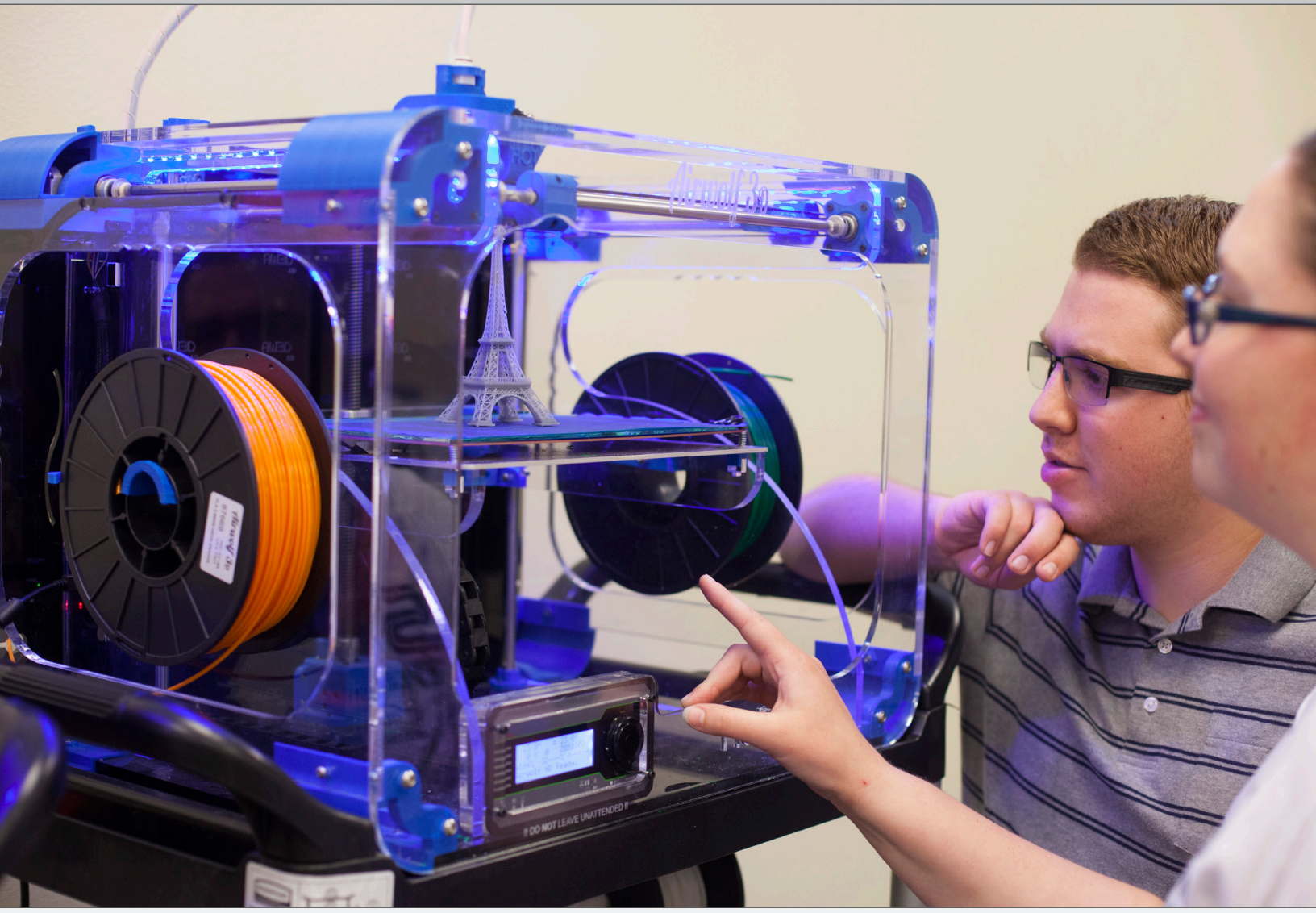
CBC CATALOG
2016-17



Columbia Basin College

Table of Contents

Table of Contents

Table of Contents

Table of Contents

General Information

Introduction

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, 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 college for life.***

Richard Cummins, Ph.D., President

Mission & Goals

Columbia Basin College upholds an environment of diversity, fairness, equity, and sustainability providing opportunities for the people of Benton and Franklin counties to succeed in their pursuit of higher educational achievement, meaningful employment, and basic skills development, while promoting cultural effectiveness and well-being for its community.

CBC is a comprehensive two-year college that provides quality education and effective job preparation. CBC has a powerful impact on every segment of the community through the End States listed below.

- 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.

History of CBC

Columbia Basin College has served Benton and Franklin counties for more than 60 years.

The first classes at CBC were authorized by the State Board of Education in May, 1955. Classes began in September, 1955 in temporary quarters at the former Pasco Naval Airbase.

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 was the V building which was replaced in 2011 by the Center for Career and Technical Education (CTE).

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

CBC continually expands and renovates programs which now includes Bachelor of Applied Science degrees. The enrollment of the College has grown from 299 students in 1955 to more than 8,000 students per quarter today. The faculty includes 140 full-time instructors and 300 part-time instructors.

Accreditation

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

Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding an institution's accredited status by the Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution. Individuals may also contact:

Northwest Commission on Colleges and Universities

8060 165th Avenue NE, Suite 100
Redmond, WA 98052
(425) 558-4224
www.nwccu.org

CBC's accreditation reports can be found at columbiabasin.edu/accreditation.

Research & 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 CBC 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.

College-Wide Student 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 demonstrated in the areas embodied in the college-wide Student 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.

CBC's Student 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

Bachelor of Applied Science

Columbia Basin College offers Bachelor of Applied Science (BAS) degrees in Applied Management, Cyber Security, and Project Management. The Applied Management program also offers a Healthcare Administration and an Agribusiness concentration. The Washington State Legislature authorized the community college baccalaureate program to increase access to bachelor's degrees for Washington citizens. The BAS degree allows CBC to expand the College's workforce mission.

Many two-year degree holders have reached a plateau in their career, unable to advance because they cannot meet the bachelor's degree requirements needed for many supervisory positions. The BAS degree will broaden career opportunities and help graduates improve chances for promotion to management positions, build project management skills, and develop cyber security skills.

These degrees are designed for those who have earned an Associate in Applied Science (AAS) degree or an Associate in Arts and Sciences (AA) degree, but lack the broader business-related education, project management, or computer skills needed to move into leadership or specialized positions.

CBC Locations

Columbia Basin College has grown and expanded throughout Benton and Franklin counties since its inception in 1955. The Naval Airbase at the Pasco airport housed most of the programs for the first two years of the College. CBC opened its first new building in fall, 1957 on the current, 150-acre Pasco campus.

CBC also serves the community in other locations across the bi-county area. In 1974, the College constructed its first buildings in Richland next to the Richland Public Library on Northgate Avenue. In 2006, CBC built the four-story Health Science Center across the street from the old campus.

In 2010, the original two-acre campus was leased to the Richland, Pasco, and Kennewick school districts for $1 per year for the Science, Technology, Engineering, and Math (STEM) high school, Delta.

In 2004, CBC built the Columbia Basin Access Center (CBAC) on 20th Avenue in Pasco to centralize its English Language Acquisition (ELA) program. The center is adjacent to the Chase Center where the College's Early Childhood Education program is housed and provides classes.

For maps, driving directions, and parking information, visit columbiabasin.edu/map.

Columbia Basin College Foundation

Since 1984, the Columbia Basin College Foundation continues to partner within the Tri-Cities community to build productive and mutually beneficial relationships with individuals, businesses, and other organizations for the benefit of CBC.

The Foundation seeks to acquire and manage donations that support student scholarships, academic programs, and faculty enrichment grants. On occasion, the Foundation is active in supporting capital campaigns for needed college projects.

Financial support is derived from a multitude of community-focused engagement activities, including annual campaigns, special events, major gift solicitations, planned giving bequests, and alumni relations. Constituent communications are provided through quarterly newsletters and social media websites.

The CBC Foundation Board of Directors represents a broad spectrum of alumni, business, agriculture, civic, and professional leaders.

For more information, visit us at coumbiabasin.edu/foundation.

Financial Information

Student Status for Tuition & 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 one year and one 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 Student Records office.

Tuition & Fees 2016-17

	WA Resident	Non WA Resident Open Fee Waiver	Non US Resident International F-1 Visa
Per Credit Charges:			
State Tuition & Fees	99.43	162.58	276.14
CBC Comprehensive Fee	4.00	4.00	4.00
CBC Instructional Support Fee	6.00	6.00	6.00
CBC Technology Fee	3.50	3.50	3.50
Per Credit	112.93	176.08	289.64
Per Quarter Charges:			
AUD, HUB, Safety & Security Fee	32.50	32.50	32.50
Total Charges per Credit:			
1	145.43	208.58	322.14
2	258.36	384.65	611.78
3	371.29	560.73	901.42
4	484.22	736.80	1191.06
5	597.15	912.88	1480.70
6	710.08	1088.95	1770.34
7	823.01	1265.03	2059.98
8	935.94	1441.10	2349.62
9	1048.87	1617.18	2639.26
10	1161.80	1793.25	2928.90
11	1224.06	1862.70	2998.35
12	1286.32	1932.15	3067.80
13	1348.58	2001.60	3137.25
14	1410.84	2067.05	3206.70
15	1473.10	2140.50	3276.15
16	1531.36	2205.95	3341.60
17	1589.62	2271.40	3407.05
18	1647.88	2336.85	3472.50
19	1749.71	2498.28	3751.04
20	1851.54	2659.70	4029.58
21	1953.37	2821.13	4308.12
22	2055.20	2982.55	4586.66
23	2157.03	3143.98	4865.20
Per Credit Over 18	101.83	161.43	278.54

*CBC's Competency-Based Education (CBE) program costs may vary; please visit columbiabasin.edu/cbe for program specific tuition and fees.

*CBC's BAS program costs may vary; please visit columbiabasin.edu/bastuition for program specific tuition and fees.

The above schedule of tuition and fees includes comprehensive, instructional support, and technology fees as well as special fees levied by the Associated Student Body of Columbia Basin College. Special course and/or laboratory fees may apply to certain courses and will result in additional charges. See course materials.

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.

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

*CBC's Competency-Based Education (CBE) program refund policy may vary from this schedule; please visit columbiabasin.edu/cbe for program specific refund policies.

Refund Exceptions

Non-Refundable Fees

The Admission 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 $5. These refunds may be applied to future CBC charges or redeemed in cash from Hawk Central (cash balances permitting).

Special Courses

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

Financial Information

Title IV Federal Financial Assistance

Students receiving Title IV federal financial assistance should refer to Hawk Central 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 with Hawk Central before withdrawing.

Financial Aid

Financial Aid personnel assist Columbia Basin College students and their parents to find funding for basic educational costs. Consumer information is available at columbiabasin.edu/finaid.

