126, AOT 142, and Internet proficiency.

AOT 244
Legal Administrative Office Procedures . . . . . 5.0 Credits
Integrates application of skills with knowledge of legal administrative office procedures to complete simulated legal office projects and documents using word processing, scheduling, billing, and research software. Includes conducting online research. Prerequisites: AOT 146, AOT 172, and Internet proficiency.

AOT 247
Medical Terminology II . . . . . 3.0 Credits
Provides further training of medical terminology for the medical office. Major topics to be studied are: cardiovascular system, blood and lymphatic-immune systems, digestive system, muscular system, skeletal system, and pharmacology. Emphasis is placed on the diseases, laboratory tests, drugs, spelling, and proper phrasing used in medical records. Prerequisite: AOT 147/HIT 147.

AOT 248
Medical Terminology III . . . . . 3.0 Credits
Provides further training of medical terminology for the medical office. Major topics to be studied are: cancer/oncology, laboratory/radiology, neurological system, and genitourinary system. Emphasis is placed on the diseases, laboratory tests, drugs, spelling, and proper phrasing used in medical records. Prerequisite: AOT 147/HIT 147.

AOT 270
Business Correspondence . . . . . 5.0 Credits
Applies human relations in the composition of business communications by integrating effective mechanics and document content. Emphasis on analyzing and adapting messages to all audiences, including multicultural and international, and choosing the appropriate strategy to accomplish the written task effectively. Includes communicating through email, letters, memos, and reports. Utilizes online services. Prerequisites: AOT 114, AOT 172 or AOT 173, Internet proficiency, and eligibility for ENGL& 101.

AOT 272
Word Processing II . . . . . 4.0 Credits
Applies knowledge of advanced word processing features, including styles, macros, mail merge, templates, and long documents, to prepare complex, integrated documents. Solves software-related problems through trouble-shooting practice. Transfers Word skills to Publisher software to created brochures, pamphlets, and flyers and comparisons made with similar documents created in Word. Preparation for Microsoft Office User Specialist, Microsoft Word Expert Certification. Prerequisites: AOT 172/CA 172.

AOT 276
Integrated Word Processing . . . . . 5.0 Credits
Integrates knowledge and application of word processing, spreadsheet, database, presentation, and Web page software. Utilizes communication, software, and Internet functions in the creation of business/office documents. Currently using Microsoft Word, Excel, Access, PowerPoint, FrontPage, and Outlook. Prerequisites: AOT 124, AOT 125, AOT 126, AOT 128, AOT 272, and Internet proficiency.

AOT 290
Professional Development . . . . . 3.0 Credits
Develops ethical qualities and personal approaches for success and excellence in office careers. Emphasis on maintaining a personal and professional balance in today's society. Refines job-search strategies, resume writing, interviewing techniques, and professional image. Student must be near end of program to enroll in this class. Prerequisites: Internet proficiency, AOT 117, AOT 172 or AOT 173, and eligibility for ENGL& 101.

AOT 2912
Special Projects. . . . . .1.0 - 5.0 Credits
Students pursue project-oriented experiences in areas or applications not provided or covered in the standard Administrative Office Technology curriculum. Prerequisites: advanced standing and instructor's permission.

AOT 294
Software Teaching Methods . . . . . 5.0 Credits
Explores the theory, methods, and practice of teaching adult learners in a technology or computer-based environment. Practical classroom or alternative educational experience with a professional instructor provides a setting for students to practice and analyze teaching and learning basics. Course is designed for individuals seeking to teach software applications. Prerequisites: AOT 124, AOT 125, AOT 126, AOT 128, AOT 129, AOT 272, and CMST 101.

Adult Basic Education/General Education Development (GED)

ABE 010
ABE Level 1 . . . . . 1.0 - 15.0 Credits
Math instruction in adding and subtracting of simple whole numbers. Reading instruction in phonics, language patterns, and using context to understand written material. Writing instruction for basic survival needs and for personal communication. Class held in the Learning Opportunities Center (LOC) where instruction is provided in a lab format.

ABE 020
ABE Level 2 . . . . . 1.0 - 15.0 Credits
Math instruction in place value, whole number operations, and problem solving. Reading instruction in phonics, language patterns, and using context to understand written material. Writing instruction for basic survival needs and for personal communication. Class held in the Learning Opportunities Center (LOC) where instruction is provided in a lab format.

ABE 030
ABE Level 3 . . . . . 1.0 - 15.0 Credits
Math instruction in decimals, fractions, and problem-solving. Reading instruction in word meanings, structure in word meanings, structure of paragraphs, identification of main idea, distinguishing between fact and opinion and comprehension strategies for a variety of reading materials. Writing instruction in sentence composition and paragraph construction. Class held in the Learning Opportunities Center (LOC) where instruction is provided in a lab format.

ABE 040
ABE Level 4 . . . . . 1.0 - 15.0 Credits
Math instruction in percent, ratio, proportion, measurement, tables, and graphs. Reading instruction in organization and main idea, as well as in evaluation, comprehension, and making inferences using a variety of intermediate level reading materials. Writing instruction in writing connected paragraphs with correct punctuation, capitalization usage, spelling, and more complex sentence structure. Class held in the Learning Opportunities Center (LOC) where instruction is provided in a lab format.

ABE 050
Basic GED Prep . . . . . 1.0 - 15.0 Credits
Individualized instruction to prepare students to pass the five official GED tests with a total score of 2250 points or better. The GED consists of a battery of five individual tests. The five tests include language arts-writing, social studies, science, language arts-reading, and mathematics. Class held in the Learning Opportunities Center (LOC) where instruction is provided in a lab format.

ABE 060
Advanced GED Prep . . . . . 1.0 - 15.0 Credits
Individual instruction to enable students to successfully complete all five of the GED tests. Student may already have completed three of the tests and need to pass the two remaining tests. Or the student could have passed all five GED tests but needs to accumulate more points to reach the necessary total score of 2250 points. Class held in the Learning Opportunities Center (LOC) where instruction is provided in a lab format.

Agricultural and Industrial Equipment Technology

AGET 110
Fundamentals of Maintenance. . . . . 7.0 Credits
This course introduces skills and knowledge required by all service technicians including: precision measurement, environmental and safety regulation compliance; safety and personal protection equipment, fastener identification; hand and power tool identification, use and safety; lifting and blocking, torque wrench use; tapping, threading, and thread inserts. Students will receive forklift operation training and testing. Students will demonstrate the ability to follow written instruction, complete business forms, and perform basic math skills. This course will include a review of the student rights and responsibilities. Prerequisites: RDG 099, MATH 084, and ENGL 099 or COMPASS test placement.

AGET 112
Pre-Delivery & Preventive Maintenance. . . . . 7.0 Credits
This course will include a review of pre-delivery, preventive maintenance (PM) and the responsibilities of the service technician to ensure that all PM items are performed to a benchmark standard. Students will review pre-delivery and PM standards established by equipment manufacturers and associations. Students will use manufacturer service and maintenance software and literature to determine proper pre-delivery and PM procedures as well as oil sampling etc. They will perform walk around inspections, pre-delivery inspections, test coolant, and learn proper disposal methods for used oil, filters, coolant, batteries, etc. This course will introduce correct machine operation, specifically related to safety precautions listed in the operators manual as well as regulations for safe machine transportation to include tie down, flagging, permitting, and weight distribution. Prerequisites: RDG 099, MATH 084, and ENGL 099 or COMPASS test placement.

AGET 117
Internship 1 . . . . . 5.0 Credits
An internship is a cooperative agreement between industry and education which allows students to utilize and refine skills previously learned in their educational process. All work is to be performed in accordance with industry standards and guidelines and will be supervised by industry and school representatives. Prerequisites: student must have a valid driver's license, be in good academic standing, and have successfully completed required core courses.

AGET 120
Power Train . . . . . 7.0 Credits
This course will discuss the basic components, operations, maintenance, diagnostics, and repair of power train systems used in agricultural and construction equipment. Included will be basic components, couplings, clutches, manual transmissions, torque converters, and power shift transmissions, hydrostatic transmissions, differentials, brakes, and final drives. Hydraulically driven machines will also be included. Prerequisite: AGET 117.

AGET 122
Mobile Air Conditioning . . . . . 7.0 Credits
This course is a study of the theory, application, and repair of mobile air conditioning and refrigeration systems. Emphasis is on preventive maintenance, design, failure analysis, troubleshooting, proper repair, and refrigerant recovery recycle methods. Prerequisite: AGET 117.

AGET 127
Internship 2 . . . . . 5.0 Credits
An internship is a cooperative agreement between industry and education which allows students to utilize and refine skills previously learned in their educational process. All work is to be performed in accordance with industry standards and guidelines and will be supervised by industry and school representatives. Prerequisites: student must have a valid driver's license, be in good academic standing, and have successfully completed required core courses.

AGET 130
Hydraulic Principles . . . . . 7.0 Credits
This course is designed to teach the systems operation and the testing, adjusting, maintenance and repair procedures for pilot operated hydraulic systems, load sensing pressure compensated hydraulic systems, electro-hydraulic systems and hydrostatic systems. Students will identify system components and be able to discuss their operation and application. Students will identify different systems, trace the oil flow through the systems, and state the systems operation and application. Students will use onboard diagnostic systems, T adapter kits, digital volt/ohm meters, flow meters, pressure gauges, and manufacturer specific tools to diagnose hydraulic system malfunctions. Prerequisite: AGET 127 or instructor's permission.

AGET 132
Wiring Circuits, Charging & Starting Systems . . . . . 7.0 Credits
This course introduces electrical laws and principles. It includes the use of digital volt/ohm meters, amp probes, wiring diagrams and electrical schematics, wire and connector repair methods, and semiconductors. Students will learn to diagnose, maintain, and repair electrical circuits, charging circuits, and starting circuits. Emphasis is on diagnostics, preventive maintenance, and correct repair procedures. Prerequisite: AGET 127 or instructor's permission.

AGET 210
Hydraulic Systems . . . . . 7.0 Credits
This course is designed to teach the systems operation and the testing, adjusting, maintenance and repair procedures for pilot operated hydraulic systems, load sensing pressure compensated hydraulic systems, electro-hydraulic systems, and hydrostatic systems. Students will identify system components and be able to discuss their operation and application. Students will identify different systems, trace the oil flow through the systems and state the systems operation and application. Students will use onboard diagnostic systems, T adapter kits, digital volt/ohm meters, flow meters, pressure gauges, and manufacturer specific tools to diagnose hydraulic system malfunctions. Prerequisites: AGET 130 and AGET 132.

AGET 212
Electronic Systems . . . . . 7.0 Credits
This course requires the student to use diagnostic testing as specified by manufacturer software, literature, and troubleshooting charts to complete required service, repair, or replacement procedures on agricultural and construction equipment electronic systems. Students will identify, locate, service, test, and repair connectors, sensors, actuators, switches, and control modules. Students will use onboard diagnostic systems, T adapter kits, digital volt/ohm meters, electrical repair kits, crimper tools, and manufacturer specific diagnostic tools. Prerequisite: AGET 130, AGET 132, or instructor's permission.

AGET 217
Internship 3 . . . . . 5.0 Credits
An internship is a cooperative agreement between industry and education which allows students to utilize and refine skills previously learned in their educational process. All work is to be performed in accordance with industry standards and guidelines and will be supervised by industry and school representatives. Prerequisites: student must have a valid driver's license, be in good academic standing, and have successfully completed required core courses.

AGET 220
Engines and Fuel Systems . . . . . 7.0 Credits
This course is an introduction to engine terminology, operating principles, and maintenance. Engine systems are examined along with diagnostic, repair, and maintenance procedures. Student will study fuel systems used by major engine manufacturers. The function and operation of various types of fuel systems, fuel system maintenance, and basic troubleshooting is covered. This course emphasizes the application of repair procedures for engines. Disassembly, parts evaluation, and reusability, failure analysis, assembly, tune-up procedures, and troubleshooting are covered. Safety, special tool use, and use of service publications are stressed throughout the course. Prerequisite: AGET 217.

AGET 227
Internship 4 . . . . . 5.0 Credits
An internship is a cooperative agreement between industry and education which allows students to utilize and refine skills previously learned in their educational process. All work is to be performed in accordance with industry standards and guidelines and will be supervised by industry and school representatives. Prerequisites: student must have a valid driver's license, be in good academic standing, and have successfully completed required core courses.

AGET 232
Precision AG and Construction . . . . . 5.0 Credits
This course will provide an introduction to the theory of Global Positioning System (GPS), Differential GPS (DGPS), Geographical Information Systems (GIS), real-time carrier phase differential called Real Time Kinematics (RTK), auto steer, grade control, and remote sensing in relation to Ag and construction equipment. Emphasis will be on installation, calibration, maintenance, operation of, and troubleshooting this equipment on the machine.

AGET 234
Diagnostics . . . . . 7.0 Credits
This course requires students to use and understand electronic service tools and on board controllers. In addition students will be required to know the procedure of removing fault codes from on board computers and controllers along with reprogramming with manufacture upgrades. Emphasis will be placed on Hyper Link diagnostics; diagnostic strategies, trouble shooting CAN and network systems. Prerequisite: AGET 227, AGET 220 or instructor's permission.

AGET 238
Capstone . . . . . 2.0 Credits
This course includes an applied research project identified during internships, as a work-based problem in need of improvement. Research could include improvements in diagnostic, service, and maintenance processes, technical support systems, customer service, etc. Advanced application of diagnostics principles relating to engine, power train, electrical systems, electronics, hydraulics, brakes, and other equipment systems, and development of preventive maintenance systems are included. Prerequisite: AGET 227, AGET 220 or instructor's permission.

Agricultural Food Systems

AFS 101
Introduction to Agricultural Systems . . . . . 3.0 Credits
Introduction to the disciplines and integration of fields of agriculture, food production, manufacturing and distribution, and rural society to define and solve real-world problems. Provides an increased awareness of emerging agriculture in the Columbia Basin including crop management, sustainable agriculture, niche and specialty markets, organic crop, and animal production, water management, global issues, technology innovations, financial management, bioterrorism, crop insurance programs, emerging commodities, biotechnology, and crop innovations.

AFS 201
Agricultural & Food Systems . . . . . 4.0 Credits
Development of tools and skills in building, evaluating, and applying model systems in agricultural production, food manufacturing, and distribution within rural society and society as a whole. Focus is on the types of systems, construction, and analysis. Prerequisite: AFS 101 recommended.

AFS 2011
Agricultural and Food Systems Lab . . . . . .1.0 Credit
Lab to be taken concurrently with AFS 201.

Agriculture

AG 101
Field Crops . . . . . 5.0 Credits
Introduction to principles of crop production, including crop growth, development, yield, and quality. High-yield production techniques of locally grown crops will be included.

AG 102
Introduction to Animal Science . . . . . 4.0 Credits
Types and breeds of livestock, terminology, methods, management systems, techniques of animal and poultry production, and consumer impact.

AG 1021
Introduction to Animal Science Lab . . . . . .1.0 Credit
Lab to be taken concurrently with AG 102.

AG 105
Introduction to Irrigation . . . . . 3.0 Credits
A course offering the student a general background and understanding of irrigation systems and water management including information on evaluation of an irrigation system, water application rates, groundwater management, soil types, drought symptoms and treatments, and runoff control.

AG 106
Introductory Soils . . . . . 2.0 Credits
A course offering the student a general background and understanding of soils, soil formation processes, soil origins with an emphasis on soil origins in the Pacific Northwest, soil taxonomy, organic matter, soil fertility, water relationships, pH, and biological relationships.

AG 1061
Introductory Soils Lab . . . . . .1.0 Credit
Lab to be taken concurrently with AG 106.

AG 107
Entomology for Professional Development . . . . . 3.0 Credits
Designed to introduce the student to the breadth and diversity of the science of entomology. This study of insects will include their diversity, the basics of systematic, anatomy, life cycles, and the role insects play in an ecological context. It also describes the effects both beneficial and prejudicial that insects may have on human welfare and the methods applied to control insect populations. It will target insects of economical interest principally for the Pacific Northwest.

AG 110
Intro to Ag: People, Plants, and Environment . . . . . 5.0 Credits
An introduction to the relationship between people, plants, and the environment as it relates to agriculture. This is a class that is designed to give the student an opportunity to learn about the interactions between humans, the foods they eat, the agricultural products they use, and the impact on human environment.

AG 141
Weed Control Technology . . . . . 4.0 Credits
A study of the safe handling of and recommendations for use of herbicides and biological control agents in agricultural crops of the northwestern United States. Plant identification and regulatory issues related to control of unwanted plant species will be emphasized. Control techniques, including natural, cultural, and chemical will be introduced. Successful completion of coursework will result in preparation of pesticide licensing in agricultural and ornamental weed control. Prerequisite: concurrent enrollment in AG 1411.

AG 1411
Weed Control Technology Lab . . . . . .1.0 Credit
A study of the safe handling of and recommendations for use of herbicides and biological control agents in agricultural crops of the northwestern United States. Plant identification and regulatory issues related to control of unwanted plant species will be emphasized. Control techniques, including natural, cultural, and chemical will be introduced. Successful completion of coursework will result in preparation of pesticide licensing in agricultural and ornamental weed control. Prerequisite: concurrent enrollment in AG 141.

AG 142
Crop Protection Technology . . . . . 5.0 Credits
The study of the various materials and techniques for controlling insects and plant diseases that occur in the Inland Northwest. Safety to the public and personnel will be a major portion of the course.

AG 143
Fertilizer Technology . . . . . 5.0 Credits
Provides a working knowledge of both dry and liquid fertilizers as used in the Pacific Northwest. Discuss the uses and methods of fertilizer application for each of the various plant nutrients-nitrogen, phosphorous, potash, secondary, and micro-nutrients.

AG 181
Irrigation I . . . . . 5.0 Credits
A course study designed for the farm operator. The relationships between soil, water, and plants, with additional study of water conveyance, pumping characteristics, and irrigation water application to the soil will be discussed.

AG 1971
Internship . . . . . .1.0 - 8.0 Credits
The internship is a field-based course in which students have an opportunity to apply and demonstrate their understanding of agricultural, geographic information systems, soils, irrigation, and biology in a work setting. Students will work in local agriculture, natural resources, and governmental establishments where they will have the opportunity to put into practice the skills and knowledge they have acquired. Interns will be engaged in meaningful tasks and assignments that contribute to their understanding of how agricultural, government, and the natural resources industries function. Students will find their own placements at organizations where they have not worked previously. The department will help students network with professional organizations in the area.

AG 201
Soils . . . . . 4.0 Credits
A course offering the student a general background and understanding of soils, soil formation processes, soil origins with an emphasis on soil origins in the Pacific Northwest, soil taxonomy, organic matter, water relationships, pH, and biological relationships. Prerequisites: CHEM& 110/CHEM& 110L or CHEM& 140/CHEM& 140L or instructor permission. This course is cross linked to BIOL 201/BIOL 201L. Students completing AG 201/AG 2011 may not receive graduation credit for BIOL 201/BIOL 201L.

AG 2011
Soils Lab . . . . . .1.0 Credit
Lab to be taken concurrently with AG 201.

AG 2101
Applied Agriculture Research . . . . . 2.0 Credits
In the lab, the student will be directly involved in conducting agricultural research as a member of a research team led by a faculty member. Students will have the opportunity to collect and analyze agricultural and environmental data that will be used to make management decisions. Upon completion of this course, students will prepare a research paper summarizing their results and present this paper at a scientific meeting or seminar. The lab provides an opportunity for students to be directly involved in a research project.

AG 230
Tree Fruit Production . . . . . 5.0 Credits
A study of fruit production in southeastern Washington, especially concentrating on many cultural practices utilized in producing maximum yields. Site selection, propagation, pruning, training, fertilization, and pest control will be the major emphasis. An Introduction to Horticulture class is suggested prior to taking this course.

AG 231
General Viticulture . . . . . 5.0 Credits
This course covers vine growth, strategies of grape production, management of the vine, and crop hazards associated with the grape juice and wine industries.

AG 233
Vegetable Production (Potatoes) . . . . . 4.0 Credits
The study of irrigated potato production practices employed in central Washington's irrigated conditions, including practices designed to produce maximum quality and yields.

AG 2331
Vegetable Production (Potatoes) Lab . . . . . .1.0 Credit
A laboratory designed to assist in the understanding of practices used in the raising of potatoes. Concurrent enrollment in AG 233 required.

AG 242
Agricultural Finance . . . . . 5.0 Credits
A study of acquisition and use of capital in agriculture including financial decision-making, investments in current and fixed assets, financial strategies, and capital markets.

AG 250
Introduction to Geographic Information Systems. . . . . 4.0 Credits
Basic computer science for GIS users including file formats, equipment, and data structures commonly used in GIS. Students will learn how to use ArcMap, ArcCatalog, and ArcToolbox, and explore how this software is used to make decisions with geographic data. Prerequisite: concurrent enrollment in AG 2501.

AG 2501
Introduction to Geographic Information Systems Lab . . . . .1.0 Credit
Development of basic computer skills for GIS users including file formats, equipment, and data structures commonly used in GIS. Students will learn how to use ArcMap, ArcCatalog, and ArcToolbox by the use of tutorials and will explore how this software is used to make decisions with geographic data. Prerequisite: concurrent enrollment in AG 250.

AG 251
Advanced Geographic Information Systems . . . . . 4.0 Credits
Advanced GIS course that builds on skills learned in AG 250. Students will learn how to use ArcMap, ArcCatalog, and ArcToolbox, and explore how this software is used to make decisions with geographic data. Creating GIS data layers using GPS, tabular data, aerial photography, and digital elevation values. Must be taken concurrently with AG 2511.

AG 2511
Advanced Geographic Information Systems Lab . . . . . .1.0 Credit
Advanced lab course for GIS users that builds on skills learned in AG 250. Students will learn how to use ArcMap, ArcCatalog, and ArcToolbox, and explore how this software is used to make decisions with geographic data. Creating GIS data layers using GPS, tabular data, aerial photography, and digital elevation values. Must be taken concurrently with AG 251.

AG 252
Insects of Economic Importance . . . . . 4.0 Credits
A study designed to introduce the student to the breadth and diversity of the science of entomology and an in-depth study of insects including: their diversity; the basics of systematic entomology; insect societies; insect physiology and structures; their ecological relationships with their physical and biotic environments; their population and community level ecology; their effects on human welfare through applied disciplines of medical and agricultural entomology; and the methods by which humans attempt to manage insect populations. Prerequisite: AG 2521 to be taken concurrently with AG 252. This course is cross linked to BIOL 252/BIOL 252L. Students completing AG 252/AG 2521 may not receive graduation credit for BIOL 252/BIOL 252L.

AG 2521
Insects of Economic Importance Lab . . . . . .1.0 Credit
Lab to be taken concurrently with AG 252.

AG 253
Plant Pathology . . . . . 4.0 Credits
An introduction to the organisms causing plant diseases, their identification, and control technologies. Material presented covers the basic principles necessary to develop an adequate understanding of plant disease processes in natural, urban, commercial, and industrial situations. Emphasis will be placed on diseases encountered in the Pacific Northwest. Prerequisite: AG 2531 to be taken concurrently with AG 253. This course is cross linked to BIOL 253/BIOL 253L. Students completing AG 253/AG 2531 may not receive graduation credit for BIOL 253/BIOL 253L.

AG 2531
Plant Pathology Lab . . . . . .1.0 Credit
Lab to be taken concurrently with AG 253.

AG 254
Plant Systematics . . . . . 2.0 Credits
A course offering the student a general background and understanding of the identification and classification of vascular plants with emphasis on the local flora of the Pacific Northwest. Prerequisites: BIOL& 212/BIOL& 212L or BIOL 140/BIOL 140L. This course is cross linked to BIOL 254/BIOL 254L. Students completing AG 254/AG 2541 may not receive graduation credit for BIOL 254/BIOL 254L.

AG 2541
Plant Systematics Lab . . . . . 3.0 Credits
Lab to be taken concurrently with AG 254.

AG 2971
Internship . . . . . .1.0 - 8.0 Credits
The internship is a field-based course in which students have an opportunity to apply and demonstrate their understanding of agricultural, geographic information systems, soils, irrigation, and biology in a work setting. Students will work in local agriculture, natural resources, and governmental establishments where they will have the opportunity to put into practice the skills and knowledge they have acquired. Interns will be engaged in meaningful tasks and assignments that contribute to their understanding of how agricultural, government, and the natural resources industries function. Students will find their own placements at organizations where they have not worked previously. The department will help students network with professional organizations in the area.

Anthropology

ANTH 1972
Field Experience . . . . . .1.0 - 3.0 Credits
The student is given the opportunity to participate in an archeological dig. Credit is dependent on the number of hours the student can devote to the field experience. (Previously ANT 1972.)

Anthropology Common Course

ANTH& 100
Survey of Anthropology [S/B] . . . . . 5.0 Credits
The field of anthropology is the scientific study of people from all periods of time and in all areas of the world. Anthropology, as a discipline, focuses on both the biological and cultural characteristics of our species, Homo sapiens. In this course, we will explore this discipline by looking at how each of the major branches of anthropology attempts to answer the basic question: What does it mean to be human? (Previously ANT 101.)

ANTH& 204
Archeology [S/B] . . . . . 5.0 Credits
Archaeology is the study of the cultural past of humankind and ANTH& 204 provides an introduction to the field of anthropological archaeology. In this course, we will examine the major concepts, theories, and methods of anthropological archaeology that contribute to an understanding of the human past. This course will also include surveys of past cultures from the Americas, Africa, Asia, and Europe. (Previously ANT 130.)

ANTH& 205
Biological Anthropology [M/S] . . . . . 5.0 Credits
Physical Anthropology is the study of human beings from an evolutionary and biological perspective and ANTH& 205 provides an introduction to this sub-field of anthropology. In this course, we will examine our own species (Homo sapiens) by looking at the biological basis of life, the processes of evolution, our primate relatives both living and extinct, and the variation seen in modern human populations. (Previously ANT 111.)

ANTH& 206
Cultural Anthropology [S/B]. . . . . 5.0 Credits
Cultural Anthropology is the branch of anthropology that studies the species Homo sapiens from a cultural perspective. This course examines and attempts to explain the diversity and similarity of cultures and peoples throughout the world. (Previously ANT 120.)

ANTH& 234
Religion & Culture [S/B] . . . . . 5.0 Credits
The Anthropology of Religion is the cross-cultural study of the relationship between humans and the supernatural world. Unlike other religious studies, scholars, and anthropologists are more concerned about the relationship and interconnections between people's religious traditions and beliefs and other aspects of society. The objective of this course is familiarizing students with certain aspects that are common to many of the world's religions. In ANTH& 234 we will explore and analyze the meaning of myth systems, the importance and meaning of religious symbols, rituals, religious specialists, how different societies organize supernatural powers and entities, and then finally a quick survey of the world's religions. We will do this in order to come to appreciate the significance all religions hold for the people who follow them, and develop a broad definition of religion that enables us to examine myriad systems of belief on equal terms. (Previously ANT 128.)

Arabic

ARAB 121
Arabic-First Quarter [H] . . . . . 5.0 Credits
Introduction to the modern, standard Arabic language including conversational skills, reading, writing, and grammar, and the culture of Arab countries of the Middle East and Northern Africa including geography, customs, daily life, and heritage. Designed for the novice learner of Arabic, with little or no proficiency in the Arabic language. Prerequisite: recommended that students have successfully completed at least ENGL 099.

ARAB 122
Arabic-Second Quarter [H] . . . . . 5.0 Credits
Introduction to the modern, standard Arabic language including conversational skills, reading, writing, grammar, and the culture of Arab countries of the Middle East and Northern Africa including geography, customs, daily life, and heritage. Prerequisite: ARAB 121 or instructor's permission.

ARAB 123
Arabic-Third Quarter [H] . . . . . 5.0 Credits
Introduction to the modern, standard Arabic language including conversational skills, reading, writing, grammar, and the culture of Arab countries of the Middle East and Northern Africa including geography, customs, daily life, and heritage. ARAB 102 or instructor's permission.

Art, Visual

ART 111
Design I . . . . . 5.0 Credits
Introduction to the formal elements and principles of design common to all two-dimensional media. The student examines the formal elements of line, shape, form, space, pattern, texture, and color and applies the principles of unity and variety, balance, focus, repetition, rhythm, movement, and proportion. Students are introduced to spatial and ordering strategies through a sequence of design and color theory problems which emphasize creative problem-solving, using a variety of media and techniques. Recommended for all art, design, photography, and architecture students, and for anyone with a general interest in art.

ART 1121
3D Design II . . . . . 5.0 Credits
This course of study is an introduction to the visual and tactile elements and principles that relate to three-dimensional forms in space. The student will execute various aesthetic design problems that focus on arriving at a better understanding of a three-dimensional dialogue, applicable to sculpture, architecture and ceramics, as well as product package and landscape design. ART 111 recommended.

ART 1131
Drawing I. . . . . 3.0 Credits
A basic studio course that focuses on the fundamental skills: observation, composition, development of forms, and personal expression. Surveys a wide range of media and techniques and examines master works of drawing.

ART 1141
Drawing II . . . . . 3.0 Credits
A continuation of ART 1131 with emphasis on individual direction, composition, color, expanded technique, and media experiences. Prerequisite: ART 1131 or instructor's permission.

ART 1151
Life Drawing. . . . . 3.0 Credits
A continuation of ART 114, with emphasis on human figures; includes structural anatomy, proportion, composition and abstraction of these subjects for purposes of individual expression. Recommended: ART 1131 or instructor's permission.

ART 116
Art History Ancient World [H] . . . . . 5.0 Credits
A comparative study of architecture, sculpture, and pictorial arts from the ancient cultures of the world. A chronological survey of prehistoric, Mesopotamian, Egyptian, Greek, Roman, Byzantine, and Islamic arts.

ART 117
Art History Medieval-Baroque [H] . . . . . 5.0 Credits
A study of architecture, painting, and sculpture from the Middle Ages through the Gothic, Renaissance, and Baroque. Comparative studies of cross cultural traditions.

ART 118
Art History Modern Times [H] . . . . . 5.0 Credits
A chronological study of architecture, sculpture, painting, printmaking, photography, and the design arts from Romanticism to the present.

ART 119
Art History of Asia [H] . . . . . 5.0 Credits
A survey of painting, sculpture, ceramics, and architecture of India, China, Southeast Asia, and Japan with emphasis on the political, philosophical, and religious courses that shape Far Eastern art.

ART 120
Art History of the Americas . . . . . 5.0 Credits
Survey of pre-Colombian art in North and South America; North American and Latin American colonial arts; modern and contemporary Latin American, and Native American art and their contributions to contemporary culture.

ART 121
Women In Art [H] . . . . . 5.0 Credits
A comparative study of women's roles in the visual arts and artists, patrons, muses, subjects, critics, and collectors. Cross-cultural, from ancient to contemporary.

ART 1571
Surface Design . . . . . 3.0 Credits
An exploratory class in the field of surface design, which is the coloring, patterning and transformation of fabric, fiber, and other materials, directed toward art and design. The class emphasis is on the studying design on cloth and experimenting with the various techniques used to achieve the design.

ART 1581
Silk Painting. . . . . 3.0 Credits
An exploratory class in painting on silk covering various painting, dyeing, resist, and discharge techniques.

ART 2011
Photography I . . . . . .1.0 - 3.0 Credits
A basic course in the use of the photographic equipment, either traditional or digital, to expose and compose photographs. This will include elements of design and composition to aid in relating your ideas of people and the world around you. Students will learn to use new technologies using computers and computer software to enlarge and print pictures.

ART 2021
Photography II . . . . . .1.0 - 3.0 Credits
A study of photography for the advanced student photographer with a working knowledge of photographic equipment, computers, and software enabling them to manipulate photographs. ART 111 and ART 2011 recommended.

ART 2081
Digital Photography . . . . . 2.0 Credits
An introduction to the use of computers and software to enhance, alter, or repair photographs. Students will do text exercises and work on their own prints, slides, or negatives.

ART 209
Digital Art and Design . . . . . 3.0 Credits
An introduction to the use of digital media in art. This course will acquaint the student with the basic fundamentals of using the Creative Suite program that includes Adobe PhotoShop, Illustrator, and InDesign. These computer programs are used for creating graphic design layouts, working with digital imagery, or creating your own unique digitally-based works of art. Recommended: ART 111.

ART 2101
Lettering . . . . . 2.0 Credits
A studio study of basic techniques and history of calligraphy styles from early manuscripts to modern, contemporary uses. Traditional calligraphic forms as well as expressive methods of calligraphy painting will be presented. The course will explore usage of type in fine arts applications as well as design. Recommended for fine arts and graphic arts majors.

ART 211
Graphic Design I . . . . . 5.0 Credits
An introductory class in the theory and application of graphic design used in today's advertising and industrial graphics. Industry-accepted computer software for vector drawing and page layout will be extensively used by the student. Prerequisite: ART 209 or instructor's permission.

ART 212
Graphic Design II . . . . . 5.0 Credits
An intermediate class in the theory and application of graphic design used in today's advertising and industrial graphics. Industry accepted computer software for bit mapped image creation and manipulation will be extensively used by the student. Further use of page layout software will be explored. Prerequisite: ART 211.

ART 2131
Printmaking I . . . . . .1.0 - 3.0 Credits
A study of traditional and contemporary printmaking techniques with emphasis on technical exposure and its effect on drawing and graphic design. Contains problems in relief, intaglio, and serigraphy (silk screen). Recommended for commercial and graphic art majors.

ART 2141
Printmaking II . . . . . .1.0 - 3.0 Credits
A continuation of ART 2131 with special emphasis on one of the following: Intaglio, the collagraph screen printing, or lithography. Prerequisite: ART 2131.

ART 2151
Painting I. . . . . .1.0 - 3.0 Credits
An introduction to techniques of painting in oil or acrylic; preparation of wood, canvas, and paper supports; color mixing and application methods. Traditional and experimental approaches to subject matter, composition, and expression.

ART 2161
Painting II . . . . . .1.0 - 3.0 Credits
Continuation of ART 2151 with greater emphasis on individual development of subject matter, technique, and personal expression. Oil, acrylic, or mixed media. Prerequisite: ART 2151.

ART 2201
Sculpture I . . . . . .1.0 - 3.0 Credits
A study of three-dimensional form with emphasis on the inter-relationships between space and form through the techniques of modeling, mold-making, and casting. Recommended: ART 111 and ART 1121.

ART 2211
Sculpture II . . . . . .1.0 - 3.0 Credits
A continuation of ART 2201 with emphasis on the techniques of casting, construction, and carving. Prerequisite: ART 2201.

ART 2221
Pottery I . . . . . .1.0 - 3.0 Credits
A basic introduction to ceramic forms with emphasis on production by hand methods. Consideration of the nature and possibilities of clay, clay body formulation, and introductory glaze testing, as well as loading and firing procedures for bisque and glaze kilns.

ART 2231
Pottery II . . . . . .1.0 - 3.0 Credits
A continuation of ART 2221 with special emphasis on wheel technique, glaze formulation, and design of clay forms. Prerequisite: ART 2221.

ART 2241
Ceramic Sculpture . . . . . .1.0 - 3.0 Credits
A studio course designed to focus on using clay as a sculptural medium. Students will develop projects that explore either large scale slab construction, large scale coiling, building effective armatures and supports, and working solid. Other fabricating processes such as mold-making for slip-casting and using forms made on the potter's wheel for sculptural construction will be introduced. Students will also apply various glazing techniques and firing processes that are appropriate to their sculptural work.

ART 2251
Jewelry I . . . . . .1.0 - 3.0 Credits
The design and construction of jewelry using a variety of media and traditional fabrication techniques of metal working. Recommended: ART 111.

ART 2261
Jewelry II . . . . . .1.0 - 3.0 Credits
A continuation of ART 2251 with emphasis on advanced fabrication techniques and contemporary jewelry design. Prerequisite: ART 2251.

ART 230
Professional Practices . . . . . .1.0 - 2.0 Credits
This course will focus on preparing the art major for admission into an accredited art program as well as exploring the business aspects of being a professional artist.

ART 2331
Jewelry Casting I . . . . . .1.0 - 3.0 Credits
Exploratory of the lost wax casting technique to make fine jewelry. How to create an original design in wax, cast it in metal and polish it to a finished piece of jewelry.

ART 2341
Jewelry Casting II . . . . . .1.0 - 3.0 Credits
Advanced exploratory of the lost wax casting technique to make fine jewelry.

ART 2411
Illustration I . . . . . .1.0 - 3.0 Credits
A studio study of design, drawing, painting media, and techniques used by professional illustrators and graphic designers. Emphasis will be on the techniques of perspective with a wide range of drawing media. Recommended: ART 111 and ART 1131.

ART 2421
Illustration II . . . . . .1.0 - 3.0 Credits
A continuation of ART 2411 with emphasis on mixed media and the techniques of pseudo realism and abstraction as applied to modern, fine, and commercial art, and graphic design. Prerequisite: ART 2411.

ART 2431
Illustration III . . . . . .1.0 - 3.0 Credits
A continuation of ART 2421 with emphasis on the use of mixed media, color, and graphic techniques applied to illustration. Prerequisites: ART 2411 and ART 2421.

ART 2501
Studio Problems . . . . . .1.0 - 3.0 Credits
Individual, contracted, advanced study in visual arts theory and practice. Prerequisite: completion of all available studio art within desired area of study. Instructor's permission.

ART 2511
Studio Problems - Design . . . . . .1.0 - 3.0 Credits
Individual, contracted, advanced study in design. Studio and seminar.

ART 2521
Studio Problems - Graphic . . . . . .1.0 - 3.0 Credits
Individual, contracted, advanced study in computer graphics. Studio and seminar.

ART 2531
Studio Problems - Drawing . . . . . .1.0 - 3.0 Credits
Individual, contracted, advanced study in drawing. Studio and seminar.

ART 2541
Studio Problems - Painting . . . . . .1.0 - 3.0 Credits
Individual, contracted, advanced study in painting. Studio and seminar.

ART 2551
Studio Problems - Sculpture . . . . . .1.0 - 3.0 Credits
Individual, contracted, advanced study in sculpture. Studio and seminar.

ART 2561
Studio Problems - Jewelry . . . . . .1.0 - 3.0 Credits
Individual, contracted, advanced study in jewelry. Studio and seminar.

ART 2571
Studio Problems - Pottery . . . . . .1.0 - 3.0 Credits
Individual, contracted, advanced study in pottery. Studio and seminar.

ART 2611
Studio Problems-Jewelry Casting . . . . . .1.0 - 3.0 Credits
Individual contracted advanced study in the exploratory of the lost wax casting technique to make fine jewelry.

Art, Visual Common Course

ART& 100
Art Appreciation [H] . . . . . 5.0 Credits
A general survey of fine and applied arts with brief media encounters in various areas of art. The class emphasis is on building a general appreciation of the techniques, styles, and history of art. (Previously ART 110.)

Astronomy Common Course

ASTR& 101
Intro to Astronomy w/lab [M/S] . . . . . 5.0 Credits
A survey of astronomy including history of astronomy, the solar system, galaxies, cosmology, and current topics. Several night observation sessions are held. Lecture and lab must be taken concurrently. Prerequisite: MATH 095 or MATH 096. (Previously AST 101.)

ASTR& 101L
Intro to Astronomy Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to recieve combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously AST 1011.)

Autobody Collision Repair

ABT 1001
Basic Autobody . . . . . .1.0 - 5.0 Credits
Enrollment limited to high school students. $10 lab fee required.

ABT 102
Automotive Detailing. . . . . .1.0 Credit
This hands-on class will give you the skills to make any vehicle look its best. Topics covered are: cleaning and polishing the vehicle exterior, wheels, tires, interiors to include leather, vinyl, carpet, convertible tops, and glass.

ABT 1021
Automotive Detailing Lab . . . . . 3.0 Credits
This hands-on class will give you the skills to make any vehicle looks its best. Topics covered are: cleaning and polishing the vehicle exterior, wheels, tires, interiors to include leather, vinyl, carpet, convertible tops, and glass.

ABT 111
Basic Repair . . . . . 5.0 Credits
This course introduces students to repair techniques for shaping and restoring body panels to their original shape using hand and power tools. Each lab and lecture class includes instructions on the safe use of hand and power tools. Students will take ASSET test first week of class if not previously taken.

ABT 1111
Basic Repair Lab . . . . . 1.0 - 9.0 Credits
Lab to be taken concurrently with ABT 111.

ABT 112
Structural Glass Installation . . . . . 3.0 Credits
Explore the history of glass manufacturing and fabrication. This course will cover stationary glass removal and installation. Understanding proper adhesives selection will be emphasized.

ABT 121
Subassembly Repair . . . . . 5.0 Credits
This class is divided into three segments. In the first segment, students learn the mechanics of vehicle doors necessary for alignment, mechanical repairs, and aligning adjustable body panels. In the second segment, students learn to replace body panels that are welded on to the vehicle. Students will take ASSET test first week of class if not previously taken.

ABT 1211
Subassembly Repair Lab . . . . . 1.0 - 9.0 Credits
Lab to be taken concurrently with ABT 121.

ABT 131
Principles of Painting . . . . . 5.0 Credits
Students learn paint preparation and how to paint a vehicle for complete refinishing. Skills learned include: painting techniques, mixing various types of paints, equipment use, and the safe use of materials and tools. Students will take ASSET test first week of class if not previously taken.

ABT 1311
Painting Lab. . . . . 1.0 - 9.0 Credits
This course has two segments. In the first segment, vehicle estimating, students learn the basics of estimating using estimating manuals and computer generated estimates. In the second segment, students learn to use basic and advanced measuring tools and equipment for straightening and replacing structural components. Students will take ASSET test first week of class if not previously taken.

ABT 150
Custom Painting & Airbrush Design . . . . . 2.0 Credits
This is an introductory course in the theory of custom painting of vehicles using airbrush techniques. The learner will be introduced to the equipment, paints, and coverings used to create custom designs on vehicles. Computer design will be introduced using the Corel Draw software. Concurrent registration in ABT 1501 is required.

ABT 1501
Custom Painting & Airbrush Design Lab . . . . . 3.0 Credits
This is an introductory course in which the learner uses the airbrush to create custom designs and paint vehicles. The learner will use the equipment, paints, and coverings to paint custom designs on vehicles. Learners will complete a computer design using the Corel Draw software. Concurrent registration in ABT 150 is required.

ABT 211
Repair Methods. . . . . 5.0 Credits
This course has two segments. In the first segment, students learn the basics of vehicle repair estimating using estimating manuals and computer generated estimates. In the second segment, students learn to use basic and advanced measuring tools and equipment for straightening and replacing structural components.

ABT 2111
Repair Methods Lab . . . . . 1.0 - 9.0 Credits
Lab to be taken concurrently with ABT 211.

ABT 221
Body Rebuilding I . . . . . 5.0 Credits
This course is a continuation of Body Rebuilding I. Students complete a major collision repair project and learn to use a variety of mechanical components for repair and replacement.

ABT 2211
Body Rebuilding I Lab . . . . . 1.0 - 9.0 Credits
Lab to be taken concurrently with ABT 221.

ABT 231
Body Rebuilding II . . . . . 5.0 Credits
Students will spend time refining skills. Emphasis will be on flat rate manual, time clock, and other skills that will be used in shop conditions. In the lab area, speed and quality work against the time clock and flat rate shop conditions will be simulated as much as possible. There will be more challenging frame work and spot painting. Prerequisites: ABT 221 and ABT 2211.

ABT 2311
Body Rebuilding II Lab . . . . . 1.0 - 9.0 Credits
Lab to be taken concurrently with ABT 231.

Automotive Technology

AMT 100
Basic Automotive Maintenance . . . . . 2.0 Credits
An introduction to general automotive systems and service procedures. This course is designed to familiarize the student with the automotive industry learning how to properly service and maintain today's vehicles, knowing how to understand what a service repair facility is saying to them when they are having a vehicle repaired, and the requirements to continue on becoming an automotive repair technician if desired. Class time consists of lecture on theory of preventative maintenance procedures and systems, basic operation of automotive tools, shop safety, computerized online information systems, written assignments, and basic automotive repair techniques. Lab time will consist of the student applying concepts learned with hands-on experience while working on student owned vehicles and school mock-ups.

AMT 1001
Basic Automotive Maintenance Lab . . . . . 1.0 - 3.0 Credits
Lab to be taken concurrently with AMT 100.

AMT 101
Front End Alignment . . . . . 2.0 Credits
This course is designed to familiarize the student with construction and operation of the front and rear suspension and alignment factors and procedures that are used on the modern automobile. This class is designed primarily for Autobody students but is open for anyone wishing a short course in front end alignment. Prerequisite: ASSET test placement with math minimum 32 and reading minimum 35 or instructor's permission.

AMT 1011
Front End Alignment Lab . . . . . 2.0 Credits
Lab to be taken concurrently with AMT 101.

AMT 102
Introduction to the Automotive Trades . . . . . 2.0 Credits
An introduction to general automotive systems and service procedures. This course is designed to familiarize the student with the automotive industry and the requirements of becoming an automotive repair technician or autobody repair technician. Class time consists of lecture on theory of preventative maintenance procedures and systems, basic operation of automotive tools, shop safety, computerized online information systems, written assignments, and basic automotive repair techniques. Lab time will consist of the student applying concepts learned with hands-on experience while working on student owned vehicles and school mock-ups.

AMT 1021
Introduction to the Automotive Trades Lab . . . . . 1.0 - 3.0 Credits
Lab to be taken concurrently with AMT 102.

AMT 110
Introduction Automotive Technology . . . . . 4.0 Credits
This combination class/lab is designed to give the student basic knowledge and understanding of all eight vehicle systems including: electrical, engines, brakes, suspension, manual transmissions and drive train components, heating and air conditioning, automatic transmissions, and engine performance. Prerequisite: completion of college placement test.

AMT 1101
Introduction Automotive Technology Lab . . . . . 10.0 Credits
Lab to be taken concurrently with AMT 110.

AMT 112
Electrical Systems . . . . . 2.0 Credits
A class covering electrical basics, electronics, test equipment, wiring circuitry, and basic diagnosis of starting and charging systems. Students in the lab will diagnose and repair light circuits, wiring systems, and basic starting and charging systems. This course is designed for automotive students.

AMT 120
Basic Electrical and Electronics . . . . . 2.0 Credits
This combination class/lab is designed to give the student a basic understanding of the theory, diagnosis, and service of automotive electrical and electronic systems. This includes examining and understanding basic electrical principles and how malfunctions affect electrical systems. Service and repair techniques are also covered. Prerequisites: AMT 110 and AMT 1101, RDG 099, ENGL 098/ENGL 099, MATH 084.

AMT 1201
Basic Electrical and Electronics Lab . . . . . 5.0 Credits
Lab to be taken concurrently with AMT 120.

AMT 123
Brakes/Suspension I . . . . . 2.0 Credits
This combination class/lab is designed to give the student a basic understanding of the theory, diagnosis, and service of automotive brake, steering, and suspension systems. The emphasis will be on the mechanical portion of those systems. Prerequisites: AMT 120 and AMT 1201.

AMT 1231
Brakes/Suspension I Lab . . . . . 5.0 Credits
Lab to be taken concurrently with AMT 123.

AMT 130
Engine Performance . . . . . 2.0 Credits
This combination class/lab is designed to give the student a basic understanding of the theory, diagnosis, and service of automotive engine performance systems. Emphasis will be on basic engine performance related to engine diagnosis, ignition systems, fuel delivery, emission systems, and routine maintenance. Prerequisites: AMT 123, AMT 1231, and CMST 103.

AMT 1301
Engine Performance Lab . . . . . 5.0 Credits
Lab to be taken concurrently with AMT 130.

AMT 133
Engine Repair and Rebuild . . . . . 2.0 Credits
This combination class/lab is designed to give the student a basic understanding of the theory, diagnosis, and service of internal engines. Students will study the operation of an internal combustion engine with an emphasis on failure analysis. Upon completing an engine rebuild the learner will do hot run engine dynamometer diagnostic tests. Prerequisites: AMT 130, AMT 1301, and CMST 103.

AMT 1331
Engine Repair and Rebuild Lab . . . . . 5.0 Credits
Lab to be taken concurrently with AMT 133.

AMT 1402
Automotive Internship . . . . . 7.0 Credits
This summer internship program is designed to prepare the student for actual shop employment. Students will be required to spend a minimum of eight weeks (340 hours) working in an automotive repair facility gaining experience with genuine automotive shop working conditions. This "hands-on" practice will enable the student to be more prepared for their second year advanced studies and will allow them to have verifiable "employed" experience when searching for employment at completion of the second year. The internship work site must be instructor approved. Prerequisites: AMT 133, AMT 1331, ENGL 103, and CMST 103.

AMT 207
Material Science of Automotive Technology . . . . . 3.0 Credits
This is an introductory level study of automotive materials used today and new materials in the future. Steels and aluminum alloys, carbon fiber composites, and plastics are introduced to the student in the context of their manufacturer and properties. The automotive maintenance and repair students are presented the common failure modes and an understanding the common nondestructive testing techniques used to diagnose degradation processes prior to catastrophic failure. The student will also learn the general steps in performing nondestructive testing and how components wear, corrode, or mechanically fail during service. The nondestructive testing component of the class training will follow guidelines set forth by the American Society of Nondestructive Testing SNT-TC-1A for Magnetic Particle Testing Level I and Penetrant Testing Level I (PT-I.)