Financial aid programs at CBC 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 meet home school requirements
- Be seeking one of the eligible degrees or certificates available at CBC
- 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 at columbiabasin.edu/finaid. Previous academic progress at CBC 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

Students apply for financial aid by completing a Free Application for Federal Student Aid (FAFSA) at www.fafsa.gov. FAFSA applicants must be U.S. Citizens or eligible non-citizens (i.e. permanent residents). Students who cannot complete a FAFSA due to not meeting citizenship requirements, but who are Washington residents (DREAMers), may apply for the WA State Need Grant by completing the WA Application for State Financial Aid (WASFA) at www.readysetgrad.org/wasfa. FASFA/WASFA applications should be submitted in January or February preceding the school year. To allow for processing time and financial aid funds to be available by the tuition due date, the FASFA/WASFA and any other required financial aid forms must be submitted to Financial Aid/Hawk Central by:

Fall Quarter . . . . . April 15

Winter Quarter . . . . . October 15

Spring Quarter . . . . . .January 15

Summer Quarter . . . . . April 15

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 eligible for a Pell Grant.

Washington 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.

Opportunity Grant

A state-funded grant for residents who are enrolled in an eligible program of study and meet the financial need criteria. For more information, visit columbiabasin.edu/opportunity.

Early Achiever's Opportunity Grant

A state-funded grant for residents who are enrolled in the Early Childhood Education program.

Scholarships

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

Employment

(refer to Human Resources' Student Employment for more details)

Federal Work Study

Federal program to provide jobs on campus to financially qualified students. Must be enrolled in at least six degree-required credits at CBC.

Washington State Work Study

Washington state program to provide career-related employment off campus to financially qualified students. Must be enrolled in at least six degree-required credits at CBC.

Loans

Federal Direct 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. If accepted into a CBC baccalaureate program, the maximum amount for third- and fourth-year students is $5,500.

Federal Unsubsidized Direct 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-funded tuition assistance program for eligible students. See the Worker Retraining section under Student Resources in this catalog for specific details or go to columbiabasin.edu/workerretraining to determine eligibility.

Veterans Benefits

A veteran eligible to use educational benefits from the Department of Veterans Affairs must meet with the Veterans coordinator located in the H building on the Pasco campus. To schedule an appointment, call 509.542.4880.

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

Admissions & Registration Information

Getting Started – Admission

Are you a New Student who has never attended college?

1. Submit application
2. Apply for Financial Aid (optional)
3. Complete Getting Started steps:
   - Schedule assessment test
   - Complete Student Orientation to Advising and Registration (SOAR)
4. Register for classes via the web during an Advising/Registration session
5. Pay tuition
6. Attend First Year Introduction (FYI)
7. Attend classes

Are you a Transfer or Returning student with one or MORE college-level credits?

1. Submit application or reactivate your application
2. Submit official transcripts
3. Apply for Financial Aid (optional)
4. Complete Getting Started steps:
   - Schedule assessment test if applicable
5. Register for classes via the web
6. Pay tuition
7. Attend First Year Introduction (FYI), if applicable
8. Attend classes

Are you a Running Start student?

High school juniors and seniors should contact their high school counselor or the CBC Running Start office at 509.542.4481 for eligibility information.

Are you a High School Completion student?

1. Submit application and official high school transcripts
2. Schedule assessment test
3. Schedule an Advising/Counseling appointment to register for classes
4. Pay tuition

Are you a high school student taking courses for High School Enrichment?

1. Submit application
2. Submit High School Enrichment form
3. Submit official high school transcripts
4. Schedule assessment test if required for course placement
5. Register for classes on first day of the quarter on space available basis
6. Pay tuition

Are you a Gold Card student (age 60 and older)?

1. Register for classes on third day of the quarter on space available basis
2. Pay tuition

Are you a student enrolling in Senior Fitness (age 55-59) or a community user?

1. Register for Fitness Center on third day of the quarter on space available basis
2. Pay tuition

Are you an ELA, ABE, GED® preparation, or HS21+ student?

Contact the Transitional Studies Division at 509.542.4701.

Are you a WorkFirst client wanting GED® prep classes?

Contact the WorkFirst office for information at 509.542.4719.

If you need accommodations for assessment testing based on a disability, please contact the Resource Center at 509.542.4412 or the Washington State Relay Service for the Deaf and Hard of Hearing at 1.800.833.6384.

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 assessment test scores.

Applicants who are less than 16 years of age and/or do not meet CBC admission requirements may be admitted through a special admission process. Contact the Student Records office for the special admissions policy and procedure.

Admission to CBC 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 individual program and/or department for admission requirements.

Transfer Evaluation Policy & Procedure

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 and adopted by the Washington Student Achievement Council. The policy addresses the rights and responsibilities of students and the process for review and appeal in transfer credit disputes.

- All credits are subject to approval by the Student Records office based on credit equivalency, applicability to the degree or certificate, and the transfer institution's accreditation. The College reserves the right to accept or reject credits earned at other institutions.
- In general, it is College policy to accept credits transferred from regionally accredited institutions, provided the credit is essentially equivalent in academic level and content to courses offered at CBC. Credits earned at institutions during their candidacy for accreditation by a regional accrediting association are accepted if accreditation was granted three years subsequent to the candidacy. Credits earned while an institution was not in candidacy or accredited will not be accepted.
- Prior to evaluating transfer credits, students must submit a completed Application for Admission. The evaluation will be completed when all official transcripts have been received by the Student Records office. A transcript is official if it is sent directly from the sending institution to CBC. Official transcripts can be sent via electronic transmission directly to CBC from any community college in the state of Washington or electronically through an authorized, online service provider. A transcript may be hand delivered to CBC only if it is sealed in an official envelope from the sending institution. Transcripts are evaluated based on the quarter/year the student plans to start and the order in which they are received. All official transcripts from other colleges must be received by the end of the student's second quarter here at CBC.
- When the evaluation has been completed, students will be mailed a Worksheet for Evaluation of Transfer Credit showing a course-by-course equivalency and the total number of credits accepted. The evaluation is specific to the student's program of study. A lower-division degree-applicable course (usually numbered 100-299) is generally accepted. An upper-division course (usually numbered 300-499) is not accepted unless equivalent in content, credits, and prerequisite to a CBC 100-299 level course.
- A maximum of two-thirds of the total applicable credits required for any CBC degree or certificate may be met with credits transferred from other institutions.
- Credits and grades transferred to CBC from other colleges and universities are included in the calculation of the overall degree GPA. Transfer courses accepted by the Student Records office are recorded in the Student Management System but CBC's official transcript will show only the name of the transfer institution, credits earned, and GPA.
- Students must earn a minimum combined cumulative grade point average of 2.0 or above in all college-level courses and a course minimum of 1.0 GPA taken at CBC and transferred from other institutions to graduate.
- Currently enrolled students are assigned registration times based on cumulative credit hours earned at CBC or a combination of CBC credits earned and a maximum of 60 quarter transfer credits officially evaluated by the Student Records office.
- International transcripts must be translated and evaluated by a current member of NACES®. Students may contact the Student Records office for a list of recognized international transcript evaluation agencies.
- If students need clarification on an evaluation determination, they are encouraged to contact the Student Records office. It is recommended that students make an individual appointment with a CBC advisor to review how transfer credits will apply to CBC degrees and certificates. In lieu of an official transcript evaluation, an unofficial transcript may be used one quarter only for purposes of advising and registration. Students are required to have an official evaluation on file for subsequent advising appointments. For

more detailed information about the transfer evaluation process, contact the Student Records office.

Reciprocity Agreement

Washington Community and Technical Colleges (CTCs) offer reciprocity to students transferring within the CTC system who are pursuing the Direct Transfer Agreement (DTA) degree or the Associate in Science – Transfer (AS-T) degree. Students who completed an individual course that met distribution degree requirements or fulfilled entire areas of their degree requirements at one college will be considered to have met those same requirements if they plan to complete the same degree when they transfer to another community or technical college in Washington. These degree requirements include communication skills, quantitative skills, or distribution requirements or either the DTA or AS-T degree at CBC. Students must initiate the review process and must be prepared to provide necessary documentation to both the sending and receiving institution. Students will be required to fulfill a minimum of 1/3 credits of degree applicable coursework at CBC and must be continuously enrolled, as defined under the Catalog Option Policy in this catalog. For procedural information, contact the Student Records office or refer to the Reciprocity Policy and Procedure.

How to Apply for General Admission

Applicants must complete and submit an Application for Admission by the quarterly deadline. Admission application may be filled out online at columbiabasin.edu/apply. 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 individual program and/or department for specific program requirements.

Admission to High School Completion Program

The High School Completion program is offered for people 19 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 Admission with an attached official high school transcript and complete the assessment test. Applications are available at columbiabasin.edu/highschoolcompletion. For general information about the High School Completion program, visit columbiabasin.edu/highschoolcompletion.

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 High School Release form.

Columbia Basin College complies with the spirit and letter of state and federal laws, regulations and executive orders pertaining to civil rights, equal opportunity, and affirmative action. CBC does not discriminate on the basis of sex, race, color, national origin, religion, age, marital status, physical, mental or sensory disability, sexual orientation, or Vietnam veteran status in its educational programs or employment. Questions may be referred to Camilla Glatt, Vice President for Human Resources & Legal Affairs, 509.542.5548.

Individuals with disabilities are encouraged to participate in all college sponsored events and programs. If you need accommodations based on a disability, please contact the Resource Center at 509.542.4412 or the Washington State Relay Service for the Deaf and Hard of Hearing at 1.800.833.6384.

This notice is available in alternative media by request.

Admission to High School Enrichment Program

Students enrolled in Benton or Franklin County high schools may take courses at Columbia Basin College for enrichment or to meet high school graduation requirements. 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
- 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 Student Records office)

Students with junior standing and at least 16 years of age or older may be considered for admission upon special request to the Director for Student Records.

Enrichment students are charged regular tuition and fees per credit.

Admission to High School Academy

The High School Academy (HSA) program is offered for students ages 16 to 20 years of age who have dropped out of high school or are at risk of dropping out. HSA is a re-engagement program for at-risk/drop-out youths who seek to complete a high school diploma.

Interested students must submit a completed HSA referral packet to the participating school district of Kennewick, Richland, Pasco, or Columbia. Included in the packet is a CBC Application for Admission which must also be completed.

Once the student referral packet is processed and approved, the student will be expected to:

- Attend an interview with the HSA Director
- Submit an official transcript
- Meet with the HSA Director to complete a transcript evaluation
- Complete the assessment test for placement purposes
- Attend a mandatory orientation

For general information about the High School Academy program, contact the HSA office at 509.542.4442.

Expanding options for students to earn high school diplomas, Bill Number: SHB 1758

CBC may issue a high school diploma or certificate when one of the following criteria is met:

- An individual satisfactorily completes the requirements for high school completion
- An individual enrolls through the Running Start program and satisfactorily completes an associate degree, including an Associate in Arts and Sciences degree, Associate of Science degree, or Associate in Applied Science degree. A written request from the student to the Registrar is required. (These individuals are not required to complete the State Board of Education's graduation requirements.)
- An individual, 21 years or older, satisfactorily completes an Associate degree, including an Associate in Arts and Sciences degree, Associate in Science degree, or Associate in Applied Science degree. A written request from the student to the Registrar is required. (These individuals are not required to complete the State Board of Education's graduation requirements.)

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 if the student doesn't exceed the enrollment combination of 1.2 FTE. 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 assessment test and must qualify for reading at college level and qualify for either ENGL& 101 or MATH& 107. Students who qualify should meet with their high school counselors to determine high school graduation requirements.

Eligible Running Start students must complete and submit to the Running Start coordinator:

- A CBC admission application (after student qualifies)

- A Running Start Enrollment Verification form

After the initial enrollment, students will be required to complete a Running Start Enrollment Verification form each quarter prior to registration.

Tech Prep & College in the High School

Tech Prep and College in the High School are co-operative programs between local school districts and Columbia Basin College. They allow students the opportunity to earn college and high school credit simultaneously while taking pre-approved courses in the students' home high school or Tri Tech Skills Center. The courses are taught by qualified high school teachers who work closely with CBC faculty mentors to ensure the high school curriculum is of college rigor and aligns to a similar course(s) taught on campus.

Students can accelerate their academic and career pathways through these dual credit programs. Tech Prep-approved courses are career and technical education courses and College in the High School courses are academic. Both programs offer students rigorous and challenging coursework that will assist them in their transition to postsecondary education and training.

Upon successful completion and meeting all eligibility requirements, the equivalent CBC course(s) is transcribed to the students' transcript with the College's course title and number, just as it appears in the catalog. For eligible students, grades will be awarded for college credit (and posted to the college transcript) using CBC's grading scale and may be slightly different than the high school grade awarded. Students in the College in the High School program may pay fees to CBC and be required to purchase required college textbooks.

For more information about either dual credit program, please contact the Tech Prep Director at 509.542.4559.

International Student Admission

Columbia Basin College welcomes qualified international students.

Admission procedures require submitting the following:

- A completed CBC international student application filled out in the student's own handwriting
- A completed CBC application
- Official transcripts translated into English by a certified translation agency from all previous high schools, colleges, or universities
- A CBC 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 61 (internet-based testing) or above is required.

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 CBC, 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 will be available from the College while they are attending CBC.

Further information and appropriate forms may be obtained at columbiabasin.edu/internationalstudent.

Admission to BAS

Columbia Basin College offers Bachelor of Applied Science (BAS) degrees in Applied Management, Cyber Security, and Project Management. This degree is designed for those who have earned an Associate in Applied Science (AAS) degree or an Associate in Arts and Sciences (AA) degree, but lack the broader business-related education needed, project management, or cyber security skills to move into leadership, specialized business, or computer positions. The BAS program is designed specifically for AAS graduates because their applied science credits are generally non-transferable to four-year institutions. The program gives AAS holders an opportunity to pursue a bachelor's degree without having to start their college education from scratch, allowing full-time students to complete a baccalaureate degree in approximately two more years. Anyone with an Applied Science or Associate in Arts and Sciences degree can apply. Although not a requirement, it is also recommended that candidates have work experience in their field of expertise before beginning the program. Due to limited enrollment, applicants have to complete a formal application and an interview before being accepted into the program. For the application and deadlines, visit columbiabasin.edu/BAS.

Admission to ELA

(English Language Acquisition)

The English Language Acquisition (ELA) program provides six levels of English language instruction to immigrants and refugees for a tuition fee of $25 per quarter. Students are tested to determine their speaking, listening, reading, and writing skills prior to being placed into an appropriate class. Depending on levels, and time of day, classes are held on the main Pasco campus, at CBAC in Pasco, and at various sites around our service district. CBC offers courses focused on workplace skills and provides support to ELA students enrolled in vocational programs. Students under 18 years of age are required to obtain permission from their high school in order to participate in ELA classes at CBC. For more information, contact the Transitional Studies Division at 509.542.4701.

Admission to ABE/GED®

(Adult Basic Education or General Educational Development)

The Adult Basic Education or General Educational Development (ABE/GED®) program offers classes to qualifying students who left high school without receiving a diploma, or are in need of improved skills prior to enrollment in college-level classes for a tuition fee of $25 per quarter. Students are assessed and attend a program orientation prior to being placed in a class. Classes are held on the main Pasco campus and at various sites around our service district. Students under 18 years of age are required to obtain permission from their high school in order to participate in ABE/GED® classes at CBC. For more information, contact the Transitional Studies Division at 509.542.4701.

If you need accommodations for the GED® examination or to participate in GED® classes based on a disability, contact the Resource Center at 509.542.4412 or the Washington Relay services for the Deaf and Hard of Hearing at 1.800.833.6384.

Admission to HEP

(High School Equivalency Program)

The High School Equivalency Program (HEP) is funded by the U.S. Department of Education and implemented through the Transitional Studies 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 place in a post-secondary education/training program, a career position, or the military.

Admission to the program is open to migrant or seasonally-employed agricultural workers and their families 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 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
- Pass entrance exams
- Demonstrate a willingness to conform to the rules of the program

*Applies only to the migrant or seasonally-employed agriculture worker. However, immediate family members of migrant and seasonally-employed agriculture workers are also eligible.

For more information, call 509.542.4775.

Funding 2015-2020 in the amount of $2,315,563.

Admission to HS21+

(High School 21+)

High School 21+ (HS21+) is a competency-based school equivalency program for adult learners 21 and older who do not have a high school diploma or equivalency. For the quarterly tuition of $25, students work to demonstrate competencies in reading, writing, and math.

To participate in the program, students must submit their official high school transcripts to the Transitional Studies Division and complete the required assessments. Students also complete an intake interview prior to admittance. For more information, contact the Transitional Studies Division at 509.542.4701.

Student Orientations

All new, degree and certificate seeking students, and students who have earned zero quarter-based credits are required to complete Student Orientation to Advising and Registration (SOAR) as part of the Getting Started process. SOAR is offered prior to each quarter to review important information from the College catalog. Students learn about various resources on campus, general information about CBC degrees, and how to register for classes.

First Year Introduction (FYI)

First Year Introduction (FYI) is a one-credit course required for all degree and certificate seeking students. Running Start students complete Workshop 090 in place of the one-credit course. FYI assists new students entering CBC who have earned zero credits (credits must be from a regionally-accredited college or university to count) by providing a thorough introduction to college and to CBC. Students are required to complete FYI at the start of their first quarter at CBC. Students register for this course while registering for their first quarter classes.

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 Completion Coaches 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, prior learning 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 Sciences 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 Completion Coach as soon as possible to discuss the impact of any change in their curricula
- Students should attend CBC 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 CBC 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 CBC transcript of their grades with them to facilitate the advisory meeting

Registration Procedures

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.

After completing the admissions process, registration times are assigned. Early application for admission is strongly encouraged. Currently enrolled students are assigned registration times based on cumulative credit hours earned at CBC or a combination of CBC credit hours earned and a maximum of 60 quarter transfer credits officially evaluated by the Student Records office.

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 assessment test. Contact the Assessment Center to schedule an appointment. Transfer students who have completed math and/or English from an accredited college will not be required to complete an assessment test, provided an official college transcript is submitted that documents the attainment of the necessary prerequisites.

Students may rearrange 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 registration form and submit it to Hawk Central or use web registration.

**For summer session and classes scheduled for less than a full quarter, students should contact Hawk Central for deadline dates.*

If you need accommodations for assessment testing based on a disability, please contact the Resource Center at 509.542.4412 or the Washington State Relay Service for the Deaf and Hard of Hearing at 1.800.833.6384.

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. Students are required to show student photo ID, proof of enrollment at CBC, and have tuition and fees paid in full to obtain card.

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 Hawk Central. Course registration for Gold Card members is on a space available basis, for audit status only, beginning the third day of the quarter. Gold Card members enrolling in Fitness Center will need to obtain a student photo ID card (see Student ID Card section above for more information). For more information, please visit Hawk Central in the H building.

My CBC Information System

columbiabasin.edu/mycbc

My CBC 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 class schedules, degree audits, financial aid data, grades, scholarship information, and transcripts
- Pay tuition online

Withdrawal Policy & Procedures

Student-Initiated Withdrawals (W)

It is the student's responsibility to officially withdraw from college or from individual courses by the deadline published in the Academic Deadlines calendar online. Students must submit a registration form to Hawk Central or withdraw online by the published deadline to guarantee the accuracy of their permanent records. Students may withdraw from full-term courses with no record on their transcripts if the withdrawal has been processed on or before the 10th day* of the quarter. Students withdrawing from full-term courses after the 10th day but on or before the 40th day* of the quarter shall have a "W" recorded on their transcripts.

**For summer quarter and all alternative class schedules such as Fast Track courses, students should contact Hawk Central for withdrawal deadlines.*

Students are encouraged to meet with a Counselor or Completion Coach and to inform instructors prior to withdrawing. Counselors or Completion Coaches will review with students the implications of withdrawing and other options to consider. Students receiving Financial Aid are strongly advised to speak with a staff member in Hawk Central prior to withdrawing as withdrawals may negatively impact their ability to receive financial aid in the future and/or they may be required to repay money received from a financial aid award. It is the responsibility of students to be fully aware of the effects of withdrawing and the College assumes no liability for financial or other adverse actions as a consequence of withdrawing.

Final withdrawal deadlines are based upon 75 percent of the scheduled class meetings. Students who stop attending classes without officially withdrawing will be issued a grade based on the work completed and any other assessments provided by instructors. However, exceptions to the withdrawal deadline can be made to the Registrar but only for extenuating circumstances and must be accompanied by appropriate and qualified documentation. Refer to the Petition for Exception to Deadline Policy (PED) for further information at columbiabasin.edu/ped. The withdrawal process is not related to tuition refunds. For further information about tuition refunds, refer to the Refund Policy.

College-Initiated Withdrawals (WA)

On rare occasions, the Registrar will complete student withdrawals at the recommendation of the appropriate Dean or Vice President for the following reasons: disciplinary actions, academic performance decisions, and health or safety issues. Additionally, the Registrar will process student withdrawals for excessive absences when initiated by a faculty member and recommended by the appropriate Dean. In these cases, the faculty member must have included an attendance policy statement in the class syllabus and the conditions under which students will be administratively withdrawn. College-initiated withdrawals will be posted on the transcript as a WA.

Academic Information

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 Courses & Programs 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 columbiabasin.edu/mycbc approximately one week after the end of the quarter.

CBC uses a decimal grading system for all lecture and laboratory courses numbered 100 and above, and for MATH 083, 084, 094, 095, 096, 097, and 098.

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. Please refer to individual degrees for specific graduation grade requirements.

CBC's Competency-Based Education (CBE) program grading may vary; please visit columbiabasin.edu/cbe for program specific grading information.

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** - Student-Initiated Withdrawal - not calculated in grade point average
- **WA** - College-Initiated Withdrawal
- **Y** - No grade reported
- **Z** - No credit award*

**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 Student Records office for the proper procedures.*

***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 MATH 083, 084, 094, 095, 096, 097, and 098.*

Pass/Fail Grades

Columbia Basin College issues a "P" (passing) grade in certain predesignated courses or experience-related evaluations for credit. A "P" grade is issued and accepted when performance is certified at a 2.0 grade point minimum. A "P" grade in a 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 Student Records office.