AMT 220
Advanced Electrical and Electronics . . . . . 2.0 Credits
This combination class/lab is designed to give the student a highly developed understanding of the theory, diagnosis and service of the advanced automotive electrical and electronic operating systems. Prerequisite: AMT 1402.

AMT 2201
Advanced Electrical and Electronics Lab . . . . . 5.0 Credits
Lab to be taken concurrently with AMT 220.

AMT 223
Brakes/Suspension II . . . . . 2.0 Credits
This combination class/lab is designed to give the student a highly developed understanding of the theory, diagnosis, and service of the advanced steering, suspension, and brake systems, with a heavy emphasis on the electronic side of those systems. Prerequisites: AMT 220 and AMT 2201.

AMT 2231
Brakes/Suspension II Lab . . . . . 5.0 Credits
Lab to be taken concurrently with AMT 223.

AMT 230
Automatic Transmission . . . . . 2.0 Credits
This combination class/lab is designed to give the student a basic understanding of the theory, diagnosis, and service of automotive automatic transmissions. This includes the complete rebuild of an automatic transmission and the understanding of the internal hydraulic, electrical, and mechanical operations. Prerequisites: AMT 223, AMT 2231, and PSYC 103.

AMT 2301
Automatic Transmission Lab . . . . . 4.0 Credits
Lab to be taken concurrently with AMT 230.

AMT 233
Manual Transmission . . . . . 2.0 Credits
This combination class/lab is designed to give the student a basic understanding of the theory, diagnosis, and service of automotive manual transmissions. The student will rebuild a manual transmission and gain knowledge of internal gear transfer paths. In addition, study of clutches, drive axles, and differentials will round out this course of study. Prerequisites: AMT 230, AMT 2301, and PSYC 103.

AMT 2331
Manual Transmission Lab . . . . . 5.0 Credits
Lab to be taken concurrently with AMT 233.

AMT 240
Drivability Diagnostics . . . . . 2.0 Credits
This combination class/lab is designed to give the student a highly developed understanding of the theory, diagnosis, and service of the drivability automotive systems. Emphasis will be on power train computer systems, sensors, and outputs, and the proper diagnostic strategies to locate potential problems in these systems. Prerequisites: AMT 233, AMT 2331, and above MATH 111.

AMT 2401
Drivability Diagnostics Lab . . . . . 5.0 Credits
Lab to be taken concurrently with AMT 240.

AMT 243
Heating Ventilation and Air Conditioning Systems . . . . . 2.0 Credits
This combination class/lab is designed to give the student a basic understanding of the theory, diagnosis, and service of automotive heating, ventilation, and air conditioning (HVAC) systems. Emphasis will be on proper air conditioning recharging techniques and the electrical portion of the HVAC systems. Prerequisites: AMT 240, AMT 2401, and above MATH 111.

AMT 2431
Heating Ventilation & Air Conditioning Systems Lab . . . . . 5.0 Credits
Lab to be taken concurrently with AMT 243.

Biology

BIOL 108
Plants of the Columbia Basin [M/S] . . . . . 2.0 Credits
Spring wildflowers, flowering shrubs, and trees of eastern Washington with emphasis on the Columbia Basin Region. Techniques in identification, collection, preservation, mounting preserved specimens, and ecological principles. Field trips will be required as weather permits. This course is designed for non-science majors. No prerequisites are required. (Previously BIO 108.)

BIOL 108L
Plants of the Columbia Basin Lab [M/S] . . . . . 3.0 Credits
Lab to be taken concurrently with BIOL 108. (Previously BIO 1081.)

BIOL 120
Bioethics [M/S] . . . . . 5.0 Credits
A survey of the scientific basis of advances in biotechnology, and an examination of the ethical questions raised by applications in medicine, agriculture, and natural resources use. Topics will include reproductive technology and cloning, gene therapy, genetic and disease screening, transplantation, allocating healthcare resources, pharmaceutical biotechnology, genetic engineering crops, patenting natural resources, and the background in cellular and molecular biology required to analyze the issues. Prerequisite: BIOL& 100/BIOL& 100L or higher. (Previously BIO 120.)

BIOL 140
Fundamentals of Botany [M/S] . . . . . 1.0 - 4.0 Credits
An introductory course in the plant sciences. Includes structure and function of plant cells, tissues, organs; growth, reproduction, diversity, evolution, and ecology. Emphasis on local flora and ecology. Primarily for non-science or agriculture majors. (Previously BIO 140.)

BIOL 140L
Fundamentals of Botany Lab [M/S] . . . . . 1.0 Credit
Lab to be taken concurrently with BIOL 140. (Previously BIO 1401.)

BIOL 148
Plant Identification [M/S] . . . . . 2.0 Credits
Spring wildflowers of eastern Washington with emphasis on the Columbia Basin Region. Techniques in identification, collection, preservation, mounting of preserved specimens, and ecological principles. During the latter part of the quarter, attendance at all-day Saturday field trips is required. (Previously BIO 148.)

BIOL 148L
Plant Identification Lab [M/S] . . . . . 3.0 Credits
Lab to be taken concurrently with BIOL 148. (Previously BIO 1481.)

BIOL 186
Extended Topics in Biology [M/S] . . . . . 1.0 - 5.0 Credits
A class designed to explore a specific topic of special interest. (Previously BIO 186.)

BIOL 186L
Extended Topics in Biology Lab [M/S] . . . . . 1.0 - 3.0 Credits
Lab to be taken concurrently with BIOL 186. (Previously BIO 1861.)

BIOL 201
Soils [M/S] . . . . . 4.0 Credits
A course offering the student a general background and understanding of soils, soil formation processes, soil origins with an emphasis on soil origins in the Pacific Northwest, soil taxonomy, organic matter, water relationships, pH, and biological relationships. Prerequisites: CHEM& 110/CHEM& 110L or CHEM& 140/CHEM& 140L or instructor permission. This course is cross linked to AG 201/AG 2011. Students completing BIOL 201/BIOL 201L may not receive graduation credit for AG 201/AG 2011. (Previously BIO 201.)

BIOL 201L
Soils Lab [M/S] . . . . . 1.0 Credit
Lab to be taken concurrently with BIOL 201. (Previously BIO 2011.)

BIOL 240
General Ecology [M/S] . . . . . 4.0 Credits
A course offering the student a general background and understanding of the fundamental principles of ecology with emphasis on ecology of terrestrial systems. Topics will include review and discussion of the organism in the context of its environment, evolutionary processes, population dynamics, communities, energy flow and ecosystems, conservation biology, field and lab techniques as presented in the text and lecture, basic natural history, and human influences on ecosystems. Prerequisites: BIOL& 211/BIOL& 211L, or CHEM& 140/CHEM& 140L or higher, and ENVS& 101/ENVS& 101L. (Previously BIO 240.)

BIOL 240L
General Ecology Lab [M/S] . . . . . 1.0 Credit
Lab to be taken concurrently with BIOL 240. (Previously BIO 2401.)

BIOL 250
General Genetics [M/S] . . . . . 4.0 Credits
An introduction to molecular and classical genetics for students intending to take enhanced courses in biology and the health sciences. Emphasis on Mendelian genetics, chromosomes and genetic linkage, gene replication, regulation of gene expression, genetic engineering, and population genetics. Prerequisites: BIOL& 160/BIOL& 160L, or BIOL& 211/BIOL& 211L, and MATH 095. (Previously BIO 250.)

BIOL 250L
General Genetics Lab [M/S] . . . . . 1.0 Credit
Lab to be taken concurrently with BIOL 250. (Previously BIO 2501.)

BIOL 252
Insects of Economic Importance [M/S] . . . . . 4.0 Credits
A study designed to introduce the student to the breadth and diversity of the science of entomology and an in-depth study of insects including: their diversity; the basics of systematic entomology; insect societies; insect physiology and structures; their ecological relationships with their physical and biotic environments; their population and community level ecology; their effects on human welfare through applied disciplines of medical and agricultural entomology; and the methods by which humans attempt to manage insect populations. Prerequisite: BIOL 252L to be taken concurrently with BIOL 252. This course is cross linked to AG 252/AG 2521. Students completing BIOL 252/BIOL 252L may not receive graduation credit for AG 252/AG 2521. (Previously BIO 252.)

BIOL 252L
Insects of Economic Importance Lab [M/S] . . . . . .1.0 Credit
Lab to be taken concurrently with BIOL 252. (Previously BIO 2521.)

BIOL 253
Plant Pathology [M/S] . . . . . 4.0 Credits
An introduction to the organisms causing plant diseases, their identification, and control technologies. Material presented covers the basic principles necessary to develop an adequate understanding of plant disease processes in natural, urban, commercial, and industrial situations. Emphasis will be placed on diseases encountered in the Pacific Northwest. Prerequisite: AG 2531 to be taken concurrently with AG 253. This course is cross linked to AG 253/AG 2531. Students completing BIOL 253/BIOL 253L may not receive graduation credit for AG 253/AG 2531. (Previously BIO 253.)

BIOL 253L
Plant Pathology Lab [M/S] . . . . . .1.0 Credit
Lab to be taken concurrently with BIOL 253. (Previously BIO 2531.)

BIOL 254
Plant Systematics [M/S] . . . . . 2.0 Credits
A course offering the student a general background and understanding of the identification and classification of vascular plants with emphasis on the local flora of the Pacific Northwest. Prerequisites: BIOL& 212/BIOL& 212L or BIOL 140/BIOL 140L. This course is cross linked to AG 254/AG 2541. Students completing BIOL 254/BIOL 254L may not receive graduation credit for AG 254/AG 2541. (Previously BIO 254.)

BIOL 254L
Plant Systematics Lab [M/S]. . . . . 3.0 Credits
Lab to be taken concurrently with BIOL 254. (Previously BIO 2541.)

Biology Common Course

BIOL& 100
Survey of Biology w/lab [M/S] . . . . . 5.0 Credits
An introductory course in basic biological principles and processes. The lab illustrates the basic concepts discussed in lecture and acquaints students with general laboratory procedures. Primarily for non-science majors. (Previously BIO 100.)

BIOL& 100L
Survey of Biology Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously BIO 1001.)

BIOL& 160
General Biology w/lab [M/S] . . . . . 5.0 Credits
An introduction to basic cell structure and physiology with emphasis on: function and structure of cell membranes; metabolism and enzyme function; genetics and protein synthesis; genetics of viruses, prokaryotes, and eukaryotes; cell signaling, and communication. The use of models, microscope slides, and physiological experiments illustrate cellular structure and function. Prerequisite: Strongly recommended: high school chemistry, or CHEM& 110/CHEM& 110L or higher, or concurrent enrollment. This course does not satisfy the prerequisite for BIOL& 212/BIOL& 212L or BIOL& 213/BIOL& 213L. (Previously BIO 105.)

BIOL& 160L
General Biology Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously BIO 1051.)

BIOL& 175
Human Biology w/lab [M/S] . . . . . 5.0 Credits
The biology of the human organism. Evolution, ecology, the functioning of cells, tissues and the major organ systems form the core of the class. Emphasis is placed on providing the student with sufficient background to make informed decisions relating to the biological aspects of the human species. Primarily for non-science majors. (Previously BIO 110.)

BIOL& 175L
Human Biology Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously BIO 1101.)

BIOL& 211
Majors Cellular w/lab [M/S] . . . . . 5.0 Credits
An introductory cell biology lecture and lab course for biology majors, pre-medical, pre-dental, pre-pharmacy, pre-physical therapy, and other pre-professional students planning to transfer to a four-year university. This is the first of a three-quarter series with an emphasis on cell chemistry, structure, metabolism, energetics, cell division, cell signaling, the molecular basis of inheritance and development, and the basis of genetic engineering. Health Science majors are advised to take BIOL& 160/BIOL& 160L. Prerequisite: a grade of 2.0 or better in CHEM& 110/CHEM& 110L or higher. (Previously BIO 111.)

BIOL& 211L
Majors Cellular Lab [M/S]. . . . . .1.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously BIO 1111.)

BIOL& 212
Majors Plant w/lab [M/S]. . . . . 5.0 Credits
Includes the concept of evolution; the origin of life; a survey of prokaryotes, protists, plants, and fungi; plant anatomy, and function. Primarily for science majors. Prerequisites: a grade of 2.0 or better in BIOL& 211/BIOL& 211L and CHEM& 140/CHEM& 140L or higher. (Previously BIO 112.)

BIOL& 212L
Majors Plant Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously BIO 1121.)

BIOL& 213
Majors Animal w/lab [M/S] . . . . . 5.0 Credits
A survey of the invertebrate and vertebrate animals covering their diversity, structure, and function of organ systems, and the interactions between organisms and the environment. Primarily for science majors. Prerequisite: a grade of 2.0 or better in BIOL& 212/BIOL& 212L. (Previously BIO 113.)

BIOL& 213L
Majors Animal Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously BIO 1131.)

BIOL& 241
Human A&P 1 w/lab [M/S] . . . . . 6.0 Credits
The structure and functions of systems of the human body; integumentary, skeletal, muscular, and nervous. The use of human models and animals illustrate the systems. Prerequisite: a grade of 2.0 or better in BIOL& 160/BIOL& 160L or BIOL& 211/BIOL& 211L. Recommended: CHEM& 110/CHEM& 110L. (Previously BIO 221.)

BIOL& 241L
Human A&P 1 Lab [M/S] . . . . . 0.0 Credits
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously BIO 2211.)

BIOL& 242
Human A&P 2 w/lab [M/S] . . . . . 6.0 Credits
Continuation of BIOL& 241/BIOL& 241L. Endocrine, digestive, respiratory, circulatory, lymphatic, urinary, and reproductive systems. Prerequisite: a grade of 2.0 or better in BIOL& 241/BIOL& 241L. (Previously BIO 222.)

BIOL& 242L
Human A&P 2 Lab [M/S] . . . . . 0.0 Credits
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously BIO 2221.)

BIOL& 260
Microbiology w/lab [M/S] . . . . . 6.0 Credits
Basic principles, concepts, and techniques in the study of bacteria, protists, fungi, and viruses. Concepts of immunity and the role of micro-organisms in medicine. Prerequisite: a grade of 2.0 or better in BIOL& 160/BIOL& 160L or BIOL& 211/BIOL& 211L. Strongly recommended: CHEM& 110/CHEM& 110L, BIOL& 241/BIOL& 241L, and BIOL& 242/BIOL& 242L (for nursing majors) or BIOL& 212/BIOL& 212L and BIOL& 213/BIOL& 213L (for biology majors). (Previously BIO 260.)

BIOL& 260L
Microbiology Lab [M/S] . . . . . 0.0 Credits
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously BIO 2601.)

Blueprint Reading

BPR 106
Blueprint Reading I (WT) . . . . . 3.0 Credits
This course is designed to introduce the welding student to the world of blueprint symbols, facts, and figures. BPR 106 is the first of a two-part series in which the student will learn the various methods of presenting to the fabricator what the designer wants in the final product. Symbolism for welding structural shapes, types of fittings, their physical make up, material, and dimensioning are covered in the class. The successful student will be an asset to any fabrication shop or when working for the Ironworkers or Millwrights. Prerequisite: DRW 106.

BPR 204
Blueprint Reading II (MT) . . . . . 3.0 Credits
This course is designed to give the student skills and knowledge necessary to read, understand tolerances, and apply geometric dimensioning to machine shop drawings. Prerequisite: MT 102.

BPR 206
Blueprint Reading II (WT) . . . . . 3.0 Credits
The second course in the series with the emphasis on pipe isometrics. The course is designed to provide the student with the ability to read, draw, and dimension pipe isometrics for fabrication. The successful student will be an asset to any fabrication shop or when working for or with pipe fitters or entry level. Prerequisite: BPR 106.

Business

BUS 103
Salesmanship . . . . . 5.0 Credits
A study in consumer motivation, buyer benefits, overcoming sales resistance, and closing of sales supplemented by sales demonstrations developed and presented in the classroom. (Previously BA 103.)

BUS 105
Business & Payroll Tax Accounting. . . . . 5.0 Credits
A study of the various aspects of federal, state, and local taxes levied upon business. Emphasis placed on Federal Income and Social Security tax withholding, sales tax requirements, and various state regulations regarding employee health, safety, unemployment insurance, and business and occupation tax. Students will practice completion of various tax reports and maintenance of accurate tax related records. Offered spring quarter. Prerequisite: ACCT& 201 or instructor's permission. (Previously BA 105.)

BUS 107
Federal Income Taxes . . . . . 5.0 Credits
This course emphasizes tax planning and tax recognition, not tax expertise. Students will be aware of the many issues and general solutions in taxation, including tax considerations in business decision-making, tax effects of business transactions; taxation of compensation; fringe benefits; capital gains; fixed asset transactions; tax credits; alternative minimum tax and passive activity rules, but leaving the detailed tax planning or compliance work for other tax courses. Offered fall quarter. Recommended prerequisite: ACCT& 201. (Previously BA 107.)

BUS 111
Computerized Accounting . . . . . 5.0 Credits
This course will require students to use QuickBooks to account for service and merchandising businesses. The different modules include Accounts Receivable, Accounts Payable, Payroll, and integration of Microsoft Excel and Word. Prerequisites: ACCT& 201 and ACCT& 202 or concurrent enrollment in ACCT& 202. (Previously BA 111.)

BUS 120
Personal Finance . . . . . 5.0 Credits
A decision-making approach to personal financial planning. Students will use course materials and Internet resources to develop personal financial strategies. (Previously BA 120.)

BUS 130
Project Management . . . . . 5.0 Credits
This introductory course covers project, program, and portfolio management. The course content includes project initiation, planning, execution, monitoring, and closing within the context of the project management profession, certification, and ethics. Theory and software application are combined to provide a foundation for future professional development.

BUS 134
Public Relations . . . . . 5.0 Credits
A critical study of the theory, principles, and practices of organizational public relations in the complex social, technical, and political climate of the era. The class is writing and speaking intensive, culminating in student oral presentations, and a portfolio of media examples. (Previously BA 134.)

BUS 150
Advertising Principles . . . . . 5.0 Credits
Study of when and how to use the major advertising mediums, with emphasis on local advertising. The course will include media buying, copywriting, layouts, production, market research, and sales promotion. (Previously BA 150.)

BUS 165
Investments . . . . . 5.0 Credits
Fundamentals of investing and investment alternatives, including a study of traditional investment vehicles such as stocks, bonds, mutual funds, and more speculative strategies such as options and futures. The course will examine investment decision-making within the framework of investment goals including safety, risk, growth, and income. The mechanics of various financial markets will also be discussed. (Previously BA 165.)

BUS 1952
Supervised Employment . . . . . 1.0 - 15.0 Credits
A supervised paid work experience in a community agency, business, or industrial firm involving the application and practice of skills and principles learned in the classroom. Instructor's permission required. (Previously BA 1952.)

BUS 1962
Employment Seminar. . . . . .1.0 - 5.0 Credits
Designed to provide students with insight into the many aspects of the world of work through discussions of their personal work environments, encompassing actual on-the-job training, and observations. Concurrent enrollment with BUS 1952. May be repeated to a maximum of six credits. (Previously BA 1962.)

BUS 220
Advanced Personal Finance . . . . . 5.0 Credits
This advanced personal finance course is for the mature individual who is seeking in-depth information and discussion on retirement, tax, and estate planning. The specifics of retirement trends and strategies, life goals, IRAs, pension plans, distributions, insurance, and wills are researched culminating in a retirement and estate plan. Prerequisite: BUS 120 or instructor's permission.

BUS 250
Management Information Systems . . . . . 5.0 Credits
This course is designed to introduce business majors to Management Information Systems (MIS) and demonstrate how these systems are used throughout organizations in theory and application. The course will focus on organizational information systems, including managerial support systems and acquisition, and application of information systems. Topical coverage consists of a web-based, global environment and how to manage it through a competitive advantage and strategic information system. Ethics and privacy, network communications, E-Commerce, mobile commerce, and contemporary topics are explored. The software deliverables include a WebCT homepage, a PowerPoint presentation, and a Word document from the student's fictional or real business, followed by an Excel spreadsheet and an Access database. As a result of taking this course, students will obtain valuable information technology knowledge and skills required for success in business. (Previously BA 250.)

BUS 257
Government Accounting . . . . . 5.0 Credits
Accounting practices for the growing nonprofit segment of the economy (governmental units, educational institutions, hospitals, etc.) with a comparison to accounting for profit-making organizations. Includes a practice set to be used on microcomputer. Prerequisite: ACCT& 201. (Previously BA 257.)

BUS 261
Human Resource Management . . . . . .1.0 - 5.0 Credits
A critical inquiry into the theory, principles, and practices of human resource management in the global work place of the 21st century. Emphasis is on the shift from large-scale business to the practices needed to sustain and nourish world-class standards and practices in small and start-up enterprises. (Previously BA 261.)

BUS 262
Management Principles . . . . . 5.0 Credits
A study of the essentials of management in merchandising, manufacturing, agriculture, agrichemical business, and service businesses. (Previously BA 262.)

BUS 263
Principles of Finance . . . . . 5.0 Credits
An examination of the analytical tools used to manage and control finances. Concepts include: acquisition and oversight of working capital; intermediate and long term financing; and the cost of capital and capital budgeting. (Previously BA 263.)

BUS 264
Fraud & Accounting Information Systems . . . . . 5.0 Credits
This course provides a perspective of Accounting Information Systems through the examination of fraud including various schemes, skimming, and check tampering. Accounting and legal principles provide a context for the big picture of occupational fraud and abuse. The behavioral theory and social factors that motivate perpetrators of fraud are explained. The Systems Understanding Aid (SUA) is an accounting practice set supported with documents to enhance understanding an accounting system. Prerequisite: ACCT&201, ACCT& 202, or ACCT&203. (Previously BA 264.)

BUS 265
Marketing Principles . . . . . 5.0 Credits
Study of marketing functions from the viewpoint of the manager covering such topics as marketing, distribution channels, price market grid, transportation, and consumer behavior. (Previously BA 265.)

BUS 267
Marketing Special Projects . . . . . 1.0 - 15.0 Credits
A practical and student-centered project oriented class, utilizing marketing skills to develop marketing plans for the Tri-Cities area business and charitable organizations. The use of primary and secondary data collection, research, business start-up planning, profitable business decision-making, and business communications skills as they relate to a final project. Prerequisite: instructor's permission. (Previously BA 267.)

BUS 268
Marketing Special Projects II . . . . . 1.0 - 15.0 Credits
A continuing practical and student-centered marketing project course utilizing material provided by proposing clients. Included in this project is the development of a marketing promotional plan for-profit and not-for-profit companies. This special project is designed to help the student use marketing skills related to primary and secondary data collecting and added researched data, business startup planning, making a business more profitable, and decision-making as they relate to the final promotion of a product or business. As in course BUS 267 more advanced projects will be assigned and above skills will be expanded. Prerequisite: instructor's permission. (Previously BA 268.)

BUS 269
Marketing Special Projects III . . . . . 1.0 - 15.0 Credits
A continuing practical and student-centered marketing project course utilizing material provided by proposing clients, student researched data. Included in this project is the development of a marketing promotional plan for-profit and not-for-profit companies. This special project is designed to help the student use marketing skills related to effective business promotion and/or product development. Selling skills, creative planning, and implementation training will be utilized for the clients benefit. As in course BUS 268 more technical and advanced projects and research will be assigned and the above skills will be expanded to client specifications. Prerequisite: instructor's permission. (Previously BA 269.)

BUS 271
Human Relations Business . . . . . 5.0 Credits
Study of the individual and his or her growth and development. Course is designed to enable students to establish goals and lead others in the accomplishment of those goals. It is aimed at heightening the student's awareness of leadership and management. (Previously BA 271.)

BUS 272
Organization Development . . . . . 3.0 Credits
A critical study of theory, principles, and practices in the development of contemporary business organizations. The focus is on diagnosis in a problem-solution approach. Key issues are triggering, managing, and nourishing change in a turbulent and highly competitive global business environment. Systems understanding, resource, and technology applications are considered. (Previously BA 272.)

BUS 2952
Supervised Employment . . . . . .1.0 - 5.0 Credits
A supervised, paid work experience in a community agency, business, or industrial firm involving the application and practice of skills and principles learned in the classroom. Instructor's permission required. (Previously BA 2952.)

BUS 2962
Employment Seminar. . . . . .1.0 - 2.0 Credits
Designed to provide students with insight into the many aspects of the world of work through discussions of their personal work environment, encompassing actual on-the-job training, and observations. Concurrent enrollment with Supervised Employment 2952. May be repeated to a maximum of six credits. (Previously BA 2962.)

Business Common Course

BUS& 101
Introduction to Business. . . . . 5.0 Credits
A critical survey of the theory, principles, and practices of modern business. The theme is building world class employees who produce and distribute world class goods and services in an increasingly competitive global marketplace. Critical thinking, systems understanding, resource allocation, human relations, and technology application are emphasized. (Previously BA 101.)

BUS& 201
Business Law . . . . . 5.0 Credits
An introduction to the American legal system including its social, political, and philosophical roots. The court system and judicial procedures are critically examined, and the class inquires extensively into business torts, crimes, and contracts. (Previously BA 254.)

Chemistry

CHEM 254
Quantitative Analysis [M/S] . . . . . 2.0 Credits
Introduction to analytical chemistry. Sampling, statistics, and spreadsheets. Acid-base, precipitation, complexion, and redox equilibria. Activity coefficients and systematic treatment of equilibrium. Volumetric, gravimetric, potentiometric, environmental, and clinical methods of analysis taught in the lab. Prerequisite: CHEM& 163/CHEM& 163L. (Previously CHM 251.)

CHEM 255
Instrumental Analysis [M/S]. . . . . 2.0 Credits
Electrochemistry, potentiometry, coulometry, voltammetry, spectrophotometry, atomic spectroscopy, chromatography, capillary electrophoresis, and mass spectrometry. Ion-selective electrode, coulometric, spectrophotometric, atomic spectrometric, solvent extraction, chromatographic, and mass spectrometric methods of analysis taught in the lab. CHEM 255/CHEM 265 has a heavy emphasis on instrumental methods of chemical analysis. Computer-interfaced instrumentation included in the lab. Prerequisite: grade of 2.0 or better in CHEM 254/CHEM 264. (Previously CHM 252.)

CHEM 264
Quantitative Analysis Lab [M/S] . . . . . 3.0 Credits
Lab to be taken concurrently with CHEM 254. (Previously CHM 2511.)

CHEM 265
Instrumental Analysis Lab [M/S] . . . . . 3.0 Credits
Lab to be taken concurrently with CHEM 255. (Previously CHM 2521.)

CHEM 2861
Undergraduate Research, Special Topic [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can pursue a special topic of interest, design, and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Prerequisite: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher, or high school chemistry with a grade of B or better. Instructor's permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2861.)

CHEM 2862
Undergraduate Research, Special Topic [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Prerequisite: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher, or high school chemistry with a grade of B or better. Instructor's permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2862.)

CHEM 2863
Undergraduate Research, Special Topic [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Prerequisite: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher, or high school chemistry with a grade of B or better. Instructor's permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2863.)

CHEM 2864
Undergraduate Research, Special Topic [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Prerequisite: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher, or high school chemistry with a grade of B or better. Instructor's permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2864.)

CHEM 2865
Undergraduate Research, Special Topic [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Prerequisite: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher, or high school chemistry with a grade of B or better. Instructor's permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2865.)

CHEM 2866
Undergraduate Research, Special Topic [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Prerequisite: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher, or high school chemistry with a grade of B or better. Instructor's permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2866.)

CHEM 2867
Undergraduate Research, Special Topic [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Prerequisite: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher, or high school chemistry with a grade of B or better. Instructor's permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2867.)

CHEM 2868
Undergraduate Research, Special Topic [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Prerequisite: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher, or high school chemistry with a grade of B or better. Instructor's permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2868.)

CHEM 2869
Undergraduate Research, Special Topic [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Prerequisite: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher, or high school chemistry with a grade of B or better. Instructor's permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2869.)

CHEM 2901
Undergraduate Research, Special Topics [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Prerequisites: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher or high school chemistry with a grade of B or better. Instructor permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2901.)

CHEM 2902
Undergraduate Research, Special Topics [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Prerequisites: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher or high school chemistry with a grade of B or better. Instructor permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2902.)

CHEM 2903
Undergraduate Research, Special Topics [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Prerequisites: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher or high school chemistry with a grade of B or better. Instructor permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2903.)

CHEM 2904
Undergraduate Research, Special Topics [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Prerequisites: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher or high school chemistry with a grade of B or better. Instructor permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2904.)

CHEM 2905
Undergraduate Research, Special Topics [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Prerequisites: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher or high school chemistry with a grade of B or better. Instructor permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2905.)

CHEM 2906
Undergraduate Research, Special Topics [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Prerequisites: CHEM& 140/CHEM& 140L with a grade of 2.0 or higher or high school chemistry with a grade of B or better. Instructor permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2906.)

CHEM 2907
Undergraduate Research, Special Topics [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Prerequisites: CHEM& 140/ CHEM& 140L with a grade of 2.0 or higher or high school chemistry with a grade of B or better. Instructor permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2907.)

CHEM 2908
Undergraduate Research, Special Topics [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Prerequisites: CHEM& 140/ CHEM& 140L with a grade of 2.0 or higher or high school chemistry with a grade of B or better. Instructor permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2908.)

CHEM 2909
Undergraduate Research, Special Topics [M/S] . . . . . .1.0 - 3.0 Credits
Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, the student can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Prerequisites: CHEM& 140/ CHEM& 140L with a grade of 2.0 or higher or high school chemistry with a grade of B or better. Instructor permission is also required to enroll. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. (Previously CHM 2909.)

Chemistry Common Course

CHEM& 110
Chemical Concepts w/Lab (M/S) . . . . . 5.0 Credits
Basic introduction to chemical principles as they apply to the structure and behavior of matter. Illustrations from everyday life, environmental topics, medicine, and biochemistry will be used to illustrate chemical principles. Topics include: measurement in science, properties of matter, atomic structure, bonding, nuclear chemistry, mole concept, gas laws, solutions, and acids/bases. Assumes no previous chemistry and designed to fulfill the chemistry requirement for the AAS degree in Nursing at CBC. Course may also be used to fulfill the general science requirement for the AA degree. Prerequisite: MATH 091/MATH 096 or higher. (MATH 106 and Vocational Math do not apply.) (Previously CHM 100.)

CHEM& 110L
Chemical Concepts Lab . . . . . 0.0 Credits
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously CHM 1001.)

CHEM& 121
Intro to Chemistry w/lab [M/S] . . . . . 5.0 Credits
Fundamentals of inorganic chemistry with special emphasis on the application of principles to the health sciences. Topics covered include: measurements, energy, atomic structure, chemical bonding, nomenclature, mole concept, stoichiometry, gas laws, liquid and solid states, solutions, equilibrium, acid/base chemistry, oxidation-reduction, and nuclear chemistry. (Students pursuing an Associate degree in Nursing should take CHEM& 110/CHEM& 110L). Prerequisite: MATH 091/MATH 096 or higher. (MATH 106 and Vocational Math do not apply). (Previously CHM 110.)

CHEM& 121L
Intro to Chemistry Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously CHM 1101.)

CHEM& 122
Intro to Organic Chemistry w/lab [M/S] . . . . . 5.0 Credits
Fundamentals of organic chemistry with special emphasis on the application of principles to the health sciences. Topics covered include: saturated, unsaturated, aromatic hydrocarbons, alcohols, thiols, phenols, ethers, aldehydes, ketones, carboxylic acids, esters, amines, and amides. Each family of compounds will be studied with respect to its structure, behavior, and function. Biochemical applications will be integrated into this approach. Prerequisite: grade of 2.0 or better in CHEM& 121/CHEM& 121L. (Previously CHM 120.)

CHEM& 122L
Intro to Organic Chemistry Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously CHM 1201.)

CHEM& 123
Intro to Biochemistry w/lab [M/S] . . . . . 5.0 Credits
Topics covered include: optical isomerism; structure and function of carbohydrates, lipids, proteins, and nucleic acids; protein synthesis, enzymes, hormones; biochemical energetics and metabolism of carbohydrates, lipids, and proteins. Prerequisite: grade of 2.0 or better in CHEM& 122/ CHEM& 122L. (Previously CHM 130.)

CHEM& 123L
Intro to Biochemistry Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously CHM 1301.)

CHEM& 131
Intro Organic/Biochemistry w/lab [M/S] . . . . . 5.0 Credits
The course will provide the fundamental chemistry of organic compounds in molecules and reactions of living systems. Topics covered include: hydrocarbons, alcohols and thiols, carbonyl compounds, carboxylic acids, esters, amines, amides, carbohydrates, proteins, lipids, and nucleic acids. Universal metabolic pathways that occur in both simple and complex organisms will be covered including: glycolysis, gluconeogenesis, citric acid cycle, electron transport chain, oxidative phosphorylation, fatty acid biosynthesis and degradation, amino acid transamination, and all aspects of the storage and expression of genetic information. This course is designed for students that need a laboratory science class that has a depth of both organic chemistry and biochemistry. Prerequisite: grade of 2.0 or better in CHEM& 140/CHEM& 140L or CHEM& 121/CHEM& 121L. (Previously CHM 135.)

CHEM& 131L
Intro Organic/Biochemistry Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously CHM 1351.)

CHEM& 140
General Chemistry Prep w/lab [M/S] . . . . . 5.0 Credits
Introduction to chemical principles, chemical measurements, matter and energy, atomic theory, periodic properties, mole concept, molecules, compounds and chemical bonding, nomenclature and chemical equations, stoichiometry and chemical calculations, gas laws, solids, liquids, phase changes, oxidation-reduction reactions, solutions, reaction rates and chemical equilibrium, and acids/bases. The course is directed toward students needing a knowledge of the fundamentals of inorganic chemistry and planning to obtain a degree in the physical/life science/engineering disciplines. Excellent preparation for CHEM& 161/CHEM&161L. Prerequisite: MATH 095 or MATH 098. (Previously CHM 101.)

CHEM& 140L
General Chemistry Prep Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously CHM 1011.)

CHEM& 161
General Chemistry I w/lab [M/S] . . . . . 5.0 Credits
Fundamental concepts, stoichiometry, atomic structure and chemical bonding, nomenclature, periodic table trends, reactions, oxidation-reduction, and gas laws. Problem-solving techniques stressed. Prerequisite: high school chemistry with a grade of B or better, or CHEM& 140/CHEM& 140L, with a grade of 2.0 or better. (Previously CHM 111.)

CHEM& 161L
General Chemistry I Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously CHM 1111.)

CHEM& 162
General Chemistry II w/lab [M/S] . . . . . 5.0 Credits
Liquids, solids, solutions, colloids, acids, bases, salts, kinetics, molecular and ionic equilibria, thermodynamics, oxidation-reduction, electrochemistry, and nuclear chemistry. Theory and problem-solving are given vigorous emphasis. Prerequisite: grade of 2.0 or better in CHEM& 161/CHEM& 161L. (Previously CHM 112.)

CHEM& 162L
General Chemistry II Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously CHM 1121.)

CHEM& 163
General Chemistry III w/lab [M/S] . . . . . 5.0 Credits
Nonmetals, metalloids, metals, coordination chemistry, and an introduction to organic and biochemistry. Laboratory includes a basic introduction to the qualitative analysis of common cations and anions. Prerequisite: grade of 2.0 or better in CHEM& 162/CHEM& 162L. (Previously CHM 113.)

CHEM& 163L
General Chemistry III Lab [M/S] . . . . . .0.0 Credit
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously CHM 1131.)

CHEM& 241
Organic Chemistry I [M/S] . . . . . 3.0 Credits
Stresses nomenclature, structure, stereochemistry, and introduces conceptual material needed to understand reaction mechanisms and synthesis. Prerequisite: CHEM& 163/CHEM& 163L. (Previously CHM 221.)

CHEM& 242
Organic Chemistry II [M/S] . . . . . 3.0 Credits
Deals with the major classes of organic compounds with respect to preparations, mechanisms of reactions, syntheses, and identification. Prerequisite: grade 2.0 or better in CHEM& 241/CHEM& 251. (Previously CHM 222.)

CHEM& 243
Organic Chemistry III [M/S] . . . . . 3.0 Credits
Advanced reaction mechanisms and syntheses. Polymers, macromolecular and biochemical applications, spectroscopy, chromatography, and identification of organic compounds. Prerequisite: grade of 2.0 or better in CHEM& 242/CHEM& 252. (Previously CHM 223.)

CHEM& 251
Organic Chemistry I Lab [M/S] . . . . . 3.0 Credits
Lab to be taken concurrently with CHEM& 241. (Previously CHM 2211.)

CHEM& 252
Organic Chemistry II Lab [M/S] . . . . . 3.0 Credits
Lab to be taken concurrently with CHEM& 242. (Previously CHM 2221.)

CHEM& 253
Organic Chemistry III Lab [M/S] . . . . . 3.0 Credits
Lab to be taken concurrently with CHEM& 243. (Previously CHM 2231.)

Chinese Common Course

CHIN& 121
Chinese I [H] . . . . . 5.0 Credits
Introduction to the Chinese language including speaking and listening skills, reading, writing, and grammar and Chinese culture including geography, customs, daily life, and heritage. Designed for the novice learner of Chinese, with little or no proficiency in the Chinese language. Recommended that students have successfully completed at least ENGL 099. (Previously CHIN 101.)

CHIN& 122
Chinese II [H] . . . . . 5.0 Credits
Introduction to the Chinese language including speaking and listening skills, reading, writing, and grammar and Chinese culture including geography, customs, daily life, and heritage. Prerequisite: CHIN& 122 or instructor's permission. (Previously CHIN 102.)

CHIN& 123
Chinese III [H] . . . . . 5.0 Credits
Introduction to the Chinese language including speaking and listening skills, reading, writing, and grammar and Chinese culture including geography, customs, daily life, and heritage. Prerequisite: CHIN& 122 or instructor's permission. (Previously CHIN 103.)

Communication Studies

CMST 101
Speech Essentials [C] . . . . . 3.0 Credits
This is a basic course in public speaking. The goal of this course is to introduce, practice, and become comfortable speaking in front of people in the workplace and in the community. This course is recommended for students with no previous speech experience. Students are taught different forms of public speaking. The student will learn to be a more effective communicator and organize his/her ideas for effective and efficient oral communication. (Previously SPE 101.)

CMST 103
Workplace Communication . . . . . 3.0 Credits
Students in the workforce will be able to develop a toolbox of communication strategies and techniques. These tools include interviewing, customer service, cultural diversity, and resolving conflicts topics. No prerequisite required. (Previously SPE 103.)

CMST 108
Voice and Articulation . . . . . 3.0 Credits
An introduction to problems of pronunciation and enunciation. Through voice and articulation techniques and the use of the international phonetic alphabet, the student gains basic knowledge of phonetics and anatomy of speech. Individual attention is given to minor speech problems. (Previously SPE 108.)

CMST 110
Communication Behavior [C] . . . . . 3.0 Credits
An introduction to the basic elements that impact our communication with each other. The course is designed to illustrate to the student the reasons for communication failures in two-party and small group situations. Among other areas, active listening, conflict communication, self-esteem, and assertiveness will be covered. (Previously SPE 110.)

CMST 141
Debate I . . . . . 2.0 Credits
Provides investigation and practice in oral problem-solving through debate format and impromptu speaking. Includes principles of argumentation and analysis of propositions; use of tests of evidence, reasoning, and logic; detection of fallacies, structure of arguments, and methods of refutation and rebuttal. The student is expected to attend a minimum of two debate tournaments. CMST 101 or equivalent recommended. (Previously SPE 141.)

CMST 142
Debate II . . . . . 2.0 Credits
Provides investigation and practice in oral problem-solving through debate format and persuasive speaking. Includes principles of argumentation and analysis of propositions; use of tests of evidence, reasoning, and logic; detection of fallacies, structure of arguments, and methods of refutation and rebuttal. The student is expected to attend a minimum of two debate tournaments. CMST 101 or equivalent recommended. (Previously SPE 142.)

CMST 143
Debate III. . . . . 2.0 Credits
Provides investigation and practice in oral problem-solving through debate format and extemporaneous speaking. Includes principles of argumentation and analysis of propositions; use of tests of evidence, reasoning, and logic; detection of fallacies, structure of arguments, and methods of refutation and rebuttal. The student is expected to attend a minimum of two debate tournaments. CMST 101 or equivalent recommended. (Previously SPE 143.)

CMST 221
Communication Skills for Conflict Resolution [H] . . . . . 5.0 Credits
This course is highly recommended for those majoring in a number of disciplines including Business Administration, Human Resources, Human Services, Criminal Justice, Pre-Law, Psychology, and Communications. Many employers today are looking for people skilled in dispute resolution techniques. Interpersonal dispute in the workplace is the major reason for termination of employees. In this active and thought-provoking class, students will study and develop communication and dispute resolution skills through role-play and practicing the mediation process. The class is designed to develop communication skills that promote active and constructive problem-solving and dispute resolution in both personal and work relationships. (Previously SPE 220.)

CMST 240
Leadership Development . . . . . 5.0 Credits
A study in theory and practice to develop individual leadership skills for the students' personal, professional, and academic lives. Includes substantial experiential learning opportunities to practice leadership in action. Prerequisite: ENGL& 101 or instructor permission. (Previously SPE 240.)

CMST 241
Applied Leadership I . . . . . 2.0 Credits
This course will explore leadership skills, concepts, and theories as it relates to student involvement on campus. Prerequisite: instructor's permission. (Previously SPE 241.)

CMST 242
Applied Leadership II . . . . . 2.0 Credits
A continuation of CMST 241, this course will explore leadership skills, concepts, and theories as it relates to student involvement on campus. Prerequisite: instructor's permission. (Previously SPE 242.)

CMST 243
Applied Leadership III . . . . . 2.0 Credits
A continuation of CMST 242, this course will explore leadership skills, concepts, and theories as it relates to student involvement on campus. Prerequisite: instructor's permission. (Previously SPE 243.)

CMST 246
Oral Interpretation [H] . . . . . 5.0 Credits
Students are taught to use their voices more effectively for character interpretation and presentation. Demonstrations, class exercises, and oral reading assignments are employed. (Previously SPE 246.)

CMST 254
Parl Procedures Workshop . . . . . .1.0 Credit
This course is open to members of the student government. The student will receive instruction in parliamentary procedure, and will practice the procedure at the meetings of the Student Senate. (Previously SPE 254.)

CMST 2541
Parl Procedures Workshop . . . . . .1.0 Credit
This course is open to members of the student government. The student will receive instruction in parliamentary procedure, and will practice the procedure at the meetings of the Student Senate. (Previously SPE 2541.)

CMST 256
Parl Procedures. . . . . .1.0 - 2.0 Credits
The theory and study of parliamentary procedures. (Previously SPE 253.)

CMST 260
Multicultural Communications [C]. . . . . 5.0 Credits
Multicultural Communications will teach the student culturally-sensitive methods of identifying basic problems involving communication failures across ethnic and racial settings. The course is designed to encourage participants to explore their own cultural identities in relationship to their cultures and those of others in order to improve the quality of their interpersonal communication skills. They will also learn to apply various multicultural approaches to behavior modification, racism, sexism, the valuing of cultural diversity, collaboration, and the move toward inherent pluralism. Prerequisite: ENGL& 101. (Previously SPE 260.)

Communication Studies Common Course

CMST& 102
Intro to Mass Media . . . . . 5.0 Credits
This course offers an overview of the development and current function and effects of the mass media in America and in the world. Media to be considered include: books, magazines, newspapers, motion pictures, radio, TV, and recorded music. (Previously JOR 100.)

CMST& 210
Interpersonal Communication[C] . . . . . 5.0 Credits
This course is recommended for students seeking to improve their communication with friends, family, and co-workers. It is designed to heighten the student's awareness of personality styles and communication behaviors, and their respective impact on interpersonal and group communication. Credit not granted for both CMST 110 and CMST& 210. (Previously SPE 111.)

CMST& 220
Public Speaking [C] . . . . . 5.0 Credits
This is a basic course in speech that expands beyond the three-credit requirement for an AA degree. The goal of this course is to introduce, practice, and become comfortable speaking in front of people in the workplace and in the community. This course is recommended for students with no previous speech experience. Students are taught different forms of public speaking. The student will learn to be a more effective communicator and organize his/her ideas for effective and efficient oral communication (Previously SPE 102.)

Community Education

CSRE 002
Traffic Control . . . . . .0.0 Credit
Columbia Basin College offers the Evergreen Flagger Training Certification program which is the most recognized course for Flagger Training for Washington state. This flagger card is accepted in Oregon and Idaho as well. The handbook and instructor's manual are constantly updated and contains all the timely information and requirements. Class will be held at the Columbia Basin College Pasco campus, 8:30am-4pm. See the program website for location on campus. Please pre-register for class.

Computer Applications

CA 100
Introduction to Microcomputers . . . . . 4.0 Credits
Introduces hardware and software concepts, operating systems and/or interface systems, Internet access, basic word processing, and spreadsheet software through hands-on experience. Recommended: keyboarding experience or AOT 101 taken concurrently.

CA 103
Presentations Graphics Applications . . . . . 2.0 Credits
Introduces the fundamentals of Microsoft PowerPoint. Students will learn how to create and modify a slide presentation, insert clip art, add slide transition effects, as well as more advanced operations such as creating graphic objects. Preparation for Microsoft Office User Specialist, Microsoft PowerPoint Expert Certification. Prerequisite: CA 100.

CA 124
Intermediate Spreadsheet Applications . . . . . 2.0 Credits
Develops employable application skills using a spreadsheet software, currently Excel. Emphasizes creation and design of spreadsheets including formulas, projections, charting, and lists as needed for effective presentations in the business/office environment. Preparation for Microsoft Office User Specialist, Microsoft Excel Certification. Prerequisites: CA 100 and eligibility for MATH 106.

CA 125
Database Applications . . . . . 2.0 Credits
Develops employable application skills using a database software, currently Microsoft Access. Emphasis is on planning and creating the structure, the data file, queries for retrieval and interpretation of data, and the forms and reports needed for effective presentations in a business/office environment. Prerequisite: CA 100.

CA 172
Word Processing . . . . . 5.0 Credits
Develops employable word processing skills and implements effective application in a business environment using a word processing software, currently Microsoft Word. Topics covered include all major functions of Word, including margins, tabs, tables, columns, document enhancement, graphics, styles, outline, tables of contents, and templates. Preparation for Microsoft Office User Certification. Specialist or Expert level. Prerequisites: CA 100 required and keyboarding recommended.

Computer Science

CS 101
Introduction to Computers and Information Technology . . . 5.0 Credits
CS 101 is a five-credit introductory class designed to meet the needs of all students as defined in CBC's "Using Information Technology & Tools Student Learning Outcome." The class emphasizes the cognitive aspects of dealing with Information Technology (IT): evaluating information, learning practical IT skills, solving problems, and dealing with information related issues such as privacy, security, ethics, etc. Students will also learn computer basics, using Windows, Word, Excel, PowerPoint, email, and Internet skills to locate, present, and report information. Prerequisite: there is no prerequisite for the class.

CS 102
Visual Basic 1 [Q/SR] . . . . . 5.0 Credits
This course is an introduction to programming using Visual Basic.NET. It is designed for those with little or no programming experience. Topics include: program development cycle, fundamentals of programming in Visual Basic, decisions, repetitions, controls, functions, and procedures. Prerequisite: MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 106
Database Systems . . . . . 5.0 Credits
This is a beginning database course in which the student will create, modify, and implement relational databases using Microsoft Access. Topics include: tables, queries, forms, reports, sharing information with other programs, data access pages, advanced queries, managing database objects, and creating macros and switchboards. Prerequisite: CS 101. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 107
Intermediate Word Processing . . . . . 2.0 Credits
The student will learn to create documents using the current version of Microsoft Word. Students will learn the principles of word processing to produce and revise a variety of business documents including brochures, flyers, and memoranda. These documents will include tables, graphics, and custom formatting to effectively convey written information. Prerequisite: CS 101.

CS 108
Intermediate Spreadsheets . . . . . 2.0 Credits
The student will learn to develop spreadsheets using the current version of Microsoft Excel. Students will learn how to use the principles of spreadsheet applications to solve a variety of financial, marketing, manufacturing, and business problems. This course will include hands-on instruction regarding how to use formulas to analyze data and generate documents using charts and graphs focusing on appearance and effectiveness of conveying information. Prerequisite: CS 101.

CS 109
PC Hardware 1 . . . . . 5.0 Credits
This is the first course in a two-course series designed to provide the knowledge, skills, and abilities essential for a successful computer service technician as defined by experts from companies across the industry. Hardware topics include: power supply, CPUs, and motherboards. Other topics include: DOS Operating System, number systems, working safely and professionally, and the customer relations skills necessary in the industry. Prerequisite: CS 101.