Transfer students are cautioned that many baccalaureate institutions impose limits or restrictions on acceptance of P/F graded credit. Students are advised to consult with an advisor at the transfer institution for how pass/fail credits are applied toward degree requirements. Students receiving a "P" grade will receive credits toward graduation as follows:

- With the exception of College Board Advanced placement credits, a maximum of 10 pass/fail credits earned through classroom instruction from a regionally accredited college will be applied toward degree requirements as:
- General elective credits for Associate in Arts and Sciences degree and the Associate in Science Transfer degree
- Support or elective credits for the Associate in Applied Science degree;
- Core credits for the Associate in Applied Science degree, if program approved. Consult program advisor for program-approved credits
- Experiential learning credit, CLEP, DANTES, and IB is limited to use within the restricted electives
- A maximum of three pass/fail credits earned for military credit or experience may be applied toward the Physical and Health Education distribution

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.

*CBE program students will have 20 calendar days of the succeeding term (terms = summer and winter).

Computation of Grade Point Averages (GPA)

Grade point averages (GPA) 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, WA, Z, are included in the GPA. Credits/GPA earned at previous institutions may be factored into the evaluation of graduation requirements.

Academic Information

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 Student Records office. Students must meet with a Counselor or Completion Coach no later than one quarter before graduation. Students may petition to set aside grade records provided:

- They are enrolled at CBC
- 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 CBC 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. Courses being petitioned cannot have been used towards a previously earned degree or certificate.

Course Repeat Policy

Courses at CBC may be repeated to improve the grade earned. A grade identifier of "R" will be posted next to the lowest graded course on the permanent transcript and the grade point average will exclude any course that has a repeat grade identifier. Letter grades of "P, Z, W, WA, N" are not used in grade point calculations and will not be given the "R" grade identifier next to the repeated course. Credit is given only once and the highest grade earned is used to compute the GPA. Repeated courses must be equivalent in credit and content and all courses and earned grades will remain on the academic transcript. Students receiving financial aid or veterans benefits should consult the respective office prior to repeating a course as financial penalties may be imposed. Other colleges and universities may include repeated course grades in their eligibility for admissions and/or graduation. Courses repeated more than three times are subject to all instructional costs that are equivalent to nonresident tuition.

To request a course repeat, students must complete and submit the Repeated Course Request form found online at columbiabasin.edu/studentforms.

A student who takes a course at CBC 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 CBC
- The course must be evaluated by CBC and verified as substantially equivalent in credit and content via official transcript
- All courses and earned grades will remain on the transcript. A repeat identifier will appear on the CBC transcript and the original grade will be removed from the GPA
- A notation will be entered on the CBC transcript indicating the course was repeated via transfer

Exceptions to the Course Repeat Policy must be submitted for consideration to the Graduation Committee. Contact the Registrar's office for further information.

Quarterly Honors Designations

Students who earn 12 credits in courses 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 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 earn an associate degree or a one-year certificate from CBC are eligible to receive scholastic honors as established by the College. The cumulative grade point average for all credits earned at CBC is used to calculate eligibility for honors. The honors grade point average calculation is based on the last quarter in which all degree requirements have been completed. Credits and grades transferred to CBC from other colleges and universities are not included in the calculation for the honors designation.

Students who earn an associate degree or certificate according to the standards above with a cumulative grade point average of 3.85–4.0 will graduate "with High Honors." Students who earn an associate degree or certificate according to the standards above with a cumulative grade-point average of 3.50-3.84 will graduate "with Honors." The honors designation will be noted on the official transcript and on the diploma or certificate.

For purposes of the Commencement program and ceremony regalia, the honors designation will be based not on the final quarter completed for degree or certificate requirements, but on the GPA as established from the winter quarter transcript for the graduating year.

Students who earn a Bachelor of Applied Science degree from CBC are eligible to receive scholastic honors as established by the College. The cumulative GPA for all credits earned at CBC is used to calculate eligibility for honors. The honors GPA calculation is based on the last quarter in which all degree requirements have been completed. Credits and grades transferred to CBC from other colleges and universities are not included in the calculation for the honors designation.

Cum Laude (with honors)	3.50 – 3.69
Magna Cum Laude (with high honors)	3.70 – 3.89
Summa Cum Laude (with highest honors)	3.90 – 4.00

Standards of Academic Progress & Performance

A student's enrollment at Columbia Basin College is a partnership among the student, the College, and the state of Washington. CBC 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. The College utilizes various resources and support programs to assist students toward successful academic performance and program completion:

- 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.

CBC does not intend to discourage or penalize students who are sincerely trying to make good use of the College's resources. 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:

- Limit or deny future enrollment to that student
- Allow continued enrollment but limit state funding support

Academic Performance Policy

Columbia Basin College's Academic Performance Policy includes both grade performance and credit completion components. Students in a degree or certificate program must maintain a minimum cumulative grade point average of 2.0. Additionally, excessive withdrawals from classes are problematic as they delay students' completion and decrease the College's ability to efficiently manage class enrollment.

Early Warning Signs of Academic Difficulty

Students are strongly encouraged to seek advice from a Counselor or Completion Coach as well as use College resources when they first begin to show signs of academic difficulty. These signs include, but are not limited to:

- Failing FYI
- Class instructor concerns about their academic performance
- Students' own acknowledgement they are not understanding class material or doing well in their coursework
- Quarterly GPA below 2.0

Academic Sanctions

Students who have a ***cumulative*** GPA below 2.0 will be placed on academic probation that could progress to academic dismissal if subsequent academic performance does not improve. CBC may block students' ability to register for future classes until they have met specific intervention requirements. When students improve their cumulative GPA to 2.0 or higher, they will be removed from unsatisfactory performance status. However, the College reserves the right to continue to monitor student progress and performance as it deems appropriate.

Probation - This sanction applies to the first quarter a student receives a ***cumulative*** GPA below 2.0. A block will be placed on the student's ability to register until the student has successfully completed the online ***Distress to Success*** workshop. For further information, contact the Counseling/ Advising Center.

Subject to Dismissal - This sanction applies to the second consecutive quarter a student receives a ***cumulative*** GPA below 2.0. The student will receive a warning letter that the next academic sanction is academic dismissal. The student is strongly encouraged to meet with a Counselor so that s/ he can begin to address whatever issues or barriers may be impeding his/her academic success. The student will remain in the subject to dismissal status as long as s/he receives ***quarterly*** GPAs of 2.0 or higher and until the ***cumulative*** GPA reaches 2.0.

Academic Dismissal - CBC will academically dismiss the student who is in subject to dismissal status when his/her subsequent quarterly GPA is under 2.0 and the cumulative GPA remains below 2.0. During Academic Dismissal, the student may not register for any classes and may not participate in any events or activities reserved for students.

Academically dismissed students may re-enroll in one of three ways: 1. appeal the academic dismissal (see Appeal of Academic Dismissal section); 2. complete an Academic CPR course; or 3. petition for reinstatement.

- If the student wishes to return earlier than the four quarter sanction, s/he may do so by completing CBC's Academic CPR workshop. Workshops are offered each quarter. After completion of the workshop, the student may return to CBC the subsequent quarter. Contact the Counseling/ Advising Center to obtain instructor permission to enroll in the course.
- Students also have the option to sit out four quarters and petition for reinstatement.The student will be scheduled to meet with a Reinstatement Committee who will decide if the student will be allowed to be re-admitted to CBC and/or set conditions to be met upon return.
- Students who have been previously dismissed will not be allowed to repeat Academic CPR. Students have the option to appeal the dismissal or submit a petition for reinstatement.

Conditional Enrollment & Financial Penalty

Students reinstated after completing the Academic CPR workshop or through the Reinstatement Committee will be placed on conditional enrollment status and must maintain a minimum 2.0 ***quarterly*** GPA. Those who do not fulfill the performance standards via Academic CPR or while on conditional enrollment status may continue to attend CBC, but will be assessed a financial penalty and no further state funds will be used to support their education.

Appeal of Academic Dismissal

Students 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 10 calendar days from the date of the dismissal. Documentation to support a statement of extenuating circumstances is ***required***. The Vice President may request a meeting with the student prior to making a decision.

- 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.
- If the appeal is not granted, the student will not be allowed to re-enroll at CBC until either completing an Academic CPR workshop or sitting out for four consecutive quarters and petitioning for reinstatement (see Academic Dismissal above).

Academic Monitoring

Students who have previously been academically dismissed may be considered at-risk even when s/he is able to bring his/her cumulative GPA to a minimum of 2.0. In such cases, the student may be required to continue working with a Counselor.

Prior Learning Credit (PLC)

Columbia Basin College acknowledges opportunities for mastering specific skills and competencies that can be gained outside of a formal classroom experience. Prior learning can be achieved through education, work, or life experiences, and students may earn credit and/or advanced placement.

Currently enrolled students may earn college credit when they demonstrate by examination or evaluation that their professional experience or substantial prior learning meets the specific outcomes of a CBC course. Not all courses at CBC are designated appropriate for credit by examination or evaluation and each department determines the evaluation method required for students to demonstrate mastery of the course content. Prior Learning Credit (PLC) can be awarded through one of the following options:

- Experiential Learning
- Course Challenge
- Military Credit and Experience
- College Level Examination Program (CLEP)
- DANTES Subject Test
- College Board Advanced Placement
- International Baccalaureate

The following restrictions apply to awarding of prior learning credits:

- Students must be currently enrolled at CBC and have an academic record before credits will be awarded. (Regardless the type of PLC, students must have transcripted courses before CBC posts to their transcript).
- For course challenge and experiential learning, students must be currently enrolled at CBC and have an academic record of 15 or more credits with a 2.0 or better GPA before credits will be awarded.
- Credits may be awarded only if the learning experiences fall within the regular curriculum of the College.
- Prior learning credits cannot duplicate credits that have already been awarded.
- One-fourth of the total credits required for a CBC Associate in Arts and Sciences degree, Associate in Science-Transfer degree, Associate in Applied Science degree, or certificate may be earned through the prior learning process.
- Prior learning credits do not count toward the minimum residency requirement.

- With the exception of course challenge, for which a decimal grade is awarded, credits for prior learning will be recorded with a "P" grade.
- With the exception of a College Board Advanced Placement course, a "P" graded course is limited to use within the restricted electives of the Associate in Arts and Sciences degree.
- A non-refundable fee per each credit must be paid for the experiential learning and course challenge assessment.

For further information about process and fees for prior learning credits, contact the Student Records office.

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 evaluation methods.

Prior experiential learning credit is granted only for classes that fall within the regular curriculum of the College. No credit will be awarded if the student has earned credit in a similar course. The application and procedure for Experiential Learning credits is available at columbiabasin.edu/PLC.

Course Challenge

If a student has established a transcript record at CBC, and believes his/her previous experience has provided the student with competencies essential for passing a course, the student may request a course challenge. The course challenge may only be completed during the term in which the course is being offered. If the student is enrolled in a course for which he/she wishes to challenge, the course challenge process must be completed within the first week of the course. Individual departments determine which, if any, of the courses offered may be challenged. The application and procedure for a course challenge is available at columbiabasin.edu/PLC.

Military Credit & 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 Noncollegiate 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 Joint Services Transcripts requested by the student and based on the American Council on Education's Registry of Credit Recommendations. Military credits will be evaluated only from official military documents. Official military transcripts must be received by the end of the student's second quarter at CBC.

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 in Arts and Sciences degree.

College Board Advanced Placement

A score of three or higher will grant credit for a specific course and credit. Students must contact CollegeBoard to request their score report be sent to the CBC Student Records office for evaluation. For further information about AP credits, contact the Student Records office.

College Level Examination Program (CLEP)

A score of 50 in the specific examination will grant credit in selected subjects. Students must submit their score report to the Student Records office for evaluation. For further information about CLEP credits, contact the Student Records office.

DANTES Subject Test

A score of 500 will grant credit in selected subjects. Students must submit their score report to the Student Records office for evaluation. For further information about DANTES credits, contact the Student Records office.

International Baccalaureate

A score of four or higher is earned in selected subjects. Students must submit their score report to the Student Records office for evaluation. For further information about IB credits, contact the Student Records office.

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 his/her 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. Students who do not wish to have any or all of such directory information published without their prior consent, must submit a Disclosure of Directory Information form to the Registrar within 15 calendar days after the beginning of the quarter. If a student places this hold on their account, it will remain in effect until otherwise notified. 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. FERPA allows higher educational institutions to share information as necessary in a crisis or in situations where students are a potential harm to themselves or others.

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 via the College's website at columbiabasin.edu/mycbc. 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 columbiabasin.edu/mycbc. Holds on permanent records resulting from non-payment of financial obligations, or failure to return College equipment or material, must be cleared by the student before transcripts will be released. CBC 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.

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 & 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 student policies and the Student Code of Conduct. 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, and the ASCBC offices. For further information, please contact the Assistant Dean for Student Conduct.

Transfer Rights & Responsibilities

1. Students have the right to clear, accurate, and current information about their transfer admission requirements, transfer admission deadlines, degree requirements, and transfer policies that include course equivalencies.
2. Transfer and freshman-entry students have the right to expect comparable standards for regular admission to programs and comparable program requirements.
3. Students have the right to seek clarification regarding their transfer evaluation and may request the reconsideration of any aspect of that evaluation. In response, the College will follow established practices and processes for reviewing its transfer credit decisions.
4. Students who encounter other transfer difficulties have the right to seek resolution. Each institution will have a defined process for resolution that is published and readily available to students.
5. Students have the responsibility to complete all materials required for admission and to submit the application on or before the published deadlines.
6. Students have the responsibility to plan their courses of study by referring to the specific published degree requirements of the college or academic program in which they intend to earn a bachelor's degree.
7. When a student changes a major or degree program, the student assumes full responsibility for meeting the new requirements.
8. Students who complete the general education requirements at any public four-year institution of higher education in Washington, when admitted to another public four-year institution, will have met the lower division general education requirements of the institution to which they transfer.

College & University Rights & Responsibilities

1. Colleges and universities have the right and authority to determine program requirements and course offerings in accordance with their institutional missions.
2. Colleges and universities have the responsibility to communicate and publish their requirements and course offerings to students and the public, including information about student transfer rights and responsibilities.
3. Colleges and universities have the responsibility to communicate their admission and transfer related decisions to students in writing (electronic or paper).

Alcohol & Drug Free Schools/Workplace

In compliance with the Federal Drug-Free Workplace Act of 1988 and the Drug-Free Schools and Communities Act of 1989, Columbia Basin College has adopted and implemented a drug and alcohol prevention program. Unlawful possession, use, or distribution of alcohol and illicit drugs is disciplinable for students under the Student Conduct Code and employees under applicable policies. Please note: marijuana remains an illicit drug on CBC's campuses, despite the change in Washington law. Information regarding CBC's drug and alcohol prevention program under these laws can be found at columbiabasin.edu/index.aspx?page=2108.

Non-Discrimination & Harassment Policy and Grievance Procedure

Columbia Basin College recognizes its responsibility for investigation, resolution, implementation of corrective measures, and monitoring the educational environment and workplace to stop, remediate, and prevent discrimination on the basis of race, color, national origin, age, perceived or actual physical or mental disability, pregnancy, genetic information, sex, sexual orientation, gender identity, marital status, creed, religion, honorably discharged veteran or military status, or use of a trained guide dog or service animal, as required by Title VI of the Civil Rights Act of 1964, Title VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Sections 504 and 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act and ADA Amendment Act, the Age Discrimination Act of 1975, the Violence Against Women Reauthorization Act and Washington State's Law Against Discrimination, Chapter 49.60 RCW and their implementing regulations. To this end, Columbia Basin College has enacted policy prohibiting discrimination against and harassment of members of these protected classes. Any individual found to be in violation of policy will be subject to disciplinary action up to and including dismissal from the College or from employment. The policy and complaint form can be found on the website.

The College takes complaints about harassment and discrimination very seriously. Depending on the facts of the individual situation, the College may proceed with actions consistent with its due process procedures, Office for Civil Rights guidance, personnel policies, collective bargaining agreements, and Code of Student Conduct. If the behavior may be criminal, the complainant has the right to file a criminal complaint with local law enforcement. This will not delay the College in doing its own work to address the complaint promptly and equitably.

Employee, student, applicant, or visitor complaints of harassment including sexual assault and misconduct, and discrimination based on an individual's protected class status or gender are handled by the Vice President for Human Resources & Legal Affairs/Title IX Coordinator who can be reached at 509.542.5548 or the Human Resources Office in the A building. A Deputy Title IX Coordinator may also be contacted at 509.542.4407.

Retaliation by, for, or against any participant (including complainant, respondent, witness, Title IX/EEO Coordinator, or investigator) is expressly prohibited. Retaliatory action of any kind taken against individuals as a result of seeking redress under the applicable procedures or serving as a witness in a subsequent investigation, or any resulting disciplinary proceedings is prohibited, and is conduct subject to discipline.

Student Resources

Hawk Central

Hawk Central, located in the H building, is centralized within Student Services to offer students an opportunity to meet face-to-face with a friendly customer service specialist. In individual walk-in sessions, the staff in Hawk Central triage student questions, assist with problem-solving, and provide information regarding key student services processes (getting started, financial aid, registration, cashiering, and general college information). Please visit columbiabasin.edu/hawkcentral or email your questions to hawkcentral@columbiabasin.edu.

Assessment Center

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

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

GED® testing: adults who have not graduated from high school may obtain a Certificate of Educational Competency by passing the GED® tests. Adults who have not graduated from high school may obtain a Certificate of Educational Competency by passing the GED® tests. The four tests, covering mathematics, social studies, science, and literature, are administered by the Assessment Center. Students seeking assistance preparing for the exams should refer to the Admissions Information section under Admission to ABE/GED®.

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 testing based on a disability, please contact the Resource Center at 509.542.4412 or the Washington State Relay Service for the Deaf and Hard of Hearing at 1.800.833.6384.

Athletics

CBC is a member of the Northwest Athletic Conference. 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. Second-year participants must maintain a 2.0 grade point average.

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. – noon 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 CBC 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 on our website. Current quarter textbook information is available online at cbcbookstore.com.

Human Resources' Student Employment

The Student Employment Office (SEO) is coordinated through the Human Resources office. The SEO provides employment information to CBC students. Information outlining the hiring process can be found on the Student Employment website: columbiabasin.edu/studentemployment. The website also provides tools and resources for students wanting to work on-campus or off-campus through the State Work Study program. Student Employment has been successful for CBC. CBC normally has more than 200 students working in departments across campus.

Types of Student Employment at CBC

On-Campus

- Federal Work Study
- CBC Non-Work Study
- Athletic Scholarships through the Athletic Department
- Summer Student Employment

Off-Campus

- State Work Study

Criteria for Work Study

(Refer to Financial Aid Programs for more detail)

Student workers under Federal Work Study or State Work Study must be enrolled in at least six degree-required credits for the Academic Year and five degree-required credits for Summer Quarter.

JobConnects

JobConnects is a cooperative online database that connects CBC students and alumni with local organizations and employers seeking to fill part- and full-time employment and internships. Employers can utilize the online database to create and announce job postings. Students can post their resumes and review and apply for jobs.

WorkFirst

The WorkFirst program provides services and funds to eligible parents currently receiving Temporary Assistance to Needy Families (TANF). WorkFirst services include:

- Career and educational planning assistance
- Registration assistance
- First quarter financial assistance for tuition, fees, and books for basic skills, vocational, technical, and professional training programs

For more information, please contact WorkFirst, 509.542.4719 or 509.542.4531.

Worker Retraining

Tuition assistance and book loans may be available if you meet one of the following criteria:

- You are currently receiving or have exhausted unemployment benefits within the last 48 months.
- You have become a displaced homemaker, meaning you were dependent on another family member's income, that income is no longer available to you, and you are either unemployed or underemployed.
- You honorably discharged from the U.S. Armed Services within the last 48 months or are going to be released from active duty within the next 18 months.
- You are a dislocated worker who is currently working a temporary stop-gap job with an income loss of 20 percent or more.
- You are currently employed but at risk for unemployment, meeting **two of the following criteria**: 1. Your job is listed as "not in demand"; 2. You need training to remain working for your current employer; 3. And/or you have less than 45 college credits.
- You have been self-employed and experienced a lack of work due to the economy.

For more information about program eligibility, call Columbia Basin College Worker Retraining at 509.542.4446 or visit columbiabasin.edu/worker-retraining.

Basic Food, Employment, & Training (BFE&T)

Students enrolled in a professional/technical program who are currently receiving or are eligible to receive food benefits from the state of Washington, are eligible for these additional benefits and resources through BFE&T:

- Maintaining eligibility for food stamps while attending school
- DSHS' Child Care Subsidy Programs
- Academic/career planning
- Referrals to on-campus and off-campus resources
- Tuition and other support assistance (as funds become available)

For more information, please call the BFE&T office at 509.542.4719.

Virtual Campus/eLearning

The Virtual Campus/eLearning department supports students, faculty, and staff in using and implementing educational technologies. This includes support of online and blended (hybrid) classes, as well as use of technology in face-to-face classes. The main technologies supported are Canvas (learning management system), Panopto (lecture capture video recording), and Elluminate (webinar, virtual office). To find out more about online classes and eLearning at CBC, visit columbiabasin.edu/eLearning.

The eLearning department is in the Faculty House, and can be reached at 509.542.4468 or via email at eLearning@columbiabasin.edu.

College Assistance Migrant Program (CAMP)

The College Assistance Migrant Program (CAMP) is a unique educational program designed for students from migrant and seasonal farm worker backgrounds. The program is funded by the U.S. Department of Education at just over $2.1 million over five years.

Our mission is to provide students with the foundation they need to successfully reach their educational and career goals, which at a minimum, is to include a bachelor's degree. CAMP will provide students with proactive academic, career, financial, and support services throughout their first year of college. For more information, please contact the CAMP office at 509.542.4602.

Counseling/Advising Center

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

Educational Planning

Counselors and Completion Coaches assist students in their transition to 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, Counselors and Completion Coaches are primarily responsible for assisting students in making decisions about academic or occupational goals. They provide specific information about CBC 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.

Human Development Courses

The Counseling/Advising Center faculty teaches a variety of human development courses. Please refer to the Courses & Programs section of this catalog for course descriptions.

Personal Counseling

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 provide short-term personal counseling and refer students to community mental professionals if needed.

To schedule an appointment with a Counselor, please call the Counseling/Advising Center at 509.542.5505.