CS 110
Windows Operating Systems . . . . . 5.0 Credits
This is an introductory operating system course using Windows Vista. Topics include: operating system fundamentals, organizing disks, managing files, system maintenance, customizing computer systems, system backup, shortcuts, troubleshooting tools, system performance, computer safeguards, solving problems, and optimizing computer systems. Prerequisite: CS 101. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 113
Introduction to the Internet . . . . . 2.0 Credits
Effective use of the Internet is recognized as an important asset for professionals in virtually every area of work or study. The student will learn how to use the Internet in a productive way to access services, resources, and information. Prerequisite: computer experience.

CS 114
HTML (Internet Publishing 1) . . . . . 5.0 Credits
This course will provide students with the skills needed to create Web pages using XHTML. Students will learn how to include text, pictures, and hypertext links, as well as tables, forms, and frames. They will also learn how to create and manipulate image maps and animated GIFs. In addition, students will be exposed to the critical design concepts including: visual design, user interface design, designing for accessibility, and designing technically correct (valid) documents. Prerequisite: CS 101. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 115
JavaScript/CSS (Internet Publishing 2) . . . . . 5.0 Credits
This course will provide students with the skills needed to add JavaScript and Cascading Style Sheets to Web pages (all the way through, etc). JavaScript is the scripting language used for developing client-side applications for Web pages. It is used for creating dynamic, interactive content for otherwise static HTML pages. The student will learn the W3C/ECMA Document Object Model (DOM) and the methods required to add client-side error checking, dynamic images, rollover buttons, and dynamic menus, etc. The student will also learn how to control page layout and appearance of Web pages using CSS. Prerequisites: CS 102 and CS 114. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 122
PC Hardware 2 . . . . . 5.0 Credits
This is the second course in a two-course series designed to provide the knowledge, skills, and abilities essential for a successful computer service technician as defined by experts from companies across the industry. Students will learn how to troubleshoot and repair hardware problems, and install components. Hardware topics include: memory, I/O busses, removable and fixed drives, optical drives, graphics and sounds, and printers. Prerequisite: CS 109. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 150
Computer Security . . . . . 5.0 Credits
This class covers the basics of computer security. Students will learn about virus protection, installing security patches, using firewalls to protect networks, cryptography and Public Key Infrastructure (PKI), and legal issues. Prerequisites: CS 109 and CS 110, or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 162
C++2 [Q/SR] . . . . . 5.0 Credits
This is an intermediate C++ course that provides students an understanding of key object-oriented programming (OOP) theories and concepts, and how to create and manipulate objects in a GUI environment. Students will learn advanced features of C++ including: arrays, strings, file processing, classes, inheritance, composition, pointers, virtual functions, templates, and introduction to linked lists. Prerequisite: CS& 131. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 171
C# 1 . . . . . 5.0 Credits
This class is the first in a series of three in which the student will learn the C# programming language using Microsoft Visual Studio. Topics include: visual programming, visual studio, control structures, object-oriented programming, selection structure, repetition structure, methods, and classes. Prerequisite: MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 172
C# 2 . . . . . 5.0 Credits
This class is the second in a series of three in which the students will learn the C# programming language using Microsoft Visual Studio. Topics include: parameter passing, type conversion, arrays, user defined classes, methods, random-numbers, collections, graphs objects, mouse and keyboard events, string processing, sequential-access files, and streams. Prerequisite: CS 171. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 1952
Work-Based Learning 1 . . . . . .1.0 - 5.0 Credits
An internship course designed to provide a single contact point for quality technical support service and/or other computer-related service in a timely manner for college faculty, staff, administrators, or a local employer. It also provides practical experience for technical support students as an integral part of the overall academic program. This course is for academic credits only and non-paying. Students are required to work 55 hours to earn one credit hour. Prerequisite: CS student and instructor's permission.

CS 1953
Work-Based Learning 2 . . . . . .1.0 - 5.0 Credits
Required for Computer Science program students who receive on-the-job training on information systems or any computer-related assignments. Instructor's signature is required for registration. Includes components of job search skills/career management, written communication, and cultural diversity. Students are required to work 33 hours to earn one credit hour, and are paid by the employer. In addition, students must meet the requirements of job performance specified by the employer and learning objectives. Employers and the college cooperate in providing an educational experience relevant to the demands of today's work. Prerequisite: CS student, a job placement, and instructor's permission.

CS 202
Visual Basic 2 [Q/SR] . . . . . 5.0 Credits
This is an intermediate Visual Basic programming course using Microsoft Visual Basic.Net. Students will learn to write, design, and debug Windows applications using a variety of controls and events, procedures, functions, arrays, structures, files, classes, ADO.net, and calculations to solve problems. Class projects involve writing simple games and business applications. Prerequisite: CS 102. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 203
Digital Graphics & Design 1 . . . . . 5.0 Credits
This class teaches the student how to use PhotoShop. The focus is on both using the software and the elements of design as they specifically apply to online applications. The students will learn color theory, typography, using layers, compression, and the various file formats, and preparing images for use on the Web. Students will learn how to use basic PhotoShop tools, as well as filters, pen tool, shape tools, and the selection tools. Students will also learn advanced techniques such as converting between paths and selections, using masks to selectively apply filter or changes to an image, etc. Prerequisite: CS 101. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 206
Database Design . . . . . 5.0 Credits
An advanced course designed to help students understand concepts including: SQL, integrity constraints, relational database design, normalization, and physical database design. Students also gain hands-on experience using Microsoft. Prerequisites: CS 106, MATH 095 or MATH 098, and/or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 207
Word Implementation . . . . . 5.0 Credits
This class teaches application-specific skills that will enable students to effectively implement, support, and troubleshoot Microsoft Word within a corporate environment. There is a strong emphasis on the skills required for supporting users of Microsoft Word in a workgroup. This class is designed to help prepare students for the MOUS Word Expert Certification test. (Extra study and product experience are typically required to pass a certification exam). Prerequisite: AOT 172, or CS 107, or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 208
Advanced Spreadsheets . . . . . 5.0 Credits
An advanced spreadsheets course with topics including: integrating Excel with other Windows programs and the World Wide Web, working with multiple worksheets, data tables, and scenario management, using solver for complex problems, importing data into Excel, exchanging Excel with Visual Basic, and installation and troubleshooting user's problems. Prerequisite: AOT 124, or CS 108, or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 212
Visual Basic 3 . . . . . 5.0 Credits
This is an advanced Visual Basic programming course using Microsoft Visual Basic.Net. Students will learn to write, design, and debug Windows applications with essential data structures and databases with .Net interfaces. Students will also learn to use different types of programming models to fit the needs of customers. Class projects involve writing applications using inheritance, polymorphism, arrays, collections, multithreading, and data from various sources. Prerequisite: CS 202. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 213
Advanced Internet. . . . . 5.0 Credits
The current Internet applications such as Web browsers and email packages make it very easy to access and exchange information with other Internet users, without an in-depth understanding of what is actually happening. This class takes the student beyond simply using the Internet, to understanding its processes and mechanisms. This will allow the student to not only use the Internet more efficiently, but also give them the skills to troubleshoot problems, or avoid potential pitfalls from the outset. Students must know how to use basic Internet applications. Prerequisite: CS 101 or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 216
XML (Internet Publishing III) . . . . . 5.0 Credits
This course provides an introduction and practical experience with the Extensible Markup Language (XML) and its associated standards including: SGML, XSL, SXLT, XHTML, CSS, and other emerging standards, and mainstream electronic publishing technologies concerning page description languages, colors, and fonts. Students will learn to edit and debug XML documents, create a DTD, create a schema, and transform documents with XSLT. Students who have some exposure to a programming or scripting language will have an advantage, though programming skill is not required. Prerequisites: CS 115 or equivalent advanced HTML skills and MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 218
ASP.NET . . . . . 5.0 Credits
This course will prepare students to develop Web applications in the .NET arena. Students will learn to create Web Services sites using Microsoft's Visual Web Developer (VWD). Students will learn how to create a Web interface to a database and add/update/delete tables and records; create a masterpage to control site appearance and layout, use navigation controls to build dynamic menus, and control access to the sites and individual pages using different forms of authentication. Prerequisites: CS 102 and CS 114, or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 219
Active Server Pages (ASP) Internet Publishing. . . . . 5.0 Credits
ASP is a technology used for building interactive Web pages. In this class, students will build server-side scripts using VBScript that dynamically create and modify XHTML pages and return those pages to the browser. Topics include: ASP architecture, ADP basics, creating custom response pages, working with query string and form collections, and building a database Web application. Prerequisites: CS 102, CS 106, and CS 114. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 221
SQL Server Administration . . . . . 5.0 Credits
This course provides students with the knowledge and skills to install, configure, administer, and troubleshoot Microsoft SQL Server client/server database management systems. It will help prepare students for the MCDBA Certificate. Prerequisites: CS 106 and MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 222
Novell . . . . . 5.0 Credits
This course is an introduction to Novell Netware. It provides students with basic knowledge about implementing NetWare and using its management tools. The course will contain information on setting up and managing network access for users, managing the file system, securing NDS and the file system, and server installation. Prerequisites: CS 109 and MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 223
Unix/Linux . . . . . 5.0 Credits
This course will prepare students to administer UNIX and Linux. This course covers topics related to: installation, configuration, troubleshooting, and optimization of a Linux Server. Students will learn to set up and maintain users, groups, and file systems. The students will learn how to use critical thinking and troubleshooting tools to troubleshoot the server, printers, and workstations. Prerequisite: CS 224, MATH 095 or MATH 098, or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 224
Networking Essentials . . . . . 5.0 Credits
Theory, design, installation, configuration, and management of computer networks. Focuses on local area network concepts with emphasis on configuring TCP/IP, subnetting, the ISO stack, interconnect devices, and physical media. Prerequisite: CS 109. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 225
SQL Server Programming . . . . . 5.0 Credits
This course provides students with the knowledge and skills to implement a database solution with Microsoft SQL Server client/server 2000 database management system. Prerequisites: CS 206 and MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 227
Windows Administration . . . . . 5.0 Credits
This course will prepare students for working with Microsoft Windows. The students will learn about installation, managing accounts, configuration, interactive Access, disk resource management, printing, performance tuning and optimization, and troubleshooting. This class will help to prepare students to pass one of the Windows exams. Prerequisites: CS 224 and MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 228
Windows Server . . . . . 5.0 Credits
This course will prepare students to work with Windows Server. This course covers topics related to installation, configuration, troubleshooting, and optimization of a Windows Server. The students will learn to set up and maintain users, groups, and file systems. The students will learn how to use critical thinking and troubleshooting tools to troubleshoot the server, printers, and workstations. This class will help to prepare students to pass one of the Windows exams. Prerequisites: CS 224 and MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 229
Webmaster . . . . . 5.0 Credits
In this course, the student will gain the knowledge and skills needed to design and manage an Intranet for an Internet website. Specifically, the student will learn how to set up and configure a web server and the applications needed to support it. Familiarity with building web pages and basic programming concepts are assumed. Prerequisite: CS 114, CS 228, and MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 230
Active Directory . . . . . 5.0 Credits
This course is designed to provide students with the knowledge and skills necessary to install, configure, and administer Microsoft Windows Active Directory. The course also focuses on implementing Group Policy and performing the Group Policy-related tasks that are required to centrally manage users and computers. Prerequisites: CS 228 and MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 231
Network Infrastructure . . . . . 5.0 Credits
This course will prepare students to install, manage, monitor, configure, and troubleshoot DNS, DHCP, Remote Access, Network Protocols, IP Routing, and WINS in a Windows network infrastructure. In addition, this class will also prepare students to manage, monitor, and troubleshoot Network Address Translation and Certificate Services. It also prepares the student to pass one of the MCSA/MCSE exams. Prerequisites: CS 228 and MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 232
Network Security . . . . . 5.0 Credits
This course will prepare students to design network security solutions. These solutions include analyzing business requirements, identifying security needs, and applying the security recommendations to assist in the control and monitoring of network service resources. Students will also learn how to use critical thinking and troubleshooting tools to troubleshoot security problems throughout the network. Prerequisites: CS 224, CS 228, and MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 233
UNIX Administration . . . . . 5.0 Credits
This course will prepare students to administer UNIX and Linux. This course covers topics related to installation, configuration, troubleshooting, and optimization of a Linux Server. Students will learn to set up and maintain users, groups, and file systems. Students will learn how to use critical thinking and troubleshooting tools to troubleshoot the server, printers, and workstations. Prerequisites: CS 223 and 224, or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 234
JAVA 2 . . . . . 5.0 Credits
This is an intermediate Java course. Students will learn to write Java applications and applets, which enhance information delivery on the Web. The topics covered include using menus, fonts, colors, images, shapes, file processing, and databases. Prerequisites: CS& 141 or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 235
JAVA 3 . . . . . 5.0 Credits
This is an advanced Java course. Students will learn to write various types of Java web applications and applets using essential data structures. Prerequisites: CS 234 or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 243
Web Animation . . . . . 5.0 Credits
This class covers the basics of 2D animation for use on the web. Students will learn Flash, a timeline-based 2D animation application. The class will introduce the Flash drawing tools, tweening, and cartoon animation techniques. Students will also be introduced to actionscript and create a simple game. Prerequisites: CS 203 and MATH 095 or MATH 098, or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 244
Digital Graphics and Design 2 . . . . . 5.0 Credits
This is the second in a series of classes that teach the student how to use PhotoShop. The students will learn color theory and the various models for storing and representing color. This theory will then be applied to improve or fix focus issues, color balance, and contrast. Students will learn how to use advanced PhotoShop tools and techniques to repair flaws, add or remove wrinkles, do selection by color, and use the liquefy filter. Prerequisites: CS 203. All prerequisites must be passed with a 2.0 or above before taking this class.

CS 260
Data Structures in C++ . . . . . 5.0 Credits
This course is the third in a series of three in which the students will learn the C++ programming language. Students will learn how to implement and use different types of data-structures. This will lead the students to create data-driven programs and algorithms. The students will learn more about linked lists, stacks, queues, binary trees, and binary search, recursion, and sorting. The course starts at a level that assumes a good working knowledge of C++. Prerequisite: CS 162 or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 261
Visual C++ . . . . . 5.0 Credits
A course in Windows programming with C++ and Visual C++ will help students to program using C++ Standard Template Libraries and Graphical User Interfaces and Multimedia. Students also learn to use Windows object-oriented development techniques for large applications. This course is intended for students who are already familiar with C++ language. Prerequisite: CS 162. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 262
Game Programming Design . . . . . 5.0 Credits
Helps students understand important fundamentals of how to develop game applications using object-oriented development techniques. Course projects involve developing, debugging, and optimizing games for multiple hardware platforms. Prerequisite: CS 162 or CS 172. All prerequisites must be passed with a 2.0 or better before taking this class.

CS 270
Data Structures in C# . . . . . 5.0 Credits
This class is the third in a series of three in which students learn the C# programming language in the .Net framework. The students will learn about how to implement and use different types of data-structures. This will lead the students to create data-driven programs and algorithms. The students will learn more about lists, arrays, stacks, queues, trees, searching, sorting, and Windows forms. The course starts at a level that assumes a good working knowledge of C#. Prerequisite: CS 172 or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class.

Computer Science Common Course

CS& 131

Computer Science I C++ [Q/SR]. . . . . 5.0 Credits

This class is the first in a series of three in which students learn the C++ programming language. C++ is an extension of C language, which includes both procedural and object-oriented programming. It is the basis for most PC based windows programs. Students will learn C++ keywords, control structures, functions, arrays, strings, and introduction to classes and objects. Prerequisite: MATH 095 or MATH 098. All prerequisites must be passed with a 2.0 or better before taking this class. (Previously CS 161.)

CS& 141

Computer Science I Java . . . . . 5.0 Credits

JAVA is an object oriented programming language that is widely used to enhance information delivery on the web. Students will learn how to write programs and applets using JAVA. Prerequisite: CS& 131 or instructor's permission. All prerequisites must be passed with a 2.0 or better before taking this class. (Previously CS 215.)

Contemporary Civilization

CC 201

Contemporary Civilization I [H] . . . . . 5.0 Credits

Introduces students to a range of issues concerning the kinds of communities -political, social moral, and religious- that human beings construct and the values that inform and define such communities. The course is intended to prepare students to become active and informed citizens. The course requires students to read text in various traditions of arguments: African, Asian, Middle Eastern, European, and American traditions developed from biblical and classical sources. The course also asks students to construct arguments of their own, both in speech and in writing, about some of the explicit and implicit issues these texts raise.

CC 202

Contemporary Civilization II [H] . . . . . 5.0 Credits

Introduce students to a range of issues concerning the kinds of communities -political, social moral, and religious- that human beings construct and the values that inform and define such communities The course is intended to prepare students to become active and informed citizens. The course requires students to read text in various traditions of arguments: African, Asian, Middle Eastern, European, and American traditions developed from biblical and classical sources. The course also asks students to construct arguments of their own, both in speech and in writing, about some of the explicit and implicit issues these texts raise.

CC 203

Contemporary Civilization III [H] . . . . . 5.0 Credits

Introduce students to a range of issues concerning the kinds of communities -political, social moral and religious- that human beings construct and the values that inform and define such communities The course is intended to prepare students to become active and informed citizens. The course requires students to read text in various traditions of arguments: African, Asian, Middle Eastern, European, and American traditions developed from biblical and classical sources. The course also asks students to construct arguments of their own, both in speech and in writing, about some of the explicit and implicit issues these texts raise.

Criminal Justice and Forensics

CJ 095

Orientation to Correctional Careers . . . . . .1.0 Credit

Introduce the student to a basic understanding of how important communicating professionally is to the correctional environment. The course design is to introduce the student to four areas that are identified as crucial when working in the corrections profession. The course provides a basic understanding of how important observation, listening, and verbal and written communications are for correctional employees and the correctional facility smooth operations. The course also provides a basic understanding of being able to communicate clearly and professionally with your co-workers. Prerequisite: a criminal background check acceptable to the Department of Corrections.

CJ 096

Communications in Corrections . . . . . .1.0 Credit

Introduce the student to a basic understanding of how important communicating professionally is to the correctional environment. The course design is to introduce the student to four areas that are identified as crucial when working in the corrections profession. The course provides a basic understanding of how important observation, listening, and verbal and written communications are for correctional employees and the correctional facility smooth operations. The course also provides a basic understanding of being able to communicate clearly and professionally with your co-workers. Prerequisite: a criminal background check acceptable to the Department of Corrections.

CJ 097

Supervision/Human Relations in Corrections . . . . . .1.0 Credit

Introduce the student to the diverse work force and offender population and helps them understand the very basics of supervising offenders in a correctional environment. The course provides a basic understanding of how a corrections employee deals with the day to day duties in managing a diverse ethnic offender population, while being a positive and professional team member. Prerequisite: a criminal background check acceptable to the Department of Corrections.

CJ 134

Organization/Administration . . . . . 5.0 Credits

The principles of organization and administration of the modern law enforcement agency. Principles of management and operation of a law enforcement agency.

CJ 135

Traffic Control . . . . . 5.0 Credits

A study of the history of traffic control, routine, and emergency traffic procedures. Fundamentals of traffic accident investigation will be covered.

CJ 136

Delinquent Behavior/Youth . . . . . 3.0 Credits

A study of the causes of juvenile delinquency, Washington law concerning juvenile problems, the role of law enforcement agencies, and juvenile delinquency.

CJ 137

Constitutional Law . . . . . 5.0 Credits

A study of the provisions of the U.S. Constitution with primary emphasis on the Bill of Rights and the 14th Amendment and the application to law enforcement and the Criminal Justice System.

CJ 1972

Internship . . . . . .1.0 - 5.0 Credits

A supervised, individual learning experience for the student in the law enforcement environment. The experience shall consist of a minimum of six hours per week. The experience assignment will be at the discretion of the agency where the student is placed. The agency will make an effort to give the student a well-rounded experience. The assignment may be terminated by either party at any time. Instructor's permission required.

CJ 198
Special Projects. . . . . .1.0 - 3.0 Credits
A supervised, individual learning experience for the student in the law enforcement environment. The experience shall consist of a minimum of six hours per week. The experience assignment will be for the student to conduct a research project that will benefit the student in the criminal justice field. Instructor's permission required.

CJ 222
Alcohol/Drug Pharmacology/Physiology . . . . . 3.0 Credits
Physical responses of the human body to alcohol and other drugs, current research findings, basic information, and terminology essential for working in the criminal justice field.

CJ 232
Criminal Investigation . . . . . 5.0 Credits
The fundamentals of criminal investigation, criminalistics, and investigative techniques. An overview of investigations of crimes against people and property, and the role of science in crime detection. Prerequisite: CJ& 101 or instructor's permission.

CJ 234
Criminal Evidence . . . . . 3.0 Credits
Rules of evidence affecting the admissibility of evidence into court in criminal cases as they pertain to the law enforcement officer or other members of the criminal justice system. Prerequisite: CJ& 101 or instructor's permission.

CJ 290
Basic Reserve Officer Law Enforcement Academy . . . . .1.0 - 9.0 Credits
An overview of the fundamental subjects associated with the position of Reserve Law Enforcement Officer. Washington Criminal Justice Training Commission approved. A law enforcement agency sponsorship required.

Criminal Justice and Forensics Common Course

CJ& 101
Introduction to Criminal Justice . . . . . 3.0 Credits
An overview of the criminal justice system in America. A look at philosophy, history, Constitutional limitations, agencies, and processes within the criminal justice system. A study of local, state, and federal careers in the criminal justice field. (Previously CJ 131.)

CJ& 110
Criminal Law . . . . . 5.0 Credits
A study of the classification of crimes, criminal responsibility, and the elements of a crime. Determining the difference between crimes against property, crimes against the public, and crimes against a person. The study of the constitutional defenses, searches, seizures, and arrest. An overview of the pretrial process, the trial, sentencing, and appeals. (Previously CJ 132.)

CJ& 240
Intro to Forensic Science . . . . . 5.0 Credits
An overview of the role of the forensic scientist in criminal investigation. Course subject matter will focus upon the crime laboratory, instruments, and methods used by the forensic scientist in analyzing criminal evidence. Specialized careers in forensic science will be reviewed. (Previously CJ 242.)

Culinary and Food Services

CUL 101
Culinary/Food Services I . . . . . 8.0 Credits
The Culinary and Food Services program is designed to prepare students for employment as entry-level culinary professionals in the food industry and/or preparation for further education in a degree or certificate program in the fields of food sciences or hospitality. The classroom is set up as a functioning restaurant and catering business. Students will gain valuable hands-on experience by participating in all operational aspects of running a restaurant and catering business. Students will work in teams to develop competencies in each of seven different operational/production areas: bakery, pantry, soups/sauces, line, dish room/kitchen sanitation, dining room and kitchen management. This class is a special Tech Prep course in partnership with Tri-Tech.

CUL 102
Culinary/Food Services II . . . . . 8.0 Credits
A continuation of CUL 101. Students will continue to work in teams to develop competencies in each of seven different operational/production areas: bakery, pantry, soups/sauces, line, dish room/kitchen sanitation, dining room and kitchen management. This class is a special Tech Prep course in partnership with Tri-Tech.

CUL 103
Culinary/Food Services III . . . . . 8.0 Credits
A continuation of CUL 102. Students will continue to work in teams to develop competencies in each of seven different operational/production areas: bakery, pantry, soups/sauces, line, dish room/kitchen sanitation, dining room and kitchen management. This class is a special Tech Prep course in partnership with Tri-Tech.

Dental Assisting

DEN 101
Dental Assisting I . . . . . 8.0 Credits
Students will learn oral anatomy, infection control, oral pathology, preventative dentistry, and radiography (X-Ray). Other course objectives include chairside procedures, impressions, study models, safety standards and regulations, observation, and internships. Course will follow Tri-Tech Skills Center calendar. This class is a special Tech Prep course in partnership with Tri-Tech.

DEN 102
Dental Assisting II . . . . . 8.0 Credits
Students will learn oral anatomy, infection control, oral pathology, preventative dentistry, and radiography (X-Ray). Other course objectives include chairside procedures, impressions, study models, safety standards and regulations, observation, and internships. Course will follow Tri-Tech Skills Center calendar. This class is a special Tech Prep course in partnership with Tri-Tech.

DEN 103
Dental Assisting III. . . . . 8.0 Credits
Students will learn oral anatomy, infection control, oral pathology, preventative dentistry, and radiography (X-Ray). Other course objectives include chairside procedures, impressions, study models, safety standards and regulations, observation, and internships. Course will follow Tri-Tech Skills Center calendar. This class is a special Tech Prep course in partnership with Tri-Tech.

Dental Hygiene

DHYG 110
Dental Anatomy . . . . . .1.0 Credit
This course is an introduction to the anatomy of crown and root structures of the teeth. Builds on basic sciences, prepares for the study of additional dental sciences, and how these structures relate to the clinical practice of dental hygiene. Prerequisite: enrollment in Columbia Basin College Dental Hygiene program.

DHYG 111
Histology/Embryology . . . . . .1.0 Credit
This course is an introduction to the embryology and histology of the head and neck region. Builds on basic sciences, prepares for the study of additional dental sciences, and how these structures relate to the clinical practice of dental hygiene. Prerequisite: enrollment in Columbia Basin College Dental Hygiene program.

DHYG 112
Oral Radiology I . . . . . .1.0 Credit
First in a series on oral radiology. Focuses on radiation physics, biology, protection, recognition of anatomical landmarks, and evidence of pathologies. Prerequisites: enrollment in the Columbia Basin College Dental Hygiene program and concurrent enrollment in DHYG 1121.

DHYG 1121
Oral Radiology I Lab . . . . . .1.0 Credit
First in a series of oral radiology labs. Application of protection, film placement, proper exposure, and developing techniques are introduced. Identification of oral structures present in radiographs is introduced. Prerequisites: enrollment in the Columbia Basin College Dental Hygiene program and current enrollment in DHYG 112.

DHYG 113
Clinical Dental Hygiene Techniques I . . . . . 2.0 Credits
Introduces basic principles used in the practice of dental hygiene, including infection control, patient assessment, and treatment. Prerequisites: enrollment in the Columbia Basin College Dental Hygiene program and concurrent enrollment in DHYG 1131.

DHYG 1131
Clinical Dental Hygiene Techniques I Lab . . . . . 3.0 Credits
Introduces basic skills used in the practice of dental hygiene, including infection control, patient assessment, and treatment. Skills are practiced in a pre-clinical setting on dental models and student partners. Prerequisites: enrollment in the Columbia Basin College Dental Hygiene program and concurrent enrollment in DHYG 113.

DHYG 114
Dental Health Education . . . . . .1.0 Credit
Covers the principles and practices of prevention and control of dental disease with emphasis on plaque control, motivation, and personal and patient oral hygiene education and techniques. Prerequisite: enrollment in the Columbia Basin College Dental Hygiene program.

DHYG 115
Dental Materials . . . . . .1.0 Credit
First in a series dealing with restorative dentistry. Presents the history, composition, chemical and physical properties, and use of materials commonly utilized in the dental laboratory and dental operatory. Prerequisite: concurrent enrollment in DHYG 1151. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 1151
Dental Materials Lab . . . . . .1.0 Credit
First in series of lab courses dealing with restorative dentistry skills as practiced by a dental hygienist in the state of Washington. Provides laboratory experience in performing common dental laboratory procedures and prepares for the clinical practice of expanded functions. Prerequisite: concurrent enrollment in DHYG 115. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 116
Head and Neck Anatomy . . . . . 2.0 Credits
Study of the head and neck regions and oral anatomy. Identification of nerves, bones, and muscles associated with the head, neck, and oral regions. Prerequisite: enrollment in the Columbia Basin College Dental Hygiene program.

DHYG 120
Medical Emergencies in Dentistry . . . . . 2.0 Credits
This course focuses on the study of commonly encountered medical emergencies in the dental setting that may involve systemic diseases and the etiology, presentation, treatment, and effect of dental treatment on patients who may present these diseases and other medical conditions. The associated emergency procedures required to treat medical emergencies in the dental setting will be covered as well as Cardio Pulmonary Resuscitation, the use of an AED, and First Aid and safety training to meet the standards required for Health Sciences Division students. Prerequisite: enrollment in the Columbia Basin College Dental Hygiene program.

DHYG 121
General Pathology . . . . . .1.0 Credit
This course focuses on the study of commonly encountered systemic diseases: etiology, presentation, treatmen,t and effect on dental treatment. Emphasizes the principles of inflammation, immunology, healing, and repair. Prerequisites: acceptance and enrollment in the Columbia Basin College Dental Hygiene program.

DHYG 122
Oral Radiology II . . . . . .1.0 Credit
Second in a series of oral radiology. Focuses on radiographic quality, techniques, film processing, mounting, and interpretation of errors. Prerequisite: concurrent enrollment in DHYG 1221. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 1221
Oral Radiology II Lab . . . . . .1.0 Credit
Practices oral radiology skill on dental manikin and student partner in a clinical setting. Application of knowledge, radiographic technique, and evaluation of films for diagnostic effectiveness is the focus. Prerequisite: concurrent enrollment in DHYG 122. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 123
Clinical Dental Hygiene Techniques II . . . . . .1.0 Credit
Second in a series of clinical dental hygiene techniques. Focuses on dental hygiene treatment planning, effective communication, and preventative client education. Prerequisite: concurrent enrollment in DHYG 1231. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 1231
Clinical Dental Hygiene Techniques II Lab . . . . . 4.0 Credits
Second in a series on clinical practice of dental hygiene. Basic skills of dental hygiene practice, including patient assessment, instrumentation, and treatment are introduced and practiced on manikins, student partners, and clients in a clinical setting. Prerequisite: concurrent enrollment in DHYG 123. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 125
Restorative Dentistry I . . . . . .1.0 Credit
Second in a series of courses dealing with restorative dentistry. Presents the composition, chemical and physical properties, and use of materials commonly utilized in the dental laboratory and dental operatory. Prerequisite: concurrent enrollment in DHYG 1251. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 1251
Restorative Dentistry I Lab . . . . . .1.0 Credit
Second in a series dealing with restorative dentistry. Provides laboratory experience in performing common dental laboratory procedures and prepares for the clinical practice of expanded functions including amalgam manipulation techniques. Prerequisite: concurrent enrollment in DHYG 125. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 126
Pain Control In Dentistry. . . . . 2.0 Credits
Covers the pharmacology and physiology of both local anesthetic agents and nitrous oxide sedation. Application of knowledge of the anatomy of nerves, physiology of nerve conduction and the transmission of pain impulse, and the use of local anesthetics and Nitrous Oxide for pain control in the delivery of dental procedures. Discussion and application of knowledge, prevention, and management of associated possible emergencies is included. Practice of local anesthetics and administration of Nitrous Oxide sedation is practiced on student partners. Prerequisite: concurrent enrollment in DHYG 1261. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 1261
Pain Control In Dentistry Lab . . . . . 2.0 Credits
Includes effective techniques in the delivery of anesthetic to the oral cavity, the appropriate selection of anesthetic, and the safe and effective delivery of Nitrous Oxide sedation as part of the expanded functions for dental hygienists in the state of Washington. Skills are practiced on student partners. Prerequisite: concurrent enrollment in DHYG 126. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 127
Pharmacology . . . . . 2.0 Credits
Focuses on pharmacology as it affects the clinical practice of dentistry. Emphasizes drugs commonly used in medicine that affect dental treatment. Also emphasizes drugs of choice for treatment of common systemic and oral diseases, and for emergency treatment; effects, administration, and toxicology. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 131
Oral Pathology . . . . . 2.0 Credits
Pathology for dental hygienist. Focuses on the study of commonly encountered oral diseases; etiology, presentation, recognition, treatment, and effect on dental treatment. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 132
Periodontics I . . . . . 2.0 Credits
First in a series on periodontology. Focuses on the study of the healthy periodontal tissues, and the factors, recognition, and classes of periodontal disease. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 134
Clinical Dental Hygiene Techniques III . . . . . .1.0 Credit
Third in a series on dental hygiene techniques. Focuses on expanding dental hygiene skills. Prerequisite: concurrent enrollment in DHYG 1341. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 1341
Clinical Dental Hygiene Techniques III Lab . . . . . 4.0 Credits
Third in a series on clinical practice of dental hygiene. Basic skills of dental hygiene practice, including client assessment, instrumentation, and treatment are practiced on clients in a clinical setting. Expands on the procedures and techniques introduced in previous clinical courses. Prerequisite: concurrent enrollment in DHYG 134. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 135
Restorative Dentistry II . . . . . .1.0 Credit
Third in a series of courses dealing with restorative dentistry skills. Includes application of dental materials, amalgam restoration, and composite restoration materials. Prerequisite: concurrent enrollment in DHYG 1351. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 1351
Restorative Dentistry II Lab. . . . . 2.0 Credits
Third in a series of courses dealing with restorative dentistry skills. Preclinical laboratory exercises in the expanded functions of the placement and finishing of amalgam and composite restoration on model teeth. Includes application of knowledge of dental materials, tooth anatomy, and clinical skills. Prerequisite: concurrent enrollment in DHYG 135. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 136
Patient Management. . . . . 2.0 Credits
This course focuses on the characteristics of individual patients, motivation, and interpersonal communication. Students are exposed to diverse cultures and their attitudes and approaches to medical and dental care. Additionally, treatment modifications for the young, geriatric, medically or mentally compromised patient, and those with transitional special needs are presented. Prerequisite: enrollment in the Columbia Basin College Dental Hygiene program. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 144
Clinical Dental Hygiene Techniques IV . . . . . .1.0 Credit
Fourth in a series of clinical dental hygiene technique courses. Provides an expanded learning experience with application of knowledge of oral findings and associated clinical application. Prerequisite: concurrent enrollment in DHYG 1441. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 1441
Clinical Dental Hygiene Techniques IV Lab . . . . . 5.0 Credits
Fourth in a series of clinical dental hygiene technique lab courses. Focuses on expanding dental instrumentation skills and patient care in the clinical setting. Prerequisite: concurrent enrollment in DHYG 144. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 211
Nutrition in Dentistry. . . . . .1.0 Credit
The information in this class recalls and reviews the basic principles of nutrition and develops an understanding of their relationship to oral health. Emphasis is placed on the assessment of patient nutritional status and chairside nutritional counseling for optimal oral health. The class builds on basic sciences and dental sciences and prepares for the clinical practice of dental hygiene. Prerequisites: successful completion of the first year of the Columbia Basin College Dental Hygiene program and current enrollment in the second year of the program.

DHYG 212
Advance Clinical Topics . . . . . .1.0 Credit
Specific advanced skills in clinical dental hygiene for periodontally involved and implant patients are discussed and explained. Prepares for clinical dental hygiene practice application. Prerequisite: concurrent enrollment in DHYG 2121. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 214
Clinical Dental Hygiene Techniques V. . . . . .1.0 Credit
Fifth in a series of clinical dental hygiene technique courses. Provides an expanded learning experience through discussion, case presentation, and study of clinical cases. Prerequisite: concurrent enrollment in DHYG 2141. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 2141
Clinical Dental Hygiene Techniques V Lab . . . . . 6.0 Credits
Fifth in a series of clinical dental hygiene technique lab courses. Provides progressive clinical experience, application of knowledge and skills; including restorative care for clinic patients. Prerequisite: concurrent enrollment in DHYG 214. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 215
Ethics and Jurisprudence, Practice Management . . . . . 2.0 Credits
Explores the fundamental factors necessary to practice within the ethical and legal framework of the American Dental Hygiene Association Code of Ethics and the Washington State Dental Practice Act. Focuses on the history of the dental profession, dental specialties, professional dental associations, practice management, career considerations, and stress management relating to dental hygiene practice. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 221
Community Oral Health I. . . . . 2.0 Credits
Examines the principles of community health, including assessment indices planning, implementation, and evaluation of healthcare, with an emphasis on oral health. Builds on knowledge of ethics, basic and dental sciences, and clinical dental hygiene practice. Provides the knowledge to function in a community oral health setting. Prerequisite: concurrent enrollment in DHYG 2211. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 2211
Community Oral Health I Lab . . . . . 2.0 Credits
Supervised clinical practice of dental hygiene students in a variety of community health settings. Prerequisite: concurrent enrollment in DHYG 221. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 222
Periodontics II . . . . . 2.0 Credits
Second in a series on periodontology. Provides background knowledge of the treatment of periodontal disease, including concepts concerning treatment planning and evaluation of treatment options and outcomes. Includes case presentation. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 224
Clinical Dental Hygiene Techniques VI . . . . . .1.0 Credit
Sixth in a series of clinical dental hygiene technique courses. Provides a learning experience for periodontally involved patients and the Dental Hygiene diagnosis and process of care. Case studies and advanced instrumentation techniques will be taught as well as clinical application of new skills and concepts for more difficult AAP patients. Restorative care will be added to the clinical portion of the class that is supported by this lecture class. Discussion of restorative care for patients will also be included. Prerequisites: Current enrollment in the Columbia Basin College Dental Hygiene program and successful completion of DHYG 214 and DHYG 2141.

DHYG 2241
Clinical Dental Hygiene Techniques VI Lab . . . . . 6.0 Credits
Sixth in series on clinical practice in dental hygiene. Provides comprehensive clinical experience in all phases of dental hygiene practice for patient care. Expands on the procedures and techniques introduced in previous clinical courses; includes restorative care for clinical patients. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 234
Clinical Dental Hygiene Techniques VII . . . . . .1.0 Credit
Seventh in a series of clinical dental hygiene courses. Provides an expanded learning experience through discussion and exploration of clinical technique practices. Prerequisite: concurrent enrollment in DHYG 2341. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

DHYG 2341
Clinical Dental Hygiene Techniques VII Lab . . . . . 8.0 Credits
Seventh in a series of clinical dental hygiene lab courses. Provides an expanded learning experience of dental hygiene care through performing clinical dental hygiene techniques already learned for various clients and the clinical application of new concepts and skills including critical evaluation of dental hygiene care and restorative treatment. Prerequisites: enrollment in the Columbia Basin College Dental Hygiene program and DHYG 234.

DHYG 246
Restorative Dentistry III . . . . . .1.0 Credit
Third in a series of courses dealing with restorative dentistry skills as practiced by a dental hygienist in the state of Washington. Focuses on Class II amalgam and composite restorations and cusp build-ups. Based on dental sciences and previous laboratory courses in dental materials. Prerequisites: enrollment in the Columbia Basin College Dental Hygiene program and completion of DHYG 135.

DHYG 2461
Restorative Dentistry III Lab . . . . . 2.0 Credits
Third in a series of courses dealing with restorative dentistry skills as practiced by a dental hygienist in the state of Washington. Laboratory exercises in the placement and finishing of amalgam and composite restorations on prepared model teeth.

Diagnostic Ultrasound Technology

DUTEC 101
Concepts of Patient Care . . . . . 3.0 Credits
Develops patient care and communication skills required in sonography. Students discuss legal, ethical, and psychological aspects of patient care as well as professional issues and concerns. Prerequisite: acceptance into program.

DUTEC 105
Pathophysiology I . . . . . 3.0 Credits
Introduces pathogenesis the sequence of events in the development of a disease. Students focus on pathological conditions affecting the abdomen and identifiable with diagnostic imaging techniques. An extensive review of normal physiology is also presented. Prerequisites: BIOL& 241/BIOL& 241L, BIOL& 242/BIOL& 242L, and acceptance into program or permission of program chair.

DUTEC 106
Pathophysiology II. . . . . 3.0 Credits
Continues Pathophysiology I, with focus on the disease process and disease states relevant to obstetrics, gynecology, and neurology. Prerequisites: DUTEC 105 and acceptance into program or permission of program chair.

DUTEC 107
Human Cross-Sectional Anatomy . . . . . 7.0 Credits
Covers the human anatomy from the cross-sectional perspective in longitudinal, transverse, coronal, and oblique planes. Students analyze correlations with clinical diagnostic imaging techniques. Prerequisite: acceptance into program or permission of program chair.

DUTEC 110
Ultrasound I: Abdominal Scanning & Techniques . . . . . 4.0 Credits
Presents basic concepts and terminology, as well as scanning protocols for the ultrasound examination of the abdomen. Topics include both normal and pathological states. Prerequisite: acceptance into program or permission of program chair.

DUTEC 112
Pathophysiology III . . . . . 3.0 Credits
Continues Pathophysiology II, emphasizing the physiology and pathology of the cardiovascular and the peripheral vascular system. Prerequisites: DUTEC 105, DUTEC 106, and acceptance into program or permission of program chair.

DUTEC 113
Pathophysiology IV . . . . . 3.0 Credits
Continues Pathophysiology III, emphasizing the physiology and the pathology of the cardiovascular and cerebral vascular system. Prerequisites: DUTEC 105, DUTEC 106, DUTEC 112, and acceptance into program or permission of program chair.

DUTEC 120
Ultrasound II: Obstetrics & Gynecological Techniques . . . . 5.0 Credits
Presents current theory and scanning techniques for medical sonographers, focusing on obstetrics and gynecology procedures and pathologies. Prerequisite: acceptance into program or permission of program chair.

DUTEC 130
Ultrasound III: Small Parts/Intraoperative Techniques . . . . 3.0 Credits
Presents the anatomy and pathophysiology of small human body parts. Intraoperative scanning focuses on surgical procedures. Prerequisite: acceptance into program or permission of program chair.

DUTEC 135
Ultrasound Equipment I . . . . . 3.0 Credits
Introduces knobology and annotation for state-of-art diagnostic ultrasound equipment and prepares student for hands-on live scanning. Prerequisite: acceptance into program or permission of program chair.

DUTEC 145
Ultrasound Equipment II. . . . . 4.0 Credits
Introduces hands-on live scanning in cardiac, vascular, abdomen, and gynecological applications. Students prepare for hospital-based live scanning on patients. Prerequisite: acceptance into program or permission of program chair.

DUTEC 150
Basic Echocardiography . . . . . 3.0 Credits
Covers basic ultrasound protocols and scanning techniques of the heart. Students focus on anatomy, physiology, pathology, and echocardiographic pattern recognition. Prerequisite: acceptance into program or permission of program chair.

DUTEC 155
Ultrasound IV: Echocardiography . . . . . 3.0 Credits
Continues basic echocardiography. Students concentrate on Doppler echocardiographic techniques and congenital heart disease as relating to the practice of adult echocardiography. Prerequisite: acceptance into program or permission of program chair.

DUTEC 160
Ultrasound V: Peripheral Vascular Scanning Techniques . . . 3.0 Credits
Presents current theory and scanning techniques for medical sonographers. Students learn Doppler techniques used to diagnose peripheral vascular and cerebral vascular disease. Prerequisite: acceptance into program or permission of program chair.

DUTEC 165
Ultrasound Equipment III . . . . . 3.0 Credits
Provides hands-on ultrasound scanning experience in the student's clinical specialty area. Competency is required before beginning the clinical practicum. Prerequisite: acceptance into program or permission of program chair.

DUTEC 170
Ultrasound Physics & Instrumentation I . . . . . 3.0 Credits
Covers acoustical physics, including heat energy, light and sound, wave theory, reflection, refraction, resonance, tissue interaction, transducers, bioeffects, and computers in ultrasonic's. Prerequisite: acceptance into program or permission of program chair.

DUTEC 171
Ultrasound Physics & Instrumentation II . . . . . 3.0 Credits
Continues DUTEC 170. Topics include: Doppler effect, Doppler techniques, acoustic power, fluid dynamics, and quality assurance procedures. Prerequisite: acceptance into program or permission of program chair.

DUTEC 180
Advanced Studies: General Ultrasound . . . . . 3.0 Credits
Examines issues relating to the clinical practicum in abdominal and obstetrics/gynecology. Prerequisite: acceptance into program or permission of program chair.

DUTEC 181
Advanced Studies: Echo-Vascular . . . . . 3.0 Credits
Examines issues relating to the clinical practicum in echocardiology and vascular technology. Prerequisite: acceptance into program or permission of program chair.

DUTEC 210
Clinical Practicum I . . . . . 10.0 Credits
Provides clinical experience in an ultrasound department under the supervision of a sonographer. Prerequisites: acceptance into program and completion of all prerequisite coursework with a grade of C or better.

DUTEC 220
Clinical Practicum II . . . . . 10.0 Credits
Provides additional clinical experience in an ultrasound department under the supervision of a sonographer. Prerequisites: DUTEC 210, acceptance into program, and completion of all prerequisite course work with a grade of C or better.

DUTEC 230
Clinical Practicum III . . . . . 10.0 Credits
Provides additional clinical experience in an ultrasound department under the supervision of a sonographer. Prerequisites: DUTEC 210, DUTEC 220, acceptance into program, and completion of all prerequisite coursework with a grade of C or better.

DUTEC 240
Clinical Practicum IV . . . . . 10.0 Credits
Provides additional clinical experience in an ultrasound department under the supervision of a sonographer. Prerequisites: DUTEC 210, DUTEC 220, DUTEC 230, acceptance into program, and completion of all prerequisite coursework with a grade of C or better.

DUTEC 250
Ultrasound Physics for Mammographers . . . . . 3.0 Credits
Covers acoustical physics, including the concepts and principles of sound transmission, and the utilization of high frequency sound to produce images for diagnostic purposes. Prerequisite: acceptance into program or permission of program chair.

DUTEC 251
Breast Ultrasound for Mammographers . . . . . 3.0 Credits
Reviews anatomy and physiology of the breast. Includes orientation to cross-sectional imaging of the breast, correlation with mammographic images, and characterization of normal and abnormal findings from a sonographic viewpoint. Prerequisite: DUTEC 250 or permission of program chair.

DUTEC 252
Ultrasound Equipment/Knobology for Mammographers . . . 2.0 Credits
Introduces the ultrasound system. Includes detailed descriptions of essential parts of the ultrasound system using a variety of ultrasound machines, classroom demonstrations of system operations and technique, and some practice on the systems. Prerequisite: DUTEC 251 or permission of program chair.

DUTEC 269
Physics Review . . . . . 2.0 Credits
Prepares student for certification exams by reviewing physics and ultrasound instrumentation. Students focus on mathematical analysis and physics theories. Prerequisite: acceptance into program or permission of program chair.

Early Childhood Education

ECE 101
Issues and Trends in ECE . . . . . 3.0 Credits
Examines current and historical theories, issues, and trends in ECE and provides an opportunity to visit and compare a variety of ECE programs.

ECE 1011
Issues and Trends in ECE Lab . . . . . .1.0 Credit
Laboratory courses provide an opportunity for practical application of course content. This course is offered on an as-needed basis.

ECE 102
Introduction to Curriculum . . . . . 3.0 Credits
Provides students with both a theoretical and practical understanding of the content in a developmentally appropriate curriculum for young children.

ECE 1021
Early Childhood Curriculum lab . . . . . .1.0 Credit
Laboratory courses provide an opportunity for practical application of course content. This course is offered on an as-needed basis.

ECE 103
Art . . . . . 3.0 Credits
Provides the student with a basic understanding of the methods used for teaching visual art to young children in a developmentally appropriate manner.

ECE 104
Child Guidance & Communications Techniques . . . . . 3.0 Credits
Students will learn methods of communication and behavior management that are effective with young children. Current models and theories will be explored.

ECE 105
Physical Education. . . . . 3.0 Credits
Provides students with a basic knowledge of developmentally appropriate physical education games and activities.

ECE 1061
Child Growth & Development Lab . . . . . .1.0 Credit
Laboratory courses provide an opportunity for practical application of course content. This course is offered on an as-needed basis.

ECE 113
Stars 20 Hour Basic Training. . . . . 2.0 Credits
This class meets the Washington State Training and Registry System (STARS) requirements for child care providers. Instruction provides an overview of the core competency areas including child growth and development, child guidance, and health and safety as well as current state policies and early childhood research.

ECE 114
Stars 10 Hour Continuing Education . . . . . .1.0 Credit
This class meets the Washington State Training and Registry System (STARS) requirements for child care providers. Instruction addresses one or more of the core competency areas including child growth, development and learning; curriculum development; child guidance; communication; health, safety, and nutrition; administration; professionalism; environmental design; family systems; cultural and individual diversity; and observation and assessment.

ECE 116
ECE Special Topics Symposium . . . . . .1.0 - 3.0 Credits
An opportunity to participate in a class dealing with special topics that relate to early childhood education but are not covered in depth in the existing curriculum.

ECE 117
ECE Seminar . . . . . .1.0 - 3.0 Credits
Provides an opportunity to participate in an intensive, short-term learning experience relating to early childhood education.

ECE 1172
Preschool Seminar . . . . . 1.0 - 3.0 Credits
Provides an opportunity to participate in a short-term seminar relating to early childhood education.

ECE 118
Skills Training . . . . . 1.0 - 3.0 Credits
Provides an opportunity to participate in a short-term skills training relating to early childhood education.

ECE 119
Workshop . . . . . 1.0 - 3.0 Credits
An opportunity to participate in a workshop class relating to early childhood education.

ECE 120
Children's Literature . . . . . 3.0 Credits
Provides an opportunity to increase awareness of and knowledge about the vast array of literature currently available for young children birth to eight-years-old. Meaningful and purposeful ways to invite children into the realm of books will be presented. Ample opportunity to evaluate literature that supports the language, intellectual, emotional, social, and creative development of young children will also be provided.

ECE 122
Math & Science . . . . . 1.0 - 5.0 Credits
Provides ideas for introducing developmentally appropriate math and science concepts to young children. Students will have an opportunity to develop and experience math and science learning activities.

ECE 125
Instructional Media . . . . . 3.0 Credits
A hands-on introduction to using instructional media equipment. Emphasis is given to basic computer operation and computer software review.

ECE 126
Literacy & Language . . . . . 3.0 Credits
Examines the knowledge base that adults need to support the development of language and literacy in young children. Language acquisition and its connection to literacy will be presented, and purposeful ways to involve children in language and literacy activities will be explored.

ECE 127
Early Childhood Music, Movement & Motor Activity . . . . . 3.0 Credits
Provides the student with a basic understanding of the methods used for teaching music, movement, and gross motor activities to young children.

ECE 141
Child Development Associate . . . . . 10.0 Credits
Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based, home visitor, or family child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential. This course is offered on an as-needed basis.

ECE 1411
Child Development Associate . . . . . 1.0 - 10.0 Credits
Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant/toddler, center-based preschool, or family child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA Assessment and credential.

ECE 151
Supervised Practicum. . . . . 3.0 Credits
Designed to be taken just before completion of an Early Childhood Education certificate or degree, this class must be taken in conjunction with ECE 1511. In class, theory is combined with practical experience in an ECE setting. Emphasis is on improving teaching skills through self-evaluation.

ECE 1511
Supervised Practicum Lab . . . . . 1.0 - 6.0 Credits
Designed to be taken just before completion of an Early Childhood Education certificate or degree, this class must be taken in conjunction with ECE 151. The student is required to spend 33 hours working in an early childhood setting to complete class assignments.

ECE 201
Multicultural Education . . . . . 3.0 Credits
Explores the theory and practice of implementing a culturally responsible early childhood program.

ECE 202
Curriculum Development . . . . . 3.0 Credits
Provides an extensive exploration of the process of theme/project development and curriculum integration for the early childhood classroom. Students will be expected to develop specific themes while integrating the different curriculum areas of an early childhood program. Prerequisite: ECE 102.

ECE 205
Infant & Toddler Education . . . . . 3.0 Credits
Explores the physical, cognitive, and psychosocial development of infants and toddlers from birth to age three. Topics covered include planning developmentally appropriate curriculum, designing infant-toddler environments, and creating nurturing relationships with very young children. Emphasis is on teaching infants and toddlers in a group setting.

ECE 209
Parent Involvement . . . . . 3.0 Credits
Assists students to develop strategies for encouraging parent participation in an early childhood setting.

ECE 213
Materials Construction . . . . . 3.0 Credits
Gives students an opportunity to construct developmentally appropriate teacher-made materials and examine their use in an early childhood setting.

ECE 215
Child Care Administration . . . . . 3.0 Credits
Provides a general background in the organization and operation of a child care facility from the administrative perspective. Topics include licensing regulations and federal guidelines, fiscal responsibilities, staffing issues, and public relations.

ECE 216
Advanced Special Topics . . . . . 1.0 - 3.0 Credits
An opportunity to participate in advanced classes dealing with special topics that relate to early childhood education but are not covered in depth in the existing curriculum.

ECE 217
Advanced Seminar. . . . . 1.0 - 3.0 Credits
Provides an opportunity to participate in an advanced short-term learning experience relating to early childhood education.

ECE 218
Advanced Skills Training . . . . . 1.0 - 3.0 Credits
Provides an opportunity to participate in an advanced short-term skills training relating to early childhood education.

ECE 219
Advanced Workshop . . . . . 1.0 - 3.0 Credits
An opportunity to participate in an advanced workshop class relating to early childhood education.

ECE 221
Strategies for Teaching Special Needs . . . . . 3.0 Credits
An introduction to teaching methods that can be used with special needs children in an inclusive early childhood setting. Prerequisite: EDUC& 203.

ECE 222
Sign Language Level 1 . . . . . 3.0 Credits
An introduction to sign language using either the Signing Exact English (SEE) or American Sign Language (ASL) method. This course provides an opportunity for students to gain a better understanding of sign language, its application, and to build a basic signing vocabulary.

ECE 223
Sign Language Level 2 . . . . . 3.0 Credits
The level 2 sign language course broadens a student's knowledge of either Signing Exact English (SEE) or American Sign Language (ASL) and builds fluency and communication skills. Prerequisite: ECE 222 or instructor's permission.

ECE 224
Sign Language Level 3 . . . . . 3.0 Credits
Level 3 sign language broadens a student's knowledge of either Signing Exact English (SEE) or American Sign Language (ASL), extending communication fluency and skills learned in the Level 1 or Level 2 sign language classes. Prerequisite: ECE 223 or instructor's permission.

ECE 230
First Aid, Health, Safety & Nutrition . . . . . 3.0 Credits
Emphasizes setting up and maintaining safe and healthy environments for young children. Course content includes basic First Aid and CPR, accident prevention and safety procedures, identification of good health practices, ,and basic nutritional needs of children.

ECE 289
Special Studies . . . . . 1.0 - 15.0 Credits
Designed to incorporate into the curriculum special learning opportunities in the field of early childhood.

ECE 2891
Special Studies Lab . . . . . 1.0-3.0 Credits
Designed to incorporate into the curriculum special learning opportunities in the field of Early Childhood Education.

ECE 2892-2899
Special Studies Lab . . . . . 1.0-3.0 Credits
Designed to incorporate into the curriculum special learning opportunities in the field of Early Childhood Education.

Economics

ECON 110
Economic Trends, Issues and Policy [S/B] . . . . . 5.0 Credits
This course is intended as a non-technical, issues-orientated 100 level course in economics. The course uses economic theory to analyze economic situations and the implications for possible public policy. The economic theory is very basic and appropriate and not geared to business and economics majors but to those students who would like an overview of economic theory. The theory includes supply and demand, aggregate supply and aggregate demand, production possibilities, and a basic description of the general macroeconomic model. Some economic history related to the formation of U.S. policy and law is included. The course makes an effort to include issues of gender, race, and ethnicity. (Previously EC 110.)

ECON 116
Economic Development of the United States . . . . . 5.0 Credits
This class is a history of the American economy. It looks at the evolution of American economic institutions, from the colonial period, early statehood, the American Civil War, westward expansion, the impact of the two world wars, and the Great Depression that was between them. It looks at the regional and occupational specialization that enable the colonial economy to grow internally and to fit itself into the world economy that nurtured it. (Previously EC 116.)

ECON 291
History of American Economic Development[S/B]. . . . . 1.0 - 5.0 Credits
Concise overview of the basic elements of microeconomics and macroeconomics. Economic analysis is used to understand the major economic forces in American history with emphasis on those factors which aided growth and development. Economic theory is applied to understand and evaluate current social and economic problems in contemporary American society. (Previously EC 291.)

Economics Common Course

ECON& 201
Micro Economics [S/B]. . . . . 5.0 Credits
Microeconomic concepts are applied to business and household decision-making as well as public policy. Major topics include: scarcity and choice, production possibilities, alternative allocative mechanisms, supply and demand analysis, elasticity, consumer choice, production and costs, market structures, antitrust and regulation, and public Micro Economics. (Previously EC 202.)

ECON& 202
Macro Economics [S/B] . . . . . 5.0 Credits
This course introduces such important concepts as: market systems and their alternatives, supply and demand, measurement and determination of a nation's output and income, inflation and unemployment, both demand-side and supply-side aspects of fiscal and monetary policies, federal debt, and international trade and finance. (Previously EC 201.)

Education

EDUC 100
College Success . . . . . 3.0 Credits
This course is designed to assist students in learning effective techniques for having a college experience that is successful both academically and personally. Topics include: time management, test-taking, communication skills, learning styles, and campus resources. The development of critical thinking skills will be incorporated throughout the course. (Previously ED 100.)

EDUC 101
Introduction to Education . . . . . 4.0 Credits
Students receive an overview of the history and philosophy of education as well as develop an awareness of current educational requirements based on legislation for K-12 schools. Students also begin to develop a personal philosophy of education. This class must be taken in conjunction with EDUC 1972. (Previously ED 101.)

EDUC 110
Tutor Training . . . . . .1.0 Credit
This course is designed to teach the student basic principles and practical strategies of peer tutoring. (Previously ED 110.)

EDUC 110L
Tutor Training Lab . . . . . .1.0 Credit
Lab to be taken concurrently with EDUC 110. (Previously ED 1101.)

EDUC 135
College Major/Career Planning. . . . . 3.0 Credits
This course is designed to assist students in gaining insight into interests, values, personality, strengths, and the decision-making processes necessary for choosing a college major and planning a career. This course is for those who are choosing, changing, or confirming their educational goals. Topics include growing: career opportunities, job hunting techniques, goal-setting, and tools for success. (Previously ED 135.)

EDUC 1972
Field Experience . . . . . .1.0 - 2.0 Credits
Students have an opportunity to observe theory in action and to gain experience in the field of education. This class must be taken in conjunction with EDUC 101. (Previously ED 1972.)

EDUC 201
Introduction to Multicultural Education . . . . . 3.0 Credits
Examines attitudes and practices that are explicitly and/or subtly biased on the basis of race, gender, socioeconomic status, ethnicity, age, culture, disability, and family/lifestyle. Emphasis is placed on the implications for classroom practices and developing a plan for incorporating anti-bias attitudes and practices into an educational setting. (Previously ED 201.)

Education Common Course

EDUC& 114
Child Development . . . . . 3.0 Credits
A study of the physical, emotional, social, and cognitive development of children from conception through eight years of age and related theories. Emphasis on current early childhood brain development research. (Previously ECE 106.)

EDUC& 203
Exceptional Child . . . . . 3.0 Credits
A comprehensive introduction to the field of special needs children and their families, including an examination of legislative action, individualized education program (IEP), handicapping conditions, child abuse, drug and alcohol effects, and socioeconomic, societal, and cultural factors that affect family functioning. (Previously ECE 107.)

Emergency Medical Services-CPR

EMS 100
CPR-Cardiopulmonary Resuscitation . . . . . .1.0 Credit
This course is the foundational level of training for all first responders and EMS workers. The course covers the risk factors and early indicators of heart attacks and strokes, prudent heart living, airway obstruction, and cardiopulmonary resuscitation for adults, children, and infants. Upon the successful completion of the course, the student will receive a Health Care Provider card.

Emergency Medical Technician

EMT 101
Emergency Medical Technician-Basic . . . . . 1.0 - 10.0 Credits
This is the entry-level course to the Emergency Medical Service (EMS) profession and is designed for those who aspire to become an Emergency Medical Technician-Basic. The course will focus on EMT roles and responsibilities, airway management, patient assessment, medical and trauma emergencies, anatomy and physiology, documentation, lifting and moving, and communications. The course also includes practical labs and a total of 10 hours of clinical experience in the emergency department to provide direct hands-on experience with a variety of patients. Upon successful completion of this course, the student will be eligible to take the Washington State Certification Exam and may be considered for the Pre-Paramedic Short Term Certificate. Current Health Care Provider CPR card required. Malpractice insurance fees are added into the registration. Immunization records must be presented the first day of class. A Washington state background check must be completed prior to admittance into this course. More information is available from the Health Sciences Division office at (509) 544-8300.

EMT 102
Emergency Medical Technician-Intermediate . . . . . 1.0 - 10.0 Credits
EMT-Intermediate is an additional course that is offered on an as-needed basis. This need is determined by the EMS officers and fire chiefs from rural departments. EMT-I is approximately 80 hours of additional training beyond EMT-B, and equips the responder with the skills to start IVs, control the airway with invasive procedures, and administer some medications to patients.

Engineering Technology

ENT 111
Introduction to Engineering . . . . . 5.0 Credits
This course introduces students to the role of the engineer, engineering dimensions and standards, and the basic methodology of engineering problem solving. Prerequisite: concurrent enrollment in MATH 095 or MATH 098.

ENT 1161
Basic Drafting . . . . . 5.0 Credits
Basic principles of drafting to include lettering, geometric construction, mechanical drawings, orthographic projection, sectional views, auxiliary views, isometric and oblique drawings, threads, fasteners, and basic applications.

ENT 121
Engineering Fundamentals . . . . . 3.0 Credits
Fundamental concepts relevant to many engineering disciplines, including energy, vectors, force systems, free body diagrams, strength of materials, associated problem solving, and basic design procedures. Prerequisite: ENT 111.

ENT 1211
Engineering Fundamentals Lab . . . . . .1.0 Credit
This course is a reinforcement of theory through practical applications.

ENT 122
Materials . . . . . 3.0 Credits
An introduction to the materials which are used in the fabrication of construction projects including foundations, wood, heavy timber frame construction, wood light frame construction, exterior finishes, interior finishes, masonry, roofing, and glass.

ENT 1261
Graphical Analysis . . . . . 5.0 Credits
Descriptive geometry to include the spatial relationship of points, lines, and planes; intersection of planes and polyhedra; and development of surfaces. Vector analysis of coplanar concurrent and coplanar parallel force systems. Advanced isometric drawings. Prerequisite: ENT 1161.

ENT 134
Surveying . . . . . 3.0 Credits
A course in plane surveying, which includes: horizontal, vertical, and angular measurements, traversing, mapping, construction survey, land survey, and calculations. Prerequisite: MATH 113, MATH& 142, or instructor's permission.

ENT 1341
Surveying Lab . . . . . 3.0 Credits
This course allows students to demonstrate their abilities to use the equipment and apply their surveying knowledge. Lab to be taken concurrently with ENT 134.

ENT 135
Statics . . . . . 5.0 Credits
Vectors, types of forces, vector addition, moments, conditions for equilibrium, free-body diagrams and conventions, coplanar and non-coplanar force systems, and load analysis of basic trusses and frames. Prerequisite: MATH 113, ENT 121, or instructor's permission.

ENT 1361
Advanced Drafting . . . . . 4.0 Credits
A introduction to the fundamentals of computer-aided drafting including extensive use of the draw and modify commands for sketches and mechanical drawings. Prerequisite: ENT 1261 or instructor's permission.

ENT 1711
Technical Drafting . . . . . 3.0 Credits
An introductory course in mechanical drawing which includes geometric construction, orthographic projection, sectional views, auxiliary views, isometric and oblique drawings, dimensions, threads, fasteners, and lettering.

ENT 1721
Technical Drafting . . . . . 3.0 Credits
This course builds on the fundamentals of multiview projection, sectional views, auxiliary views, shop fabrication processes, and dimensioning. Prerequisite: ENT 1711 or instructor's permission.

ENT 214
Strength of Materials . . . . . 5.0 Credits
A study of stress and deformation of materials. Topics include: axial and torsional loading, stress-strain relationships, shearing stresses, temperature stresses, and engineering applications. Prerequisite: ENT 135 or instructor's permission.

ENT 2161
Mechanical Drafting & Design . . . . . 5.0 Credits
Fundamentals of design, assembly drawings, dimensioning systems, and a mechanical design/drafting project. The primary emphasis of this course is the application of CAD to mechanical drawings using AutoCAD. Prerequisite: ENT 1361 or instructor's permission.

ENT 2191
Construction Estimating . . . . . .1.0 Credit
An overview of the techniques used in estimating material quantities in construction projects. Prerequisite: ENT 122, completion of or concurrent enrollment in ENT 2261, or instructor's permission.

ENT 224
Structures . . . . . 5.0 Credits
Load analysis and design of basic structural members using timber and steel. Prerequisite: ENT 214.

ENT 2261
Architectural/Structural Drafting . . . . . 5.0 Credits
A drafting and design course covering construction techniques, architectural drawings, organization of drawing sets, and design projects. Prerequisite: ENT 1361.

ENT 229
Construction Specifications . . . . . 2.0 Credits
A study of construction specifications using the CSI format. Prerequisite: completion of or concurrent enrollment in ENT 2261 or instructor's permission.

ENT 2361
Design. . . . . 5.0 Credits
Various individual and team projects with specific criteria and constraints assigned. The completed projects are formally presented using both oral and written reporting techniques. Prerequisites: ENT 224, ENT 2261, and students must be enrolled in the ENT program.

ENT 238
Electricity . . . . . 5.0 Credits
An introductory course in electricity which includes basic electrical theory and mathematical relationships, series and parallel circuits, DC and AC circuit components, power generation and distribution. Prerequisite: MATH& 141 and the student must be enrolled in the ENT program or instructor's permission.

ENT 267
AutoCAD I . . . . . 2.0 Credits
This course utilizes AutoCAD for Computer-Aided Drafting (CAD). The course shows how to use AutoCAD to set up drawings, additional draw and edit commands, dimensioning, and text. Students utilize drafting and editing techniques to efficiently produce their drawings. Prerequisite: ENT 1161, ENT 1721, or equivalent.

ENT 2671
AutoCAD I Lab . . . . . .1.0 Credit
This course is offered to complement the ENT 267 course. Students must be concurrently enrolled in ENT 267.

ENT 268
AutoCAD II . . . . . 2.0 Credits
This course goes beyond the basic fundamentals of AutoCAD and examines ways to use it in today's workplace. Emphasis is placed on advanced commands including blocks, dimensions, attributes and extracting them, paper space/model space, xrefs, and file management. The class then customizes a menu creating custom pulldown menus, toolbars, and macros. Prerequisite: ENT 267.

ENT 2681
AutoCAD II Lab . . . . . .1.0 Credit
This course is offered to complement the ENT 268 course. Students must be concurrently enrolled in ENT 268.

ENT 269
Visual LISP . . . . . 2.0 Credits
This course is the beginning VisualLISP course. The course covers how to write simple programs using AutoCAD's programming language. It also demonstrates, using VisualLISP, how to interface with, control, and enhance AutoCAD. Prerequisite: ENT 268 or instructor's permission.

ENT 2691
Visual LISP Lab . . . . . .1.0 Credit
This course is offered to complement the ENT 269 course. Students must be concurrently enrolled in ENT 269.

ENT 270
3-D . . . . . 2.0 Credits
The focus of this course is three-dimensional drawings using AutoCAD. After completion, the student will be proficient in wire line and surface 3-D modeling. There will also be a brief overview of rendering and transferring of rendered information to other presentation software. Prerequisite: ENT 268 or instructor's permission.

ENT 2701
3-D Lab . . . . . .1.0 Credit
This course is offered to complement the ENT 270 course. Students must be concurrently enrolled in ENT 270.

ENT 271
Drawing Production . . . . . 2.0 Credits
This course simulates actual drawing projects in a variety of disciplines such as civil, structural, architectural, mechanical, and electrical. Students are expected to develop and manage large sets of drawings. Prerequisite: ENT 268 or instructor's permission.

ENT 2711
Drawing Production Lab . . . . . .1.0 Credit
This course is offered to complement the ENT 271 course. Students must be concurrently enrolled in ENT 271.

ENT 272
Advanced 3-D . . . . . 2.0 Credits
The focus of this course is three-dimensional solid modeling using AutoCAD. After completion, students will be proficient in 3-D solids modeling, mass property takeoffs, and the uses of three-dimensional media across software platforms. Prerequisite: ENT 268.

ENT 2721
Advanced 3-D Lab . . . . . .1.0 Credit
This course is offered to complement the ENT 272 course. Students must be concurrently enrolled in ENT 272.

ENT 273
Advanced AutoCAD Applications . . . . . 2.0 Credits
This course covers advanced AutoCAD features, such as how AutoCAD interacts with the web, from transmitting files, reviewing, to collaborating. The class also examines AutoCAD interactions with Imaging, AutoDesk View, Microsoft Word and Excel. Advanced features also include attributes, xrefs, and layouts. Express Tools are also covered. Prerequisites: ENT 268 or instructor's permission.

ENT 2731
Advanced AutoCAD Applications Lab . . . . . .1.0 Credit
This course is offered to complement the ENT 273 course. Students must be concurrently enrolled in ENT 273.

ENT 274
Architectural Residential Drawing . . . . . 2.0 Credits
A drafting and design course covering architecture, residential drawings, and the organization of drawing sets incorporating design projects. Prerequisite: ENT 267.

ENT 2741
Architectural Residential Drawing Lab . . . . . .1.0 Credit
This course is offered to complement the ENT 274 course. Students must be concurrently enrolled in ENT 274.

ENT 2801
Extended CAD Lab . . . . . .1.0 - 3.0 Credits
This is an open lab class to support AutoCAD. It allows for intermediate and advanced skill placement. Specific projects may be assigned. It is be a variable credit, continued enrollment class. Prerequisite: ENT 267 or instructor's permission.

ENT 281
MicroStation I for the AutoCAD User . . . . . 2.0 Credits
This course utilizes MicroStation for Computer-Aided Drafting (CAD). The course is designed for the beginning user who wants to transfer existing AutoCAD knowledge to MicroStation skills. Prerequisite: ENT 267.

ENT 2811
MicroStation I for the AutoCAD User Lab. . . . . .1.0 Credit
This course is offered to complement the ENT 281 course. Students must be concurrently enrolled in ENT 281.

ENT 282
MicroStation II for the AutoCAD User . . . . . 2.0 Credits
This course continues the development of concepts presented in ENT 281/ENT 2811, MicroStation I for the AutoCAD User, and therefore utilizes MicroStation for computer-aided drafting (CAD). The course is designed for the advanced CAD user who wants to continue transferring existing AutoCAD knowledge to MicroStation skills, or to enhance current MicroStation knowledge. Prerequisites: ENT 281/ENT 2811 or instructor's permission.

ENT 2821
MicroStation II for the AutoCAD User Lab . . . . . .1.0 Credit
This course is offered to complement the ENT 282 course. Students must be concurrently enrolled in ENT 282.

English

ENGL 086
Writing Skills . . . . . .1.0 - 3.0 Credits
This class is for students needing individualized instruction to improve their proficiency in basic writing skills. After interpreting diagnostic testing in the Learning Opportunities Center (LOC), the instructor develops a program for each student. The grade is pass/no-credit. Class is held in the Learning Opportunities Center (LOC) where instruction is conducted in a lab format. (Previously ENG 086.)

ENGL 087
Writing Skills . . . . . .1.0 - 3.0 Credits
This class is for students needing individualized instruction to improve their proficiency in basic writing skills. After interpreting diagnostic testing in the Learning Opportunities Center (LOC), the instructor develops a program for each student. The grade is pass/no credit. Class is held in the Learning Opportunities Center (LOC) where instruction is conducted in a lab format. (Previously ENG 087.)

ENGL 088
Writing Skills . . . . . .1.0 - 3.0 Credits
This class is for students needing individualized instruction to improve their proficiency in basic writing skills. After interpreting diagnostic testing in the Learning Opportunities Center (LOC), the instructor develops a program for each student. The grade is pass/no-credit. Class is held in Learning Opportunities Center (LOC) where instruction is conducted in a lab format. (Previously ENG 088.)

ENGL 090
Writing Express. . . . . .1.0 - 3.0 Credits
An intensive composition course designed to prepare students for college reading and writing. Successful completion of this course will make the student eligible for ENGL& 101. Prerequisite: ENGL 098 or an ASSET score between 39-42. (Previously ENG 090.)

ENGL 091
Grammar Skills . . . . . .1.0 - 3.0 Credits
A review of basic grammar including sample writing, sentence structure, usage, and mechanics. The grade is pass/no credit. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format. Prerequisite: ASSET score of 23-32 or COMPASS score of 1-12. (Previously ENG 091.)

ENGL 095
English Review . . . . . 5.0 Credits
A study of basic grammar and beginning paragraph writing. This is a review class to better prepare students to continue to more advanced English courses. (Previously ENG 095.)

ENGL 098
Writing Prep I . . . . . 5.0 Credits
This course is designed to teach the basics of writing well-developed and grammatically correct single and multiple paragraph papers. Prerequisite: an ASSET score between 33-38 or COMPASS score of 13-44. (Previously ENG 098.)

ENGL 099
Writing Prep II [C] . . . . . 5.0 Credits
This is an intensive reading and writing course designed to prepare students for the reading and writing they will do in college. Students will respond to and make connections between thematically linked texts. Successful completion of this course will make the student eligible for ENGL& 101. Prerequisites: successful completion of ENGL 098 or COMPASS writing score of 43-77 and COMPASS reading score of 82-100 or ASSET writing score of 39-42 and ASSET reading score of 42-53 (college-level reading) (Previously ENG 100.)

ENGL 100
Reading and Writing in College . . . . . 5.0 Credits
This is an intensive reading and writing course designed to prepare students for the reading and writing they will do in college. Students will respond to and make connections between thematically linked texts. Successful completion of this course will make the student eligible for ENGL& 101. (Previously ENG 100.)

ENGL 103
Writing in the Workplace . . . . . 5.0 Credits
This course is designed to teach writing tasks encountered in the workplace including resumes, business letters, memos, reports, instructions, and policies. Prerequisite: a passing grade in ENGL 099 or ASSET score of 43 or above or a COMPASS score of 78 or above. (Previously ENG 103.)

ENGL 136
Intro to Drama . . . . . 3.0 Credits
The reading and analysis of various dramas, with emphasis on understanding its constituent parts, meanings, and methods. Previous completion of ENGL& 101 is strongly recommended. (Previously LIT 136.)

ENGL 140
The Cinema [H] . . . . . 5.0 Credits
The study of cinema and its narrative function; presentation of alternative modes of narrative structure; comparative analyses of original texts and their filmic adaptations. Prerequisite: ENGL 099 or concurrent enrollment. (Previously LIT 140.)

ENGL 160
Women's Literature [H] . . . . . 5.0 Credits
This course is a study of the ways women represent female experience and question cultural norms through the literary arts. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 160.)

ENGL 180
Multicultural Literature [H] . . . . . 5.0 Credits
Introduction to the multicultural literatures of the Americas (i.e., African American literature, Native American literature, Hispanic American literature, Asian American literature, etc). Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 180.)

ENGL 195
Bible as Literature [H] . . . . . 5.0 Credits
Readings from the Old Testament and New Testament, in appropriate cultural, historical, and literary contexts. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 195.)

ENGL 203
Mythology [H] . . . . . 5.0 Credits
The theory of mythology and the use of Greco-Roman myths in art, literature, and music. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 203.)

ENGL 210
Intro to Linguistics [H] . . . . . 5.0 Credits
An introduction to the study of human language from the standpoint of sounds and sound patterns, word formation, and sentence structure. Students will learn about the similarities and differences among the world's languages and be introduced to the various sub-disciplines of the field of linguistics. Prerequisite: ENGL& 101 or concurrent enrollment in ENGL& 101. (Previously ENG 210.)

ENGL 257
English Grammar [H] . . . . . 5.0 Credits
An introduction to the terms, concepts, (including phonemics, morphology, and syntax) and analytical methods of English grammar. Prerequisite: ENGL& 101 or concurrent with ENGL& 101. (Previously ENG 255.)

ENGL 264
English Literature [H] . . . . . 5.0 Credits
A survey of English literature from Beowulf to 1640. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENG 099. (Previously LIT 264.)

ENGL 265
English Literature [H] . . . . . 5.0 Credits
A survey of English literature from 1640 to 1800. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 265.)

ENGL 266
English Literature [H] . . . . . 5.0 Credits
A survey of English literature from 1800 to the present. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 266.)

ENGL 275
The Lord of the Rings . . . . . 5.0 Credits
Students will study J.R.R. Tolkien's trilogy and Peter Jackson's films, analyzing their literary, theological, and philosophical elements. Students will be reading the novels in their entirety over the course of the quarter. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 275.)

ENGL 280
Gay and Lesbian Studies [H] . . . . . 5.0 Credits
An introduction to interdisciplinary field of lesbian/gay/bisexual/transgender studies from a historical and multicultural perspective. Readings from fiction, poetry, autobiography, history, essays, plays, and film/television will be used to understand connections between sexual orientation and the humanities. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 280.)

English Common Course

ENGL& 101
English Composition I [C]. . . . . 5.0 Credits
Study and application of the principles of writing clear exposition, with emphasis on organizing unified and coherent essays. Prerequisite: a passing grade in ENGL 099 or ASSET score of 43 or above or COMPASS score above 78. (Previously ENG 101.)

ENGL& 102
Composition II [C] . . . . . 5.0 Credits
An advanced expository writing course, focusing on research essays and other aspects of college writing. Prerequisite: ENGL& 101. (Previously ENG 201.)

ENGL& 111
Intro to Literature [H]. . . . . 5.0 Credits
This course focuses on reading and analyzing prose, poetry, and drama and is designed to help students develop a method of reading and evaluating literature. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 150.)

ENGL& 220
Intro to Shakespeare [H] . . . . . 5.0 Credits
Shakespeare as dramatist and poet. Readings from comedies, histories, and tragedies. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 270.)

ENGL& 235
Technical Writing [C] . . . . . 5.0 Credits
This course emphasizes students technical communication skills for use in the workplace and other academic settings. Students will employ various methods of analyzing and writing for different audiences and purposes. Students will also use traditional and online resources for problem solving, research, documentation, and editing. Prerequisite: ENGL& 101. (Previously ENG 205.)

ENGL& 236
Creative Writing I [H] . . . . . 5.0 Credits
A study of creative writing, emphasizing diverse styles and techniques. Previous completion of ENGL& 101 is strongly recommended. (Previously ENG 240.)

ENGL& 237
Creative Writing II [H]. . . . . 5.0 Credits
A continuation of ENGL& 236. Prerequisite: ENGL& 236. (Previously ENG 241.)

ENGL& 244
American Literature I [H] . . . . . 5.0 Credits
A survey of American literature from the founding of Jamestown to the Civil War Era. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 225.)

ENGL& 245
American Literature II [H] . . . . . 5.0 Credits
A survey of American literature from Civil War to World War I. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 226.)

ENGL& 246
American Literature III [H] . . . . . 5.0 Credits
A survey of American literature from World War I to the present. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 227.)

ENGL& 254
World Literature I [H] . . . . . 5.0 Credits
A survey of world literature from ancient times through the Roman Empire. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 205.)

ENGL& 255
World Literature II [H] . . . . . 5.0 Credits
A survey of world literature emphasizing European Medieval and Renaissance literature. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 206.)

ENGL& 256
World Literature III [H] . . . . . 5.0 Credits
A survey of world literature emphasizing Classicism, Romanticism, Realism, and Modernism. Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099. (Previously LIT 207.)

English As A Foreign Language

EFL 090
Spelling and Pronunciation . . . . . 3.0 Credits
This course is designed for non-native speakers of English to develop an understanding of the patterns in English spelling and pronunciation.

EFL 101
Written English Language I [H]. . . . . 5.0 Credits
This course is part one of a two-step sequence dealing with written English skills. The course will address rhetorical styles in writing essays as well as journal writing to increase fluency in writing. Students will also learn to use the reader's guide to periodical literature and other research facilities in the library. Finally, English structures particularly problematical for non-native speakers will be addressed, including verb tense choice and verb form and article usage. Prerequisite (at least one of the following): P grade in ENGL 098, MTELP score 70 or more, TOEFL score 500 or more, or instructor's permission.

EFL 102
Spoken English . . . . . 5.0 Credits
This course addresses the challenges of spoken English in an academic setting. Activities are evenly divided between note-taking while listening to academic lectures and pronunciation work and oral presentation skills. This course may be taken concurrently with either EFL 101 or EFL 111. Prerequisite (at least one of the following): P grade in developmental ESL, MTELP 70 or more, TOEFL score of 500 or more, or instructor's permission.

EFL 111
Written English Language II [H] . . . . . 5.0 Credits
This course is the continuation of EFL 101. This second course covers more rhetorical styles for use in academic papers written in conjunction with the reading of literature. Journal writing will be continued, and further research will be encouraged. More problematical structures will be explained. Prerequisite (at least one of the following): completion of EFL 101, MTELP score of 85 or more, TOEFL score of 520 or more, or instructor's permission.

English As A Second Language

ESL 010
ESL Level 1 . . . . . 1.0 - 18.0 Credits
For people who have had little or no formal English instruction and who have little or no ability to communicate in English. Emphasis is on basic literacy, fundamental speaking and listening skills, and an introduction to computer use.

ESL 015
First Language Literacy . . . . . 1.0 - 18.0 Credits
A course to help non-native speakers of English to develop or improve fundamental literacy skills in their first language as a tool to facilitate their acquisition of English as a second language.

ESL 020
ESL Level 2 . . . . . 1.0 - 18.0 Credits
For people who have had some formal English language instruction but whose ability to communicate is very limited. Emphasis is on basic survival needs, beginning reading and writing skills, and an increased familiarity with computer skills.

ESL 030
ESL Level 3 . . . . . 1.0 - 18.0 Credits
For people who read and write some English and are able to communicate with native speakers with some difficulty. Emphasis is on developing students' reading, writing, communication, and computer skills.

ESL 040
ESL Level 4 . . . . . 1.0 - 18.0 Credits
Designed for persons who are fairly literate in English, can handle their jobs using simple oral and written instructions, and can communicate with native speakers with little difficulty. Emphasis is on improving the students' speaking, listening, reading, and writing skills along with use of various computer software.

ESL 050
ESL Level 5 . . . . . 1.0 - 18.0 Credits
Designed for persons who are functionally literate in English, can handle their jobs with oral and written instructions, and can communicate with native speakers with little difficulty. Emphasis is on strengthening students' speaking, listening, reading, and writing skills and performing additional computer skills.

ESL 053
ESL Writing Workshop . . . . . 4.0 Credits
This multi-level class is designed to teach non-native speakers of English the fundamentals of good English writing. Students will do a variety of writing including dialogue journals and compositions. Students may choose to practice other forms such as resumes, applications, or longer essays. The class is open to ESL level 3 students and above.

ESL 055
ESL Special Purposes . . . . . 1.0 - 18.0 Credits
Course designed to address specific needs for non-native speakers of English. Content may vary form course to course.

ESL 056
ESL Computer Lab . . . . . .1.0 - 6.0 Credits
A course with a computer lab setting to help non-native speakers of English transition to college level academic or vocational courses. Course-work will be individualized to fit the needs of each student. Although there is a multi-skill base, particular emphasis is given to writing. The lab may be taken in conjunction with an ESL class or independently.

ESL 060
ESL Level 6 . . . . . 1.0 - 18.0 Credits
Designed for persons who are literate in English, can handle their jobs with oral and written instructions, and can communicate with native speakers. Emphasis is on speaking, listening, reading, and writing skills with continued use of computers and other technologies.

Environmental Science

ENVS 174
Intro to Meteorology and the Atmosphere [M/S] . . . . . 5.0 Credits
An introduction to meteorology, weather, climate, and the atmospheric processes related to air pollution and climate change. Topics include atmospheric structure, solar radiation, clouds, precipitation, pressure, fronts, hurricanes, air pollution, climate, and global climate change. Prerequisites: MATH 095 or MATH 098.

Environmental Science Common Course

ENVS& 101
Intro to Environmental Science w/Lab [M/S] . . . . . 5.0 Credits
A multidisciplinary course designed to provide both the non-science and science major the background necessary to understand environmental problems that have arisen due to human activities. Topics include food chains, energy production, nutrient cycles, forest and wildlife management, population demographics, air and water pollution, ozone depletion, and global warming. Lab and lecture must be taken concurrently. (Previously ENVS 100.)

ENVS& 101L
Intro to Environmental Science Lab [M/S] . . . . . 0.0 Credits
You must sign up for both lecture and lab to receive combined lecture and lab credits. No lab credits will show as they are included in the lecture credits. (Previously ENVS 1001.)

Fire Protection Technology

FPT 110
Fire Behavior and Tactics. . . . . 5.0 Credits
Discussion of basic fire behavior and the firefighting tactics of company response, including size-up, rescue, exposure, ventilation and fire problems, and tactics used.

FPT 120
Fire Protection Systems/Fire Prevention . . . . . 5.0 Credits
Designed to give students a clear understanding of the principles and limitations of fire suppression and detection systems. This also covers the history and philosophy of fire prevention, challenges of fire prevention education, and public education.

FPT 130
Fire Service Hydraulics/E.V.A.P.. . . . . 5.0 Credits
A course that is designed to give the new firefighter a basic understanding of municipal water systems, principles of fluids, fire flow requirements, and basic fire stream calculations. This course will also study safe vehicle operations and safe response procedures.

FPT 205
Fire Academy I . . . . . 8.0 Credits
Introduction to firefighting tools, equipment, and basic firefighting techniques. Skills development and proficiency in fire ground operations using firefighting companies. Emphasis on fire ground safety.

FPT 210
Building Construction . . . . . 5.0 Credits
A course covering basic building construction concepts, structure rating, classification, and outlining the specific weakness of various types of construction. Building collapse and firefighter safety in burning buildings.

FPT 215
Fire Academy II . . . . . 8.0 Credits
Continuation of FPT 205. Introduction to firefighting tools, equipment, and basic firefighting techniques. Skills development and proficiency in fire ground operations using firefighting companies. Emphasis on fire ground safety. Prerequisites: FPT 205 (with a 2.0 GPA) and instructor's permission.

FPT 220
Fire Inspection/Fire Codes . . . . . 5.0 Credits
A course designed to give the new firefighter a basic concept of inspections involving the International Fire Code and the International Building Code.

FPT 225
Fire Academy III . . . . . 8.0 Credits
Continuation of FPT 215. Introduction to firefighting tools, equipment, and basic firefighting techniques. Skills development and proficiency in fire ground operations using firefighting companies. Emphasis on fire ground safety and multi-company operations. Prerequisites: FPT 215 (with a 2.0 GPA) and instructor's permission.

FPT 230
Fire Investigation . . . . . 5.0 Credits
Includes methods of determining the area of fire origin, fire causes, fire spread, and the aspects of fire behavior; recognition of accidental and incendiary fires, and securing and preserving evidence.

Fire Science

FS 111
Fire Administration . . . . . .1.0 - 3.0 Credits
Management in the fire service explores the skills and techniques used by competent management in business, government, and voluntary organizations, with particular emphasis on their application to the fire service.

FS 121
Fire Tactics . . . . . .1.0 - 3.0 Credits
Discussion of basic firefighting tactics of company response, including size-up rescue, exposure, ventilation and fire problems, and tactics used.

FS 131
Introduction to Fire Inspections . . . . . .1.0 - 3.0 Credits
A course designed to give the new inspector a basic concept of inspections that deal with fire hazards, authority to inspect, and how to conduct a pre-fire plan.

FS 141
Hazardous Materials I. . . . . .1.0 - 3.0 Credits
A basic hazardous materials course with emphasis on the identification, recognition, and resource information available to the fire fighting situations involving hazardous materials.

FS 151
Hazardous Materials II . . . . . .1.0 - 3.0 Credits
An applied course covering special firefighting situations involving hazardous materials. Prerequisite: FS 141.

FS 211
Building Construction . . . . . .1.0 - 3.0 Credits
A course covering basic building construction, outlining the specific weaknesses of various constructions.

FS 222
Fire Tactics II. . . . . 3.0 Credits
This course includes planning, implementing, and evaluating basic and advanced fire tactics at the command officer level. Prerequisite: FS 121.

FS 231
Fire Protection Equipment . . . . . .1.0 - 3.0 Credits
Designed to give students a clear understanding of the principles and limitations of fire suppression and detection systems.

FS 241
Fire Investigation . . . . . .1.0 - 3.0 Credits
Includes methods of determining the area of fire origin, fire causes, fire spread, and the aspects of fire behavior; recognizing accidental and incendiary fires, and securing and preserving evidence. Witness interrogation methods, arson laws, court procedures, and review of case histories will be discussed.

Firefighter I

FCA 105
Hydraulics . . . . . 3.0 Credits
A course that is designed to give the new firefighter a basic understanding of municipal water systems, principles of fluids, fire flow requirements, and basic fire stream calculations.

FCA 120
Fire Investigation . . . . . 3.0 Credits
Includes methods of determining the area of fire origin, fire causes, fire spread, and the aspects of fire behavior; recognition of accidental and incendiary fires, and securing and preserving evidence.

FCA 137
Fire Protection Systems . . . . . 3.0 Credits
Designed to give a clear understanding of the principles and limitations of fire suppression and detection systems.

FCA 152
Building Construction . . . . . 3.0 Credits
A course covering basic building construction, outlining the specific weaknesses of various types of construction.

FCA 160
Fire Ground Tactics. . . . . 3.0 Credits
Discussion of basic firefighting tactics of company response, including size-up, rescue, exposure, ventilation and fire problems, and tactics used.

FCA 177
Wildland/Urban Interface . . . . . 3.0 Credits
Discussion of basic firefighting tactics of wildland fires that threaten homes within urban areas. In addition to general firefighting tactics, discussions on determining if a home or a group of homes can be safely protected will be presented.

FCA 190
Introduction to Fire Inspection and Codes . . . . . 3.0 Credits
A course designed to give the new firefighter a basic concept of inspections involving the International Fire Code and the International Building Code.

FCA 251
Firefighter Level I Academy . . . . . 1.0 - 23.0 Credits
This Academy offers extensive classroom and hands-on training to those seeking a career in fire science. The Academy meets or exceeds all the required subject areas for Firefighter Level I Certification as outlined by the Washington State Patrol Fire Protection Bureau.

FCA 261
Firefighter Level II Academy . . . . . 8.0 Credits
This Academy is a continuation of Firefighter Academy I. Firefighter II provides extensive classroom and hands-on training to those seeking a career in fire science. The Academy meets or exceeds all the required subject areas for Firefighter Level II. Prerequisite: Firefighter I certification. Certification as outlined by the Washington State Patrol Fire Protection Bureau.

First Year Introduction (FYI)

WKSP 090
First Year Introduction . . . . . .0.0 Credit
Introduction to the academic culture, purpose, expectations, resources, procedures, and policies. Required for all degree and certificate seeking students prior to enrollment in second quarter of classes. There is a fee of $50.

WKSP 097
Self Guided First Year Introduction . . . . . .0.0 Credit
Degree or certificate seeking students may elect to complete the FYI requirement by taking a self-guided workshop. The workshop assesses student's knowledge of college, general policy, procedures, and resources available to students at CBC. There is a fee of $50.

First Year Introduction for Trades

FYI 103
First Year Introduction for Trades . . . . . .1.0 Credit
An introduction to the academic and trades culture, purpose, expectations, resources, procedures, policies, and shop safety. Required for all degree or long term certificate seeking students in Agriculture and Industrial Equipment, Autobody, Automotive, Machine, and Welding Technology prior to enrollment in second quarter of classes. Students must earn a 3.0 in FYI 103 to register for their second quarter of classes.

French

FRCH 150
Beginning Conversational French . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. Recommended that students have successfully completed at least FRCH& 121. (Previously FR 150.)

FRCH 151
Beginning Conversational French . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. Recommended that students have successfully completed at least FRCH& 121. (Previously FR 151.)

FRCH 152
Beginning Conversational French . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. Recommended that students have successfully completed at least FRCH& 121. (Previously FR 152.)

FRCH 250
Intermediate Conversational French . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking French for students who have already gained a knowledge of beginning level grammar and vocabulary. Class will be conducted entirely in French. Instructor's permission required. (Previously FR 250.)

FRCH 251
Intermediate Conversational French . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking French for students who have already gained a knowledge of beginning level grammar and vocabulary. Class will be conducted entirely in French. Instructor's permission required. (Previously FR 251.)

FRCH 252
Intermediate Conversational French . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking French for students who have already gained a knowledge of beginning level grammar and vocabulary. Class will be conducted entirely in French. Instructor's permission required. (Previously FR 252.)

FRCH 260
French Literature Reading [H] . . . . . .1.0 - 3.0 Credits
Selected readings of French literature. Prerequisite: FRCH& 223 or instructor's permission. (Previously FR 260.)

FRCH 261
French Literature Reading [H] . . . . . .1.0 - 3.0 Credits
Selected readings of French literature. Prerequisite: FRCH& 223 or instructor's permission. (Previously FR 261.)

FRCH 262
French Literature Reading [H] . . . . . .1.0 - 3.0 Credits
Selected readings of French literature. Prerequisite: FRCH& 223 or instructor's permission. (Previously FR 262.)

French Common Course

FRCH& 121
French I [H] . . . . . 5.0 Credits
Introduction to the French language including conversational skills, reading, writing, and grammar, and French culture including geography, customs, daily life, and heritage. Designed for the novice learner of French, with little or no proficiency in the French language. Recommended that students have successfully completed at least ENGL 099. (Previously FR 101.)

FRCH& 122
French II [H] . . . . . 5.0 Credits
Introduction to the French language including conversational skills, reading, writing, and grammar, and French culture including geography, customs, daily life, and heritage. Prerequisite: FRCH& 121 or instructor's permission. (Previously FR 102.)

FRCH& 123
French III [H]. . . . . 5.0 Credits
Introduction to the French language including conversational skills, reading, writing, and grammar, and French culture including geography, customs, daily life, and heritage. Prerequisite: FRCH& 122 or instructor's permission. (Previously FR 103.)

FRCH& 221
French IV [H]. . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, listening). The course includes cultural readings and short stories and includes an in-depth review of basic French grammar, expansion of basic vocabulary, and a broadening of the student's understanding of French culture. Prerequisite: FRCH& 123 or instructor's permission. (Previously FR 201.)

FRCH& 222
French V [H] . . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, listening). The course includes cultural readings and short stories and includes an in-depth review of basic French grammar, expansion of basic vocabulary, and a broadening of the student's understanding of French culture. Prerequisite: FRCH& 221 or instructor's permission. (Previously FR 202.)

FRCH& 223
French VI [H]. . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, listening). The course includes cultural readings and short stories and includes an in-depth review of basic French grammar, expansion of basic vocabulary, and a broadening of the student's understanding of French culture. Prerequisite: FRCH& 222 or instructor's permission. (Previously FR 203.)

General Engineering

ENGR 120
Innovative Engineering Design I . . . . . 2.0 Credits
Engineering problem-solving, creativity, role, function, design methods, and product development. Topics include engineering disciplines, ethics, engineering issues, design methods and tools, product development process, product safety and reliability, engineering economics, and decision-making process. Engineering design problems will be introduced and discussed. This introductory course is designed on a two-quarter basis. Students are required to complete the two consecutive quarters of this course (ENGR 120 and ENGR 121). This course is equivalent to ENGR 120 "Innovation in Design," offered at WSU during the freshman year. Prerequisites: MATH& 142, MATH& 144, or MATH 103. (Previously GE 120.)

ENGR 121
Innovative Engineering Design II . . . . . 2.0 Credits
Engineering problem solving, creativity, role, function, design methods, product development, design projects, and reports. This course focuses on design projects in major branches of engineering disciplines such as electrical, mechanical, and civil engineering. Computer engineering design project may be included. The goals are to provide students an opportunity to explore the different engineering disciplines, and to expose students to engineering problems, designs, and product development. This course emphasizes teamwork, and students are required to work in teams for all projects. Each student will individually explore an engineering discipline and complete a research project and written report. Students will demonstrate awareness of applicable codes and standards related to the selected project. Prerequisite: ENGR 120. (Previously GE 121.)

General Engineering Common Course

ENGR& 111
Engineering Graphics 1 . . . . . 3.0 Credits
Principles of mechanical drawing: geometric construction, orthographic projection, sectional views, auxiliary views, isometric and oblique drawings, dimensions, threads, fasteners, and lettering. (Previously GE 101.)

ENGR& 112
Engineering Graphics 2 . . . . . 3.0 Credits
Descriptive geometry: lines, points, planes, successive auxiliary views, intersections, and developments. Prerequisite: ENGR& 111. (Previously GE 102.)

ENGR& 214
Statics. . . . . 5.0 Credits
Analysis of force systems in static equilibrium. Topics include force vectors, equilibrium of particles and rigid bodies, structural analysis, distributed forces, friction, center of gravity, moments of inertia. Prerequisites: PHYS& 221/PHYS& 231 and MATH& 151. (Previously GE 281.)

ENGR& 215
Dynamics. . . . . 5.0 Credits
Analysis of motion of particles and rigid bodies. Topics include kinematics of particles and rigid bodies, kinetics of particles and rigid bodies, Newton's laws, work and energy, impulse, and momentum. Prerequisite: ENGR& 214. (Previously GE 291.)

Geography

GEO 101
Physical Geography [M/S] . . . . . 5.0 Credits
An introduction to the physical earth. It may include processes, which impact the earth; it may also include the relationship between humans and the earth. Study of the physical areas and environment of the earth. Topics include the weather, climate, water cycle, soils, and land form studies. The class also covers how humans influence and are influenced by their physical environment.

GEO 120
Introduction to Atmospheric Science [M/S] . . . . . 4.0 Credits
An introductory study of fundamental scientific principles through their application to everyday weather events. Study and observations of the atmosphere and the principles of meteorology. Students use analysis and decision-making skills used by meteorologists to diagnose weather patterns, understand air motions, and predict future atmospheric conditions. Lecture/lab must be taken concurrently. Prerequisites: reading ASSET score of 35+; a WebCT workshop.

GEO 1201
Introduction to Atmospheric Science Lab [M/S] . . . . . .1.0 Credit
Lab to be taken concurrently with GEO 120.

GEO 150
Cultural Geography [S/B]. . . . . 5.0 Credits
An introduction to the use of human geography as a framework with which to critically analyze and understand the world, both on a micro and macro level. CBC's course in Cultural Geography provides an introduction to the ways in which human groups think about, arrange, and modify their physical habitats. This geographic knowledge is a basic means to understanding one's own world and the worlds of others.