High School Equivalency Program (HEP)

The High School Equivalency Program (HEP) is funded by the U.S. Department of Education. It is a secondary migrant education program designed to assist migrant and seasonal farm workers to earn their General Educational Development (GED®) certificate through preparatory instruction, cultural activities, and educational and career planning advice.

HEP's goal is to help students further their education and knowledge so they may qualify for more rewarding employment or enroll in vocational or technical schools, two-year community colleges, four-year universities, or military services.

CBC serves a minimum of 150 students through HEP annually. HEP has graduated 347 students in the past five years, an average of 69 students per year. Currently, HEP continues to place an average of 86 percent or more of students in post-secondary education, training, career positions, or careers in the military.

Library Services

The CBC Library is located in the L building on the Pasco campus and is open to students, faculty, staff, and the public. The Benton-Franklin County Regional Law Library is located in the northwest corner of the library. The Health Sciences Library is located on the third floor of the CBC Health Science Center in Richland.

The Library is the main computer lab on both campuses with 76 computers in Pasco and 37 in Richland. All computers have Microsoft Office as well as other specialized software. The Library also has a laptop lending program with 200 laptops available for one-week checkout. The Library provides quiet study space for individuals, rooms for group study and collaboration, and a large computer lab for instruction. The Circulation area houses a collection of textbooks and supplemental course materials.

Through the website at columbiabasin.edu/library, students and faculty have 24/7 access to many computerized resources for educational purposes including databases with more than 22,000 journals in full text. The Library has more than 86,000 print and online books, a collection of more than 2,400 sound recordings on compact discs and LPs, more than 3,000 instructional videos, and other audio/visual materials.

Reference librarians are available during library hours to provide research assistance to library users. Library orientation sessions, which provide information on the effective use of the library resources, are available upon request at both libraries.

The main campus library hours for fall, winter, and spring quarters are Monday through Thursday from 7:30 a.m. to 7:30 p.m., Friday 7:30 a.m. to 4:30 p.m., and Saturday from 11 a.m. to 4:00 p.m. Contact the Library regarding hours for the medical library, interim hours, and summer quarter hours at 509.542.4887.

MESA

Funded by the National Science Foundation, the MESA Community College program aims to increase the number of traditionally underrepresented students receiving a bachelor's degree in a Science, Technology, Engineering, or Mathematics (STEM) discipline. CBC is one of six participating community colleges in the state of Washington to fully implement all six components of the program. Each year, the MESA program recruits and retains a cohort of 50 students from the time they enroll in the program to the time they graduate and transfer to a four-year university. The students that MESA serves must have the intent to transfer to a four-year university, come from a traditionally underrepresented group in the STEM fields, be pursuing their first bachelor's degree in a STEM field, and be financially and educationally disadvantaged. For more information, please call the MESA program office at 509.542.4621.

Academic Success Center

The Academic Success Center provides CBC students free drop-in instructional support in subject areas for which there is high demand. The Center's services include drop-in and online tutoring, a writing center, and academic success workshops. The Center is equipped with computers and printers for student use, as well as whiteboards and group study areas. Tutors can help students through a particular area of difficulty in a one-on-one or small group setting. Contact the Center for updated drop-in tutoring subject hours and availability.

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 Academic Success Center website or at www.etutoring.org and selecting the Western eTutoring Consortium when logging in.

For writing assistance, tutors offer advice and assistance with revising, reorganizing, and elaborating drafts of papers, as well as with syntax, usage, mechanics, citations, and documentation. Students also come in to receive assistance with prewriting-related tasks such as brainstorming ideas, outlining, and locating research information, while others come in to receive help with developing writing

Student Resources

skills in general. Appointments can be scheduled by contacting the Academic Success Center or online through the Center's web page.

The Academic Success Center is located in the Thornton Center, room TD-434 on the Pasco campus. For more information, contact the Academic Success Center at 509.542.4676 or visit the website at columbiabasin.edu/asc.

Resource Center

The Resource Center is dedicated to assisting students and community members in reaching their personal and educational 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 support to qualified students with disabilities, as well as financial resources and support to low income students.

Services are offered in three major areas: disability services, family services, and student assistance.

Disability Services

The Resource Center ensures that students and community members with disabilities are given an equal access to the educational opportunities our college provides. Prospective and current students, as well as community members needing accommodations, should contact the Resource Center to request services. Auxiliary Aids and reasonable accommodations will be determined based on each individual's unique situation.

Contact us at 509.542.4412 or by email at rcdesk@columbiabasin.edu. Relay Service for the Deaf and Hard of Hearing: 1.800.833.6384.

Family Services

These are services available to low-income students with families attending our college. Services include:

- Childcare assistance
- Holiday Adopt a Family Program
- Community Referrals

Student Assistance

Financial assistance is available to students attending CBC. These services include:

- Short-term emergency book and tuition loans
- Travel assistance
- Night taxi service
- Dial-a-Ride passes

The Resource Center is located in the Hawk Union Building (HUB) on the Pasco campus. Contact us at 509.542.4412.

Office of Student Activities

The CBC staff members of the Office of Student Activities supervise and serve as daily advisors to the ASCBC Student Leaders. Student Activities works with student groups to develop and plan cultural, social, recreational, and celebration events to meet the needs of the student body. Student-funded activities include intercollegiate athletics, game room access, music, drama, and various interest clubs.

Associated Students of Columbia Basin College (ASCBC)

ASCBC is thrilled to have you as a member of our student population! Your student government officers are available to help you during your college experience. Stop by our office (upstairs in the HUB) to learn about starting a club, sign up for Leadership Council, and hear about upcoming student events. We want to make sure that you get the most out of your college experience. Have a great year!

ASCBC Clubs & Organizations

CBC has approximately 26 clubs and 12 athletic and fine arts organizations focusing on sports, arts, diversity, fun, travel, and more!

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 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/TRiO (SSS) is a federally funded project to help students graduate and transfer to a university. Students may be eligible for SSS if they are a first generation college student (neither parent has earned a bachelor's degree), are financially limited, or have a documented disability. SSS provides the following support:

- Academic advising
- Transfer planning
- Major and career planning
- Financial literacy and scholarship information
- Campus visits
- Coordination with the Resource Center
- Tutoring in math and science

Veterans Education & Transition Services

The Veterans Education and Transition Services (V.E.T.S.) office opened fall quarter, 2013. The V.E.T.S. office supports student veterans in their transition to CBC through academic advising, education benefits certification, and mental health counseling. The office hosts a variety of services including math and English tutoring, a study table, and access to computers. To learn more about student veterans at CBC, visit columbiabasin.edu/veterans, or speak to a member of the V.E.T.S. staff at 509.542.4280.

Upward Bound

The mission of CBC's Upward Bound program is to academically prepare low-income high school students to become first-generation graduates of post-secondary programs. Upward Bound students participate in both summer and academic-year programs. After graduation from high school, students are eligible to enroll in the BRIDGE program for their first summer of college course work.

Program Components:

- Tutoring
- Mentoring
- Advising
- Cultural Events
- College Visitations
- Pre-college Workshops
- Community Service
- Summer Instruction

Who is Eligible?

Students are eligible if:

- They are potential first-generation college graduates
- They are attending one of the target schools - Prosser, Connell, Chiawana, Pasco
- Their family income meets federal guidelines
- They are preferably in the ninth or tenth grade and not yet in the twelfth grade
- They received no Fs on their last semester's grades
- They have a strong desire for a college degree

The CBC Upward Bound project is 100 percent federally funded at $357,583 annually to serve 83 participants from four high schools.

Assistive Technology Center

The Assistive Technology Center (ATC) ensures students with a disability are given equal access to education with the help of adaptive technology. In the spirit of Section 508 and the Americans with Disabilities Act (ADA), these technologies can support a range of disabilities including, but not limited to, deaf, hard of hearing, blind/low vision, learning disabilities, and mobility impairments. ATC provides a number of adaptive technologies: printed materials in alternate formats such as braille, audio or enlarged print text, captioned visual and audio content, and more. ATC works collaboratively with faculty to promote a Universal Design for Learning (UDL) atmosphere for all students whether they have a disability or not. We are located in the Lee R. Thornton Center (S/T building) and can be reached at 509.542.5529 or by email atc@columbiabasin.edu.

Planetarium

The Bechtel National Planetarium on the Pasco campus is the largest planetarium theater in Washington. The Planetarium uses one of the Northwest's most advanced projection systems to share the wonder of science, technology, and the universe. Our goal is to enrich education, research, and outreach in astronomy, physics, and many other sciences for communities in the lower Columbia Basin.

The Planetarium is used for all of CBC's astronomy courses as well as for other student events, including club ceremonies and movie nights. Field trips for local K-12 classes are offered free of charge every weekday, and other private organizations may rent the facility for educational visits. Shows for the public are held every Friday evening and Saturday afternoon.

Public show schedules, ticket sales, and other information can be found on the website at columbiabasin.edu/planet.

Safety & Security Information

Campus Safety & Security

Columbia Basin College strives to provide a safe and secure environment for students, staff, and visitors. The Campus Security department 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 ext. 7777. 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 CBC.

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 at 509.542.4819 or via the Crime Incident Report form located on the CBC website at 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 in an Annual Security Report. CBC has developed a protocol with area law enforcement agencies to report and obtain data for the Annual Security 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: columbiabasin.edu/safety.

Printed copies of this report are available by request from CBC Security. The report on safety and crime statistics also is available by contacting: Columbia Basin College Vice President for Administrative Services, 2600 North 20th Avenue, MS-A13, Pasco, WA, 99301, 509.542.4408.

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 media alerts (TV/radio), social media posts (Facebook/Twitter), email, text messages, posters/flyers, and/or notices in the student bulletin. Sign up for emergency notifications via email and/or text message at columbiabasin.edu/ens.

Disciplinary Action

Any student who commits 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, Level I, II, and 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. Any sex offender who wants to enroll at CBC must meet with the Assistant Dean for Student Conduct prior to the start of their first 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 or the Vice President of Student Services and the Assistant Dean for Student Conduct. Notification to the College community will be made pursuant to CBC's Sexual Offender Notification Procedure which can be located at columbiabasin.edu/safety.

Title IX

CBC is committed to fostering a safe, productive learning environment. Title IX and our Non-Discrimination & Harassment Policy prohibit discrimination on the basis of sex, which regards sexual misconduct — including harassment, domestic and dating violence, sexual assault, and stalking. We understand that sexual violence can undermine students' academic success and we encourage students who have experienced some form of sexual misconduct to talk to someone about their experience, so they can get the support they need. The College offers information and referral for victims of sexual misconduct. Victims of sexual misconduct on any College-owned or leased facility are encouraged to report the incident as soon as possible to the Title IX Coordinator or Deputy Coordinator in the Human Resources office in the A building or at 509.542.4407.

Severe Weather

Although it is rare, if you suspect that CBC may be closed, please check one of these resources:

- CBC Emergency Notification System (ENS): sign up (columbiabasin.edu/ens) to receive emergency notifications via email and text messaging
- Local media outlets (radio stations and television news)
- Flash Alert: f1ashalertnewswire.net
- CBC homepage: columbiabasin.edu
- CBC Facebook: facebook.com/columbiabasin-college
- CBC readerboards
- CBC main line: 509.547.0511; if the College is closed, the message will state that CBC is closed

Information will only be posted or announced if CBC should close. That determination is made by 6 a.m., after area roads have been driven and information obtained from weather reporting services. Employees and students are expected to use reasonable judgment regarding traveling in inclement weather/adverse road conditions.