Geology

GEOL 102
Physical Geology II [M/S] . . . . . 3.0 Credits
An introduction to geomorphology. A descriptive and interpretive examination of the earth's topographic features produced by a) surface processes such as glaciers, streams, wind, waves, and groundwater, and b) deformation which results in structures such as folds and faults. Laboratory exercises will include the use and interpretation of topographic maps and aerial photographs, and possible field experiences. Lecture and lab must be taken concurrently. Prerequisite: GEOL& 101/GEOL& 101L or instructor's permission. (Previously GEL 102.)

GEOL 102L
Physical Geology II Lab [M/S] . . . . . .1.0 - 2.0 Credits
Lab to be taken concurrently with GEOL 102. (Previously GEL 1021.)

Geology Common Course

GEOL& 101
Intro to Physical Geology w/Lab [M/S] . . . . . 3.0 Credits
Composition and structure of the earth. Study and identification of common minerals and the three major rock groups. Plate tectonics concept of the evolution of surface features of continents. A study of volcanic, seismic, weathering, and ground water processes. Outline of geologic development of the Pacific Northwest, including field studies. Lecture and lab must be taken concurrently. (Previously GEL 101.)

GEOL& 101L
Intro Physical Geology Lab [M/S] . . . . . 2.0 Credits
Lab to be taken concurrently with GEOL& 101. (Previously GEL 1011.)

GEOL& 103
Historical Geology w/Lab [M/S]. . . . . 3.0 Credits
Assessment of the history and development of the earth's physical environment and its inhabitants. An historical and chronologic analysis of the origin of the earth, including the development of the earth through time and discussion based on the paleontologic, sedimentologic, and stratigraphic record. Study of distinctive fossil groups for each geologic period and applications for correlation and reconstruction of regional geologic history. Lecture and lab must be taken concurrently. Prerequisite: GEOL& 101/GEOL& 101L or instructor's permission. (Previously GEL 203.)

GEOL& 103L
Historical Geology Lab [M/S] . . . . . 2.0 Credits
Lab to be taken concurrently with GEOL& 103. (Previously GEL 2031.)

GEOL& 110
Environmental Geology w/Lab [M/S] . . . . . 3.0 Credits
Relationships of human activities with earth materials and processes. Earthquakes, volcanic activity, mass wasting, subsidence, surface water, mineral resources, waste disposal, water pollution, and a heavy emphasis on groundwater may all be included. Students will be expected to make interpretations and draw conclusions from scientific data such as graphs, charts, and maps. Lecture and lab must be taken concurrently. Field trips may be included as a part of the laboratory experience. Prerequisite: GEOL& 101/GEOL& 101L or instructor's permission. (Previously GEL 211.)

GEOL& 110L
Environmental Geology Lab [M/S] . . . . . 2.0 Credits
Lab to be taken concurrently with GEOL& 110. (Previously GEL 2111.)

German

GERM 150
Beginning Conversational German . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. Recommended that students have successfully completed at least GERM& 121. (Previously GER 150.)

GERM 151
Beginning Conversational German . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. Recommended that students have successfully completed at least GERM& 121. (Previously GER 151.)

GERM 152
Beginning Conversational German . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. Recommended that students have sucessfully completed at least GERM& 121. (Previously GER 152.)

GERM 250
Intermediate Conversational German . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking German for students who have already gained a knowledge of beginning-level grammar and vocabulary. Class will be conducted entirely in German. Instructor's permission required. (Previously GER 250.)

GERM 251
Intermediate Conversational German . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking German for students who have already gained a knowledge of beginning-level grammar and vocabulary. Class will be conducted entirely in German. Instructor's permission required. (Previously GER 251.)

GERM 252
Intermediate Conversational German . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking German for students who have already gained a knowledge of beginning-level grammar and vocabulary. Class will be conducted entirely in German. Instructor's permission required. (Previously GER 252.)

GERM 260
German Literature Readings [H]3 . . . . . .1.0 - 3.0 Credits
Selected readings of German literature. Prerequisite: GERM& 223 or instructor's permission. (Previously GER 260.)

GERM 261
German Literature Readings [H] . . . . . .1.0 - 3.0 Credits
Selected readings of German literature. Prerequisite: GERM& 223 or instructor's permission. (Previously GER 261.)

GERM 262
German Literature Readings [H] . . . . . .1.0 - 3.0 Credits
Selected readings of German literature. Prerequisite: GERM& 223 or instructor's permission. (Previously GER 262.)

German Common Course

GERM& 121
German I [H]. . . . . 5.0 Credits
Introduction to the German language including conversational skills, reading, writing, and grammar, and German culture including geography, customs, daily life, and heritage. Designed for the novice learner of German, with little or no proficiency in the German language. Recommended that students have successfully completed at least ENGL 099. (Previously GER 101.)

GERM& 122
German II [H] . . . . . 5.0 Credits
Introduction to the German language including conversational skills, reading, writing, and grammar, and German culture including geography, customs, daily life, and heritage. Prerequisite: GERM& 121 or instructor's permission. (Previously GER 102.)

GERM& 123
German III [H] . . . . . 5.0 Credits
Introduction to the German language including conversational skills, reading, writing, and grammar, and German culture including geography, customs, daily life, and heritage. Prerequisite: GERM& 122 or instructor's permission. (Previously GER 103.)

GERM& 221
German IV [H] . . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, and listening). The course is based on cultural readings and short stories and includes an in-depth review of basic German grammar, expansion of basic vocabulary, and a broadening of the student's understanding of the Germanic culture. Prerequisite: GERM& 123 or instructor's permission. (Previously GER 201.)

GERM& 222
German V [H] . . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, and listening). The course is based on cultural readings and short stories and includes an in-depth review of basic German grammar, expansion of basic vocabulary, and a broadening of the student's understanding of the Germanic culture. Prerequisite: GERM& 221 or instructor's permission. (Previously GER 202.)

GERM& 223
German VI [H] . . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, and listening). The course is based on cultural readings and short stories and includes an in-depth review of basic German grammar, expansion of basic vocabulary, and a broadening of the student's understanding of the Germanic culture. Prerequisite: GERM& 222 or instructor's permission. (Previously GER 203.)

Health Education

HE 160
Diet, Exercise & Weight Control [PE] . . . . . 2.0 Credits
Class is designed to promote and achieve knowledge in the areas of diet, exercise, and weight management for today's lifestyles as it relates to the student's total well-being.

HE 161
HIV/AIDS Issues and Strategies [PE] . . . . . 2.0 Credits
A comprehensive overview of the virus HIV and AIDS, including biological, epidemiological, historical, universal precautions, economic, legal, ethical, social, and behavioral aspects.

HE 170
Health and Wellness [PE] . . . . . 3.0 Credits
Study of current health and wellness issues and problems of the college-age student. Emphasis is on lifestyles, risk factors, and preventing disease and illness with a wellness lifestyle.

HE 171
Exercise Prescription [PE] . . . . . 2.0 Credits
This course is the study of the history, current trends, and research regarding proper protocols for designing individual workout programs based on needs and experience of individuals.

HE 1711
Exercise Prescription Lab [PE] . . . . . .1.0 Credit
Lab to be taken concurrently with HE 171.

HE 180
Adaptive Physical Education [PE] . . . . . 2.0 Credits
This course is a study of the history, current global perspective, current trends, and laws regarding the opportunity for people with challenges and limitations to participate in physical activity and sports.

HE 1801
Adaptive Physical Education Lab [PE]. . . . . .1.0 Credit
Lab to be taken concurrently with HE 180.

HE 210
Sports Nutrition [PE] . . . . . 3.0 Credits
This course is an introduction to terms, concepts, and research regarding proper nutrition for athletes and active individuals. In addition, supplementation and aids to enhance performance will be studied.

HE 215
Health and Fitness for Life [PE]. . . . . 2.0 Credits
This is a foundation course designed to prepare students for living the rest of their lives in a state of optimal health by providing the necessary knowledge and skills that are desirable in order to make meaningful, beneficial, and successful choices in the area of physical fitness, nutritional awareness, stress management, and other aspects of health. This class requires lab activities in the fitness center.

HE 2151
Health and Fitness for Life Lab [PE] . . . . . .1.0 Credit
Lab to be taken concurrently with HE 215.

HE 220
Drugs and Health [PE] . . . . . 3.0 Credits
This course is designed to achieve physiological knowledge and awareness of chemical use and abuse as it relates to the student's total well-being.

HE 230
First-Aid Safety [PE] . . . . . 3.0 Credits
Course designed to help students learn first-aid skills and accident prevention. Advanced first-aid and CPR card given for successful completion.

HE 232
Sports Psychology [PE] . . . . . 3.0 Credits
This course is an introduction to terms, concepts, and research regarding the psychological area of sports. The history, current trends, and legal issues regarding the field of sports psychology will be studied.

HE 240
Stress Management [PE] . . . . . 3.0 Credits
A study of the causes of human stress and how to manage or minimize this stress. Theories, implications, and practical applications are emphasized.

HE 250
Sports Management [PE] . . . . . 3.0 Credits
This course is an introduction to the history, current global perspectives, trends, and research regarding the field of sports management. Students will gain an understanding of marketing, organization, and financial aspects of sports management.

Health Information Technology

HIT 115
Legal Aspects of the Medical Office I . . . . . 2.0 Credits
An introduction of the basics of the American legal system, the physician-patient relationship, the medical record and its uses; informed consent; licensure, certification, and registration; the basic laws protecting patient information including knowledge of HIPAA regulations, and how they pertain to the medical assistant. Prerequisite: Internet proficiency.

HIT 116
Legal Aspects of the Medical Office II . . . . . .1.0 Credit
A continuation course on how to apply the laws protecting patient information including a basic knowledge of HIPPA, RCWs, and WACs regulations and how they pertain to the medical office. Emphasis is on the release of healthcare information process. Intended for the transferring medical assistant student who has completed HIT 115 and needs to fulfill AOT requirements. Prerequisites: AOT 115/HIT 115 and Internet proficiency.

HIT 118
Legal Aspects of the Medical Office III . . . . . 3.0 Credits
An introduction to the American legal system; the physician-patient relationship; the laws and statutes that apply to health professions; the basis of medical law; the litigation processes; employment and safety laws including quality improvement programs and incident reports; medical ethics, and bioethics; professional and ethical conduct and behavior; and ethical issues in the medical office; the medical record and its uses; the basic laws protecting patient information including knowledge of HIPPA regulations and how they pertain to the medical office. Prerequisite: Internet proficiency.

HIT 147
Medical Terminology . . . . . 5.0 Credits
Provides a basic background of medical terminology for the medical office. Major topics to be studied are cells and oncology, tissues and the integumentary system, skeletal system, muscular system, nervous system, special senses, glands, cardiovascular system; blood and lymphatic-immune systems, respiratory system; digestive system; urinary system, reproductive system, pregnancy and human development; and general diseases, lab tests, diagnoses, surgery, pharmacology, and therapy. Emphasis is placed on identifying and labeling word parts, defining and building medical terms, basic anatomy, and becoming familiar with common diseases of the systems.

HIT 152
Pharmacotherapy for Health Information Technology . . . . 2.0 Credits
Emphasis is placed on the understanding of the action of drugs, including the absorption, distribution, metabolism, and excretion of drugs by the body. Prerequisite: AOT 147/HIT 147 with a minimum 2.0.

HIT 153
Medical Reimbursement . . . . . 4.0 Credits
Introduction to medical insurance including diagnostic coding, procedural coding, ambulatory care coding (ICD-9-CM, CPT/HCPCS) and completion of HCFA forms for insurance billing. The course will also include specific discussion of Blue Cross/Blue Shield, Medicare, Medicaid, Champus/Champoa, and Worker's Compensation. Prerequisites: AOT 101, AOT 118/HIT 118 (or HIT 115 and HIT 116), and HIT 155 or AOT 150. Concurrent enrollment in HIT 156 approved.

HIT 154
Anatomy and Physiology for Health Information Technology . . 4.0 Credits
A study of the structure and function of the human body utilizing a system approach. Emphasis is placed on the gross and microscopic anatomy as well as the physiology of the cell, skeletal system, muscular system, nervous system, cardiovascular, respiratory, urinary, reproductive, endocrine, and digestive systems. Prerequisite: AOT 147/HIT 147 with a minimum 2.0.

HIT 155
Introduction to Medical Coding . . . . . 4.0 Credits
Introduction to medical coding concepts, methods, and, guidelines using International Classification of Diseases 9th Edition (ICD-9-CM) and Current Procedural Terminology (CPT). Prerequisite: AOT 147/HIT 147 with a minimum 2.0.

HIT 156
Intermediate Medical Coding . . . . . 4.0 Credits
An intermediate presentation of medical coding concepts, methods, and guidelines using the International Classification of Diseases 9th Edition (ICD-9-CM) and Current Procedural Terminology (CPT). This course covers the rules and regulations regarding coding. Prerequisite: AOT 155/HIT 155 or AOT 150 with a minimum 2.0.

HIT 157
Advanced Medical Coding . . . . . 4.0 Credits
Advanced medical coding concepts, methods, and guidelines using International Classification of Diseases 9th Edition (ICD-9-CM), Current Procedural Terminology (CPT), and HCPCS. Prerequisite: HIT 156 or AOT 151 with a minimum 2.0.

HIT 158
Pathophysiology for Health Information Technology . . . . 4.0 Credits
Emphasis is placed on the disease processes affecting the human body via an integrated approach to specific disease entities including the causes, diagnosis, and treatment of disease. Prerequisite: AOT 147/HIT 147 with a minimum 2.0.

HIT 159
Advanced Hospital Coding and CCS Prep . . . . . 4.0 Credits
The Advanced Hospital and CCS Prep course is a capstone course. It is designed for students with previous experience and or education in coding and billing and want to prepare for successful completion of the American Health Information Management Association's Mastery level credentialing exam Certified Coding Specialist (CCS). Students must have an intermediate knowledge of medical terminology, anatomy, physiology, pathology, ICD-9-CM coding and CPT-4 coding. Prerequisites: HIT 157 or a score of 78 percent on the AOT coding exam.

HIT 245
Medical Office Procedures . . . . . 2.0 Credits
Integrates application of skills with knowledge of medical office procedures to complete a simulated medical office project. Includes conducting online research. Prerequisites: AOT 142, AOT 147/HIT 147, and Internet proficiency.

HIT 283
Medical Transcription I . . . . . 4.0 Credits
Prepares students to transcribe reports commonly dictated in physicians' offices and clinics. History and physical examinations, pharmacology and laboratory procedures, chart notes, letters, initial office evaluations, consultations, and discharge summaries in several specialties are covered. Emphasis is on accuracy, appropriate formats, and acquiring skill in the use of references. Prerequisites: AOT 114, HIT 147, and AOT 172.

HIT 284
Medical Transcription II . . . . . 4.0 Credits
Prepares students to transcribe reports commonly dictated in physicians' offices, clinics, hospitals, surgery centers, radiology centers, and pathology offices. Operative reports, diagnostic procedures, surgical discharge summaries, radiology, and pathology reports in several specialties are covered. Emphasis is on speed, accuracy, appropriate formats, and use of references. Prerequisite: HIT 283.

HIT 285
Medical Transcription III . . . . . 4.0 Credits
Prepares students to transcribe operative reports, diagnostic procedures, surgical discharge summaries, radiology, and pathology reports commonly dictated in outpatient and same-day surgery centers, hospitals, large multi-specialty clinics, radiology centers, and pathology offices. Specialties include cardiology, GI, orthopedic, pathology, and radiology transcription. Included are dictations from physicians for whom English is not their first language. In addition, this comprehensive course provides an opportunity to demonstrate mastery of medical transcription specialty fields from previous medical transcription courses. Prerequisite: HIT 284.

Health Sciences

HSCI 220
ACLS Initial . . . . . 2.0 Credits
Through the Advanced Cardiac Life Support course, healthcare providers will enhance their skills in the treatment of the adult victim of a cardiac arrest or other cardiopulmonary emergencies. The emphasis will be on the importance and integration of basic life support CPR with advanced cardiovascular life support and then importance of effective team interaction and communication during resuscitation. Prerequisites: current healthcare provider BLS card and completion of prerequisite checklist.

HSCI 221
ACLS Renewal . . . . . .0.9 Credit
This course is offered to provide an update to current ACLS providers and to renew ACLS provider status. Prerequisites: current healthcare provider BLS card, current ACLS provider card, and completed ACLS precourse checklist.

HSCI 222
ACLS Experienced Provider . . . . . .1.0 Credit
The ACLS Experienced Provider course is for seasoned ACLS providers who wish to renew their ACLS provider status. This course provides a stimulus for expert healthcare providers to identify areas in resuscitation that deal with special circumstances. Prerequisites: Current Healthcare Provider BLS card and current ACLS Provider Card.

HSCI 223
ACLS Instructor Course . . . . . .1.0 Credit
One credit class to prepare individuals to become instructors in advanced cardiovascular life support. Prerequisites: current ACLS provider. Recommendation of an ACLS course director or ACLS regional faculty member. Completion of AHA core instructor course prior to class.

HSCI 230
PALS Initial . . . . . 2.0 Credits
The goal of the Pediatric Advanced Life Support course is to aid the healthcare provider in developing the knowledge and skills necessary to provide emergency care for the pediatric population, and effectively manage critically ill infants and children. Skills taught include recognition and treatment of infants and children at risk for cardiopulmonary arrest; the systematic approach to pediatric assessment, effective respiratory management; defibrillation and synchronized cardioversion; intraosseous access and fluid bolus administration; and effective resuscitation team dynamics. Prerequisites: current healthcare provider BLS card and completed PALS precourse checklist.

HSCI 231
PALS Renewal . . . . . .0.9 Credit
This course is offered to provide an update to current PALS providers and to renew PALS provider status. Prerequisites: current healthcare provider BLS card, current PALS provider card, and completed PALS precourse checklist.

HSCI 233
PALS Instructor Course . . . . . .1.0 Credit
One credit class to prepare individuals to become instructors in pediatric advanced life support. Prerequisites: current PALS provider is required. Recommendation of PALS course director or PALS regional faculty member. Completion of AHA core instructor course prior to class.

HSCI 240
ALS/OTEP General Pharmacology . . . . . .0.3 Credit
This course provides an overview of the basic principles of pharmacology as they apply to the paramedic administering medications in the field setting. Significant emphasis is placed on the pharmacokinetics and dynamics with specific drug profiles being completed in the specific treatment modalities taught in the separate courses of ALS OTEP. Prerequisite: current certification as EMT-I/Paramedic.

HSCI 241
ALS/OTEP Medical Legal . . . . . .0.3 Credit
This course provides a general overview of legal considerations as they apply to the certified paramedic or EMT-Intermediate. The course focuses on standard of care issues, legal terminology, issues regarding consent to treat, refusals, Do Not Resuscitate Orders and POLST, abandonment, negligence claims, civil and tort law, certification, and proper documentation. Prerequisite: current certification as Paramedic.

HSCI 242
ALS/OTEP Patient Assessment in the Field . . . . . .0.3 Credit
This course provides an overview of patient assessment of the patient in the field. The course focuses on the general medical and trauma patient with specific emphasis on scene size-up, initial assessment, identifying life threatening emergencies, focused assessment and history, detailed and ongoing exam, and the prioritization of patients. Prerequisite: current certification as Paramedic.

HSCI 243
ALS/OTEP Communicable Disease . . . . . .0.3 Credit
This course provides a general overview of communicable disease to the certified Paramedic or EMT-Intermediate. The course focuses on principles of infectious disease control, barriers to infection, and stages of infectious disease. The course further discusses the pathophysiology, identification, and treatment of various blood, air, parasitic, and fecal/sputum pathogens. Prerequisite: current certification as Paramedic.

HSCI 244
ALS/OTEP Mass Casualty & Terrorist Incidents . . . . . .0.3 Credit
This course provides the certified paramedic with the necessary knowledge and skills necessary to identify the Mass Casualty Incident and the possibilities of terrorist involvement. The course emphasizes the need of the paramedic to recognize the need for triage, treatment, and transportation; as well as fulfill the role of each of the MCI positions as they relate to the size and complexity of the emergency. The course provides specific information on explosive, nuclear, chemical, and biological agents, as well as tools to assist EMS personnel in recognition of terrorist acts. There is a strong emphasis of scene safety for all EMS personnel. Prerequisite: current certification as Paramedic.

HSCI 245
ALS/OTEP Shock Trauma Resuscitation . . . . . .0.3 Credit
This course provides current specific assessment and management techniques to be used on the trauma patient suffering compensated, uncompensated, or irreversible shock. Identifying the stage of shock and the appropriate actions to improve end organ perfusion will be the primary focus of the course. Prerequisite: current certification as Paramedic.

HSCI 246
ALS/OTEP Burns & Soft Tissue Trauma . . . . . .0.3 Credit
The purpose of this course is to review the various mechanisms and effects of soft tissue trauma, ranging from the minor laceration to the severe crush injury, and compartment syndrome. Within this subject, specific pathophysiology, assessment, and management will be covered. Additionally, the pathophysiology, assessment, and management of all severities of burns will be addressed. At the completion of the course, students will be expected to perform specific skills pertaining to the treatment of soft tissue injuries. Prerequisite: current certification as EMT-I/Paramedic.

HSCI 247
ALS/OTEP Musculoskeletal Trauma . . . . . .0.3 Credit
The purpose of this course is to review the various mechanisms and effects of musculoskeletal trauma on the human body. Pathophysiology of the trauma, assessment, and management of the injury will be covered in depth. At the completion of the course, students will be expected to perform specific skills pertaining to the treatment of musculoskeletal injuries. Prerequisite: current certification as Paramedic.

HSCI 248
ALS/OTEP Head & Facial Trauma . . . . . .0.3 Credit
The focus of this course is the epidemiology and pathophysiology of head and facial trauma. Specific assessment and management techniques will be reviewed and discussed within the course. At the completion of the course, students will be expected to perform specific skills pertaining to the treatment of head and facial injuries. Prerequisite: current certification as Paramedic.

HSCI 249
ALS/OTEP Neck & Spinal Trauma . . . . . .0.3 Credit
The focus of this course is the epidemiology and pathophysiology of neck and spinal trauma. Specific assessment and management techniques will be reviewed and discussed within the course. At the completion of the course, students will be expected to perform specific skills pertaining to the treatment of neck and spinal injuries. Prerequisite: current certification as Paramedic.

HSCI 250
ALS/OTEP Chest & Abdominal Trauma . . . . . .0.3 Credit
The focus of this course is the epidemiology and pathophysiology of chest and abdominal trauma. Specific assessment and management techniques will be reviewed and discussed within the course. At the completion of the course, students will be expected to perform specific skills pertaining to the treatment of chest and abdominal injuries. Prerequisite: current certification as Paramedic.

HSCI 251
ALS/OTEP Environmental Emergencies . . . . . .0.3 Credit
The focus of this course is to provide the paramedic with additional information regarding the various medical and trauma emergencies that can evolve from exposure to a wide spectrum of environmental conditions. Drowning, altitude illnesses, diving complexes, and exposure to various reptiles and spiders are discussed. Prerequisite: current certification as Paramedic.

HSCI 252
ALS/OTEP Respiratory Emergencies . . . . . .0.3 Credit
The focus of this course is to review the pathophysiology of various pulmonary disorders that frequently affect the population. There is a heavy focus on the assessment and management of the patient suffering from various components of COPD, asthma, SARS, lung cancer, and pulmonary embolism. Prerequisite: current certification as EMT-I/Paramedic.

HSCI 253
ALS/OTEP Neurological Emergencies . . . . . .0.3 Credit
This course specifically targets the assessment and treatment of patients suffering from a neurological disorder. Specific illness/diseases covered include stroke, seizures, altered mental status, and syncope. Prerequisite: current certification as Paramedic.

HSCI 254
ALS/OTEP Gastro & Endocrine Emergencies . . . . . .0.3 Credit
The purpose of this course is to provide a general overview of the assessment and treatment of acute upper and lower gastrointestinal disorders treated by paramedics in the pre-hospital setting. Prerequisite: current certification as EMT-I/Paramedic.

HSCI 255
ALS/OTEP OB-GYN Emergencies. . . . . .0.3 Credit
The focus of this course is obstetrical and gynecological emergencies faced by the paramedic in the pre-hospital setting. At the completion of the course, paramedics should be able to distinguish various OB/GYN emergencies from GI emergencies and adequately provide treatment accordingly. Prerequisite: current certification as Paramedic.

HSCI 256
ALS/OTEP Geriatric Emergencies . . . . . .0.3 Credit
The focus of this course is to review the added difficulty in managing both medical and trauma emergencies involving geriatric patients. Prerequisite: current certification as Paramedic.

HSCI 257
ALS/OTEP Behavioral Emergencies & the Violent Patient . . . .0.3 Credit
This course reviews the three major mental illnesses, identifies appropriate assessment techniques, and discusses the appropriate treatment of these patients, to include the physical and chemical restraint of violent patients. Prerequisite: current certification as Paramedic.

HSCI 258
ALS/OTEP Allergies & Anaphylaxis . . . . . .0.3 Credit
This course specifically discusses the assessment and aggressive treatment of anaphylaxis in the pre-hospital setting. Prerequisite: current certification as EMT-I/Paramedic.

HSCI 259
ALS/OTEP Toxicologic Emergencies . . . . . .0.3 Credit
This course reviews toxicological emergencies found in the pre-hospital setting and discusses the current treatment modalities of such emergencies. Prerequisite: current certification as Paramedic.

HSCI 260
ALS/OTEP Advanced Airway Management . . . . . .0.9 Credit
This course provides the paramedic with specific training in the techniques for securing a patent airway in the critical medical or trauma patient. Included within the course is anatomy and physiology, recognition of existing and impending airway compromise, determination of appropriate advanced maneuvers, and deployment of various advanced airway skills and tools. Prerequisite: current certification as Paramedic.

HSCI 261
ALS/OTEP Advanced Cardiac Life Support . . . . . .0.9 Credit
This course provides recertification to the certified paramedic in Advanced Cardiac Life Support. The course focuses on ACLS as intended to be taught by the American Heart Association. In addition, focus is also applied to the modalities of care for the cardiac patient in Benton/Franklin counties as per local protocol. Prerequisite: current certification as Paramedic.

HSCI 262
ALS/OTEP Pediatric Advanced Life Support . . . . . .0.9 Credit
This course provides recertification to the certified paramedic in Pediatric Advanced Life Support. The course focuses on PALS as intended to be taught by the American Heart Association. In addition, focus is also applied to the modalities of care for the general pediatric patient in Benton/Franklin counties as per local protocol. Prerequisite: current certification as Paramedic.

HSCI 263
48 Hour Paramedic Refresher . . . . . 4.5 Credits
This course is intended for the paramedic preparing for recertification of the National Registry of EMT-Paramedic, or attempting to regain this certification. The course covers all required hours and skills required of the National Registry 48 Hour Certificate. Prerequisite: current certification as Paramedic.

HSCI 264
ILS/OTEP Refresher . . . . . .0.9 Credit
This course is intended for the EMT-Intermediate as a supplement to his/her EMT-B OTEP courses. This course will focus on the additional skills and requisite knowledge of the EMT-I in the areas of assessment, pharmacology, intravenous skills, and advanced airway management. Prerequisite: current certification as an EMT- Intermediate.

HSCI 265
Combi-Tube Endorsement Course . . . . . .0.9 Credit
This course is intended for EMT-Basic who desires the additional endorsement to his/her certification for insertion of a dual lumen advanced airway device, specifically Combi-Tube. Prerequisite: current certification as an EMT-Basic.

Hebrew

HEB 121
Hebrew I [H] . . . . . 5.0 Credits
Introduction to the modern Hebrew language including conversational skills, reading, writing, and grammar and Israeli and Jewish culture including geography, customs, daily life, and heritage. Designed for the novice learner of Hebrew, with little or no proficiency in the Hebrew language. Prerequisite: recommended that students have successfully completed at least ENGL 099.

HEB 122
Hebrew II [H] . . . . . 5.0 Credits
Introduction to the Hebrew language including conversational skills, reading, writing, and grammar and Israeli and Jewish culture including geography, customs, daily life, and heritage. Prerequisite: HEB 101 or instructor's permission.

HEB 123
Hebrew III [H] . . . . . 5.0 Credits
Introduction to the Hebrew language including conversational skills, reading, writing, and grammar and Israeli and Jewish culture including geography, customs, daily life, and heritage. Prerequisite: HEB 122 or instructor's permission.

History

HIST 100
Cultural and Historical Linked to Travel . . . . . .1.0 - 3.0 Credits
An introduction to the history, culture, geography, art, and language of a country or countries, to be followed by a required trip to the area studied for an immersion experience. (Previously ICS 100.)

HIST 107
Chicano History [S/B] . . . . . 5.0 Credits
This course is an introduction to the history of peoples of Mexican origin in the United States beginning with the period before the arrival of the Europeans and ending with an examination of contemporary issues such as immigration, acculturation/assimilation, and political representation facing the Chicano community during the contemporary period. (Previously HIS 107.)

HIST 108
History of Immigration in the United States [S/B] . . . . . 5.0 Credits
This course provides an overview of the history of immigration (voluntary and involuntary) in the United States and examines the factors that led people from Europe, Asia, Africa, Latin America, and other parts of the world to migrate to the United States. The course will also examine and compare the experience of the various groups once they are in the United States. (Previously HIS 108.)

HIST 110
History of Modern East Asia [S/B] . . . . . 5.0 Credits
A history of East Asia. Major emphasis will be upon the history of China, an analysis of modernization in Japan, and issues of colonialism and nationalism in East Asia. (Previously HIS 110.)

HIST 111
Colonial Latin America [S/B]. . . . . 5.0 Credits
The primary objective of the course is to familiarize students with the major phases in colonial Latin American history and to study, analyze, and understand the most important issues that characterized and shaped this period. Some of the topics include the conquest of the indigenous people, the imposition of Catholicism, the insertion of Latin America into the world market, the introduction and development of African slavery, independence movements, and the creation of new societies resulting from the mixing of indigenous, Iberian, and African cultures. (Previously HIS 111.)

HIST 112
Modern Latin America [S/B] . . . . . 5.0 Credits
A survey of the political, social, and economic history of Latin America from the last decades of the 19th century to the present. (Previously HIS 112.)

HIST 113
Mexico Since Independence [S/B] . . . . . 5.0 Credits
This course will provide students with an overview of the history of modern Mexico from the first movements towards independence at the beginning of the 19th century to the economic, political, and cultural struggles which the nation faces at the start of the 21st century. Through an examination of a number of periods and events (such as Independence, French Intervention, Mexican Revolution, and the Zapatista Uprising) that the country has experienced in the last 200 years, students will learn about the racial, economic, social, and political complexities of the Mexican past in order to understand the forces that produced contemporary Mexican society. Finally, in this course we will also pay attention to the ways Mexico's relationships with the United States and its citizens has also helped to influence the course of Mexican history since the latter part of the 19th century. (Previously HIS 113.)

HIST 115
History of Modern Middle East [S/B] . . . . . 5.0 Credits
An introduction to the history of the modern Middle East. Topics covered include: an introduction to Islam as a polity; Arab Muslim societies, past and present; Islamic law; the Ottoman Empire; the age of nation-states and the end of Empires; economics of the region. (Previously HIS 115.)

HIST 116
History of Africa [S/B] . . . . . 5.0 Credits
This course is an introduction to the history of the peoples of Africa from the earliest human civilizations on the continent to the present. (Previously HIS 116.)

HIST 117
History of India [S/B] . . . . . 5.0 Credits
This course is an introduction to the history of India from the earliest civilizations in the Indus Valley to the current political, social, and economic conditions of modern-day India. (Previously HIS 117.)

HIST 233
War In History [S/B] . . . . . 5.0 Credits
A study of the history of warfare in the Western world from the Ancient period to the present. Students will be introduced to the study of war in terms of its social, political, economic, technological, and cultural roots, and its effects on these various fields. (Previously HIS 233.)

HIST 275
Recent American History. . . . . 5.0 Credits
A survey of United States history from World War II to the present. Emphasis on political, diplomatic, and social history. (Previously HIS 275.)

History Common Course

HIST& 126
World Civilizations I [H] . . . . . 5.0 Credits
A study of world civilizations from their origins through late antiquity. Emphasis will be placed upon Western, East Asian, and South Asian civilizations. Philosophies, religions, and political and social systems will be covered. (Previously HIS 101.)

HIST& 127
World Civilizations II [H] . . . . . 5.0 Credits
The development of world civilizations from the end of the classical age to the beginning of the modern. Political, social, economic and cultural development will be covered with emphasis upon Europe, Asia, and Africa. (Previously HIS 102.)

HIST& 128
World Civilizations III [H]. . . . . 5.0 Credits
An examination of the major civilizations of the world from the birth of the modern age to the present. Emphasis is on the development of the modern nation-state, international relations, socio-economic developments, and shifting patterns of thought. (Previously HIS 103.)

HIST& 136
U.S. History I [S/B] . . . . . 5.0 Credits
Survey of American history from the colonial period through the Civil War and Reconstruction. Emphasis is placed on early colonial development, the American Revolution, the building of the nation, territorial expansion, slavery, the Civil War, and Reconstruction. (Previously HIS 104.)

HIST& 137
U.S. History II [S/B]. . . . . 5.0 Credits
A survey of American history from the post-Civil War era to the present. Emphasis is upon the political, social, economic, and cultural forces which have shaped modern America. Special emphasis is given to industrialization, class, race relations, social reform movements, foreign policy and political change, including the World Wars, the Great Depression, and postwar politics to the present. (Previously HIS 105.)

HIST& 214
Pacific Northwest History . . . . . 5.0 Credits
A general history of the Pacific Northwest, with particular emphasis on Washington state. Special emphasis is given to Indian culture, Indian-White relations, settlement, race relations, industrialization, and changes created by WWI and WWII. (Previously HIS 251.)

HIST& 219
Native American History [H]. . . . . 5.0 Credits
An introduction to the history and culture of Native American peoples. The situation of Native Americans in contemporary society is also discussed with particular focus on issues of tribal sovereignty. (Previously ICS 125.)

HIST& 220
African American History [S/B] . . . . . 5.0 Credits
This course is an introduction to the history of African Americans in the United States beginning with a study of the ancestors in Africa and ending with a discussion of the issues facing the African American community today. (Previously HIS 106.)

Horticulture

HORT 201
Introduction to Horticulture . . . . . 5.0 Credits
A course offering the student a general background in the basic principles of plant growth and development covering a wide range of plants and industries related to production, marketing, and utilization of plants and plant products. Topics will emphasize nursery operations, landscaping, container gardening, houseplants, floral design, plant identification, and career opportunities.

HORT 202
Cultivated Plants . . . . . 4.0 Credits
The goal of the course is to introduce students to the morphology, anatomy, growth, and development of agronomic and horticultural crops. Prerequisite: BIOL& 211 is recommended.

HORT 2021
Cultivated Plants Lab . . . . . .1.0 Credit
Lab to be taken concurrently with HORT 202.

HORT 215
Urban Forest Management . . . . . 5.0 Credits
Introduction to the use of trees and related vegetation planted in cities and urban sites. Such plantings are used for beautification, religious purposes, and linkage with nature. The elements of area design, cultural considerations, environmental impact, and maintenance of trees and shrubs used in urban settings will be addressed.

HORT 220
Turf and Landscape Management. . . . . 4.0 Credits
A course in the principles and practices of landscape installation and management. Students will survey the landscape industry; learn the biology and management of turf grasses, and interior plantscape management including soil preparation, planting, maintenance, and pest identification and management. Prerequisite: concurrent enrollment in HORT 2201.

HORT 2201
Turf and Landscape Management Lab . . . . . .1.0 Credit
A course in the principles and practices of landscape installation and management. Students will survey the landscape industry; learn the biology and management of turf grasses and interior plantscape management, including soil preparation, planting, maintenance, and pest identification and management. Prerequisite: concurrent enrollment in HORT 220.

HORT 230
Tree Fruit Technology . . . . . 5.0 Credits
Introduction to the horticultural principles and practices used in deciduous tree fruit production and orchard management. Topics include cultivars, rootstocks, climate and environment, orchard systems, orchard establishment, pruning and training, flowering, pollination, fruit set, fruit growth and thinning, fruit maturation, harvest and storage, hardiness, and acclimation.

HORT 234
Small Fruit Technology . . . . . 5.0 Credits
An introduction to the cultivation of plants bearing edible fruit of small to moderate size. Small fruits produced in the Pacific Northwest will be emphasized. Cultural, financial, and environmental factors will be addressed. Uses of fruit produced from fresh consumption to medicinal extracts, will be discussed.

HORT 235
Greenhouse Management . . . . . 5.0 Credits
A course designed to present the principles and practices of greenhouse production and management. Students will survey the greenhouse industry; learn the biology and management of greenhouse plants and interior plantscape management, including soil preparation, planting, maintenance, and pest identification and management.

HORT 240
Aquaculture Technology . . . . . 5.0 Credits
An introduction to the basic principles of aquaculture. Examples of major aquatic plant and animal species cultured in fresh, brackish, and marine ecosystems will be discussed. Production and uses of flowering plant materials, methods of production, cultural practices, and environmental factors will be emphasized. Specific reference to selected freshwater species of commercially cultured animals, their culture, and uses, will complete the course.

HORT 242
Hydroponic Technology . . . . . 5.0 Credits
An introduction to the production and uses of liquid (soil less) culture media to produce plant materials. Methods of production, cultural practices, and environmental factors will be emphasized. Specific reference to selected plants, growth media, their culture and uses, will complete the course.

HORT 245
Floriculture . . . . . 4.0 Credits
An introduction to the production and uses of flowering plant materials. Methods of production, cultural practices, and environmental factors will be emphasized. Specific reference to selected flowering plants, their culture, and uses, will complete the course. Prerequisite: concurrent enrollment in HORT 2451.

HORT 2451
Floriculture Lab. . . . . .1.0 Credit
An introduction to the production and uses of flowering plant materials. Methods of production, cultural practices, and environmental factors will be emphasized. Specific reference to selected flowering plants, their culture, and uses, will complete the course. Prerequisite: concurrent enrollment in HORT 245.

HORT 251
Plant Propagation . . . . . 4.0 Credits
An introduction to the methods of plant propagation including methods of propagating by true seed, bulbs, divisions, layering, cuttings, budding, grafting, and micro-propagation. Emphasis is placed on the basic principles necessary to furnish an adequate understanding for commercial and industrial application. Prerequisite: concurrent enrollment in HORT 2511.

HORT 2511
Plant Propagation Lab . . . . . .1.0 Credit
An introduction to the methods of plant propagation including methods of propagating by true seed, bulbs, divisions, layering, cuttings, budding, grafting, and micro-propagation. Emphasis is placed on the basic principles necessary to furnish an adequate understanding for commercial and industrial application. Prerequisite: concurrent enrollment in HORT 251.

Human Services

HS 101
Introduction to Social Work . . . . . 5.0 Credits
An overview of social work experience including history, purpose and tasks, practice settings, and future trends of social work profession.

HS 102
Counseling: Theory & Practice . . . . . 5.0 Credits
Introduction to psychopathology, personality theory, assessment, and counseling theories. The course will include some demonstration techniques associated with the therapies as well as an opportunity for student involvement and role play.

HS 103
Ethical & Legal Issues in Human Services/Chemical Dependency . 3.0 Credits
The course is intended to help the human services worker identify, understand, and deal with the professional ethical issues, dilemmas, and laws that most affect the human service practitioner in a variety of settings.

HS 104
Community Resources . . . . . 3.0 Credits
Introduction to publicly and privately funded social services. The services provided by the agencies will be reviewed. Students will also learn how to facilitate an appropriate referral and act as an effective advocate for people in need.

HS 105
Crisis Intervention . . . . . 3.0 Credits
The course is intended to introduce crisis theory and techniques for beginning counselors. Emphasis will be placed on areas causing stress such as psychiatric emergencies, sexual assault, incest, battered women, death and dying, and loss. Assessment techniques and in-depth interviewing skills will also be covered along with time spent on the actual practice of crisis intervention.

HS 110
HIV/AIDS Brief Risk Intervention . . . . . .1.0 Credit
Overview of interview/listening skills and counseling theories unique to the chemically dependent person (adult as well as child/adolescent) who is infected with HIV/AIDS or other bloodborne pathogens. Areas to be covered: etiology of HIV, transmission and infection control, testing and counseling, clinical manifestations and treatment, legal and ethical issues, and psychosocial issues. This course is required by the Washington State Department of Health for certification as a Chemical Dependency Counselor.

HS 120
Drug/Alcohol Counseling Techniques . . . . . 3.0 Credits
Overview of interview/listening skills and counseling theories unique to the chemically dependent person and family members. Introduction to self-help support systems and developmental aspects of coping skills to maintain a clean and sober lifestyle.

HS 122
Alcohol/Drug Group Process . . . . . 5.0 Credits
Practical basics of group work as applied to alcohol/drug and co-dependency treatment. Dynamics of group interaction, composition, goal-setting, and group topic development to be included. Experiential learning opportunity provided.

HS 124
Case Management of Chemically Dependent Client . . . . . 3.0 Credits
Understanding coordination of assessment, treatment planning, resource identification, service implementation, monitoring progress, legal documentation requirements, and evaluation of the chemically dependent patient.

HS 202
Therapeutic Approaches & Techniques . . . . . 5.0 Credits
Introduction to basic counseling skills. The course will deal with principles, concepts, and processes of counseling. Counseling skills are demonstrated and practiced.

HS 220
Advanced Counseling . . . . . 5.0 Credits
Designed for the individual who is involved in the field of therapeutic counseling of chemically dependent patients, their families, and significant others. Advanced skills are introduced and practiced in class sessions. Includes brief review of basic interviewing skills. Special attention to issues regarding nonverbal language and counselor ethics. Prerequisite: HS 120.

HS 222
Alcohol/Drug Pharmacology/Physiology . . . . . 3.0 Credits
Physical response of the human body to alcohol and other drugs, current research findings, basic information and terminology essential for working on treatment teams with physicians and nurses and for communicating with patients and families.

HS 224
Chemical Dependency in the Family . . . . . 5.0 Credits
Study of family dysfunction and family therapy models focusing on empowerment of family members. Introduction to dynamics of co-dependency, family intervention, and support programs.

HS 231
Adolescent Chemical Dependency Assessment & Counseling Techniques. . . . . 3.0 Credits
This course will explore in depth the various needs of the chemically dependent adolescent, including specific assessment and counseling techniques. Models of adolescent chemical dependency treatment will be studied as well as their effectiveness.

HS 232
Relapse Prevention . . . . . 3.0 Credits
The course will provide a comprehensive understanding of the problems of relapse, models of relapse, assessment of relapse, relapse management, and relapse prevention.

HS 233
Chemical Dependency and the Law . . . . . 3.0 Credits
This course will allow the student to have an enhanced understanding of the legal ramifications of chemical dependency. Topics that will be covered are ethical and legal obligations and limitations of the chemical dependency counselor, search and seizure law practices, domestic law as related to chemical dependency, the influence and effect of drugs on the criminal justice and corrections systems, and other related topics.

HS 240
Survey of Chemical Dependency . . . . . 3.0 Credits
This course is designed to provide the student with a basic knowledge of chemical dependency, disease concepts, theories of addiction, rates of prevalence, and problems associated with addiction.

HS 241
Advanced Adolescent Chemical Dependency Assessment & Counseling . . . . . 5.0 Credits
This course will expand the knowledge gained in HS 231 and will provide additional experience with adolescent addictions theory. Specific course topics will include advanced adolescent assessment, adolescent and child development in relation to alcohol/drug use, and advanced assessment and treatment of the culturally diverse youth as required by Washington Administrative Code for Youth Chemical Dependency Counselors (YCDC.)

HS 2972
Alcohol/Drug Practicum . . . . . .1.0 - 6.0 Credits
Students will acquire practical experience within a qualified chemical dependency agency to assist in utilizing skills learned within the classroom.

Industrial Drawing

DRW 106
Mechanical Drawing for Vocational Application . . . . . 3.0 Credits
A basic course in the technique of sketching and drawing. Welding students will learn to create orthographic, oblique, and isometric renderings. The course also teaches dimensioning for the welding shop fabrication drawings.

Intercultural Studies

ICS 120
Survey of Hispanic Culture [H] . . . . . 5.0 Credits
An introduction to the culture and civilization of the Spanish-speaking world; taught in English.

ICS 130
Survey of Asian American Culture [H]. . . . . 5.0 Credits
This course offers an introduction to the history and people of Asian descent in the United States. The class will cover the ethnic, national, cultural, and religious diversity of Americans who trace their culture and/or origins to Asia as well as the immigration and acculturation of members of these populations.

ICS 222
Columbia Basin Cultures [H]. . . . . 5.0 Credits
A study of the history and contemporary situation of the Columbia Basin with special attention paid to Native Americans, Hispanic Americans, Asian Americans, and African Americans. Important topics include early settlement, labor relations, race relations, and historic and modern patterns of migration.

ICS 255
Race and Ethnic Relations [S/B] . . . . . 5.0 Credits
Relationships among various ethnic and racial groups in America, patterns of immigration, assimilation and mobility, and inter-ethnic conflicts and coalitions will be examined. Although the perspective is historical, contemporary data will be used to explore the question of the persisting impact of ethnicity. Special attention will be paid to the relationship between ethnicity and social class.

Japanese Common Course

JAPN& 121
Japanese I [H] . . . . . 5.0 Credits
Introduction to the Japanese language including speaking and listening skills, reading, writing, and grammar, and the Japanese culture including geography, customs, daily life, and heritage. Designed for the novice learner of Japanese, with little or no proficiency in the Japanese language. Recommended that students have successfully completed at least ENGL 099. (Previously JPSE 101.)

JAPN& 122
Japanese II [H] . . . . . 5.0 Credits
Introduction to the Japanese language including speaking and listening skills, reading, writing, grammar, and the Japanese culture including geography, customs, daily life, and heritage. Prerequisite: JAPN& 121 or instructor's permission. (Previously JPSE 102.)

JAPN& 123
Japanese III [H] . . . . . 5.0 Credits
Introduction to the Japanese language including speaking and listening skills, reading, writing, grammar, and the Japanese culture including geography, customs, daily life, and heritage. Prerequisite: JAPN& 122 or instructor's permission. (Previously JPSE 103.)

JAPN& 221
Japanese IV [H] . . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, and listening). The course includes cultural readings and includes an in-depth review of basic Japanese grammar, expansion of basic vocabulary, and a broadening of the student's understanding of Japanese culture (including geography, customs, daily life, and heritage). Prerequisite: JAPN& 123 or instructor's permission. (Previously JPSE 201.)

JAPN& 222
Japanese V [H] . . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, and listening). The course includes cultural readings and in-depth review of basic Japanese grammar, expansion of basic vocabulary, and a broadening of the student's understanding of Japanese culture. Prerequisites: JAPN& 221 or instructor's permission. (Previously JPSE 202.)

JAPN& 223
Japanese VI [H] . . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, and listening). The course includes cultural readings and in-depth review of basic Japanese grammar, expansion of basic vocabulary, and a broadening of the student's understanding of Japanese culture. Prerequisites: JAPN& 222 or instructor's permission. (Previously JPSE 203.)

Machine Technology

MT 102
Solid Works for Machine Technology . . . . . 5.0 Credits
This course is an introduction to solidworks design software. The course's intent is to guide students through the software so they develop an understanding of how parts are designed as well as the concepts of blueprint construction/reading. We are stressing the principles of geometric construction and constraints such as perpendicularity, concentricity, and parallelism so the student will be able to understand the workings of a precision model. Prerequisite: CA 100 or instructor's permission.

MT 111
Basic Machine Tech I . . . . . 5.0 Credits
This course is designed to give students skills in using measuring instruments and concepts of machining with a metal lathe. Upon completion of this course, the student should know how to turn and measure diameters within .001", cut threads, knurl, and cut tapers. Student will take ASSET test first week of class if not previously taken.

MT 1111
Basic Machine Tech I Lab . . . . . .1.0 - 9.0 Credits
Work on projects using the lathe to practice the concepts taught in the class.

MT 121
Basic Machine Tech II . . . . . 5.0 Credits
This course is designed to build skills and knowledge on vertical and horizontal milling machine. Upon completion, the student should be able to set up a milling machine to cut features with a tolerance of .001". Prerequisite: MT 111 or instructor's permission.

MT 1211
Basic Machine Tech II Lab . . . . . .1.0 - 9.0 Credits
Work on projects using the lathe and milling machine to practice the concepts taught in class. Prerequisite: MT 1111 or instructor's permission.

MT 131
Basic Machine Tech III. . . . . 5.0 Credits
This course is designed to build skills and knowledge on a vertical milling machine. Upon completion of this course, the student should be able to set up the machine and cut project within a .001" tolerance. Prerequisite: MT 121 or instructor's permission.

MT 1311
Basic Machine Tech III Lab . . . . . .1.0 - 9.0 Credits
Work on projects using the lathe and milling machine to practice the concepts taught in the class. Prerequisite: MT 1211 or instructor's permission.

MT 201
Introduction to Engineering Material Science . . . . . 5.0 Credits
As an introductory course, the goal is to learn the fundamental nature of engineered materials as applied to a Machine Technology Certificate or as a qualifying transfer class to a bachelor program. Instruction will start with the basics of how materials are organized on the atomic, microscopic, and macroscopic levels, and how and why these produce a finished project. Though this course is more practical to the common processes used today, it will also introduce new trends in materials manufacturing for sustainability, automation, and some of the recent developments in materials science using polymers, composites, ceramics, and advanced metal alloys. Materials science and engineering is an exciting field and an understanding of it is vital for technologists and engineers alike.

MT 211
Advanced Machine Tech I . . . . . 5.0 Credits
This course is designed to build skills and knowledge in Computer Numerical Controlled (CNC) milling. Upon completion of this course, the student should be able to program, set up, and operate a CNC milling machine. Prerequisite: MT 131 or instructor's permission.

MT 2111
Advanced Machine Tech I Lab . . . . . .1.0 - 9.0 Credits
Work on projects using the lathe and milling machine to practice the concepts taught in class. Prerequisite: MT 211 or instructor's permission.

MT 221
Advanced Machine Tech II . . . . . 5.0 Credits
This course is designed to build skill and knowledge in CNC. Upon completion of this course, the student should be able to program, set up, and operate CNC equipment. Prerequisite: MT 211 or instructor's permission.

MT 2211
Advanced Machine Tech II Lab . . . . . 9.0 Credits
Work on projects using the CNC to practice the concepts taught in class. Prerequisite: MT 2111 or instructor's permission.

MT 231
Advanced Machine Tech III . . . . . 5.0 Credits
This course is designed to build skill and knowledge in Computer Aided Manufacturing (CAM). Upon completion of this course, the student should be able to draw a part in a solid modeling software, write a program with the CAM system, and machine the part on a CNC. Prerequisite: MT 221 or instructor's permission.

MT 2311
Advanced Machine Tech III Lab . . . . . 9.0 Credits
Work on projects using Solidworks, CAM system, and CNC milling machine to practice the concepts taught in class. Prerequisite: MT 2211 or instructor's permission.

MT 291
Basic Tool/Die . . . . . 1.0 - 18.0 Credits
This course is designed to teach students the basics of tool and die. The students work on various projects in tool and die design using CAD/CAM and CNC machines.

Mathematics

MATH 080
Whole Numbers . . . . . .1.0 Credit
Addition, subtraction, multiplication, and division. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format unless otherwise noted. Prerequisite: ASSET score between 23-28 or COMPASS score between 1-19. **(Previously MTH 080.)**

MATH 081
Fractions . . . . . .1.0 Credit
Fraction operations and word problems. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format unless otherwise noted. Prerequisite: ASSET score between 29-32 or COMPASS score between 20-27. **(Previously MTH 081.)**

MATH 082
Measures/Decimals/Percentages . . . . . 2.0 Credits
Decimals, ratios, proportions, percents, measurements, and graphs. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format unless otherwise noted. Prerequisite: MATH 081. **(Previously MTH 082.)**

MATH 083
Review Basics . . . . . 2.0 Credits
A review of whole numbers, fractions, decimals, percents, power and square roots, measurement and metrics, word problems (fractions, decimals, percentages), and tables and graphs. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format unless otherwise noted. Prerequisite: ASSET score between 33-37 or COMPASS score between 28-43. **(Previously MTH 083.)**

MATH 084
Algebra/Geometry. . . . . 2.0 Credits
This introductory course includes signed number operations, algebraic concepts, ratio and proportion, rectangular coordinates, angles, triangles, and area and volume. For the student who has never taken algebra or who needs a refresher before enrolling in MATH 091. Prerequisite: MATH 082 with appropriate TABE test score or MATH 083 or ASSET 38-40/COMPASS 44-50 placement. **(Previously MTH 084.)**

MATH 093
Vocation Review . . . . . 3.0 Credits
This course is primarily coverage of high school shop math and elementary algebra. Topics include measurement principles such as fractional measure calculations plus decimals, conversion of metric to standard and vice versa using various measuring devices, area and volume formulas of complex shapes, solution of linear equations and inequalities for industry application, along with reading of graphs intended for industrial usage, and designed to meet deficiencies in computing measure for vocational applications. This course is for vocational students entering the various vocational disciplines, not intended to replace or augment MATH 096, MATH 097, MATH 098, or MATH 095. Prerequisite: MATH 084 or ASSET test placement at MATH 096 or better and a grade of 2.5 or above.

MATH 095
Intermediate Algebra. . . . . 5.0 Credits
This course is a rapid coverage of high school-level algebra. Topics include integer and rational exponents, operations with polynomials and factoring, operations with rational and radical expressions, solving quadratic and rational equations, graphs of lines and parabolas, systems of equations, complex numbers, functions, and applications of all of the aforementioned. Prerequisite: 2.0 or better in MATH 097 is acceptable but not advised or ASSET/COMPASS test placement. (Previously MTH 095.)

MATH 096
Algebra Review 1 . . . . . 5.0 Credits
The first course of a three-quarter sequence (MATH 096, MATH 097, MATH 098) which covers elementary and intermediate algebra. Topics include operations with real numbers, solutions of linear equations and inequalities, graphing lines, and applications of the aforementioned. Prerequisite: MATH 084 or ASSET/COMPASS test placement. (Previously MTH 096.)

MATH 097
Algebra Review 2 . . . . . 5.0 Credits
The second course of a three-quarter sequence (MATH 096, MATH 097, MATH 098) which covers elementary and intermediate algebra. Topics include operations with polynomials, factoring polynomials, solving equations by factoring, exponents, scientific notation, operations with rational expressions, solving rational equations, and applications of all of the aforementioned. Prerequisite: grade of 2.0 or better in MATH 096 or ASSET/COMPASS test placement. (Previously MTH 097.)

MATH 098
Algebra Review 3 . . . . . 5.0 Credits
The third course of a three-quarter sequence (MATH 096, MATH 097, MATH 098) which covers Elementary and Intermediate Algebra. Topics include: graphs of lines and parabolas, systems of equations, operations with radical expressions, complex numbers, solving quadratic equations, functions, and applications of the aforementioned. A grade of 2.0 or better in this class will satisfy the Intermediate Algebra proficiency requirement for the AA degree. Prerequisite: grade of 2.0 or better in MATH 097. (Previously MTH 098.)

MATH 100
Algebraic Tools for Vocational Application . . . . . 2.0 Credits
The first course of a three-quarter sequence designed to introduce the vocational student to the tools necessary to solve mathematical problems applicable to the student's trade. Topics include operations with natural numbers, integers, and rational numbers; introduction to set theory; solving liner equations; linear. Prerequisite: ASSET test placement at MATH 096 or 2.5 or higher in MATH 092. (Previously MTH 100.)

MATH 102
Geometric Tools for Vocational Application. . . . . 3.0 Credits
The second course of a three-quarter sequence designed to introduce the vocational student to the tools necessary to solve mathematical problems applicable to the student's trade. Topics include fundamental instruction in plane and solid geometry including linear, area, and volumetric calculations of various composite shapes. Prerequisite: 2.0 or higher in MATH 100. (Previously MATH 102.)

MATH 106
Business Mathematics . . . . . 5.0 Credits
Mathematical concepts used in business such as interest, buying, selling, and depreciation. Required by some majors for AAS degree; does not satisfy math requirement for AA degree. This course does not satisfy the prerequisite requirements for courses requiring MATH 095. Prerequisite: MATH 084 or ASSET/COMPASS test placement. (Previously MTH 106.)

MATH 108
Math for Early Childhood Education . . . . . 5.0 Credits
An elementary introduction to problem solving, fractions and decimals, probability and statistics, geometry and measurement, and functions and graphs. Intended for early childhood and para education majors only. Prerequisite: MATH 084 or ASSET/COMPASS test placement. (Previously MTH 108.)

MATH 109
Trigonometric Tools for Vocational Application . . . . . 3.0 Credits
The third course of a three-quarter sequence designed to introduce the vocational student to the mathematical tools necessary to solve problems applicable to the student's trade. Topics include trigonometric functions, emphasis on right angle triangles; law of sines; law of cosines; solving oblique triangles; and vectors. Prerequisite: 2.0 or higher in MATH 102. (Previously MTH 109.)

MATH 111
Automotive Math . . . . . 5.0 Credits
Mathematical concepts listed in the automotive trades including algebraic functions, geometry, interest, discounts, brief review of micrometer reading, and the physics of engine design. Required by Automotive Technology for AAS degree; does not satisfy math requirement for AA degree. Prerequisite: MATH 084 or COMPASS test placement. (Previously MTH 111.)

MATH 112
Machinist Math. . . . . 5.0 Credits
A mathematic course designed to assist the machine student with the tools necessary to solve problems associated with the field of endeavor-the machine shop. Topics include algebraic manipulation of equations, both linear and quadratic with graphs. The use of ratios, direct, and inverse proportions especially in relation to gears. Introduction to geometric principles, volumes of various shapes, right angle, and obuque trigonometry required for Machine Technology for AAS degree; does not satisfy math requirement for AA degree. Prerequisite: grade of 2.0 or better in MATH 095 or MATH 098, or permission of program lead with input from instructor.

MATH 113
Geometry/Trigonometry [M/S] . . . . . 5.0 Credits
Areas and volumes of basic geometric figures, approximations, ratio and proportions, literal equations, scientific notation, vectors, logarithms, complex numbers, trigonometric functions, and graphs of trigonometric functions. Recommended for students intending to take PHYS& 121. Prerequisite: grade of 2.0 or better in MATH 095, MATH 098, or ASSET/COMPASS test placement. (Previously MTH 113.)

MATH 121
Structure of Elementary Math [M/S] . . . . . 5.0 Credits
An introduction to problem solving principles and strategies, sets and logic, numeration systems, properties of the real number system and its subsystems, and applications of mathematics. Primarily for elementary education majors. This course satisfies the quantitative skills requirement for the AA degree provided that MATH 122 is also successfully completed. Prerequisite: grade of 2.0 or better in MATH 095, MATH 098, or ASSET/COMPASS test placement. (Previously MTH 121.)

MATH 122
Informal Geometry/Elementary Teachers [M/S][Q/SR] . . . . . 5.0 Credits
An informal approach to the basic ideas of geometry; including construction, congruence and similarity, transformations, symmetry, measurement, and coordinate geometry. This course satisfies the quantitative skills requirement for the AA degree, provided that MATH 121 has also been successfully completed. Prerequisite: grade of 2.0 or better in MATH 121. (Previously MTH 122.)

MATH 123
Algebra/Probability/Stats Elementary [M/S][Q/SR] . . . . . 5.0 Credits
An elementary introduction to algebraic reasoning, probability, and statistics. Primarily for elementary education majors. This course satisfies the quantitative skills requirement for the AA degree, provided that MATH 121 has been successfully completed. Prerequisite: grade of 2.0 or better in MATH 121. (Previously MTH 123.)

MATH 147
Finite Math [M/S] [Q/SR] . . . . . 5.0 Credits
Fundamental concepts of mathematics emphasizing appreciation and respect for precise definitions and logical reasoning. A course especially suited for students in the behavioral, managerial, and social sciences. Topics include matrices, systems of linear equations and inequalities, finance, probability, and counting techniques, game theory, decision analysis, and Markov chains. Prerequisite: grade of 2.0 or better in MATH 095, MATH 098, or ASSET/COMPASS test placement. (Previously MTH 147.)

MATH 243
Linear Algebra [MS/] [Q/SR] . . . . . 5.0 Credits
Designed for the physical science majors in fields such as mathematics, engineering, and physics. Topics include vectors, matrices and determinants, lines and planes in 3-space, linear systems, vector spaces, linear transformations, eigenvalues, and eigenvectors. Prerequisite: grade of 2.0 or better in MATH& 151. (Previously MTH 243.)

MATH 246
Discrete Structures [M/S] [Q/SR] . . . . . 5.0 Credits
This course is an introduction to discrete mathematics, trees, graphs, elementary logic, and combinatorics with applications to computer science. Prerequisite: grade of 2.0 or better in MATH& 141. A knowledge of computers, programming, and calculus would be beneficial but is not required. (Previously MTH 246.)

MATH 255
Differential Equations [M/S] [Q/SR] . . . . . 5.0 Credits
Beginning course in differential equations. Topics include first order methods, linear differential operators, laplace transforms, series methods, and numerical techniques. Prerequisite: MATH& 153 or equivalent. MATH& 153 may be taken concurrently. (Previously MTH 254.)

Mathematics Common Course

MATH& 107
Math In Society [M/S] [Q/SR] . . . . . 5.0 Credits
This class is designed for the student who has successfully completed intermediate algebra. The course will attempt to make mathematics enjoyable, practical, understandable, and informative using a variety of real-life applications. Topics include linear, quadratic, exponential, and logarithmic models, geometry, tessellations, fractals, logic, interest, annuities, loans, probability, and statistics. The class will satisfy the quantitative skills requirement for the AA degree. Prerequisite: grade of 2.0 or better in MATH 095, MATH 098, or ASSET/COMPASS test placement. (Previously MTH 130.)

MATH& 141
Precalculus I [M/S] [Q/SR] . . . . . 5.0 Credits
Designed to prepare the student for entry into Basic Calculus. Precalculus I together with Precalculus II is designed to prepare the student for entry into the calculus sequence: MATH& 151, MATH& 152, MATH& 153, and MATH& 254. The topics include absolute value, complex numbers, linear and quadratic equations, rational, polynomial, exponential and logarithmic functions, inverse functions, theory of equations, and sequences and series. Prerequisite: grade of 2.0 or better in MATH 095, MATH 098, or ASSET/COMPASS test placement. Students completing MATH& 141 may not receive graduation credit for MATH& 144. (Previously MTH 154.)

MATH& 142
Precalculus II [M/S] [Q/SR] . . . . . 5.0 Credits
Precalculus II is the second quarter of the precalculus sequence. Precalculus II is predominantly trigonometry. The topics include trigonometric functions and their inverses, solving triangles, circular functions, identities, conditional equations, complex numbers in polar form, conic sections, parametric and polar equations, systems of equations, matrices and determinants, and vectors. Prerequisite: grade of 2.0 or better in MATH& 141. Students completing MATH& 142 may not receive graduation credit for MATH& 144. (Previously MTH 155.)

MATH& 144
Precalculus I & II [M/S] [Q/SR] . . . . . 5.0 Credits
Precalculus I & II is a condensed, accelerated combination of Precalculus I and Precalculus II. Selected topics from Precalculus I and Precalculus II are covered in one quarter, allowing the better prepared student to complete the precalculus preparation in one quarter rather than two. The topics include polynomial, rational, logarithmic, and circular functions. Also, analytic geometry, complex numbers, vectors, and sequences and series. Prerequisite: ASSET/COMPASS test placement or instructor's permission. Students completing MATH& 144 may not receive graduation credit for MATH& 141 and/or MATH& 142. (Previously MTH 157.)

MATH& 146
Introduction to Stats [M/S] [Q/SR] . . . . . 5.0 Credits
A course especially suited for the non-physical science major such as business, behavioral sciences, computer science, etc. A study of both descriptive and inferential statistics. It includes measures of central tendency, probability, sampling methods, hypothesis testing, linear regression, and correlation. Prerequisite: grade of 2.0 or better in MATH 095, MATH 098, or ASSET/COMPASS test placement. (Previously MTH 143.)

MATH& 148
Business Calculus [M/S] [Q/SR] . . . . . 5.0 Credits
Designed for non-physical science majors such as business, management, behavioral science, and social science. Topics include relations, functions, exponential and logarithmic functions, derivatives and their applications, integrals and their applications, and functions of several variables. Prerequisite: grade of 2.0 or better in MATH& 141 or ASSET/COMPASS test placement. (Previously MTH 210.)

MATH& 151
Calculus I [M/S] [Q/SR]. . . . . 5.0 Credits
The first course in the sequence for students whose major field of study requires a full year of calculus. Topics include limits of algebraic and trigonometric expressions, the derivatives of algebraic and trigonometric functions, applications of the derivative, and an introduction to antiderivatives and the definite and indefinite integral. Prerequisites: Grade of 2.0 or better in MATH& 141 and MATH& 142 or MATH& 144 or ASSET/COMPASS test placement. (Previously MTH 231.)

MATH& 152
Calculus II [M/S] [Q/SR] . . . . . 5.0 Credits
A continuation of MATH& 151. Topics includeapplications of the definite integral; differentiation and integration of logarithmic, exponential, and inverse trigonometric functions; hyperbolic functions and their inverses, techniques of integration; indeterminate forms and improper integrals. Prerequisite: grade of 2.0 or better in MATH& 151 or equivalent. (Previously MTH 232.)

MATH& 153
Calculus III [M/S] [Q/SR] . . . . . 5.0 Credits
A continuation of MATH& 152. Topics include infinite sequences and series, conics, parametric equations, polar coordinates, arc length, vectors in two and three dimensions, surfaces, cylindrical coordinates, and spherical coordinates. Prerequisite: grade of 2.0 or better in MATH& 152 or equivalent. (Previously MTH 233.)

MATH& 254
Calculus IV [M/S] [Q/SR] . . . . . 5.0 Credits
An introduction to the calculus applied to functions of two or three variables. Topics include functions of several variables, partial derivatives, differentials, directional derivatives, multiple integration, vector fields, line integrals, Green's Theorem, surface integrals, the Divergence Theorem, and Stokes's Theorem. Prerequisite: grade of 2.0 or better in MATH& 153 or equivalent. (Previously MTH 234.)

Medical Assistant

MA 111
Pharmacology I. . . . . 5.0 Credits
This class will provide a basic knowledge of pharmacology including the legal, ethical issues, the terms and abbreviations, the involvement of governmental agencies, the role of the providers and allied health professional, reading, interpreting, and documenting the medication orders; and the effects of medication and common drugs used with each body system including antineoplastics, analgesics, antipyretics, nutritional supplements, and alternative medicines. Prerequisites: MATH 082 or ASSET score of MATH 083. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 114
Human Body Structure, Function and Diseases I . . . . . 4.0 Credits
This is the first of two structure and function classes introducing cellular function, organ systems of the body, the anatomy and physiology of the integumentary, skeletal, muscular, nervous, endocrine systems, the senses and the blood, and the common diseases and their pathology of each of these body systems. Prerequisites: AOT 147/HIT 147. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 115
Clinical Procedures Theory I. . . . . 4.0 Credits
This class provides a theoretical foundation in medical asepsis and infection control, vital signs, phlebotomy, the medical record, physical agents to promote tissue healing, radiology, sterilization and disinfection, minor office surgery, eye and ear assessment and procedures, the physical examination, and hematology. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 1151
Clinical Procedures Lab I . . . . . 4.0 Credits
This lab class provides for a practice in basic patient exam techniques/procedures/lab tests commonly performed in the physician's office or clinic. Lab to be taken concurrently with MA 115. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 140
Administrative Medical Assistant Office Procedures I . . . . . 5.0 Credits
This course will help define the front office roles and responsibilities of an Administrative Medical Assistant. Major topics covered are a history of the profession, communication, patient education, performing administrative office duties including reception, appointment scheduling, and the use of computers in the medical office. Required admission into the Medical Assisting program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 141
Career Development for Medical Assistants . . . . . 2.0 Credits
This class will cover professionalism in a medical office, successful job search, interview techniques, the importance of networking, and how to be successful on the job. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 211
Pharmacology II . . . . . 5.0 Credits
This is the second of two pharmacology classes. This class includes the administration of medication including safety and quality assurance, enteral, percutaneous, and parenteral routes of medication, medication for multi-system application, and medications related to body systems. Prerequisites: MATH 082 or ASSET score of MATH 083. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 214
Human Body Structure, Function and Diseases II . . . . . 4.0 Credits
This is the second of two body classes and includes the circulatory system, lymphatic system and immunity, the respiratory system, the digestive system, nutrition and metabolism, the urinary system, fluid and electrolyte balance, acid-base balance, the reproductive system, growth and development, and the common diseases and their pathology of each of these body systems. Prerequisites: AOT 147/HIT 147. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 215
Clinical Procedures Theory II . . . . . 4.0 Credits
This class provides a theoretical foundation for the gynecological exam and prenatal care pediatric exam, cardiopulmonary procedures, colon procedures, introduction to the clinical laboratory, urinalysis, phlebotomy, hematology, blood chemistry and serology, medical microbiology, and office emergencies. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 2151
Clinical Procedures Lab II . . . . . 4.0 Credits
This class provides for a practice in basic patient exam techniques/procedures/lab tests commonly performed in the provider's office or clinic. Lab to be taken concurrently with MA 215. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 240
Administrative Medical Assistant Office Procedures II . . . . 5.0 Credits
This course will expand on front office roles and responsibilities of an administrative medical assistant. Major topics covered are introductory level bookkeeping, medical billing, medical banking services and procedures, management of practice finances, and the use of computers in the medical office. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 241
Externship Seminar . . . . . .1.0 Credit
This course is to be taken concurrently with the Externship for medical assistants. The seminar will provide current information regarding workplace issues, technologies, and advancements in healthcare pertinent to the externship experience. Students will be engaged in discussions based on their experiential learning opportunities within the externship. Prerequisites: successful completion of all other Medical Assistant courses with a GPA of 2.0 or higher. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

MA 2413
Externship . . . . . 6.0 Credits
This class provides an opportunity to apply the theory learned in the classroom setting to a healthcare setting through practical, hands-on experience. Prerequisites: successful completion of all other Medical Assistant courses with a GPA of 2.0 or higher. Required admission into the Medical Assistant program. Information available at the Health Sciences Division office, (509) 544-8300.

Medical Imaging Technology

IMAGE 100
Bone Densitometry . . . . . 4.0 Credits
An in-depth analysis of bone densitometry positioning, exposure techniques, quality control, film critiquing, and radiation safety. Prerequisites: currently enrolled in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.

IMAGE 110
Bone Densitometry Clinical Practicum . . . . . 4.0 Credits
Students are assigned to a bone densitometry department for 132 hours to satisfy clinical competency requirements of the ARRT for eligibility to sit for the ARRT advanced level exam in bone densitometry. Prerequisites: currently enrolled in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.

IMAGE 225
Mammography . . . . . 4.0 Credits
An in-depth analysis of mammographic positioning, exposure techniques, quality control, film critiquing, and radiation safety. Prerequisites: currently enrolled in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.

IMAGE 229
Mammography Clinical . . . . . 4.0 Credits
Students are assigned to a mammography department for 132 hours to satisfy clinical competency requirements of the ARRT for eligibility to sit for the ARRT advanced level exam in mammography. Prerequisite: acceptance into the program.

IMAGE 250
Cross Sectional Anatomy . . . . . 3.0 Credits
Course presents normal human anatomy in various planes using CT, MR, Interventional, and Cardiac Cath images. Prerequisites: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 251
Advanced Sectional Anatomy . . . . . 2.0 Credits
Designed for students having completed a cross-sectional anatomy course. Neuro and vascular anatomy and sectional images of joint and extremity body areas will be presented with CT and MRI images. Prerequisites: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 265
Body Pathophysiology . . . . . 3.0 Credits
Presents pathologies of the abdomen, chest, and neck with physiological implications pertinent to CT, MR, Interventional, and Cardiac Cath imaging modalities. Prerequisites: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 266
Neuropathophysiology . . . . . 3.0 Credits
Presents neurological-based pathologies and the related diagnostic/interventional procedures applied in evaluation and treatment of them. Prerequisites: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 270
CT Clinical Practicum I . . . . . 12.0 Credits
Provides hands-on experience in the clinical setting. Students perform designated tasks associated with CT scanning and procedures under direct and indirect supervision. Completion of this course prepares the student for entry-level work in a CT department. Prerequisites: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 271
MRI Clinical Practicum II . . . . . 12.0 Credits
Provides hands-on experience in the clinical setting. Students perform designated tasks associated with MRI scanning and procedures under direct and indirect supervision. Prerequisites: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 280
CT Instrumentation . . . . . 3.0 Credits
Designed to provide didactic preparation for advanced-level certification exam in CT scanning. Includes information pertaining to the equipment used, clinical application, specific technique applications, patient care, and quality control. Prerequisites: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 281
MRI Instrumentation and Procedures . . . . . 3.0 Credits
Presents the physics of magnetization, image production, image weighting, pulse responses, scanning procedures, magnet safety, and the role of the technologist. Prerequisites: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

Music

MUSC 100
Music Fundamentals . . . . . 3.0 Credits
Non-major course covering basic concepts of rhythm, melody, keyboards, scales, and harmony. (Previously MUS 100.)

MUSC 116
History of Jazz [H] . . . . . 5.0 Credits
The evolution of jazz and the development of black music in white America. This is an intercultural humanities course. Emphasis on listening and enjoyment through the use of recordings, attendance at concerts, and films. (Previously MUS 116.)

MUSC 118
Band . . . . . 1.0 - 2.0 Credits
Instruction and performance of standard and contemporary wind literature. In all performing groups a maximum of six elective credits may be applied to an AA degree. (Previously MUS 118.)

MUSC 122
Applied Music . . . . . .1.0 Credit
Private lessons on wind, percussion, and keyboard instruments. Instruction may be by CBC faculty or by instructors approved by the CBC Music department. There may be additional fees charged by the instructor. These courses are intended for students who are pursuing a degree in music. (Previously MUS 122.)

MUSC 123
Applied Music . . . . . .1.0 Credit
Private vocal lessons. Instruction may be by CBC faculty or by instructors approved by the CBC Music department. There may be additional fees charged by the instructor. These courses are intended for students who are pursuing a degree in music. (Previously MUS 123.)

MUSC 124
Applied Music . . . . . .1.0 Credit
Private lessons on string instruments. Instruction may be by CBC faculty or by instructors approved by the CBC Music department. There may be additional fees charged by the instructor. These courses are intended for students who are pursuing a degree in music. (Previously MUS 124.)

MUSC 125
Orchestra . . . . . .1.0 Credit
Introduction in and performance of standard orchestral literature. In all performing groups a maximum of six elective credits can be applied to an AA degree. Prerequisites: orchestra instrument background and instructor's permission. (Previously MUS 125.)

MUSC 134
Piano Class . . . . . 2.0 Credits
Group piano instruction for all students interested in beginning piano. Students may take more than one quarter. (Previously MUS 134.)

MUSC 135
Piano Class . . . . . 2.0 Credits
Group piano instruction for music majors and minors who cannot meet entrance requirements in piano and for all students interested in beginning piano. (Previously MUS 135.)

MUSC 136
Piano Class . . . . . 2.0 Credits
Group piano instruction for music majors and minors who cannot meet entrance requirements in piano and for all students interested in beginning piano. (Previously MUS 136.)

MUSC 137
Jazz Band. . . . . .1.0 - 3.0 Credits
Study, rehearse, and perform jazz, commercial, and big band literature. Performances required on and off campus. A maximum of six elective credits from this course can be applied to an AA degree. Prerequisite: audition and/or instructor's permission. (Previously MUS 137.)

MUSC 138
Voice Class . . . . . 2.0 Credits
An introduction to the principles of voice production, vocal literature, and vocal techniques. (Previously MUS 141.)

MUSC 139
Voice Ensemble . . . . . .1.0 - 3.0 Credits
Emphasis on vocal ensemble literature. May include different types of ensembles/styles according to available voicing. Prerequisite: instructor's permission. (Previously MUS 142.)

MUSC 140
Vocal Jazz . . . . . .1.0 - 3.0 Credits
Emphasis on swing and vocal jazz concepts within a performance ensemble. Performances required on and off campus. In all performing groups a maximum of six elective credits from this course can be applied to an AA degree. Prerequisite: instructor's permission. (Previously MUS 140.)

MUSC 147
Instrument Ensemble. . . . . .1.0 Credit
The following ensembles will be organized if enrollment warrants: brass ensemble, woodwind ensemble, string ensemble, and mixed instrumental ensemble. A maximum of six elective credits from this course can be applied to an AA degree. (Previously MUS 147.)

MUSC 151
Brass Techniques . . . . . .1.0 - 3.0 Credits
Class instruction in fundamentals and materials for beginning students on brass instruments. Cornet, trumpet, French horn, baritone horn, trombone, sousaphone, and tuba. (Previously MUS 151.)

MUSC 152
Percussion Techniques . . . . . 2.0 Credits
Class instruction in fundamentals and materials for beginning students on percussion instruments. (Previously MUS 152.)

MUSC 153
Woodwind Techniques . . . . . 2.0 Credits
Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon. (Previously MUS 153.)

MUSC 154
Woodwind & Flute . . . . . 2.0 Credits
Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon. (Previously MUS 154.)

MUSC 155
Wood/Oboe/Bassoon . . . . . 2.0 Credits
Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon. (Previously MUS 155.)

MUSC 156
Wood/Oboe/Bassoon . . . . . 2.0 Credits
Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon. (Previously MUS 156.)

MUSC 161
Beginning Folk Guitar . . . . . 2.0 Credits
Group guitar instruction in the fundamentals of folk guitar playing for the beginner, including basic strums, chords, and note reading. (Previously MUS 161.)

MUSC 162
Intermediate Folk Guitar . . . . . 2.0 Credits
Group intermediate guitar instruction for intermediate students. The student will cover various techniques in strumming, picking, movable chords, and musical styles; i.e., Calypso, Latin Strum, Bossa Nova. (Previously MUS 162.)

MUSC 171
Ear Training Fundamentals . . . . . .1.0 Credit
This class will focus on developing the skills to correctly identify major and minor scales, intervals, rhythmic patterns, and triads in root position. This class should be taken concurrently with MUSC& 141. Offered fall quarter only. (Previously MUS 171.)

MUSC 172
Ear Training Fundamentals . . . . . .1.0 Credit
This class will focus on developing the skills to correctly identify triads in 1st and 2nd inversion, basic chord progressions, and cadences. This class should be taken concurrently with MUSC& 142. Offered winter quarter only. (Previously MUS 172.)

MUSC 173
Ear Training Fundamentals . . . . . .1.0 Credit
This class will focus on developing the skills to correctly identify seventh chords (both in root position and inversion), diatonic chord progression, and simple melodies containing basic non-harmonic tones. This class should be taken concurrently with MUSC& 143. Offered spring quarter only. (Previously MUS 173.)

MUSC 181
Chorus. . . . . .1.0 - 3.0 Credits
Instruction and performance of standard choral literature from a variety of historical periods and cultures. Performances required on and off campus. Open to all students. A maximum of six credits from this course can be applied to an AA degree. (Previously MUS 181.)

MUSC 207
Music Literature Survey I. . . . . 3.0 Credits
The historical forms and styles of musical literature with emphasis on the style and period in relation to the cultural development. Classes need not be taken in sequence. Music from the Middle Ages through the Baroque (1750). Prerequisite: MUSC& 105. (Previously MUS 207.)

MUSC 208
Music Literature Survey II . . . . . 3.0 Credits
The historical forms and styles of musical literature with emphasis on the style and periods in relation to the cultural development. Music of the Classical and Romantic Periods (1750-1900). (Previously MUS 208.)

MUSC 209
Music Literature Survey III . . . . . 3.0 Credits
The historical forms and styles of musical literature with emphasis on the style and period in relation to the culture development. Music of the 20th century. (Previously MUS 209.)

MUSC 210
Electronic Music I . . . . . 3.0 Credits
A beginning course focusing on the study of musical sounds and MIDI synthetic sound productions through the use of digital synthesizers and sequencers. Prerequisites: one quarter of piano or demonstrated piano proficiency and instructor's permission. (Previously MUS 210.)

MUSC 211
Electronic Music II . . . . . 3.0 Credits
An intermediate course focusing on the study of musical sounds and synthetic sound productions through the use of digital synthesizer combined with MIDI sequencers. Prerequisite: MUSC 210 or instructor's permission. (Previously MUS 211.)

MUSC 212
Electronic Music III. . . . . 3.0 Credits
An advanced course focusing on the study of musical sounds and synthetic sound productions through the use of digital synthesizers and MIDI sequencers. Prerequisite: MUSC 211 or instructor's permission. (Previously MUS 212.)

MUSC 2151
Studio Problems Electronic Music . . . . . 3.0 Credits
Individual study for advanced students relating to music. Prerequisites: instructor's permission and successfully completed classes in area of individual study and/or demonstrated proficiency in area of individual study. (Previously MUS 2151.)

MUSC 2152
Studio Problems - Conducting . . . . . 3.0 Credits
Individual study for advanced students relating to conducting. Prerequisites: instructor's permission and successfully completed classes in area of individual study and/or demonstrated proficiency in area of individual study. (Previously MUS 2152.)

MUSC 2153
Studio Problems - Composition . . . . . 3.0 Credits
Individual study for advanced students relating to composition. Prerequisites: instructor's permission and successfully completed classes in area of individual study and/or demonstrated proficiency in area of individual study. (Previously MUS 2153.)

MUSC 2154
Studio Problems - Performance . . . . . 3.0 Credits
Individual study for advanced students relating to performance. Prerequisites: instructor's permission and successfully completed classes in area of individual study and/or demonstrated proficiency in area of individual study. (Previously MUS 2154.)

MUSC 225
Applied Music . . . . . 2.0 Credits
Advanced private vocal lessons. Instruction may be by CBC faculty or by instructors approved by the CBC Music department. There may be additional fees charged by the instructor. These courses are intended for students who are pursuing a degree in music. (Previously MUS 225.)

MUSC 227
Applied Music . . . . . 2.0 Credits
Advanced private instrumental lessons. Instruction may be by CBC faculty or by instructors approved by the CBC Music department. There may be additional fees charged by the instructor. These courses are intended for students who are pursuing a degree in music. (Previously MUS 227.)

MUSC 236
Piano Class/Music Majors . . . . . 2.0 Credits
Group piano instruction for music majors who cannot meet keyboard entrance requirements necessary for transfer to four-year institutions or for more advanced students interested in concepts of piano theory. Students may take more than one quarter. (Previously MUS 236.)

MUSC 240
Jazz Theory and Improvisation . . . . . .1.0 - 2.0 Credits
A combination of jazz theory and improvisation techniques for the small group setting. The emphasis will be on individual solving skills. Performance required at various CBC concerts and jazz festivals. (Previously MUS 240.)

MUSC 244
Advanced Vocal Jazz . . . . . .1.0 - 3.0 Credits
Emphasis on traditional and contemporary vocal jazz concepts in an advanced ensemble situation. Extensive audition required each spring for the following academic year. Performances required on and off campus. A maximum of six credits from this course can be applied to an AA degree. Prerequisite: instructor's permission. (Previously MUS 242.)

MUSC 274
Advanced Ear Training . . . . . .1.0 Credit
This class will focus on developing the skills to correctly identify chord progressions and melodic dictation. There will also be continued work with ear training concepts. This class should be taken concurrently with MUSC& 241. Offered fall quarter only. (Previously MUS 274.)

MUSC 275
Advanced Ear Training . . . . . .1.0 Credit
This class will focus on developing the skills to correctly notate chord progressions using inversions, two-part melodic dictation, and identification of chromatically altered chords. This class should be taken concurrently with MUSC& 242. Offered winter quarter only. (Previously MUS 275.)

MUSC 276
Advanced Ear Training . . . . . .1.0 Credit
This class will focus on developing the skills to correctly notate chord progressions using inversions and chromatically altered chords, four-part dictation, and identification of scales, chords, and progressions as used in 20th century techniques. This class should be taken concurrently with MUSC& 243. Offered spring quarter only. (Previously MUS 276.)

MUSC 281
Advanced Chorus . . . . . .1.0 - 3.0 Credits
Instruction and performance of advanced choral literature from a variety of historical periods and cultures. Performances required on and off campus. A maximum of six credits from this course can be applied to an AA degree. Prerequisite: instructor's permission. (Previously MUS 281.)

Music Common Course

MUSC& 105
Music Appreciation [H] . . . . . 5.0 Credits
The study of musical literature from early times to the present. Emphasis on listening and enjoyment through the use of recordings, attendance at concerts, and films. (Previously MUS 115.)

MUSC& 141
Music Theory I . . . . . 5.0 Credits
Courses must be taken in sequence. The melodic, rhythmic, and harmonic elements of music through ear-training, sight singing, writing, analysis, and keyboard work. This course should be taken concurrently with MUSC 171. Some music background is required. Students with no piano background should take MUSC 134 concurrently. Offered fall quarter only. (Previously MUS 101.)

MUSC& 142
Music Theory II . . . . . 5.0 Credits
Courses must be taken in sequence. The melodic, rhythmic, and harmonic elements of music through ear-training, sight singing, writing, analysis, and keyboard work. Students with no piano background must take MUSC 135 concurrently. Prerequisite: MUSC& 141. Offered winter quarter only. (Previously MUS 102.)

MUSC& 143
Music Theory III. . . . . 5.0 Credits
Courses must be taken in sequence. The melodic, rhythmic, and harmonic elements of music through writing, analysis, ear-training, sight singing, and keyboard work. Music background is required. Students with no piano background must take MUSC 136 concurrently. Prerequisite: MUSC& 142. Offered spring quarter only. (Previously MUS 103.)

MUSC& 241
Music Theory IV. . . . . 5.0 Credits
Melody harmonization, harmonic dictation, chromatic harmony, advanced modulation, 20th century techniques, and oral composition. Prerequisite: MUSC& 143. This course should be taken concurrently with MUSC 274. Offered fall quarter only. (Previously MUS 204.)

MUSC& 242
Music Theory V . . . . . 5.0 Credits
Melody harmonization, harmonic dictation, chromatic harmony, advanced modulation, 20th century techniques, and oral composition. Prerequisite: MUSC& 241. Offered winter quarter only. (Previously MUS 205.)

MUSC& 243
Music Theory VI. . . . . 5.0 Credits
Melody harmonization, harmonic dictation, chromatic harmony, advanced modulation, 20th century techniques, and oral composition. Prerequisite: MUSC& 242. Offered spring quarter only. (Previously MUS 206.)

Non-Destructive Testing

NDT 101
Basic NDT Theory in VT, PT, RMT . . . . . 5.0 Credits
An introductory-level study of non destructive testing, welding codes, and standards as applied in the construction trades and maintenance repair programs. Includes discussion of NDE techniques, AWS, API inspection standards, ASME Sections V and IX codes, and introduces their use. The training will follow SNT-TC-1A format for Visual Testing Level I (VT-I), Magnetic Particle Testing Level I (MT-I) and Penetrant Testing Level I (PT-I). Upon completion of this course, the student should be able to minimally identify proper welding codes, follow inspection procedures, and be able perform Level I NDE for the three techniques VT, PT, and MT.

NDT 102
Basic Ultrasound & Radiographic Testing . . . . . 5.0 Credits
An entry-level course on ultrasonic and radiographic testing, techniques as applied in the construction trades, and maintenance repair programs. This is a course for individuals with little or no experience in ultrasonic and radiographic testing. The course is divided into two parts, ultrasonic and radiographic testing. The course covers ultrasonic and radiographic theory, applications, inspection procedures, training standards, evaluation codes, interpretation of results, and instrument operation. Includes discussion of NDE techniques, AWS, API inspection standards, ASME Sections V and IX codes, and introduces their use. The class outline will generally follow SNT-TC-1A format for Ultrasonic Testing Level I (UT-I) and Radiographic Testing Level I (RT-I.)

Nuclear Medicine Technology

NMTEC 200
Applied Anatomy & Physiology. . . . . .1.0 Credit
Studies human anatomy and physiology as they apply to nuclear medicine imaging. Specific organ systems covered include skeletal, circulatory, cardiac, pulmonary, gastrointestinal, immune, excretory, endocrine, and central nervous systems. Prerequisite: acceptance into program.

NMTEC 201
Basic Nuclear Medicine Science . . . . . 3.0 Credits
Presents basic science required for nuclear medicine. Topics include types of radiation, half-life and radioactive decay, interactions of radiation, detection instruments, statistics of radiation counting, basic radiation protection, and introduction to gamma camera. Prerequisite: acceptance into program.

NMTEC 202
Instrumentation . . . . . 3.0 Credits
Examines the function and use of the nuclear medicine gamma camera. Topics include basic electronics, collimators, digital cameras, online correction systems, and modifications required for tomographic studies. Students learn quality control and troubleshooting. Also includes positron emission tomography. Prerequisite: acceptance into program.

NMTEC 203
Computers in Nuclear Medicine . . . . . 3.0 Credits
Introduces the use of computers in nuclear medicine, emphasizing analysis of static, dynamic, and tomographic images. Prerequisites: acceptance into program.

NMTEC 210
Radiopharmacy. . . . . .1.0 Credit
Studies all commonly used nuclear medicine pharmaceuticals, their preparation, indications for use, dosages, and contraindications. Prerequisite: acceptance into program.

NMTEC 211
Nursing Procedures . . . . . .1.0 Credit
Presents nursing procedures relating to nuclear medicine. Topics include patient assessment, oxygen administration, infection control, intravenous drug administration, vasovagal and anaphylactic reactions, basic pharmacology, sedation, medical and legal issues, cardiac physiology, and electrocardiography. Prerequisite: acceptance into program.

NMTEC 212
Position Emission Tomography. . . . . .1.0 Credit
Covers all aspects of Positron Emission Tomography (PET), including issues relating to implementation and reimbursement for PET scans, approved clinical indications for PET imaging, biochemistry of fluorodeoxyglucose (FDG), clinical aspects of FDG imaging, new PET radiopharmaceuticals, and PET/CT fusion imaging. Applications of PET to research. Prerequisite: acceptance into program.

NMTEC 229
Introduction to Clinical Education. . . . . 3.0 Credits
Provides the student with basic understanding of nuclear medicine instruments and procedures, with an emphasis on the operation of a gamma camera, basic radiopharmacy and radiation safety principles, and patient care procedures. Prerequisite: acceptance into program.

NMTEC 230
Clinical Education I . . . . . .10.0 Credits
First in a five-course sequence of supervised clinical instruction in nuclear medicine technology. Topics including imaging, patient care, radiopharmacy, camera quality control, and computer analysis. Students are expected to gain proficiency according to defined objectives. Prerequisite: acceptance into program.

NMTEC 231
Clinical Education II . . . . . .10.0 Credits
Second in a five-course sequence of supervised clinical instruction in nuclear medicine technology. Topics include imaging, patient care, radiopharmacy, camera quality control, and computer analysis. Students are expected to gain proficiency according to defined objectives. Prerequisite: acceptance into program.

NMTEC 232
Clinical Education III . . . . . .10.0 Credits
Third in a five-course sequence of supervised clinical instruction in nuclear medicine technology. Topics include imaging, patient care, radiopharmacy, camera quality control, and computer analysis. Students are expected to gain proficiency according to defined objectives. Prerequisite: acceptance into program.

NMTEC 233
Clinical Education IV . . . . . .13.0 Credits
Fourth in a five-course sequence of supervised clinical instruction in nuclear medicine technology. Topics include imaging, patient care, radiopharmacy, camera quality control, and computer analysis. Students are expected to gain proficiency according to defined objectives. Prerequisite: acceptance into program.

NMTEC 234
Clinical Education V . . . . . .13.0 Credits
Fifth in a five-course sequence of supervised clinical instruction in nuclear medicine technology. Topics include radiopharmacy, positron emission tomography, nuclear cardiology, and pediatrics. Prerequisite: acceptance into program.

NMTEC 240
Radiation Safety . . . . . .1.0 Credit
Covers principles and practices for radiation safety. Topics include calculation of doses absorbed from procedures, personnel monitoring, handling, and disposal of radioactive materials, and licensing of a nuclear medicine department. Prerequisite: acceptance into program.

NMTEC 241
Radiation Biology . . . . . .1.0 Credit
Discusses the potentially harmful effects of radiation on humans. Topics include the basic chemistry of radiation interactions in living cells, the effects of extensive radiation exposure, and the potential long-term effects of accumulated radiation damage. Prerequisite: acceptance into program.

NMTEC 250
Sectional Anatomy for Nuclear Medicine . . . . . 3.0 Credits
Presents sectional anatomy of the body, including a brief introduction to the following imaging modalities: CT, MRI, angiography, and ultrasound. Prerequisite: acceptance into program.

NMTEC 260
Clinical Nuclear Medicine I . . . . . .1.0 Credit
Presents nuclear medicine from the technologist's standpoint, emphasizing the technical aspects and pitfalls of nuclear medicine procedures. NMTEC 260 lectures are coordinated with NMTEC 200. Prerequisite: acceptance into program.

NMTEC 261
Clinical Nuclear Medicine II . . . . . .1.0 Credit
Presents nuclear medicine from the physician's standpoint, emphasizing the diagnosis of disease and ways in which the technologist can assist the physician making a correct diagnosis. Prerequisite: acceptance into program.

NMTEC 262
Clinical Nuclear Medicine III. . . . . .1.0 Credit
Discusses advanced topics related to imaging and non-imaging procedures. Topics include Schilling test, H.pylori breath testing, blood volume determination, radioimmunotherapy, and advanced topics in nuclear cardiology, nuclear neurology, and bone densitomotry. Prerequisite: acceptance into program.

NMTEC 275
Board Preparation. . . . . .1.0 Credit
Prepares students for the NMTCB exam by reviewing all aspects of nuclear medicine technology and giving practice tests. Students focus on practical application of the basic science knowledge gained throughout the program. Students also complete a capstone project. Prerequisite: acceptance into program.

NMTEC 280
CT for the Nuclear Medicine Technologist . . . . . 3.0 Credits
Provides didactic instruction in CT scanning, as is pertinent to its application to nuclear medicine procedures. Includes information pertaining to production and detection of X-rays in CT, instrumentation and image reconstruction, specific technique applications, patient care and quality control. Prerequisite: acceptance into program.

Nursing

NRS 101
Basic Pharmacology . . . . . .1.0 - 3.0 Credits
Drug dosage calculations and administration techniques. Emphasis is on mathematic computations for various forms of drug administration utilizing household, metric and Apothecary measurements. Prerequisite: admission to the Nursing program.

NRS 111
Nursing I . . . . . .1.0 - 7.0 Credits
Initial course in the Nursing program. Includes theory and clinical practice in the fundamentals of Nursing care and the introduction of the nursing process. Concepts of growth and developmental tasks for all ages and beginning-level professional communication skills are presented. Emphasis is on safety, health maintenance and basic skills development. Prerequisites: admission to the Nursing program and BIOL& 241/BIOL& 241L with a grade of 2.0 or above or concurrent enrollment.

NRS 1111
Nursing I Lab . . . . . 1.0 - 4.0 Credits
Lab to be taken concurrently with NRS 111.

NRS 121
Nursing II. . . . . 1.0 - 5.0 Credits
A continuation of the skills and concepts introduced in NRS 111/NRS 1111. Introduction of physical and mental illness throughout the life span. The nursing process is used as a framework to develop knowledge and skills needed to care for clients. Clinical experience in acute care and gerontology are a part of the course. Prerequisites: NRS 101; NRS 111/NRS 1111; BIOL& 241/BIOL& 241L; BIOL& 242/BIOL& 242L; PSYC& 100 or concurrent enrollment. All must have a grade of 2.0 or above.

NRS 1211
Nursing II Lab . . . . . 1.0 - 5.0 Credits
Lab to be taken concurrently with NRS 121.

NRS 131
Nursing III . . . . . 1.0 - 5.0 Credits
A continuation of NRS 121/NRS 1211 with further exploration of physical and mental illness throughout the life span. Normal labor, delivery, and postpartum care are introduced. A continuing and increasing emphasis on the use of the nursing process to plan, deliver, and evaluate nursing care in the clinical setting. Prerequisites: BIOL& 242/BIOL& 242L; NRS 121/NRS 1211; PSYC& 100, and ENGL& 101 or concurrent enrollment. All must have a grade of 2.0 or above.

NRS 1311
Nursing III Lab . . . . . 1.0 - 5.0 Credits
Lab to be taken concurrently with NRS 131.

NRS 1351
Nursing Trends Lab . . . . . 2.0 Credits
A campus laboratory experience designed to allow the nursing student time to gain proficiency in nursing skills before actual practice in the hospital setting. Students enrolled in the Nursing program register for this class each quarter. Pass/Fail class. Prerequisite: enrollment in the Nursing program.

NRS 141
Practical Nursing . . . . . 1.0 - 5.0 Credits
A course designed to be the completion point of the Practical Nurse curriculum. Emphasis is on theory and practice at the Practical Nurse level in the acute care setting. The legal and professional roles of the Licensed Practical Nurse are included. Students satisfactorily completing the course are eligible to write the State Board Examination leading to licensure as an LPN. Prerequisites: NRS 131/NRS 1311, ENGL& 101. All must have a grade of 2.0 or above.

NRS 1411
Practical Nursing Lab . . . . . 1.0 - 6.0 Credits
This course provides a basic understanding in the role of the Licensed Practical Nurse. This quarter is designed to expand on the student's knowledge and skill base as well as help the student to recognize and identify specific situation and problem areas which require critical thinking and problem-solving skills. Current issues in healthcare and the Washington state laws related to the Licensed Practical Nurses will be reviewed. It is also designed to assist in the transition of student to graduate Practical Nurse and meet the eligibility requirements to write the State Board Exam for Licensure. Team-leading and delegation principles will be introduced and the student will be participating in planned team-leading activities in the clinical setting. Additionally, an introduction to community health nursing will be provided. Prerequisites: successful completion of NRS 131/NRS 1311, or the student is a Licensed Practical Nurse and has met the requirements for entrance into the Advanced Placement program.