Graduation Information

Graduation

Candidates for degrees, certificates, and diplomas should meet with their Counselor, Completion Coach, or program advisor at least two quarters prior to the anticipated completion date. During the last and next to last quarter in which all requirements are being completed, students must formally apply for graduation.

Graduation applications for transfer degrees are available from a Counselor/Completion Coach in the Counseling/Advising Center. Graduation applications for the Associate in Applied Science degrees and certificates are available from program department advisors. All graduation applications are available online at columbiabasin.edu/gradapps. Students may graduate at the end of any quarter.

To be approved for graduation, a student must:

- Complete all degree/certificate program requirements. No one course can fulfill two distribution requirements within a degree.
- Complete at least one-third of the credits required for a degree or certificate in residence at CBC.
- Earn a cumulative GPA of 2.0 or better in all courses applied to a degree or certificate, including credits transferred from other colleges.
- Earn a minimum cumulative GPA of 2.0 or better in all courses taken at CBC.
- Earn a minimum combined cumulative grade point average of 2.0 or above in all college-level courses taken at CBC and transferred from other colleges.

Catalog Option Policy

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 from CBC 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 to apply 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. There is a one-year limitation of completing a degree under the catalog in effect at the time they last attended CBC for students transferring back credits from another college to complete a degree at CBC.

Transfer Policy

Students who transfer from CBC before successful completion of an associate degree may qualify for reverse articulation when the following has been met:

- Student completes a graduation application with a CBC counselor/advisor.
- CBC degree requirements are successfully completed within four consecutive quarters of leaving CBC.
- Student ensures that all official transcripts are sent from other colleges to CBC for evaluation of transference of credits.
- Student contacts Student Records department to update personal information prior to processing graduation application.

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 Sciences (AA) 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 CBC. 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 (MRP) agreements 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 an MRP 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 (AS-T) degree is based upon an agreement between CBC 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 AS-T 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 (AAS) degree is earned by students who complete a prescribed two-year professional/technical program with a cumulative GPA of 2.0 or above. The AAS degree is not designed for transfer, although some classes may be accepted for transfer by baccalaureate degree institutions.

Bachelor of Applied Science (BAS) Degrees

Minimum of 180 credits

Columbia Basin College currently offers three Bachelor of Applied Science degrees that include Applied Management, Project Management, and Cyber Security. Bachelor of Applied Science degrees are designed to expand career opportunities. Additional BAS programs are being added and may be available after the publication of this 2016-2017 catalog. Check with your advisor for additional degree programs.

The Applied Management BAS (BAS-AM) degree offers students a chance to take 300- and 400-level business classes without the traditional business prerequisites. The ideal Applied Management candidate is someone who has a workforce degree and is seeking career advancement into a management position. The management curriculum is designed to teach business theory within the context of real life work place. The Applied Management program also offers a Healthcare Administration and an Agribusiness concentration.

The Bachelor of Applied Science in Cyber Security (BAS-CS) is designed for two-year Computer Science graduates to continue to build their cyber security skills. The degree offers students a chance to take 300- and 400-level cyber security classes and to prepare for a career in the rapidly growing field of cyber security. The ideal BAS candidate is someone who has a cyber security two-year degree or other two-year computer science degrees. The upper division cyber security courses collectively build on other lower division computer science and cyber security courses and degrees to meet the needs of businesses and organizations to protect computer networks, intellectual property, infrastructure such as the SmartGrid, etc.

The Project Management Bachelor of Applied Science (BAS-PM) degree provides knowledge and skills in project management, including fundamentals (e.g., initiating, planning, execution, monitoring, and control), as well as scheduling software, procurements and contracts, managing human resources, and risk management. The degree incorporates a hands-on, practical application approach and uses experienced project management practitioner perspectives in the development and execution of a project. The BAS degree uses a building block approach of a one-year certificate and two-year Associate in Applied Science degree, where each added step in the education builds on and reinforces the earlier knowledge, skills, and experiences culminating in a Bachelor of Applied Science in Project Management.

The general education courses are specifically designed to support the applied and project management programs and the cyber security programs in the areas of applied economics, professional ethics, technology, environmental principles, and the changing diversity of the 21st century worker. Integrated in the course work is the use of technology, sustainability concepts, teamwork skills, and applied ethics across the curriculum. Refer to the degree outline in the Degree & Certificate Requirements section in the 2016-2017 catalog.

Graduation Information

Direct Transfer Agreements

All degree requirements are listed in the Degree & Certificate requirements section of this catalog. It is important that students refer to the specific degree outlines and work closely with a Counselor or Completion Coach at CBC to assist in choosing the appropriate degree to meet their educational goals.

Associate in Arts and Sciences (AA) Degree (DTA)

An Associate in Arts and Sciences (AA) degree 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. Refer to the specific degree outline located in the Degree & Certificate Requirements section within this catalog. Students are advised to work closely with an advisor from Columbia Basin College.

For students who have selected a major and identified the four-year institution they plan to attend, the AA degree 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 or university. Students are required to complete all of the AA degree requirements listed in the specific degree outline located in the Degree & Certificate Requirements section within this catalog and are strongly advised to work closely with an advisor from CBC and an advisor from the transfer baccalaureate institution to ascertain limits on transferability of community college credits and appropriate course selection for the major.

Associate in Arts and Sciences (AA) Degree (DTA) - With Emphasis

An Associate in Arts and Sciences degree (DTA) with an emphasis (Option C) is recommended for students who have decided on a major but have not identified the four-year institution they will attend. This degree is designed to satisfy most or all of the specific pre-program major requirements of most baccalaureate institutions. Please refer to the degree outlines located in the Degree & Certificate Requirements section of this catalog and work closely with an advisor from Columbia Basin College.

Associate in Math Education (DTA)

The Associate in Math Education degree 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. Please refer to the specific degree outline located in the Degree & Certificate Requirements section of this catalog and work closely with an advisor from CBC and the transfer baccalaureate institution.

Associate in Business Degree (DTA/MRP)

The Associate in Business degree 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 first-year and second-year students.The degree also indicates that a student has completed a two-year business program, which may be of value to career or lifetime goals. Refer to the degree outline located alphabetically within the catalog and work closely with an advisor from CBC and the transfer baccalaureate institution.

The Associate in Arts and Sciences in Business (DTA/MRP) can be earned through CBC's Competency-Based Education (CBE) program, a completely online, self-paced program. Students work through competencies taking advantage of prior experience in work or life where appropriate. There is a formal application to the program and students enroll in six-month terms. Along with instructors, a completion coach is dedicated specifically to assist students with progress toward the degree. For more information, visit columbiabasin.edu/cbe or email cbe@columbiabasin.edu.

Associate in Science – Transfer Degree (AS-T)

For most students majoring in engineering and science, the Associate in Science – Transfer degree works best. The 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. 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 Applied Science Degree (AAS)

The Associate in Applied Science (AAS) 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 AAS degree is not designed for transfer, although some classes may be accepted for transfer by baccalaureate degree institutions. Refer to the specific degree outlines located in the Degree & Certificate Requirements section of this catalog and work closely with a program advisor from CBC.

Certificates

General Studies Certificate

Minimum 90 credits

The General Studies Certificate is earned by students who have successfully completed 90 or more quarter credits in courses numbered 100 or above with a minimum 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. Students earning a General Studies Certificate with a minimum 90 credits are eligible to participate in the commencement ceremony and may qualify for honors designation.

One-Year Certificate

45-89 credits

Certificate programs are designed to provide recognition for students who have not completed an Associate in Applied Science degree but are interested in training and instruction in specialized areas. One-Year Certificates incorporate specific general education requirements, as well as the core course content. Students earning a One-Year Certificate with 45-89 credits are eligible to participate in the commencement ceremony and may qualify for honors designation.

Certificate

20-44 credits

Certificate programs are designed to provide recognition for students who have not completed an Associate in Applied Science degree but are interested in training and instruction in specialized areas. Certificates contain the core course content but do not contain the requisite number of general education credits. Students earning a Certificate with 20-44 credits do not participate in the commencement ceremony or qualify for honors designation.

Graduation Information

Short-Term Certificate

0-19 credits

Short-term certificates recognize students' mastery of information and skills important to employment and career advancement. Students earning a Short-Term Certificate with 0-19 credits do not participate in the commencement ceremony or qualify for honors designation.

Specialized Transfer Assistance

Washington State University Tri-Cities at Columbia Basin College

Columbia Basin College students and staff seeking information about transferring to Washington State University Tri-Cities through the BRIDGES program can meet with WSU Tri-Cities advisors located in the Transfer University office. BRIDGES is a coordinated bachelor's degree program partnership between CBC and WSU Tri-Cities offering students a continuous pathway to one of 18 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, academic advisors share transfer information via office visits, campus information tables, "Future Cougs" FYI modules, and collaborative workshops.

To meet with a CBC advisor about your CBC degree options and requirements or to schedule an appointment with a visiting WSU Tri-Cities academic advisor about BRIDGES, contact CBC Counseling/Advising Center, 509.542.5505. To learn more about the BRIDGES program, visit columbiabasin.edu/bridges.

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.

Program advisors are available to meet with interested students at the Heritage at CBC office in the Thornton Center.

For more information:

Dr. Marisol Rodriguez-Price, Regional Director
509.542.5506 or tricities@heritage.edu
Heritage at CBC office
Thornton Center, room S345
2600 N. 20th Ave., Pasco, WA

Heritage Undergraduate Degrees

- Bachelor of Arts in Education, Elementary Education (K-8)
  - » ELL Endorsement
  - » Bilingual Endorsement
- Bachelor of Social Work
- Bachelor of Criminal Justice
- Bachelor of Science in Accounting
- Bachelor of Arts in Chemistry

Heritage Graduate Degrees

- Master of Education
  - » Teacher Leadership
- ProTeach Portfolio Support
- Educational Administration
- Master in Teaching (K-8), for individuals with a bachelor's degree seeking a teaching certificate

www.heritage.edu • 1.888.272.6190

Instructional Divisions

At Columbia Basin College, as at most colleges and universities, instructional departments offer areas of study (e.g., English, sociology, and physics). Related departments are combined into larger divisions (e.g., Arts & Humanities, Health Sciences, Math & Science). The outline below shows CBC's division structure. Students who have questions about the subject matter, requirements, permission to register, etc., for a particular course or program of study are encouraged to contact the appropriate department or the division office.