NRS 151
Advanced Placement . . . . . 1.0 - 11.0 Credits
This course is offered to LPNs in the community licensed in the state of Washington. An LPN may apply for advanced placement into the second year of the Nursing program. This course is offered summer quarter on a space available basis.

NRS 201
Pharmacology . . . . . 1.0 Credit
This class will supplement, review, and reinforce information provided on pharmacology of drugs that have been covered in Nursing I, II, III, and IV. Students will review drug classifications and pharmacological principles associated with medication administration, while relating this information to a corresponding patient diagnosis as well as understanding the related nursing implications. Students will also be challenged with medication calculations throughout the course of the program. Prerequisites: current enrollment in NRS 211/NRS 2111.

NRS 211
Nursing IV . . . . . 1.0 - 5.0 Credits
The first course in the second level of the Nursing program. Emphasis is on the application of the nursing process in the delivery of nursing care to individuals experiencing acute medical/surgical and psychiatric illness. Classroom and clinical experiences are directed toward increasing the student's knowledge of pathophysiological and psychiatric dysfunctions and developing advanced nursing skills in assessment, planning, and implementation of patient care. Prerequisite: student must meet minimal requirements for entry into the second year of the Nursing program under the following conditions: an LPN with advanced placement; a student continuing in the Nursing program from the first year with a minimum 2.5 GPA in Nursing and a 2.0 in all supporting courses; BIOL& 260/BIOL& 260L with a grade of 2.0 or above or concurrent enrollment.

NRS 2111
Nursing IV Lab . . . . . 1.0 - 5.0 Credits
Lab to be taken concurrently with NRS 211.

NRS 221
Nursing V. . . . . 1.0 - 5.0 Credits
A continuation of NRS 211/NRS 2111. There is continued emphasis on advanced nursing skills as well as leadership, delegation, pharmacological management, and critical thinking skills development in both theory and clinical. Prerequisites: NRS 211/NRS 2111 and BIOL& 260/BIOL& 260L. All must have a grade of 2.0 or above.

NRS 2211
Nursing V Lab . . . . . 1.0 - 5.0 Credits
Lab to be taken concurrently with NRS 221.

NRS 222
Professional Issues I . . . . . 1.0 Credit
One-credit class providing an overview of nursing management and leadership, legal issues in nursing, job search, nursing delivery systems, and role transition issues related to moving from a nursing student to professional nursing practice. Prerequisites: concurrent enrollment in NRS 221/NRS 2211.

NRS 231
Nursing VI . . . . . 1.0 - 5.0 Credits
A progression from NRS 221/NRS 2211 with additional physiological and psychological health needs. Concurrent focus on exploration of nursing roles and organizational approach to the delivery of nursing and healthcare. Clinical experience focuses on the refinement of advanced nursing skills, critical thinking, and leadership abilities. Clinical experiences will assist the student in transition from the classroom to employment. The professional issues will focus on the history and trends of nursing, legal aspects, community health, and current political issues concerning nursing. A project reviewing normal pediatric growth and development as well as care of the pediatric client in the healthcare setting will be required. Prerequisites: NRS 221/NRS 2211; PSYC& 200 and SOC& 101 or concurrent enrollment. All must have a grade of 2.0 or above.

NRS 2311
Nursing VI Lab . . . . . .1.0 - 8.0 Credits
Lab to be taken concurrently with NRS 231.

NRS 232
Professional Issues II . . . . . .1.0 Credit
One-credit class provides an overview of contemporary healthcare, regulations of Registered Nurse practice, collective bargaining, conflict management, safety in the workplace, and boundary issues for professional nurses. Prerequisites: concurrent enrollment in NRS 231/NRS 2311.

NRS 2351
Nursing Trends Lab . . . . . .1.0 Credit
A campus laboratory experience designed to allow the nursing student time to gain proficiency in nursing skills before actual practice in the hospital setting. Students enrolled in the Nursing program register for this class each quarter. Pass/Fail class. Prerequisite: enrollment in the Nursing program.

Nursing Assistant

NA 100
Nursing Assistant . . . . . 4.0 Credits
This course leads to the ability of those completing the course to become eligible for testing as a Nursing Assistant Certified. The course covers communication and interpersonal skills, infection control, safety and emergency procedures, promoting resident independence, respecting resident rights, basic nursing skills, personal care skills, mental health and social services needs, care of the cognitively impaired resident, basic restorative care, resident rights, HIPAA, First Aid and CPR for the healthcare provider, HIV/AIDS, dementia, and cultural awareness. Concurrent enrollment into NA 1001 Lab. Students will be required to demonstrate skills associated with each of the course subjects within the laboratory or clinical setting. More information is available from the Health Sciences Division office at (509) 544-8300.

NA 1001
Nursing Assistant Lab. . . . . 4.0 Credits
This course provides the skills laboratory and clinical requirements for the Nursing Assistant lecture course. The student will be involved in on-campus learning laboratory experiences as well as clinical rotations within community health facilities.

Nutrition [M/S]

NUTR& 101
Nutrition [M/S] . . . . . 5.0 Credits
Principles of nutrition as they apply to macro-nutrients. Economic, cultural, and psychological influences are considered. The need for vitamins, minerals, and special nutritional requirements at different stages of the life cycle and special topics of current concern are included. (Previously NFS 111.)

Paralegal

PL 101
Introduction to Paralegalism . . . . . 5.0 Credits
Basic paralegal procedures designed to acquaint those interested in the paralegal field with a broader understanding of the judicial process.

PL 103
Civil Procedures . . . . . 3.0 Credits
This course is designed to familiarize the student with rules of civil procedure in Washington state, including pretrial tasks in the office, through discovery, to the trial and appeal, and the role of the paralegal in civil litigation.

PL 104
Criminal Procedures . . . . . 3.0 Credits
This course is designed to familiarize the student with rules of criminal procedure in Washington state. This class will begin with constitutional concepts (state and federal) including double jeopardy, right against self-incrimination, right to counsel, etc., how criminal cases are initiated, arrest, search and seizure, exceptions to the warrant requirement, confession procedure, preliminary appearances, pre-trial, trial, verdicts, and post-conviction procedures.

PL 105
Law Office Management . . . . . 3.0 Credits
Office management including policies, budgeting, personnel, purchasing, billing, etc., to relieve attorney from routine duties.

PL 107
Interview/Investigation . . . . . 3.0 Credits
Methods of successfully interviewing clients in a legal setting to put them at ease and obtain the necessary information needed by the attorney.

PL 108
Administrative Law . . . . . 3.0 Credits
Class focuses on state and federal administration agencies, their impact, rule-making procedures, growth, accountability, discretion, and judicial review of their actions.

PL 121
Beginning Contract Law . . . . . 3.0 Credits
A three-quarter series of courses that study promissory agreements between two or more persons which create, modify, or destroy legal relations. Courses include the study of offer, acceptance, and consideration.

PL 122
Intermediate Contract Law . . . . . 3.0 Credits
The study of promissory agreements between two or more persons that create, modify, or destroy legal relations. Courses will include the study of offer, acceptance, and consideration. Prerequisite: PL 121 with a grade of 2.0 or better.

PL 123
Advanced Contract Law . . . . . 3.0 Credits
The study of promissory agreements between two or more persons that create, modify, or destroy legal relations. Courses will include the study of offer, acceptance, and consideration. Prerequisite: PL 122 with a grade of 2.0 or better.

PL 131
Introduction to Torts . . . . . 3.0 Credits
A three-quarter series of courses that includes an introduction to the field of personal injury case law. Emphasis on principles such as international injuries, negligent injuries, activities for which one may be held strictly liable, and products liability. The student also develops an understanding of the principles of case and tort analysis.

PL 132
Intermediate Torts . . . . . 3.0 Credits
Student will develop an understanding of the principles of case and tort analysis. Prerequisite: PL 131 with a grade of 2.0 or better.

PL 133
Advanced Torts . . . . . 3.0 Credits
Studying personal injury case law. Prerequisite: PL 132 with a grade of 2.0 or better.

PL 141
Probate Procedures . . . . . 3.0 Credits
The study of probate laws, practices, and procedures necessary to probate estates. Special emphasis on the skills necessary for a paralegal to handle probate matters.

PL 142
Community Property Law . . . . . 3.0 Credits
A study of the various laws and regulations as they pertain to community and separate property.

PL 143
Trial Preparation . . . . . 3.0 Credits
This course explores the use of investigative techniques in both the civil and criminal arenas, including crime scene and physical evidence, civil rules of evidence, and witness location and interviews. The class learns how the evidence gathered may eventually be used in trial through participation in a mock trial.

PL 145
Family Law . . . . . 5.0 Credits
The various laws and regulations of community and separate property along with the study of procedures as they relate to the family. Substantive practice including dissolution procedures, decrees of invalidity, separate maintenance, property settlement agreements, adoptions, and surrogacy.

PL 146
Paralegal Ethics . . . . . 3.0 Credits
This course will explore ethics and the practice of law. Special attention will be paid to ethics for paralegal practice and issues that the paralegal might encounter.

PL 147
Computers in a Law Environment . . . . . .1.0 Credit
A course that will assist the student to use standard and specialized computer software to complete legal documents, conduct research, and coordinate paralegal activities. Must be taken currently with PL 1471. Prerequisite: CA 100 or instructor's permission.

PL 1471
Computers in a Law Environment Lab . . . . . .1.0 Credit
A lab that provides an opportunity to have hands-on interaction with standard and specialized computer software to complete legal documents, conduct research, and coordinate paralegal activities. This lab is taken with PL 147.

PL 150
Introduction to Legal Writing . . . . . 3.0 Credits
This is the first of a three-quarter sequence of courses that examine and develop legal research and writing skills. This course examines the fundamentals of legal research and writing. Students become familiar with the American court system, criminal and civil legal process, legal citations, and the law library. Lectures, practical exercises, as well as writing assignments, will be used to assist the students in understanding the topics covered in this course. Prerequisites: PL 101 and ENGL& 101.

PL 151
Legal Research & Writing . . . . . 5.0 Credits
This is the second course in a series of three designed to examine the fundamentals of legal research and writing. The students continue familiarization with the law library and sources of legal information. Application of these sources in the form of practical exercises, research and writing assignments, as well as examinations will be used to assist the student in developing and learning the skills of legal research and writing. Prerequisite: PL 150 with a grade of 2.0 or better.

PL 152
Advanced Legal Writing . . . . . 5.0 Credits
This course examines advanced techniques of legal research and writing. Emphasis is on developing advanced research methods and concise legal writing. Students apply research methods in practical applications and in legal writing assignments. Prerequisite: PL 151 with a grade of 2.0 or better.

PL 1972
Internship . . . . . .1.0 - 3.0 Credits
Supervised learning in a law office or other legal facility. Jobs are planned to give students on-the-job training as legal assistants enabling them to see the practical use of course work they have completed. Prerequisite: at least 45 credits of paralegal courses.

PL 201
Commercial Law . . . . . 3.0 Credits
The study of commercial law as it relates to transactions in personal property, commercial paper, mortgages, and other security agreements. Prerequisites: PL 121, PL 122, PL 123.

PL 210
Immigration Law . . . . . 3.0 Credits
This course explores all significant aspects of the immigration and naturalization process in the United States, including the Homeland Security Act of 2002 and the Illegal Immigration Reform and Immigrant Responsibility Act of 1996. Helps students ground conceptual principles in real-world applications; delve more deeply into the intricacies of immigration law in practice; exposes students with the materials they will encounter on the job; provides a convenient study and review tool; familiarizes students with the professional vocabulary they will encounter on the job; and challenges students to analyze real-world immigration scenarios.

PL 212
Real Estate & Personal Property . . . . . 3.0 Credits
An overview of basic Washington State Real Estate Law, designed to acquaint the student with traditional concepts.

PL 213
Insurance Law . . . . . 3.0 Credits
General legal principles relating to motor vehicles, homeowners, commercial property, and multiple line insurance agreements. Emphasis will be on understanding insurance agreements, in particular, relating to the definition of insurable events, and understanding of endorsements, duties of the insured exclusions, and policy limits. Laws relating to the regulation of the insurance industry in Washington state will also be examined.

PL 214
Criminal Law . . . . . 3.0 Credits
Examination of criminal justice system, including procedures from arrest to final disposition; study of federal, state, and local laws as they affect the process in criminal court procedures.

PL 215
Bankruptcy Law . . . . . 3.0 Credits
Study of the Bankruptcy Act including procedural steps involved in bankruptcy proceedings and wage-earner plans. Attention also given to collection of claims and creditors' rights including enforcement of judgments and remedies.

PL 216
Corporate Law . . . . . 3.0 Credits
Study of law, procedures, and documents involved in the organization, operation, and dissolutions of business entities, with emphasis on corporations.

PL 219
Environmental Law . . . . . 3.0 Credits
History of environmental law, with emphasis on the inter-relationships between federal, state, and local environmental regulations and requirements. Prerequisites: PL 108 and PL 150.

PL 220
Employee Benefits Law . . . . . 3.0 Credits
Survey of employee benefits laws with applications to paralegal work. Prerequisites: 15 credits of 100-level PL courses.

PL 221
Labor Law . . . . . 3.0 Credits
Survey of the field of labor law and relations as it relates to paralegal work. Prerequisites: 15 credits of 100-level PL courses.

PL 222
Personal Injury . . . . . 3.0 Credits
An advanced course that teaches students how to manage a personal injury case. Prerequisites: PL 103, PL 104, PL 107, PL 131, PL 132, PL 133, PL 143.

PL 225
CLA Prep . . . . . 3.0 Credits
This course is offered to assist students in preparing for the Certified Legal Assistant (CLA) examination sponsored by the National Association of Legal Assistants (NALA.)

PL 2972
Advanced Internship . . . . . .1.0 - 3.0 Credits
Continuation of PL 1972. Prerequisite: 60 hours of paralegal courses.

Paramedic

PMD 100
Pre-Paramedic Short Term Certificate . . . . . 2.0 Credits
The Pre-Paramedic Short Term Certificate is designed to supplement an EMT's basic field experience. The Short Term Certificate course starts with an introduction course that reviews EMT cognitive and psychomotor objectives and lays the groundwork for students to prepare for PMD 1002 and the Paramedic course. This field experience focuses on primary responsibilities of an EMT.

PMD 1002
Pre-Paramedic Short Term Certificate Practicum . . . . .1.0 - 6.0 Credits
The Pre-Paramedic Short Term Certificate includes up to six credits of practicum experience, designed to provide the EMT with a minimum number of patient contacts, geared towards establishing a strong EMT basic foundation. The practicum portion of the Short Term Certificate will be accomplished with the local fire department agencies. The practicum will include no more than 110 hours of ride time per quarter in the field.

PMD 201
Paramedic I . . . . . 6.0 Credits
This is the first course in a six-quarter sequence intended to prepare the paramedic student in the areas of medical, legal, ethics, roles and responsibilities, principles of Pathophysiology, Pharmacology, intravenous access, and medication administration. The course follows the 1998 DOT National Standard Curriculum for EMT-Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic exam. The lab portion of the course introduces the students to the policies and procedures of the field and hospital internship sites, where students begin in same-day surgery performing IVs on patients preparing for surgical procedures. Prerequisite: acceptance into the program upon application and completion of the oral interview and approval of the Paramedic program director.

PMD 2013
Paramedic I Lab . . . . . 2.0 Credits
Lab to be taken concurrently with PMD 201.

PMD 202
Paramedic II . . . . . 6.0 Credits
The second course in the Paramedic sequence, intended to train the student in the areas of advanced airway management, physical assessment, field assessment, clinical decision-making, documentation, and the assessment and management of respiratory emergencies. The course follows the 1998 DOT National Standard Curriculum for EMT-Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic exam. The lab portion of the course introduces the students to the policies and procedures of the field and hospital internship sites, where they continue to work on their minimum competencies in same-day surgery, operating room, emergency department, as well as beginning their field/ambulance experience. Prerequisite: completion of PMD 201/PMD 2013 with a grade of 2.0 or better.

PMD 2023
Paramedic II Lab . . . . . 3.0 Credits
Lab to be taken concurrently with PMD 202.

PMD 203
Paramedic III . . . . . 6.0 Credits
This is the third course in the Paramedic sequence. It provides skills and knowledge necessary to assess and manage medical emergencies, specifically cardiac, neurological, and endocrine emergencies as well as allergies and anaphylaxis. At the completion of this course, students will be certified in ACLS. The course follows the 1998 DOT National Standard Curriculum for EMT-Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic exam. Prerequisite: completion of PMD 202/PMD 2023 with a grade of 2.0 or better.

PMD 2033
Paramedic III Lab . . . . . 3.0 Credits
The lab portion of the course introduces the students to the policies and procedures of the field and hospital internship sites, where they continue to work on their minimum competencies in the operating room, emergency department, respiratory therapy, cardiac catheterization lab and the intensive care units. Students continue the field/ambulance clinical competencies. Lab to be taken concurrently with PMD 203.

PMD 204
Paramedic IV . . . . . 6.0 Credits
This is the fourth course in the Paramedic sequence. It provides skills and knowledge necessary to assess and manage trauma emergencies, specificallymechanism of injury, soft tissue and burn injuries, as well as head, neck, chest, abdominal, and other musculoskeletal trauma. The course follows the 1998 DOT National Standard Curriculum for EMT-Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic exam. The lab portion of the course introduces the students to the policies and procedures of the field and hospital internship sites, where they continue to work on their minimum competencies in the emergency department, respiratory therapy, cardiac catheterization lab, and the intensive care units. Students continue the field/ambulance clinical competencies. At the end of this course, the areas of neonate and pediatric care will begin, with completion in PMD 205. Prerequisite: completion of PMD 203/PMD 2033 with a grade of 2.0 or better.

PMD 2043
Paramedic IV Lab . . . . . 3.0 Credits
Lab to be taken concurrently with PMD 204.

PMD 205
Paramedic V . . . . . 6.0 Credits
This is the fifth course in the Paramedic sequence. It provides skills and knowledge necessary to assess and manage special emergencies with neonates, pediatrics, childbirth, geriatrics, behavioral emergencies as well as abuse and assault. At the completion of this course students will be certified in PALS. The course follows the 1998 DOT National Standard Curriculum for EMT-Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic exam. The lab portion of the course introduces the students to the policies and procedures of the field and hospital internship sites, where they continue to work on their minimum competencies in the emergency department, respiratory therapy, cardiac catheterization lab, intensive care units, pediatrics, neonate intensive care unit, obstetrics unit, and psychiatric rotations. Students continue the field/ambulance clinical competencies. Prerequisite: completion of PMD 204/PMD 2043 with a grade of 2.0 or better.

PMD 2053
Paramedic V Lab . . . . . 3.0 Credits
Lab to be taken concurrently with PMD 205.

PMD 206
Paramedic VI . . . . . 6.0 Credits
Sixth and final major course in the Paramedic sequence. The course provides skills and knowledge necessary to assess and manage emergencies of a gastrointestinal, urological, toxicological, or environmental nature. It additionally reviews special considerations of mass casualty, hazardous materials, rescue, and crime scene awareness. At the completion of this course, students will complete a term paper and oral presentation. The course follows the 1998 DOT National Standard Curriculum for EMT-Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic exam. The lab portion of the course focuses on the completion of hospital internship, where they continue to work on their minimum competencies in the emergency department, respiratory therapy, cardiac catheterization lab, intensive care units, pediatrics, neonate intensive care unit, obstetrics unit, and psychiatric rotations. Students continue the field/ambulance clinical competencies.

PMD 2063
Paramedic VI Lab . . . . . 3.0 Credits
Lab to be taken concurrently with PMD 206.

PMD 2103
Extended Paramedic Internship . . . . . .1.0 - 3.0 Credits
This course is provided to current paramedic students who are working to complete field and/or hospital internship requirements as required by the program. The course follows the National Curriculum for Paramedic Training and it allows the student to complete all requirements, and to become eligible to take the National EMT-P Certification exam. Prerequisite: successful completion of all previous PMD sequences, with a minimum overall GPA of 2.5. All students must have malpractice insurance.

PMD 235
Professional Issues for the Paramedic . . . . . 2.0 Credits
A course designed to provide the Paramedic student the opportunity to explore professional issues important to the success of a certified paramedic. The focus will be upon advanced directives of terminally ill patients, documentation considerations, advanced cardiac life-support skills, and advanced trauma skills and procedures.

Parent Education

PED 085
Parent-Infant . . . . . .1.0 - 2.0 Credits
Parents and infants 0-12 months attend class together once each week in a specially designed infant/toddler environment. Class time is spent in active parent-child interactions and in group discussions led by parenting education instructors. The class helps parents develop realistic age-level expectations, clarify child rearing values, explore methods of child guidance, strengthen family communication, explore contemporary family issues, and relax and enjoy their role as parents.

PED 086
Parent-Young Toddler. . . . . .1.0 - 2.0 Credits
Parents and children ages 12 to 24 months attend class together once a week. A quality early learning program, taught by an early childhood specialist, is offered to the children. Parents assist in the classroom with developmentally appropriate activities. During group discussion, led by a parenting education instructor, parents develop realistic age-level expectations, clarify personal child rearing values, explore child guidance techniques, and discuss contemporary family issues.

PED 087
Parent-Toddler-Sibling . . . . . .1.0 - 2.0 Credits
Parents and their children ages three years and under attend class together once a week. A quality early learning program taught by an early childhood specialist, is offered to the children. Parents assist in the classroom with developmentally appropriate activities. During discussion time with a parenting education instructor, parents explore parenting siblings, develop realistic age-level expectations, clarify personal child rearing values, explore child guidance techniques, and discuss contemporary family issues.

PED 088
Parent-Toddler . . . . . .1.0 - 2.0 Credits
Parents and children ages 24 to 36 months attend class together once a week. A quality early learning program, taught by an early childhood specialist is offered to the children. Parents assist in the classroom with developmentally appropriate activities. During group discussion led by a parenting education instructor, parents develop realistic age-level expectations, clarify personal child rearing values, explore child guidance techniques, and discuss contemporary family issues.

PED 089
CO-OP Preschool . . . . . .1.0 - 3.0 Credits
Parents and children ages three to five years attend school together one day and the child attends an additional one or two days per week. A quality preschool program taught by an early childhood specialist is offered to the children. Parents assist in the classroom with developmentally appropriate activities. Through observation, participation, and discussion with a parenting education instructor, parents have an opportunity to better understand their own child and his/her individual needs as well as explore a variety of parenting issues.

Philosophy

PHIL 121
Symbolic Logic [Q/SR] . . . . . 5.0 Credits
A study of the principles of formal thinking, which includes an analysis of symbolic theory within a context that encourages the development of logical skills. This course can be used as an elective or quantitative reasoning. Previous completion of MATH 095 is highly recommended. (Previously PHI 121.)

PHIL 131
World Religions [H] . . . . . 5.0 Credits
A survey of the major religious systems of the world, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam. (Previously PHI 131.)

PHIL 150
Introduction to Ethics [H] . . . . . 5.0 Credits
An introduction to moral concepts; their assumptions, arguments, implications, and practices. Special consideration will be given to topics in the area of medicine, business, war, individual rights, and the future. (Previously PHI 150.)

Philosophy Common Course

PHIL& 101
Intro to Philosophy [H] . . . . . 5.0 Credits
A study of the fundamental questions concerning humans and the universe that recur in the history of their thoughts, religion, knowledge, reality, and morality. (Previously PHI 101.)

PHIL& 106
Intro to Logic [H] . . . . . 5.0 Credits
A study of the principles of formal and informal thinking; induction, deduction, and language. (Previously PHI 120.)

Phlebotomy

PHLEB 100
Phlebotomy I . . . . . 4.0 Credits
This first quarter is lecture for the two-quarter sequence. Students must pass this first quarter with 70 percent or higher in order to continue into the following quarter, PHLEB 1001 Lab. Malpractice Insurance fees are added into the registration. A national background check must be completed prior to admittance into this course. Immunization records must be presented the first day of class. Prerequisite: acceptance into the Phlebotomy program. Information available at the Health Sciences Division office, (509)544-8300.

PHLEB 1001
Phlebotomy I Lab . . . . . 5.0 Credits
The second quarter of the class includes 120 hours of supervised clinical experience in 14 various medical facilities throughout the Tri-Cities area. These 120 clinical hours will be arranged by the instructor. Students will need to accommodate the hours of the facility and complete the 120 hours within the quarter. Students that successfully complete both quarters will receive a certification of completion from CBC with academic credit and will be prepared to test with the American Society of Clinical Pathologists (ASCP). The licensing test is not included and will be an additional fee. Prerequisite: acceptance into the Phlebotomy program. Information available at the Health Sciences Division office, (509)544-8300.

Physical Education

PE 1101
Aerobics Step Training I [PE] . . . . . .1.0 Credit
A low-impact exercise program that involves stepping up and down on a platform of adjustable height to the accompaniment of music, leading to improved cardiovascular conditioning, as well as lower body endurance and strength.

PE 1111
Aerobics Step Training II [PE] . . . . . .1.0 Credit
Continued study and involvement offering a greater level of conditioning through the use of more intense training techniques involved with step training.

PE 1121
Aerobic Dance I [PE] . . . . . .1.0 Credit
Dance steps and routines rigorously executed to increase cardiovascular rate, leading to figure trimming and toning. Records on improvements in pulse rates and pulmonary recovery will be kept.

PE 1131
Aerobic Dance II [PE] . . . . . .1.0 Credit
Continued study and advanced techniques of this activity. Dance steps and routines executed to increase cardiovascular rate. Student's test and record improvements in pulse rates and pulmonary recovery. Prerequisite: PE 1121.

PE 1141
Aerobic Dance III [PE] . . . . . .1.0 Credit
Advanced study in this activity. Dance steps and routines rigorously executed for improving cardiovascular rate and leading to figure trimming and toning. Improvements will be tested and recorded. Prerequisite: PE 1131.

PE 1151
Body Mechanics [PE] . . . . . .1.0 Credit
This course involves special exercise and calisthenics which enhance total fitness, figure improvement, body toning, weight control, and posture.

PE 1161
Pilates [PE] . . . . . .1.0 Credit
An introductory course to Pilates. The course will emphasize physical exercises, breathing, core strength and stability, and muscle awareness.

PE 1171
Yoga I [PE] . . . . . .1.0 Credit
An introductory course to Hatha Yoga. The course will emphasize physical exercises, breathing exercises, and meditation practice.

PE 1181
Step Aerobic Interval Training [PE] . . . . . .1.0 Credit
Using intervals of high intensity exercise followed by recovery periods, this class will combine high and low intensity exercises performed on the floor as well as on the step. Aerobic exercise, power moves, step training, light weight training, and body resistance will be used to introduce the student to the benefits of an interval training program. Greater cardiovascular strengthening as well as muscular strengthening and endurance will be introduced and practiced in this class.

PE 1191
Yoga II [PE] . . . . . .1.0 Credit
A continuation course to a Hatha Yoga practice. The course will include intermediate physical poses, yoga breathing exercises, and selected meditations.

PE 1201
Weight Training I [PE]. . . . . .1.0 Credit
The student will be exposed to theories of weight training. Emphasis will be placed on strength development, muscular endurance, and flexibility. The student will design an individual program with the use of free weights and multi-station machines.

PE 1211
Weight Training II [PE] . . . . . .1.0 - 2.0 Credits
An intermediate program with the student designing his/her individual workout program.

PE 1221
Weight Training III [PE] . . . . . .1.0 - 2.0 Credits
An advanced program with the student designing her/his individual workout program.

PE 1271
Fitness Center I [PE] . . . . . .1.0 - 2.0 Credits
A total fitness program that develops individual fitness levels in cardiovascular training with benefits of weight training to improve muscle tone and physical conditioning.

PE 1281
Fitness Center II [PE] . . . . . .1.0 - 2.0 Credits
A continuation of the total fitness program with more involvement in strength, flexibility, muscle toning, aerobic exercise, and body composition.

PE 1291
Fitness Center III [PE] . . . . . .1.0 - 2.0 Credits
An advanced, self-paced approach to fitness through the use of specialized exercises, multiple weight machines, and aerobic equipment.

PE 1321
Golf I [PE]. . . . . .1.0 Credit
Basic stroke instruction with all clubs to provide the student with sufficient skill to enjoy playing the game. The rules, courtesies, and safety factors will be taught and tested.

PE 1331
Golf II [PE] . . . . . .1.0 Credit
Techniques on special shots such as sand shots, sidehill, and downhill lies are emphasized. Prerequisite: PE 1321.

PE 1351
Golf Swing Analysis Strategies [PE] . . . . . 2.0 Credits
A comprehensive study of the individual parts of the modern golf swing with intensive training directed toward precise control and more power.

PE 1401
Softball I [PE] . . . . . .1.0 Credit
Designed for the beginning softball player. The course offers instruction of basic skills and rules of softball. Skills and knowledge of rules will be tested.

PE 1411
Softball II [PE] . . . . . .1.0 Credit
Designed for the intermediate softball player. Additional work of strategy, individual, and team offensive/defensive techniques will be taught. Skills and knowledge of rules will be tested. Prerequisite: PE 1401.

PE 1421
Softball III [PE] . . . . . .1.0 Credit
Designed for the advanced softball player. Additional work of strategy, individual, and team offensive/defensive techniques will be taught. Skills and knowledge of rules will be tested. Prerequisites: PE 1401 and PE 1411.

PE 1451
Soccer I [PE] . . . . . .1.0 Credit
Basic individual skills are presented and developed. The international rules are emphasized and a physical conditioning program designed to prepare the student for play is implemented.

PE 1461
Soccer II [PE]. . . . . .1.0 Credit
Designed for the intermediate player. Review of the basic skills taught in the beginning course. Additional work on strategy and defensive techniques will be taught. Prerequisite: PE 1451.

PE 1471
Soccer III [PE] . . . . . .1.0 Credit
Designed for the advanced player. Advanced strategy, team defensive, and team offensive techniques will be taught. Skills and rules will be tested. Prerequisite: PE 1461.

PE 1481
Jogging I [PE] . . . . . .1.0 - 2.0 Credits
Provides cardiovascular improvement, burns body fat, and builds lifetime skills in aerobic fitness. Emphasis on stretching, safety, motivation, and enjoying jogging. Offered for the beginning jogger or walker through the competitive runner.

PE 1491
Jogging II [PE] . . . . . .1.0 - 2.0 Credits
Provides cardiovascular improvement, burns body fat, and builds lifetime skills in aerobic fitness. Emphasis on stretching, safety, motivation, and enjoying jogging. Offered for the intermediate jogger or walker through the competitive runner.

PE 1501
Jogging III [PE] . . . . . .1.0 - 2.0 Credits
Provides cardiovascular improvement, burns body fat, and builds lifetime skills in aerobic fitness. Emphasis on stretching, safety, motivation, and enjoying jogging. Offered for the advanced jogger or walker through the competitive runner.

PE 1601
Basketball I [PE] . . . . . .1.0 Credit
Beginning skills and strategy; this class is suitable for anyone with a desire to learn the basics of the game, with emphasis on rules and court procedure.

PE 1611
Basketball II [PE] . . . . . .1.0 Credit
Students will expand their knowledge of the skills of basketball, and additional skills will be introduced. Team strategy at a more advanced level will be emphasized. Prerequisite: PE 1601.

PE 1621
Basketball III [PE] . . . . . .1.0 Credit
Review of advanced basketball skills. Introduction of offensive patterns, defensive sets, and individual style of play. The class will also involve usage of fast break and the transition game. Prerequisite: PE 1611.

PE 1631
Volleyball I [PE]. . . . . .1.0 Credit
Covers basic skills, court positions, and strategies for beginning sets along with 4-2 and 5-1 offenses.

PE 1641
Volleyball II [PE] . . . . . .1.0 Credit
A continuation of Volleyball I. Intermediate skills, defensive strategies, play sets, and how to play doubles and triples volleyball. Prerequisite: PE 1631.

PE 1651
Volleyball III [PE] . . . . . .1.0 Credit
Emphasis is on team plan and interaction using and applying all volleyball skills. Prerequisite: PE 1641.

PE 180
Adaptive PE [PE] . . . . . 2.0 Credits
This course is a study of the history, current global perspective, current trends, and laws regarding the opportunity for people with challenges and limitations to participate in physical activity and sports.

PE 1801
Adaptive PE Lab [PE] . . . . . .1.0 Credit
Lab to be taken concurrently with PE 180.

PE 1811
Swimming I [PE] . . . . . .1.0 Credit
This course is designed to provide students with the basic fundamental skills to become a proficient safe swimmer. Rhythmic breathing, breath holding, leveling off from vertical position, floats in both supine and prone positions, arm strokes for front crawl, back stroke, side stroke, breast stroke and the front dive.

PE 1871
Baseball I [PE] . . . . . .1.0 - 2.0 Credits
Introduces the student to basic skills of baseball. Student will be given instruction in all phases of the game, with main purpose being to gain an understanding of fundamentals.

PE 1881
Baseball II [PE] . . . . . .1.0 Credit
Students will expand their knowledge of the skills of baseball taught at the beginning level. Team strategy will be taught at a more advanced level. Prerequisites: PE 1871.

PE 1891
Baseball III [PE] . . . . . **.1.0 Credit**
Advanced level of skills will be taught, and theory of baseball strategy will be introduced in all phases of the game. Specific drills will be used for development of specialized skills. Prerequisites: PE 1881.

PE 1901
Cardio Kickboxing I [PE] . . . . . **.1.0 Credit**
This course involves the study and implementation of martial art style kicks and punches, along with exercises to enhance flexibility, cardiovascular endurance, and increased stamina.

PE 2011
Exercise and Weights [PE] . . . . . **.1.0 Credit**
Combination of activities including plyometrics, agility and speed training, and circuit training. Students participate in a supervised program designed to improve cardiovascular conditioning, core body strength, and physical agility.

Physical Education Professional

PEC 1351
Swing Analysis and Strategies . . . . . **2.0 Credits**
A comprehensive study of the individual parts of the modern golf swing with intensive training directed toward precise control and more power. Class meets at Golf Land, Argent and Road 42 in Pasco.

PEC 180
Care and Prevention of Athletic Injuries . . . . . **3.0 Credits**
This course includes information on preventative procedures such as taping and bracing. Care of initial injury including American Red Cross Certification for Adult CPR and First Aid. Rehabilitation and return to activity protocol. This is good information for coaches, athletes, or active people in general.

PEC 182
Care & Prevention of Athletic Injuries II . . . . . **2.0 Credits**
This course is a continuation of the study as to the causes of athletic injury with a focus on rehabilitation. Theories, implications, and techniques such as rehabilitation program development, re-evaluations, communication with the medical community, and modalities are researched. Prerequisite: PEC 180.

PEC 1821
Care & Prevention of Athletic Injuries II Lab . . . . . **.1.0 Credit**
Lab to be taken concurrently with PEC 182.

PEC 183
Athletic Training Internship . . . . . **2.0 Credits**
This course is for students interested in transferring to a four-year athletic training program and therefore need to complete a minimum of 100 internship hours under the supervision of a certified athletic trainer. The internship consists of practical work in the training room and with sports programs. Prerequisite: PEC 180.

PEC 1831
Athletic Training Internship Lab . . . . . **.1.0 Credit**
Lab to be taken concurrently with PEC 183.

PEC 235
Fundamentals of Basketball . . . . . **2.0 Credits**
History, fundamentals, practice organization, method of instruction, game preparation, and player evaluation are the main topics for instruction.

PEC 236
Fundamentals of Volleyball . . . . . **2.0 Credits**
This is an introductory course in the history and development of power volleyball. It is also a study of the basic skills and organization of offensive and defensive strategies.

PEC 239
Fundamentals of Golf . . . . . **2.0 Credits**
All elements of basic knowledge of golf fundamentals will be reviewed with emphasis on methods and techniques of golf instruction for individuals or groups.

PEC 242
Theory of Basketball . . . . . **2.0 Credits**
Advanced concepts and theory in basketball coaching and continuation of fundamentals of basketball will supply students with up-to-date information concerning fundamentals, practice organization, game preparation, and player evaluation. Prerequisite: PEC 235.

PEC 243
Theory of Volleyball . . . . . **2.0 Credits**
Theory of volleyball for prospective coaches and advanced players with the aspects of philosophy, psychology, methods, and organization.

PEC 248
Theory of Baseball I . . . . . **2.0 Credits**
Introduces the student to the complexities of offensive and defensive strategies. A complete review of the mental aspects of individual and team play. Prerequisite: PEC 250.

PEC 249
Theory of Golf . . . . . **2.0 Credits**
To introduce the student to the philosophies and strategies involved in golf at all levels. The main objective is to help each student understand and form sound philosophy in teaching and playing the sport. The course will include stroke, match, and best ball strategy and cover weather, game management, and the mental aspects. The complete theory of the mechanics of the golf swing will be investigated and explored with reference to the scientific foundation of the maneuver. Prerequisites: PE 1321, PE 1331, and instructor's permission.

PEC 250
Baseball Fundamentals . . . . . **3.0 Credits**
Study of the basics involved in the total offensive and defensive scheme of baseball. Methods of instruction and techniques of performance will be covered along with specific progress drills.

Physics Common Course

PHYS& 100
Physics Non-Sci Majors [M/S] . . . . . **4.0 Credits**
Introduces the principles and concepts of physics using elementary algebraic procedures. Selected topics from classical and modern physics. Primarily for the non-science major. Prerequisite: MATH 095 or MATH 096. (Previously PHY 100.)

PHYS& 101
Physics Lab Non-Sci Majors [M/S] . . . . . **.1.0 Credit**
Lab to be taken concurrently with PHYS& 100. (Previously PHY 1001.)

PHYS& 121
General Physics I [M/S] . . . . . **4.0 Credits**
This course is designed for those students that are not majoring in a four-year engineering or physical science degree. Topics include measurement and units, vectors, motion in one and two dimensions, Newton's laws, work and energy, momentum and collisions, circular motion, gravity, and rotational motion. Prerequisite: MATH 113 or equivalent with a 2.0 or higher. (Previously PHY 105.)

PHYS& 122
General Physics II [M/S] . . . . . **4.0 Credits**
Solids and fluids, thermal physics, laws of thermodynamics, vibrations and waves, sound, electric forces and fields, electrical energy, capacitance. Prerequisite: PHYS& 121/PHYS& 131. (Previously PHY 106.)

PHYS& 123
General Physics III [M/S] . . . . . 4.0 Credits
Resistance, direct current circuits, magnetism, inductance, alternating current circuits, electromagnetic waves, reflection, refraction, interference and diffraction of light, mirrors and lenses, and optical instruments. Prerequisite: PHYS& 122/PHYS& 132. (Previously PHY 107.)

PHYS& 131
General Physics Lab I [M/S] . . . . . .1.0 Credit
Lab to be taken concurrently with PHYS& 121. (Previously PHY 1051.)

PHYS& 132
General Physics Lab II [M/S] . . . . . .1.0 Credit
Lab to be taken concurrently with PHYS& 122. (Previously PHY 1061.)

PHYS& 133
General Physics Lab III [M/S] . . . . . .1.0 Credit
Lab to be taken concurrently with PHYS& 123. (Previously PHY 1071.)

PHYS& 221
Engineering Physics I [M/S] . . . . . 4.0 Credits
Physics for Engineering or Physical Science majors. Mechanics. Prerequisite: MATH& 151, or equivalent, with a G.P.A. of 2.0 or better. (Previously PHY 201.)

PHYS& 222
Engineering Physics II [M/S]. . . . . 4.0 Credits
Mechanics, thermodynamics, and electromagnetism. Prerequisites: MATH& 152 and PHYS& 221/PHYS& 231. (Previously PHY 202.)

PHYS& 223
Engineering Physics III [M/S] . . . . . 4.0 Credits
Electromagnetism and optics. Prerequisite: PHYS& 222/PHYS& 232. (Previously PHY 203.)

PHYS& 231
Engineering Physics Lab I [M/S] . . . . . .1.0 Credit
Lab to be taken concurrently with PHYS& 221. (Previously PHY 2011.)

PHYS& 232
Engineering Physics Lab II [M/S] . . . . . .1.0 Credit
Lab to be taken concurrently with PHYS& 222. (Previously PHY 2021.)

PHYS& 233
Engineering Physics Lab III [M/S] . . . . . .1.0 Credit
Lab to be taken concurrently with PHYS& 223. (Previously PHY 2031.)

Political Science

POLS 104
State and Local Government [S/B]. . . . . 5.0 Credits
An examination of federal, state, and local government relationships; state executive, legislative, judicial, and political party systems; and forms of local governmental units. (Previously PS 104.)

Political Science Common Course

POLS& 200
Introduction to Law . . . . . 5.0 Credits
A continuation of BUS& 201. Topics covered include partnerships, corporations, real and personal property, financial arrangements, government regulatory schemes, and more. (Previously BA 255.)

POLS& 201
Intro Political Theory [S/B] . . . . . 5.0 Credits
An introduction to fundamental concepts and theories in political science. This course uses classic and contemporary works of political thought to deal with basic issues in the study of politics, such as who should rule, and the nature and limits of political authority, and political rights. (Previously PS 150.)

POLS& 202
American Government [S/B] . . . . . 5.0 Credits
A survey of the system and process of American national politics and government; including the structure and function of the executive, legislative, and judicial branches and the American political party system. (Previously PS 100.)

POLS& 203
International Relations [S/B] . . . . . 5.0 Credits
An examination of various theoretical approaches to international politics, causes of war, approaches to peace, and sources of conflict in the contemporary world. (Previously PS 103.)

POLS& 204
Comparative Government [S/B] . . . . . 5.0 Credits
A survey of the system and process of American national politics and government; including the structure and function of the executive, legislative, and judicial branches and the American political party system. (Previously PS 101.)

Psychology

PSYC 103
Applied Psychology [S/B]. . . . . 3.0 Credits
Designed to meet requirements for students graduating with vocational and technical degrees. The application of psychology in the workplace and the development of human relations skills is emphasized. (Previously PSY 100.)

PSYC 106
Child Growth & Development . . . . . 3.0 Credits
This course provides an overview of all aspects of child growth and the developmental stages of children from conception to adolescence. You will study the physical, cognitive, linguistic, emotional, mental, social, and personality development of the child. It will help you understand the things and situations that can affect how a child behaves. (Previously PSY 106.)

PSYC 201
Social Psychology [S/B] . . . . . 5.0 Credits
Interaction between the individual and the group with emphasis on how the group influences the behavior of individuals. Topics include conformity, aggression, communication, attitudes, attribution processes, group dynamics, and the social construction of reality. (Previously PSY 201.)

PSYC 205
Psychology of Adjustment [S/B] . . . . . 5.0 Credits
A study of important findings of modern psychology as they relate to adjustment. Social development, personality theory, motivation, mental health, and resources for personal growth. (Previously PSY 205.)

PSYC 2972
Field Experience . . . . . .1.0 - 3.0 Credits
The student will work as a volunteer in a community agency and complete a journal and report (usually one credit). Prerequisites: PSYC& 100 and instructor's permission. (Previously PSY 2972.)

Psychology Common Course

PSYC& 100
General Psychology [S/B]. . . . . 5.0 Credits
Introduction to the basic principles of human behavior and mental processes. Some areas of study are personality and learning theory, neurobiology, motivation, cognition, memory, research design, and methods. (Previously PSY 101.)

PSYC& 180
Human Sexuality . . . . . 5.0 Credits
A survey of human sexuality from biological, psychological, sociocultural, and sociobiological perspectives. Topics include sexual orientation, sexual dysfunction, and sexually transmitted diseases. (Previously PSY 230.)

PSYC& 200
Lifespan Psychology [S/B] . . . . . 5.0 Credits
A comprehensive survey of psychological development of the human from conception to death in relation to biological, physical, social, and psychological conditions. Prerequisite: PSYC& 100. (Previously PSY 240.)

PSYC& 220
Abnormal Psychology [S/B] . . . . . 5.0 Credits
Explores mental disorders from sociocultural, neurobiological, psycho dynamic, cognitive, and behavioral perspectives. Describes maladaptive mental disorders as well as their incidence and treatment. Prerequisite: PSYC& 100. (Previously PSY 202.)

Radio Broadcasting

RBR 101
Radio Broadcasting 1 . . . . . 8.0 Credits
This course is designed to prepare individuals for entry-level employment in the radio broadcasting field. Students who take this class will learn about music format and programming, marketing, and sales. Opportunities to work on the air on KTCV FM 88.1. This class is a special Tech Prep course in partnership with Tri-Tech.

RBR 102
Radio Broadcasting 2 . . . . . 8.0 Credits
This is the second course in a series designed to prepare individuals for entry-level employment in the radio broadcasting field. Students who take this class will learn about music format and programming, marketing, and sales. Opportunities to work on the air on KTCV FM 88.1. This class is a special Tech Prep course in partnership with Tri-Tech.

RBR 103
Radio Broadcasting 3 . . . . . 8.0 Credits
This is the third course in a series designed to prepare individuals for entry-level employment in the radio broadcasting field. Students who take this class will learn about music format and programming, marketing, and sales. Opportunities to work on the air on KTCV FM 88.1. Also internship possibilities along with job shadows. This class is a special Tech Prep course in partnership with Tri-Tech.

Radiologic Technology

RATEC 101
Introduction to Radiologic Technology . . . . . .1.0 Credit
Surveys types and operations of hospital departments. Students learn medical ethics, basic radiation protection, chemistry, and methods of film processing, and construction of film. Prerequisite: acceptance into program.

RATEC 102
Radiographic Physics . . . . . 5.0 Credits
Examines x-ray circuits, tubes, and x-ray equipment. Topics include design and application, troubleshooting and maintenance, equipment testing, imaging intensification, cineradiography, and advanced imaging procedures. Prerequisite: acceptance into program.

RATEC 103
Principles of Radiographic Exposure . . . . . 3.0 Credits
Presents basic elements of radiologic technique and other factors influencing it. Format includes two-hour lectures and two-hour labs each week. Prerequisite: acceptance into program.

RATEC 104
Advanced Radiographic Procedures . . . . . 4.0 Credits
Examines the theory and principles of contrast media used in radiologic examinations and special positioning. Prerequisite: acceptance into program.

RATEC 105
Introduction to Radiographic Technique . . . . . 2.0 Credits
Introduces concepts of electromagnetic radiation necessary to understanding the production and control of x-radiation. Students learn how the radiographic image is created and what factors affect the appearance of that image. Prerequisite: acceptance into program.

RATEC 106
Computed Imaging . . . . . 2.0 Credits
Presents computed imaging in comparison to screen-film technology. Topics include identifying components, understanding how they affect the image, and quality control. Prerequisite: acceptance into program.

RATEC 107
Positioning and Related Anatomy I . . . . . 2.0 Credits
Presents basic positioning principles and terminology. Students get demonstration and film evaluation experience in positioning and related anatomy of the chest, abdomen, and upper extremities. Format includes one hour lecture and two hours lab each week. Prerequisite: acceptance into program.

RATEC 108
Positioning and Related Anatomy II . . . . . 3.0 Credits
Provides demonstration and film evaluation experience in positioning and related anatomy of the spine, pelvis, and lower extremities. Format includes one hour lecture and two hours lab each week. Prerequisite: acceptance into program.

RATEC 109
Positioning and Related Anatomy III . . . . . 3.0 Credits
Provides demonstration and film evaluation experience in positioning and related anatomy of the skull, facial bones, sinuses, and mastoids. Format includes a one hour-lecture and two-hour labs each week. Prerequisite: acceptance into program.

RATEC 1103
Clinical Education I . . . . . 3.0 Credits
Provides supervised clinical experience at an affiliated healthcare site. Beginning RATEC students are assigned to clinical education sites, 40 hours per week for two weeks. Students get an orientation to hospital and department procedures, participate in ancillary radiology activities, and observe and perform diagnostic radiologic procedures. Prerequisite: acceptance into program.

RATEC 1113
Clinical Education II . . . . . 5.0 Credits
Second in a series of supervised clinical education experiences. Students are assigned to clinical sites, 15 hours per week. Students observe and perform diagnostic radiologic procedures. Prerequisite: acceptance into program.

RATEC 1123
Clinical Education III . . . . . 5.0 Credits
Third in a series of supervised clinical education experiences. Students are assigned to clinical sites, 15 hours per week. Specific performance objectives are established for the student. Prerequisite: acceptance into program.

RATEC 1133
Clinical Education IV . . . . . 5.0 Credits
Fourth in a series of supervised clinical education experiences. Students are assigned to clinical sites, 15 hours per week. Specific performance objectives are established for the student. Prerequisite: acceptance into program.

RATEC 120
Nursing Procedures . . . . . 2.0 Credits
Presents basic nursing procedures, emphasizing the role of the radiologic technologist in various patient-care situation. Incorporates seven hours of AIDS and bloodborne pathogen education. Prerequisite: acceptance into program.

RATEC 121
Patient Care . . . . . 2.0 Credits
Examines patient care and assessment in the imaging department, as well as in other special care units. Topics include medications and their administration, acute patient care, bedside radiography, and patient lines and tubes. Healthcare provider BLS is also included. Prerequisite: acceptance into program.

RATEC 125
Medical Terminology . . . . . .1.0 Credit
Presents a systematic approach to medical terminology combining word roots, prefixes, and suffixes. Prerequisite: acceptance into program.

RATEC 127
Introduction to Sectional Anatomy . . . . . 2.0 Credits
Expands knowledge of anatomy through the introduction of transverse and sagittal orientations. Students review normal anatomy of the brain, chest, abdomen, pelvis, neck, and spine. Prerequisite: acceptance into program.

RATEC 207
Concept Integration . . . . . 2.0 Credits
Prepares students for the American Registry of Radiologic Technologists exam through a comprehensive review.

RATEC 2103
Clinical Education V . . . . . 13.0 Credits
Fifth in a series of supervised clinical education experiences. Students are assigned to clinical sites, 40 hours per week for 11 weeks. Specific performance objectives are established for the student. Prerequisite: acceptance into program.

RATEC 2113
Clinical Education VI . . . . . 8.0 Credits
Sixth in a series of supervised clinical education experiences. Students are assigned to clinical sites, 24 hours per week. Specific performance objectives are established for the student. Prerequisite: acceptance into program.

RATEC 2123
Clinical Education VII . . . . . 8.0 Credits
Seventh in a series of supervised clinical education experiences. Students are assigned to clinical sites, 24 hours per week. Specific performance objectives are established for the student. Prerequisite: acceptance into program.

RATEC 2133
Clinical Education VIII. . . . . 8.0 Credits
Eighth in a series of supervised clinical education experiences. Students are assigned to clinical sites, 24 hours per week. Specific performance objectives are established for the student. Prerequisite: acceptance into program.

RATEC 220
Pathology I . . . . . 3.0 Credits
Introduces changes that occur in disease and injury, with application to radiologic technology. Topics include respiratory, skeletal, gastrointestinal, and urinary systems. Prerequisite: acceptance into program.

RATEC 221
Pathology II . . . . . 2.0 Credits
Continues RATEC 220. Students become familiar with the etiology, symptoms, prognosis, and imaging of disease processes of the cardiovascular, nervous, hemoparetic, endocrine, and reproductive systems. Prerequisite: acceptance into program.

RATEC 230
Quality Assurance . . . . . 2.0 Credits
Presents theory and practice for operating a successful quality assurance program in a diagnostic radiology department. Students discuss the importance of quality control with respect to healthcare costs, radiation exposure to patients, and improvement of the diagnostic quality of films. Prerequisite: acceptance into program.

RATEC 240
Radiation Biology and Protection . . . . . 3.0 Credits
Explores types of radiation, interaction of radiation with matter, and the effects of those interactions in human tissue. Students learn methods and principles of radiation protection for both patient and technologist. Prerequisite: acceptance into program.

RATEC 296
Special Topics in Radiology . . . . . 2.0 Credits
Allows study of special topics that may be necessary to update students in the field of radiologic technology. Prerequisite: acceptance into program or instructor's permission.

Reading

RDG 079
Spelling . . . . . .1.0 - 3.0 Credits
This course teaches students how to improve their spelling through the use of spelling rules and in-context exercises. Grading is pass/no credit. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format.

RDG 080
Study Techniques . . . . . .1.0 - 3.0 Credits
Students become active learners by developing academic study strategies for college. Topics include needs assessments, campus resources, self (time) management, creating a study system, test preparation and taking. This is a directed learning course offered by the Learning Opportunities Center (LOC). Instruction includes textbook and web activities.

RDG 081
Study Techniques . . . . . .1.0 - 3.0 Credits
Students become active learners by developing academic study strategies for college. Topics include needs assessments, campus resources, self (time) management, creating a study system, test preparation and taking. This is a directed learning course offered by the Learning Opportunities Center (LOC). Instruction includes textbook and web activities.

RDG 082
Study Techniques . . . . . .1.0 - 3.0 Credits
Students become active learners by developing academic study strategies for college. Topics include needs assessments, campus resources, self (time) management, creating a study system, test preparation and taking. This is a directed learning course offered by the Learning Opportunities Center (LOC). Instruction includes textbook and web activities.

RDG 083
Vocabulary Improvement . . . . . .1.0 - 3.0 Credits
This developmental vocabulary class teaches students how to increase their vocabulary using an in-context approach. Two levels of text are available, based on reading level. Grading is pass/no credit. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format.

RDG 084
Vocabulary Improvement . . . . . .1.0 - 3.0 Credits
This developmental vocabulary class teaches students how to increase their vocabulary using an in-context approach. Two levels of text are available, based on reading level. Grading is pass/no credit. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format.

RDG 085
Vocabulary Improvement . . . . . .1.0 - 3.0 Credits
This developmental vocabulary class teaches students how to increase their vocabulary using an in-context approach. Two levels of text are available, based on reading level. Grading is pass/no credit. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format.

RDG 086
Reading Skills . . . . . .1.0 - 3.0 Credits
Designed for students needing individualized instruction to improve their proficiency in basic reading skills. After interpreting diagnostic testing in the Learning Opportunities Center (LOC), the instructor develops a program for each student. Grading is pass/no credit. Class is held in the LOC where instruction is a lab format. For those students whose schedules do not allow for Reading 091, this class serves as an alternate. Prerequisite: minimum ASSET score of 32, or teacher recommendation.

RDG 087
Reading Skills . . . . . .1.0 - 3.0 Credits
Designed for students needing individualized instruction to improve their proficiency in basic reading skills. After interpreting diagnostic testing in the Learning Opportunities Center (LOC), the instructor develops a program for each student. Grading is pass/no credit. Class is held in the LOC where instruction is a lab format. For those students whose schedules do not allow for Reading 091, this class serves as an alternate. Prerequisite: minimum ASSET score of 32, or COMPASS score of 45-60, or teacher recommendation.

RDG 088
Reading Skills . . . . . .1.0 - 3.0 Credits
Designed for students needing individualized instruction to improve their proficiency in basic reading skills. After interpreting diagnostic testing in the Learning Opportunities Center (LOC), the instructor develops a program for each student. Grading is pass/no credit. Class is held in the LOC where instruction is a lab format. For those students whose schedules do not allow for RDG 091, this class serves as an alternate. Prerequisite: minimum ASSET score of 32, or COMPASS score of 45-60, or teacher recommendation.

RDG 089
Speed Reading . . . . . .1.0 - 3.0 Credits
This class is designed to increase reading speed and to improve reading comprehension and vocabulary through the use of computer software. Grading is pass/no credit. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format.

RDG 091
Reading Skills . . . . . 3.0 Credits
Reinforces six essential reading comprehension skills: recognizing vocabulary in context, locating main ideas, understanding supporting details, identifying transitions, making inferences, outlining, and summarizing. This class gives students an opportunity to practice and improve these strategies. Prerequisite: minimum ASSET score of 32, or COMPASS score of 45-60, or teacher recommendation.

RDG 099
College Reading Skills . . . . . 3.0 Credits
Breaks reading down into the skills necessary for academic success: identification of unfamiliar words, main ideas, supporting details, and inferences; distinguishing among organization patterns, and between fact and opinion. Prerequisite: minimum ASSET score of 35, or COMPASS score of 61-81, or successful completion of RDG 091, or teacher recommendation.

RDG 105
Speed Reading . . . . . .1.0 - 3.0 Credits
This class is designed to increase reading speed and to improve reading comprehension and vocabulary through the use of computer software. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format.

RDG 110
Study Techniques . . . . . .1.0 - 3.0 Credits
Students become active learners by developing academic study strategies for college. Topics include needs assessments, campus resources, self (time) management, creating a study system, test preparation and taking. This is a directed learning course offered by the Learning Opportunities Center (LOC). Instruction includes textbook and web activities.

RDG 115
Vocabulary Improvement . . . . . .1.0 - 3.0 Credits
This class teaches students how to expand their vocabularies with emphasis on Greek and Latin root words. Also included are words often confused and misused, descriptive words, action words, name derivatives, and words from various academic disciplines. Class is held in the Learning Opportunities Center (LOC) where instruction is a lab format.

Real Estate

RE 207
Principles of Real Estate . . . . . .1.0 - 5.0 Credits
An overview of the sale, financing, transfer, and management of real estate, through lectures, discussion, workbooks, and video materials. Course completion qualifies for taking the Washington State Real Estate Licensing exam.

Retail Associate

RO 100
Introduction to Retail. . . . . 10.0 Credits
This class prepares students for working in a variety of customer service and cashiering positions in the retail wholesale and/or grocery industry. Students learn workplace skills along with the ability to provide excellent customer service and effectively handle monetary transactions. Prerequisites: minimum score of 221 on CASAS Reading and Math Assessments. Familiarity with keyboard and/or 10 key.

Russian Common Course

RUSS& 121
Russian I [H] . . . . . 5.0 Credits
Introduction to the Russian language including speaking and listening skills, reading, writing, and grammar, and Russian culture including geography, customs, daily life, and heritage. Designed for the novice learner of Russian, with little or no proficiency in the Russian language. Recommended that students have successfully completed at least ENGL 099. (Previously RUS 101.)

RUSS& 122
Russian II [H] . . . . . 5.0 Credits
Introduction to the Russian language including speaking and listening skills, reading, writing, and grammar, and Russian culture including geography customs, daily life, and heritage. Prerequisite: RUSS& 121 or instructor's permission. (Previously RUS 102.)

RUSS& 123
Russian III [H] . . . . . 5.0 Credits
Introduction to the Russian language including speaking and listening skills, reading, writing, and grammar, and Russian culture including geography, customs, daily life, and heritage. Prerequisite: RUSS& 122 or instructor's permission. (Previously RUS 103.)

Science

SCI 110
Natural History of the Columbia Basin Region [M/S] . . . . . 3.0 Credits
The course will examine basic principles of biology, geology, and environmental science through an understanding and appreciation of local ecosystems, human activities, and cultural history. The laboratory will include Saturday field trips and subsequent analysis of collected materials. A local emphasis on the role of the Columbia River will include a day long float trip on the Hanford Reach, observing salmon spawning and migratory eagles, and a discussion of natural and cultural history. Topics include Shrub-Steppe ecosystem structure, ornithology, wildlife management, local geology, cultural history, and environmental impacts of the Hanford site.

SCI 1101
Natural History of the Columbia Basin Region Lab [M/S] . . . 2.0 Credits
Lab to be taken concurrently with SCI 110.

Social Science

SSCI 100
Social Science of American History . . . . . 5.0 Credits
A survey of core concepts of sociology, psychology, economics, anthropology, and political science applied to American history. The course provides a basic foundation for subsequent social science courses.

SSCI 290
Social Research Methods [S/B] . . . . . 4.0 Credits
This course introduces students to the theory, methodology, and some of the specific techniques of social science research. Students will learn how to compose research questions, review the literature, make measurements and obtain data, perform basic analyses of qualitative and quantitative data, and write up research findings. The course will also explore the philosophical underpinnings and ethical considerations involved in social research. This course is intended for students majoring in the social or behavioral sciences.

SSCI 2901
Social Research Methods Lab [S/B] . . . . . .1.0 Credit
Lab to be taken concurrently with SCCI 290.

Sociology

SOC 150
Marriage-Family [S/B] . . . . . 5.0 Credits
The family is discussed in broad sociobiological, historical, and comparative perspectives. Modern family life is analyzed after conceptual frameworks have been developed.

SOC 160
Gender Studies . . . . . 5.0 Credits
Societies create many roles for their members, depending upon technology, organization, and the distribution of power. Some of those roles are assigned on the basis of sex. This course examines the social creation of those gender roles assigned to sex and sexual behavior, and explores the inner life of acting out those roles.

SOC 1972
Field Experience . . . . . .1.0 - 3.0 Credits
Arrangements will be made for the student to receive actual field experience. The number of hours per week will determine the credit enrollment. Prerequisites: SOC& 101 and instructor's permission.

SOC 230
Human Sexuality . . . . . 3.0 Credits
A survey of human sexuality from biological, psychological, sociocultural, and sociobiological perspectives. Topics include sexual orientation, sexual dysfunction, and sexually transmitted diseases.

SOC 269
Sociology of World Cinema [S/B] . . . . . 5.0 Credits
This course introduces students to one of the most vital and significant aspects of cultural life in the world. The world cinema is central to an artistic self-awareness that reflects a range of dominant social and cultural issues. Through a number of feature films from the Arab, Iranian, Israeli, Turkish, Chinese, Indian, French, Italian, German, Mexican, and American cinema, this course takes these cultural products as the aesthetic expressions of some enduring social, cultural, political, and economic concerns in contemporary world societies. A total of about ten feature films will be shown and discussed in the course of the quarter.

SOC 2972
Field Experience . . . . . .1.0 - 3.0 Credits
Arrangements will be made for the student to receive actual field experience. The number of hours per week will determine the credit enrollment. Prerequisites: SOC& 101 and instructor's permission.

Sociology Common Course

SOC& 101
Intro to Sociology [S/B] . . . . . 5.0 Credits
An introduction to the scientific study of society. Emphasis on relationship of the individual to society, inequality, social institutions, and deviant behavior. (Previously SOC 101.)

SOC& 201
Social Problems [S/B] . . . . . 5.0 Credits
Examines conditions that adversely affect the quality of life in the United States. Deviant behavior (crime, alcoholism, drug abuse, sexual deviance, mental illness) and problems of inequality (including poverty, racism, and sexism) will be covered. (Previously SOC 201.)

Spanish

SPAN 104
Intensive 1st Year Spanish [H] . . . . . 15.0 Credits
An intensive introduction to the Spanish language (including speaking and listening skills, reading, writing, and grammar) and Hispanic culture (including geography, customs, daily life, and heritage). (Previously SPA 104.)

SPAN 110
Beginning Spanish for Professionals [H]. . . . . 5.0 Credits
A beginning-level Spanish course designed for those who interact with Spanish-speaking people professionally as customers, clients, patients, or co-workers. This course is also intended for students who intend to follow business, service, legal, or medical professions. The class will begin with basic Spanish language study, followed by activities specifically designed to meet the individual needs and professions of the participants. No previous Spanish is required. (Previously SPA 110.)

SPAN 111
Intermediate Spanish for Professionals [H]. . . . . 5.0 Credits
The second level of Spanish for Professionals, is a course designed for those who interact with Spanish-speaking people professionally as customers, clients, patients, or co-workers. This course is also intended for students who intend to follow business, service, legal, or medical professions. Continuing basic Spanish instruction will be followed by activities specifically designed to meet the individual needs and professions of the participants. Prerequisite: SPAN 110, SPAN& 121, or instructor's permission. (Previously SPA 111.)

SPAN 112
Advanced Spanish for Professionals [H] . . . . . 5.0 Credits
The third level of Spanish for Professionals, a course designed for those who interact with Spanish-speaking people professionally as customers, clients, patients, or co-workers. This course is also intended for students who intend to follow business, service, legal, or medical professions. Continuing Spanish language instruction will be followed by activities specifically designed to meet the individual needs and professions of the participants. Prerequisite: SPAN 111, SPAN& 122, or instructor's permission. (Previously SPA 112.)

SPAN 150
Beginning Conversational Spanish . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. Recommended that students have successfully completed at least SPAN& 121. (Previously SPA 150.)

SPAN 151
Beginning Conversational Spanish . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. Recommended that students have successfully completed at least SPAN& 121. (Previously SPA 151.)

SPAN 152
Conversational Spanish . . . . . 5.0 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. Recommended that students have successfully completed SPAN& 121. (Previously SPA 152.)

SPAN 205
Spanish for Spanish Speakers [H] . . . . . 5.0 Credits
Native or near-native speakers of Spanish will develop and improve reading, writing, and grammar skills in their native language, while learning to appreciate the depth and diversity of Latino culture both in the United States and abroad. Special attention will be given to spelling, accents, grammar, and vocabulary of standard Spanish. Students will also be introduced to a comprehensive and analytical survey of Spanish and Latin American literature. (Previously SPA 205.)

SPAN 206
Spanish for Spanish Speakers [H] . . . . . 5.0 Credits
Native or near-native speakers of Spanish develop and improve reading, writing, and grammar skills in their native language, while learning to appreciate the depth and diversity of Latino culture both in the United States and abroad. Special attention is given to advanced grammar and vocabulary of standard Spanish. Students are introduced to a comprehensive and analytical survey of Spanish and Latin American literature. Prerequisite: SPAN 205 or instructor's permission. (Previously SPA 206.)

SPAN 207
Spanish For Spanish Speakers [H] . . . . . 5.0 Credits
Native or near-native speakers of Spanish develop and improve reading, writing, and grammar skills in their native language, while learning to appreciate the depth and diversity of Latino culture both in the United States and abroad. Special attention is given to advanced grammar and vocabulary of standard Spanish. Students are introduced to a comprehensive and analytical survey of Spanish and Latin American literature, as well as theoretical and practical approaches in Spanish translating and interpreting. Prerequisite: SPAN 206 or instructor's permission. (Previously SPA 207.)

SPAN 250
Intermediate Conversational Spanish . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking Spanish for students who have already gained a knowledge of beginning-level grammar and vocabulary. Class will be conducted entirely in Spanish. Prerequisite: one year of college-level Spanish or instructor's permission. (Previously SPA 250.)

SPAN 251
Intermediate Conversational Spanish . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking Spanish for students who have already gained a knowledge of beginning-level grammar and vocabulary. Class will be conducted entirely in Spanish. Prerequisite: one year of college-level Spanish or instructor's permission. (Previously SPA 251.)

SPAN 252
Intermediate Conversational Spanish . . . . . .1.0 - 5.0 Credits
Intensive practice in speaking Spanish for students who have already gained a knowledge of beginning-level grammar and vocabulary. Class will be conducted entirely in Spanish. Prerequisite: one year of college-level Spanish or instructor's permission. (Previously SPA 252.)

SPAN 260
Spanish Literature Readings [H] . . . . . 3.0 Credits
An introduction to Spanish and Spanish American Literature, with reading selections from a variety of Hispanic authors and discussions of literary movements and periods. Taught entirely in Spanish. Prerequisite: SPAN& 223 or instructor's permission. (Previously SPA 260.)

SPAN 261
Spanish Literature Readings [H] . . . . . 3.0 Credits
An introduction to Spanish and Spanish American literature, with reading selections from a variety of Hispanic authors and discussions of literary movements and periods. Taught entirely in Spanish. Prerequisite: SPAN& 223or instructor's permission. (Previously SPA 261.)

SPAN 262
Spanish Literature Readings [H] . . . . . 3.0 Credits
An introduction to Spanish and Spanish American literature, with reading selections from a variety of Hispanic authors and discussions of literary movements and periods. Taught entirely in Spanish. Prerequisite: SPAN& 223 or instructor's permission. (Previously SPA 262.)

Spanish Common Course

SPAN& 121
Spanish I [H] . . . . . 5.0 Credits
Introduction to the Spanish language including conversational skills, reading, writing, and grammar, and Hispanic culture including geography, customs, daily life, and heritage. Designed for the novice learner of Spanish, with little or no proficiency in the Spanish language. Recommended that students have successfully completed at least ENGL 099. (Previously SPA 101.)

SPAN& 122
Spanish II [H] . . . . . 5.0 Credits
Introduction to the Spanish language including conversational skills, reading, writing, and grammar, and Hispanic culture including geography, customs, daily life, and heritage. Prerequisite: SPAN& 121 or instructor's permission. (Previously SPA 102.)

SPAN& 123
Spanish III [H] . . . . . 5.0 Credits
Introduction to the Spanish language including conversational skills, reading, writing, grammar, and Hispanic culture including geography, customs, daily life, and heritage. Prerequisite: SPAN& 122 or instructor's permission. (Previously SPA 103.)

SPAN& 221
Spanish IV [H] . . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, listening). The course includes cultural readings and short stories and an in-depth review of basic Spanish grammar, expansion of basic vocabulary, and a broadening of the student's understanding of Hispanic culture. Prerequisite: SPAN& 123 or instructor's permission. (Previously SPA 201.)

SPAN& 222
Spanish V [H] . . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, listening). The course includes cultural readings and short stories and an in-depth review of basic Spanish grammar, expansion of basic vocabulary, and a broadening of the student's understanding of Hispanic culture. Prerequisite: SPAN& 221 or instructor's permission. (Previously SPA 202.)

SPAN& 223
Spanish VI [H] . . . . . 5.0 Credits
Extensive practice in all four language skills (reading, writing, speaking, listening). The course includes cultural readings and short stories and an in-depth review of basic Spanish grammar, expansion of basic vocabulary and a broadening of the student's understanding of Hispanic culture. Prerequisite: SPAN& 222 or instructor's permission. (Previously SPA 203.)

Surgical Technology

SRGT 101
Introduction to Surgical Technology . . . . . 4.0 Credits
This class is an introduction to the knowledge and techniques essential to the surgical technician in preparation for a surgical procedure. Areas of emphasis include expertise in preparation/utilization of equipment and supplies, sterilization and disinfection, aseptic techniques, instrumentation, surgical accessories and duties of the surgical technologist, working as a member of the surgical team.

SRGT 1011
Introduction to Surgical Technology Lab . . . . . 2.0 Credits
This class is an introduction to the knowledge and techniques essential to the surgical technician in preparation for a surgical procedure. Areas of emphasis will include expertise in preparation/utilization of equipment and supplies, sterilization and disinfection, aseptic techniques, instrumentation, surgical accessories and duties of the surgical technologist, working as a member of the surgical team.

SRGT 102
Disease Transmission and Control . . . . . 3.0 Credits
This class provides an understanding of the basic concepts of microbiology as related to surgical procedures and overall patient safety, and proper application in the operating room environment as identified in the core curriculum for surgical technologists.

SRGT 103
Ethics & Professionalism . . . . . 2.0 Credits
This class will provide an understanding of the necessary ethical and legal background to address ethical dilemmas, participate in the functioning of organizational ethical issues and ethics committees, ethical and legal concepts, and the law as related to every aspect of the decision-making process in the healthcare setting, and resolving ethical conflicts and dilemmas.

SRGT 104
Pharmacology for the Surgical Technologist . . . . . 5.0 Credits
This class provides a basic knowledge of the language of pharmacology includingreading, interpreting, and documenting medication orders; systems of measurement and conversions; measuring medications for administration; calculating dosages and solutions; routes of administration for the surgical patient; anesthesia agents and principles of anesthesia administration; medications used in emergency situations in the operating room. Prerequisites: completion of major support classes for Surgical Technology and acceptance into the Surgical Technology program.

SRGT 110
Operating Room Aide . . . . . 3.0 Credits
This class will teach the essential knowledge to help the student build a sound foundation to be a part of the operating room team.

SRGT 1101
Operating Room Aide Lab . . . . . 2.0 Credits
This class will teach the essential knowledge necessary to build a sound foundation to function as an operating room aide.

SRGT 120
Central Service . . . . . .1.0 Credit
This class provides an understanding of the necessary aseptic and sterile techniques necessary to perform the essential job duties of central processing personnel.

SRGT 1201
Central Service Clinical . . . . . .1.0 Credit
This class provides the essential aseptic and sterile skills necessary to perform the essential job duties of central processing personnel.

SRGT 130
Human Anatomy for the Surgical Technician . . . . . 4.0 Credits
This class provides students with applicable surgical knowledge necessary to be able to relate to the patient and coworkers and use reasoned judgment in meeting the expectations of the operating room environment.

SRGT 1301
Human Anatomy for the Surgical Technician Lab . . . . . 2.0 Credits
This class will provide students the knowledge necessary to be able to relate to the patient and coworkers and use reasoned judgment in meeting the expectations of the operating room environment.

SRGT 1411
Operating Room Practicum I Lab . . . . . 6.0 Credits
This class provides an opportunity to apply the theory learned in the classroom setting to a healthcare setting through practical, hands-on experience.

SRGT 150
Surgical Procedures I . . . . . 4.0 Credits
This class provides students the knowledge necessary to be able to relate to the patient and coworkers and use reasoned judgment in meeting the expectations of the operating room environment.

SRGT 1501
Surgical Procedures I Lab . . . . . 2.0 Credits
This class provides students the skills necessary to be able to relate to the patient and coworkers and use reasoned judgment in meeting the expectations of the operating room environment.

SRGT 160
Perioperative Patient Care . . . . . 2.0 Credits
This class teaches the Peri-Operative responsibilities as they relate to patient safety, and code of conduct.

SRGT 1601
Perioperative Patient Care Lab. . . . . .1.0 Credit
This class provides the fundamental skills of Peri-Operative case management.

SRGT 240
Surgical Seminar . . . . . 3.0 Credits
This course is to be taken concurrently with the Operating Room Practicum II for Surgical Technologists. The seminar will provide current information regarding workplace issues, technologies, and advancements in healthcare pertinent to the practicum experience. Students will be engaged in discussions based on their experiential learning opportunities within the practicum.

SRGT 2411
Operating Room Practicum II . . . . . 10.0 Credits
This class is a progression from SRGT 150, and provides students the necessary skills to be able to relate to the patient and coworkers and use reasoned judgment in meeting the expectations of the operating room environment. Clinical experience focuses on the advanced skills that will assist the student to transition from the classroom to employment.

SRGT 250
Surgical Procedures II. . . . . 4.0 Credits
This class is a progression from SRGT 150, and provides students the necessary skills, and techniques to be able to relate to the patient and coworkers and use reasoned judgment in meeting the expectations of the operating room environment. Clinical experience focuses on the advanced skills that will assist the student to transition from the classroom to employment.

SRGT 2501
Surgical Procedures II Lab . . . . . 2.0 Credits
This class is a progression from SRGT 1501, and provides students the necessary knowledge to be able to relate to the patient and coworkers and use reasoned judgment in meeting the expectations of the operating room environment. Clinical experience focuses on the advanced skills that will assist the student to transition from the classroom to employment.

Theatre

DRMA 1001
Theatre Study Tour . . . . . .1.0 - 3.0 Credits
Students participate in a field trip experience to attend professional, commercial theatre. Destinations are selected among Ashland, Los Angeles, Seattle, San Francisco, Portland, and New York City. Students meet for analysis and discussions before and after attending the planned events. Fees apply. May be repeated for credit. (Previously THA 1001.)

DRMA 1051
Rehearsal and Performance. . . . . .1.0 - 3.0 Credits
Participation in college theatre productions on stage and backstage. After play auditions for each quarter, the class, composed of students selected for cast and production staff positions, will be involved in rehearsals and performances. (Previously THA 1051.)

DRMA 1061
Rehearsal and Performance. . . . . .1.0 - 3.0 Credits
Participation in college theatre productions on stage and backstage. After play auditions for each quarter, the class, composed of students selected for cast and production staff positions, will be involved in rehearsals and performances. (Previously THA 1061.)

DRMA 1071
Rehearsal and Performance. . . . . .1.0 - 3.0 Credits
Participation in college theatre productions on stage and backstage. After play auditions for each quarter, the class, composed of students selected for cast and production staff positions, will be involved in rehearsals and performances. (Previously THA 1071.)

DRMA 110
Creative Dramatics . . . . . 3.0 Credits
A course in the fundamentals of creative dramatics. This course fosters some competency in teaching drama skills to children, through the combined use of theatre games, improvisation, class exercises, lectures, and discussion. Recommended for Education majors. Recommended: DRMA 2251 Touring Children's Theatre (previously THA 2251). (Previously THA 110.)

DRMA 120
Acting-Beginning . . . . . 3.0 Credits
An introductory course in acting fundamentals. Basic fundamentals such as the playing of actions and objectives, imagination, relaxation, and concentration will be explored through improvisation, scenework, and the study of theory. (Previously THA 120.)

DRMA 121
Acting-Intermediate . . . . . 3.0 Credits
An intermediate studio acting course which is a continuation of DRMA 120. This course continues its focus on creating a character with internal truth that is presented with an awareness of external craft, including interpretive skills, through a variety of exploratory exercises. Class culminates in performance final. Prerequisite: DRMA 120 or instructor's permission. (Previously THA 121.)

DRMA 122
Acting-Advanced . . . . . 3.0 Credits
An advanced studio acting course which is a continuation of DRMA 121. This course continues its focus on creating a character with internal truth that is presented with an awareness of external craft, including interpretive skills, through exploration of scenes, monologues, and readings. Students will broaden their knowledge of dramatic literature and build their repertoire of audition monologues. Prerequisites: DRMA 120 and DRMA 121 or instructor's permission. (Previously THA 122.)

DRMA 1261
Stagecraft . . . . . .1.0 - 3.0 Credits
A study of the technical aspects of stage craft, and some design, with an emphasis on construction techniques. During lab times, students will gain a working knowledge of shop tools, their application, shop safety, and crew protocol. (Previously THA 1261.)

DRMA 1271
Stagecraft . . . . . .1.0 - 3.0 Credits
A study of the technical aspects of stage craft, and some design, with an emphasis on construction techniques. During lab times, students will gain a working knowledge of shop tools, their application, shop safety, and crew protocol. (Previously THA 1271.)

DRMA 1281
Stagecraft . . . . . .1.0 - 3.0 Credits
A study of the technical aspects of stage craft, and some design, with an emphasis on construction techniques. During lab times, students will gain a working knowledge of shop tools, their application, shop safety, and crew protocol. (Previously THA 1281.)

DRMA 130
Stage Movement . . . . . .1.0 - 3.0 Credits
This course explores various types of movement particularly useful for the stage, inclusive of dance, ballet, and stylized period movement. It is a technique class intended to help the student gain control of his/her body (and thus more effectively use it on stage), and to introduce various skills and functions useful to period plays. May be repeated for credit. (Previously THA 130.)

DRMA 149
Special Studies . . . . . .1.0 - 3.0 Credits
Topics vary from among dramatic literature, acting styles, directing, theory, criticism, aesthetics, history, and design. May be repeated for credit. (Previously THA 149.)

DRMA 1971
TV Project Field Study. . . . . .1.0 - 3.0 Credits
An independent study class that occurs in the work place. The student may or may not be paid. It will require 55 work hours for each credit under the supervision of a full-time television technology instructor. The student is required to secure the field position. Prerequisite: instructor's permission. (Previously THA 1971.)

DRMA 2001
Theatre Study Tour . . . . . .1.0 - 3.0 Credits
Students participate in a field trip experience to attend professional, commercial theatre. Destinations are selected among Ashland, Los Angeles, Seattle, San Francisco, Portland, and New York City. Students meet for analysis and discussions before and after attending the planned events. Fees apply. May be repeated for credit. (Previously THA 2001.)

DRMA 215
Survey of Theatre History [H] . . . . . 5.0 Credits
This is a survey course that will cover significant trends and innovations throughout theatre history from its inception in ancient Greece through the present. The emphasis, however, will be on early theatre and its development and evolution. (Previously THA 215.)

DRMA 216
Acting for the Camera . . . . . 3.0 Credits
Instruction and practice in the basics of acting for both TV and film style productions. Playing to the camera, shooting out of sequence, blocking and other production considerations. Prerequisite: DRMA 120 or instructor's permission. (Previously THA 216.)

DRMA 217
Classical Acting . . . . . .1.0 - 3.0 Credits
An introductory course in basic fundamentals, such as movement, posture, voice work, and delivery and analysis of text will be explored through research, scene work, exercises, and the study of classical period practices. Prerequisite: DRMA 120 or instructor's permission.

DRMA 2201
Acting Studio . . . . . .1.0 - 3.0 Credits
A professional acting studio which utilizes class performances of scenes and monologues, as well as class discussions of theory. This course focuses on creating a character with internal truth (Stanislavskian-based) that is presented with an awareness of external craft, including interpretive skills. Emphasis is placed on actor coaching and discovery. Prerequisite: DRMA 120 or instructor's permission. (Previously THA 2201.)

DRMA 2211
Acting Studio . . . . . .1.0 - 3.0 Credits
A professional acting studio which utilizes class performances of scenes and monologues, as well as class discussions of theory. This course focuses on creating a character with internal truth (Stanislavskian-based) that is presented with an awareness of external craft, including interpretive skills. Emphasis is placed on actor coaching and discovery. Prerequisite: DRMA 120 or instructor's permission. (Previously THA 2211.)

DRMA 2221
Acting Studio . . . . . .1.0 - 3.0 Credits
A professional acting studio which utilizes class performances of scenes and monologues, as well as class discussions of theory. This course focuses on creating a character with internal truth (Stanislavskian-based) that is presented with an awareness of external craft, including interpretive skills. Emphasis is placed on actor coaching and discovery. Prerequisite: DRMA 120 or instructor's permission. (Previously THA 2221.)

DRMA 2251
Touring Children's Theatre . . . . . .1.0 - 3.0 Credits
This course involves adapting and developing material from children's stories and original literature into theatrical presentations. Emphasis is on ensemble acting and improvisation skills. The second half of the quarter focuses on performance, as group tours area schools. (Previously THA 2251.)

DRMA 2271
Touring Rep Part I . . . . . .1.0 - 3.0 Credits
This course is a two-quarter commitment. The first quarter involves casting, language, and script study, and rehearsal of the one-hour classical play that will be presented to middle and high schools during the second quarter. This course emphasizes ensemble acting, learning how to work with classical text, learning iambic pentameter and other meters, as well as how to act and "heighten" classical text. (Previously THA 2271.)

DRMA 2281
Touring Rep Part II. . . . . .1.0 - 3.0 Credits
This course is a two-quarter commitment. The second quarter class travels to Washington middle and high schools, performing the previously rehearsed material. Students learn the challenges and skills of touring theatre, with emphasis on ensemble acting and touring techniques. Prerequisite: DRMA 2271. (Previously THA 2281.)

DRMA 2301
Stage Combat . . . . . 2.0 Credits
This is an introductory course, meant to teach the basics required for safe and effective stage combat. This is a course for students who wish to pursue theatre as a career option, and want to learn new skills to add to their repertoire. This is not a certification course, however you will learn the skills that will lay the foundation for future stage combat education. (Previously THA 2301.)

DRMA 242
Design Essentials . . . . . 3.0 Credits
This is an introductory course in developing basic skills in visualization, period research, graphic techniques, and script interpretation for theatre design, the focus being on scenic and costume design approaches. (Previously THA 242.)

DRMA 2431
Stage Costuming . . . . . .1.0 - 3.0 Credits
An introductory course in the theory and practice of stage costume design and construction. (Previously THA 2431.)

DRMA 244
Stage Makeup . . . . . .1.0 - 2.0 Credits
A course covering the basics of stage makeup design as an extension of characterization. Students will learn the techniques of makeup application, including youth, middle-age, old-age, and "specialty" makeup. (Previously THA 244.)

DRMA 2451
Sound Design . . . . . .1.0 - 3.0 Credits
An introduction to sound design for theatre. The class will focus on the equipment, typical set-ups for theatre, and the design concepts for the use of sound in today's theatre environments. Prerequisite: DRMA 242 or instructor's permission. (Previously THA 2451.)

DRMA 2461
Stage Lighting . . . . . .1.0 - 3.0 Credits
A beginning course in the theory and practice of stage lighting. The course is a "hands-on" approach to design and technical drawing. Lab time involves "hang and focus", crew techniques and protocol, and special projects. (Previously THA 2461.)

DRMA 248
Stage Management . . . . . 2.0 Credits
A course which examines the work of the stage manager. The course covers the management of the stage and explores the "business" aspects of the commercial theatre. Emphasis is placed on preparing students for stage managing in the commercial theatre and to prepare him/her to pursue a theatre career with an enlightened view of theatre as a business. Prerequisite: instructor's permission. (Previously THA 248.)

DRMA 249
Special Studies . . . . . .1.0 - 3.0 Credits
Topics vary from among dramatic literature, acting styles, directing, theory criticism, aesthetics, history, and design. May be repeated for credit. (Previously THA 249.)

DRMA 250
Directing for the Stage . . . . . 3.0 Credits
An introductory course in the theory and practice of directing for the stage. Students explore analysis, interpretation, and concept formulation of dramatic literature. Communication and collaboration is emphasized. Prerequisite: DRMA& 101 or DRMA 120 or instructor's permission. (Previously THA 250.)

DRMA 2971
TV Project Field Study. . . . . .1.0 - 3.0 Credits
An independent study class that occurs in the work place. The student may or may not be paid. Requires 55 work hours for each credit under the supervision of a full-time television technology instructor. The student is required to secure the field position. Prerequisite: instructor's permission. (Previously THA 2971.)

Theatre Common Course

DRMA& 101
Intro to Theatre [H] . . . . . 5.0 Credits
An exploration of the many facets of theatre and the many creative artists who comprise the theatre arts. The student studies the history of theatre, styles of production, plays, playwrights, directors, actors, critics, and designers. (Previously THA 115.)

Welding Technology

WT 100
Basic Welding . . . . . .1.0 Credit
A basic introduction to welding designed for students exploring the trade. Introductory information about various welding processes will be presented, including safety concepts. This class meets the welding requirements of the Autobody program. Concurrent enrollment in WT 1001 is required.

WT 1001
Basic Welding Lab . . . . . .1.0 - 3.0 Credits
This class is designed for students wanting to explore the welding trade. It is also available for automotive and autobody technology students to meet their required welding class. The class provides hands-on demonstrations, as well as personalized instruction of various welding applications including safety, set-up and tear down, and methods of operation for oxy-acetylene, arc welding, and wire feed welding.

WT 101
Oxy-Acetylene Process . . . . . .1.0 Credit
A theoretical approach to give students an understanding in the areas of oxy-acetylene cutting, welding, and brazing of various metals. This class is for the beginning entry-level student. Subject matter will focus on background of the process and safety of this process and equipment and its uses.

WT 1011
Oxy-Acetylene Process Lab . . . . . .1.0 - 3.0 Credits
Hands-on experience in a laboratory situation with the use of oxygen-acetylene equipment. Safety equipment set up/shut down, manual and automatic cutting, identification of metals.

WT 1021
Introduction to Shield Metal Arc Welding . . . . . 1.0 - 10.0 Credits
An introduction to mild steel arc welding, consisting of manipulative skills using the shield metal arc process with E6010 type mild steel electrode. Prerequisite: ASSET test placement with a math minimum of 32 and a reading minimum of 35 or instructor's permission.

WT 103
Fund of Major Processes and Their Consumables . . . . .1.0 - 5.0 Credits
This is the systems' approach to welded design, the design of welded joints, and allowable for welds. Arc welding consumables will also be covered. The student will also become familiar with various welding processes.

WT 1031
Advanced Shield Metal Arc Welding . . . . . 1.0 - 10.0 Credits
This course will develop welding skills to meet AWS and ASME standards using the shielded metal arc process. Prerequisite: WT 1021 or instructor's permission.

WT 1041
Shield Metal Arc Welding Certification . . . . . 1.0 - 10.0 Credits
Advanced development of arc welding skills to meet AWS, WABO, and ASME certification standards using the shielded metal process. Prerequisite: WT 1031 or instructor's permission.

WT 1051
Gas Metal Arc Welding (MIG) Certificate . . . . . 1.0 - 10.0 Credits
An introduction to gas metal arc welding, consisting of manipulative skills using the gas metal arc process. Prerequisite: WT 1031 or instructor's permission.

WT 108
Fabrication Technique I . . . . . .1.0 Credit
This course is designed to aid students in understanding the variables that greatly affect welding fabrication. Prerequisites: WT 1021 or instructor's permission.

WT 1081
Fabrication Technique I Lab . . . . . 3.0 Credits
This course is designed to aid students in understanding the variables that greatly affect welding fabrication. Students will have hands-on and field work experience utilizing a welding truck for structural fabrication including hoisting and rigging. Prerequisite: WT 1021 or instructor's permission.

WT 1301
Metallic Arc Refresher . . . . . 1.0 - 10.0 Credits
Designed primarily for tradesmen who need upgrading in shielded metallic arc welding. Includes instruction and practice for upgrading skills, test qualifications, and special application. Prerequisite: trade experience. A test may be given to verify experience.

WT 144
Welding Upgrade . . . . . .1.0 Credit
This course provides an opportunity for journeyman welders to upgrade their skills for current employment opportunities. Prerequisite: instructor's permission. Credits depend on how many hours.

WT 154
WABO Testing . . . . . .1.0 - 2.0 Credits
This course provides required testing to meet the standards for structural steel welding. When the student passes the test, the Welding program submits required test results to the Washington Association of Building Officials (WABO) and they issue certification to the student. Prerequisite: instructor's permission. Credits depend on type of test.

WT 201
Weldability of Metals . . . . . .1.0 - 5.0 Credits
This course introduces the concepts that explain the metallurgical behavior and determine the weldability of ferrous and non-ferrous metals. Prerequisites: WT 1041, WT 108, and WT 1081.

WT 2011
Introduction to Pipe Welding . . . . . 1.0 - 10.0 Credits
An introduction to pipe welding using mild steel pipe and the shield metal arc process with E6010/E7081 covered electrode. Develop the necessary welding skills and techniques to prepare for certification in accordance with ASME code. Prerequisite: WT 1041, WT 1051, or instructor's permission.

WT 202
Welding Inspection . . . . . .1.0 - 5.0 Credits
This course has been designed to acquaint the student with fundamental information and to help in the preparation for the AWS Welding Inspector Certification examination.

WT 2021
Gas Tungsten Arc Welding (TIG) . . . . . 1.0 - 10.0 Credits
This course is designed for the welding of plate and pipe using the Gas Tungsten Arc Welding (GTAW) process. Instruction will stress developing proper manipulative techniques and skills necessary to certify using the GTAW process. Prerequisite: WT 2011 or instructor's permission.

WT 2031
Pipe Welding Certification . . . . . 1.0 - 10.0 Credits
This course will have special emphasis on qualification tests for piping and tubing. Prerequisite: WT 2021 or instructor's permission.

WT 208
Fabrication Technique II . . . . . .1.0 Credit
This course is designed to aid students in understanding the variables that greatly affect welding fabrication. Prerequisite: WT 2021 or instructor's permission.

WT 2081
Fabrication Technique II Lab . . . . . 3.0 Credits
This course is designed to aid students in understanding the variables that greatly affect the welding of pipe fabrication. Students will have hands-on and field work experience utilizing a welding truck for pipe fabrication including hoisting and rigging. Prerequisite: WT 2021 or instructor's permission.

WT 2301
Pipe Welding Refresher . . . . . 1.0 - 10.0 Credits
This course is designed for tradesmen who need upgrading on pipe welding procedures and skills for employment in the piping field. Includes instruction and practice for upgrading welding test qualifications and special applications. Prerequisite: trade experience. A test may be given to verify experience.

WT 2302
Pipe Welding Refresher . . . . . .1.0 - 3.0 Credits
$10 lab fee required.

WT 241
Automated Welding . . . . . .1.0 - 5.0 Credits
This class examines the principle of orbital tube and pipe welding. The welding equipment and how it functions, proper set up of equipment, how to create weld schedules, controlling welding variables, material preparation, and weld joint fit up and safety.

WT 2411
Automated Welding Lab . . . . . .1.0 - 5.0 Credits
This is a lab class that facilitates the practical application of orbital tube and pipe welding. Safe set up of welding equipment, material preparation, weld joint fit up, and practical orbital welding. Prerequisite: concurrent enrollment in WT 241.

Wine Tasting Room Attendant

WINE 100
Wine Tasting Room Attendant . . . . . .1.0 - 7.0 Credits
This course prepares participants for employment in setting where wine is served and/or tasted. Major concepts include the history of wine, major wine varietals, wine pouring and tasting, pairing of wine and food, and legal issues associated with wine service. Preparation for licensure through the Washington State Liquor Control Board may be provided as part of the class. Students desiring the licensure will be required to pay an extra fee. Prerequisite: students must be at least 21-years-old to participate in wine tasting, and to be employed as a wine server.

Women's Studies

WS 155
Women's Cultural Heritage [H] . . . . . 5.0 Credits
An introductory course which presents an overview of the contributions women have made socially, politically, and culturally.

WS 160
Women in Literature and Art [H] . . . . . 5.0 Credits
A survey of women writers and artists from the 19th and 20th centuries, including the historical background and social context of their works, the intellectual/cultural issues they addressed, and their role and influence in society.

Miscellaneous

A Community of Learning
Columbia Basin College
Building Futures for Changing Times

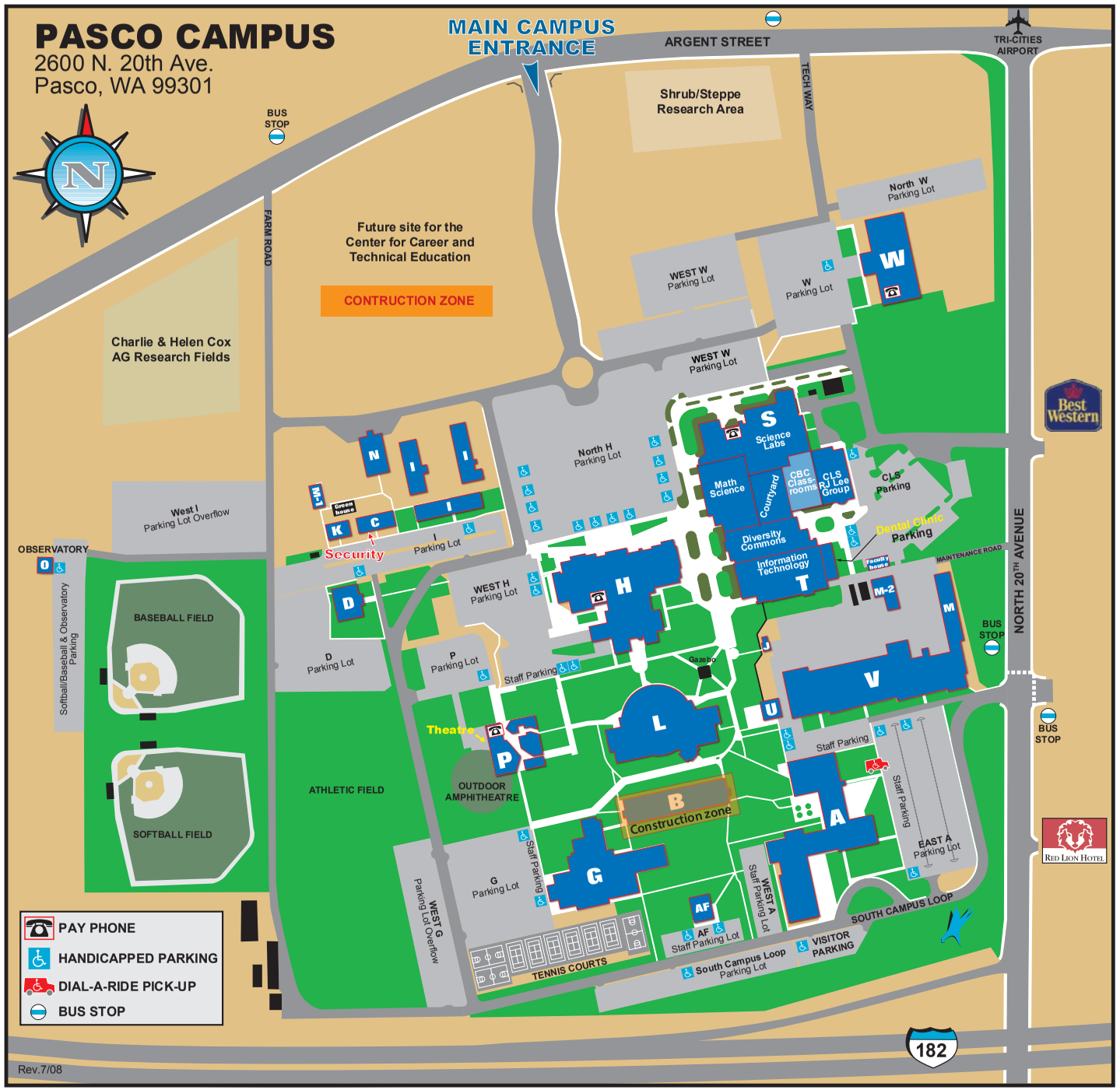
PASCO CAMPUS

2600 N. 20th Ave.
Pasco, WA 99301

A	Administration Bldg.
AF	Foundation
B	Business Bldg.
C	Security
D	Classroom Bldg.
G	Gymnasium
H	Student Services (HUB)
I	Industrial Complex
K	Kartchner Ag. Tech. Bldg.
L	Library
M	Maintenance
M-1	Maintenance Annex
M-2	Grounds Maintenance
N	AG Technology Center
O	Observatory
P	Performing Arts Bldg.
S/T	Lee R. Thornton Center
U	Utility Bldg.
V	Vocational Bldg.
W	CH2M Hill Technology Center

Administrative offices	A Bldg.
Admissions/Registration	H Bldg.
Assessment Testing	H Bldg.
CLS Center for Laboratory Sciences	T Bldg.
Counseling/Career Center	H Bldg.
CBC Bookstore	H Bldg.
CBC Business office	A Bldg.
CBC Foundation office	AF Bldg.
Cafeteria	H Bldg.
Copy Center	I Bldg.
Dental Clinic	T Bldg.
Diversity Commons	T Bldg.
Esvelt Gallery (art gallery)	P Bldg.
Financial Aid	H Bldg.
Fitness Center	G Bldg.
Graphics & Printing	I Bldg.
Gjerde Center	H Bldg.
Information Technology	T Bldg.
Library	L Bldg.
Media Center	W Bldg.
Security & Safety office	C Bldg.
Student Employment	H Bldg.
Student Body offices (ASB)	H Bldg.
Theatre	P Bldg.
Resource Center	H Bldg.
Writing Center	B Bldg.

Campus Security (509) 542-4819
Cell Phone 521-4599
(after hours and weekends)



Pasco Campus Map


Columbia
Basin
College