Arts & Humanities

Division Office: P100
Phone: 509.542.5531
Email: bmckay@columbiabasin.edu
Dean: Bill McKay

Instructional Programs

- Communication Studies
- English
- Music
- Reading
- Theatre
- Visual Arts

Transitional Studies

Division Office: A227
Phone: 509.542.4562
Email: dlarios@columbiabasin.edu
Associate Dean: Daphne Larios

Instructional Programs

- Adult Basic Education/GED®
- Early Childhood Education
- Education
- English as a Foreign Language
- English Language Acquisition (ELA)
- High School Equivalency Program (HEP)
- High School Academy (HSA)
- Integrated Basic Education Skills Training (I-BEST)
- High School 21+ (HS21+)

Business

Division Office: B119
Phone: 509.542.4863
Email: dmeadows@columbiabasin.edu
Dean: Deborah Meadows

Instructional Programs

- Accounting
- Applied Management
- Business
- Economics
- Healthcare Administration
- Project Management

Computer Science, Engineering, & Career Technical Education

Division Office: CTE 101E
Phone: 509.542.4542
Email: jthatcher@columbiabasin.edu
Dean: Janese Thatcher

Instructional Programs

- Aerospace Machine Maintenance
- Apprenticeship
- Automotive Technology
- Blueprint Reading
- Commercial Drivers License
- Computer Applications
- Computer Science
- Computer Science Information Technology
- Cyber Security
- Electronics
- Engineering Technology
- Industrial Drawing
- Industrial Hygiene Technology
- Industrial Technology
- Instrumentation and Control
- Maintenance
- Manufacturing Technology
- Non-Licensed Operator
- Nuclear Technology
- Radiation Protection Technician
- Technical Education
- Welding Technology

Health & Physical Education

Division Office: P100
Phone: 509.542.5531
Email: bmckay@columbiabasin.edu
Dean: Bill McKay

Instructional Programs

- Health Education
- Physical Education
- Physical Education Professional

Health Sciences

Division Office: HSC 210
Phone: 509.544.8302
Email: mhoerner@columbiabasin.edu
Dean: Mary Hoerner

Instructional Programs

- Dental Hygiene
- Diagnostic Ultrasound Technology
- Emergency Medical Services-CPR
- Emergency Medical Technician
- Fire Science
- Firefighter I
- Health Sciences
- Healthcare Central Service Technology
- Medical Assistant
- Medical Imaging Technology
- Medical Records & Healthcare Information
- Nuclear Medicine Technology
- Nursing
- Nursing Assistant
- Paramedic
- Phlebotomy
- Radiologic Technology
- Surgical Technology

Library, Instructional Support, & Competency Based Education

Division Office: Library
Phone: 509.542.4382
Email: mmcburney@columbiabasin.edu
Dean: Melissa McBurney

Instructional Programs

- Competency Based Education (CBE)

Math & Science

Division Office: S202
Phone: 509.542.4881
Email: ccrawford@columbiabasin.edu
Dean: Curtis Crawford

Instructional Programs

- Agricultural Food Systems
- Agriculture
- Astronomy
- Biology
- Chemistry
- Environmental Science
- General Engineering
- Geology
- Horticulture
- Mathematics
- Nutrition & Food Science
- Physical Geography
- Physics

Student Services

Division Office: HN-146
Phone: 509.542.4595
Email: lschumacher@columbiabasin.edu
Associate Dean: Lane Schumacher

Instructional Programs

- First Year Introduction
- Human Development

Social Sciences, World Languages, & Assessment

Division Office: L010G
Phone: 509.542.4614
Email: mhansen@columbiabasin.edu
Dean: Monica Hansen

Instructional Programs

- Anthropology
- Arabic
- Chinese
- Criminal Justice and Forensics
- Cultural Geography
- French
- Hebrew
- History
- Human Services
- Intercultural Studies
- International Studies
- Japanese
- Latino & Latin American Studies
- Philosophy
- Political Science
- Psychology
- Race, Ethnicity, & Immigration
- Russian
- Social Science
- Sociology
- Spanish
- Women's Studies

Course Prefix & Department Titles

Course Prefix	Department Title
ACCT and ACCT&	Accounting
ABE	Adult Basic Education
APM	Aerospace Apprenticeship
AMM	Aerospace Machine Maintenance
AFS	Agricultural Food Systems
AG	Agriculture
ANTH and ANTH&	Anthropology
AMGT	Applied Management
ARAB	Arabic
ART	Art, Visual
ASTR and ASTR&	Astronomy
AMT	Automotive Technology
BAS	Bachelor of Applied Science
BIOL and BIOL&	Biology
BPR	Blueprint Reading
BUS and BUS&	Business
CHEM and CHEM&	Chemistry
CHIN and CHIN&	Chinese
CDL	Commercial Drivers License
CMST and CMST&	Communication Studies
CSRE	Community Education
CBE	Competency-Based Education
CA	Computer Applications
CS and CS&	Computer Science
CSIT	Computer Science Information Technology
CJ and CJ&	Criminal Justice and Forensics
CSIA	Cyber Security
DHYG	Dental Hygiene
DUTEC	Diagnostic Ultrasound Technology
ECED and ECED&	Early Childhood Education
ECON	Economics
EDUC and EDUC&	Education
ELT	Electronics
EMS	Emergency Medical Services-CPR
EMT	Emergency Medical Technician
ENT	Engineering Technology
ENGL and ENGL&	English
EFL	English As A Foreign Language
ELA	English Language Acquisition
ENVS and ENVS&	Environmental Science
FS	Fire Science
FCA	Firefighter I
FYI	First Year Introduction
FRCH and FRCH&	French
ENGR and ENGR&	General Engineering
GED®	General Education Degree
GEO	Geography
GEOL and GEOL&	Geology
HE	Health Education
HSCI	Health Sciences
HCAD	Healthcare Administration
HCST	Healthcare Central Service Technology
HEB	Hebrew
HIST and HIST&	History
HORT	Horticulture
HDEV	Human Development (HDEV)
HS	Human Services
DRW	Industrial Drawing
IHT	Industrial Hygiene Technology
INT	Industrial Technology
IC	Instrumentation and Control
ICS	Intercultural Studies
JAPN&	Japanese
MNT	Maintenance
MT	Manufacturing Technology
MATH and MATH&	Mathematics
MA	Medical Assistant
IMAGE	Medical Imaging Technology
MRHI	Medical Records & Healthcare Information
MUSC and MUSC&	Music
NOP	Non-Licensed Operator
NMTEC	Nuclear Medicine Technology
NT	Nuclear Technology
NRS	Nursing
NA	Nursing Assistant
NUTR&	Nutrition
PMD	Paramedic
PHIL and PHIL&	Philosophy
PHLEB	Phlebotomy
PE	Physical Education
PEC	Physical Education Professional
PHYS and PHYS&	Physics
POLS and POLS&	Political Science
PROJ	Project Management
PSYC and PSYC&	Psychology
RPT	Radiation Protection Technician
RATEC	Radiologic Technology
RDG	Reading
RUSS&	Russian
SNR	Senior Citizen
SSCI	Social Science
SOC and SOC&	Sociology
SPAN and SPAN&	Spanish
SURG	Surgical Technology
EDUT	Technical Education
DRMA and DRMA&	Theatre
WT	Welding Technology
WS	Women's Studies
WKSP	Workshop

College Survival Guide

academic concentration
Specialization in one academic discipline or field of study is called academic concentration. See also major.

academic year
Usually this refers to the September–June school year. In some cases it refers to the entire year.

accreditation
Certification that a school or an instructional program meets standards set by an outside reviewing organization. Many forms of financial aid are available only to students attending accredited institutions.

admission
Approval for a student to attend an educational institution. The admission process usually involves an application and may require transcripts or other supporting documents.

application
The first step in requesting admission to an institution of higher education. Usually there is a form to fill out by a certain deadline; sometimes there is an application fee to pay.

articulation
A formal agreement between high schools and colleges or between community/technical colleges and baccalaureate institutions, designed to make it easy for students to move from one educational level to the next without any gaps or repetition in their coursework.

assessment
A method of determining a student's knowledge or skill level, such as an exam, often taken to find his or her best placement or starting level in a series of courses in English, world languages, math, or science. At CBC, assessment also refers to determining skills and abilities as learning outcomes in the college's general education program.

associate's degree
A diploma earned after successfully completing a required program of study in a community or technical college. It typically requires 90 or more credits and takes two years of full-time study. Some associate degrees enable students to transfer to baccalaureate colleges and universities, others prepare students to go right into the workforce in a professional/technical field.

audit
A student who audits a course formally registers for it and attends class sessions but earns no credit and has no obligation to complete homework projects or take tests.

baccalaureate or bachelor's degree
A college degree which can often be earned by following a four-year instructional program. A baccalaureate institution, sometimes informally called a "four-year college," is a college or university which is entitled to grant a baccalaureate or bachelor's degree.

basic skills
Usually refers to a level of competency—specifically in reading, writing, and mathematics—which is required for successful college-level work in all fields of study.

campus
The land and buildings that a college or university uses for instruction or student services.

catalog
A comprehensive resource published which lists college regulations, program and course descriptions, degree and graduation requirements, transfer requirements, and other essential information.

CBE (competency-based education)
A self-paced program in which students work through competencies based on prior work or life experience to earn credit toward a degree.

certificate
A document granted by a college or university indicating that a student has successfully completed specified courses and requirements (compare with degree, which usually requires more time and coursework).

class
(1) A specific group of students meeting for specific instructional purposes. It can mean the whole series of scheduled meetings ("Dr. Owen is teaching two English Composition classes this quarter") or just one session ("we had a guest speaker in my Economics class today").
(2) Often means the same as course ("she's taking classes in Welding Technology").
(3) A group of students who start at a school together and expect to complete their studies at the same time ("he's in the graduating class of 2017").

class schedule
(1) A publication listing detailed course and section information (days, times, room numbers, etc.) for a specific semester or quarter.
(2) The specific courses that an individual student is taking or plans to take for a given semester or quarter.

college-level study
Curricula and instruction that assume the student has already mastered certain skills and abilities and has the level of commitment needed for postsecondary school work. Compare to developmental-level study. At CBC, college-level courses are numbered 100 or above.

commencement
The ceremony at the end of an academic year when students receive their degrees or diplomas (compare to graduation).

common course numbering
The Common Course Numbering system identifies courses that are commonly shared among Washington community and technical colleges. Visit columbiabasin.edu/ccn for more information.

competency
In "competency-based" courses or instructional programs, students must demonstrate certain skills and abilities (instead of just earning passing grades in classes) before moving from one level to the next or earning the final certificate or degree.

completion coach
A member of the college faculty or staff who assists students with planning quarter or semester schedules as well as their overall programs of study. Completion Coaches may also help with career planning. See also counselor.

counselor
A member of the college faculty who has special training in guidance and who assists students in academic or personal matters. See also completion coach.

course
(1) Often means the same as class.
(2) A planned sequence of instruction in a particular topic; may include class meetings, lectures, readings, demonstrations, exercises, assignments, examinations, etc.; offered repeatedly to different groups of students.

credit
A unit of measure for college work. Generally speaking, one credit hour represents one hour of classroom instruction each week for one term, plus the study time, homework, etc. that go along with it.

credit load
The total credit value of the courses a student is currently enrolled in.

curriculum (plural: curricula)
(1) An established sequence of information to be learned, skills to be acquired, etc. in a specific course or in a complete instructional program.
(2) Collectively, all the courses offered by a department, division, or college.

dean
An academic administrator or official at a school, college, or university, especially one with responsibility for students or faculty.

degree
A rank conferred by a college or university and earned by a student who has successfully completed specified courses and requirements (compare with certificate, which usually requires less time and coursework).

department
An organizational unit within a college or university, offering courses about closely related topics (at a small school there may be one world languages department, at a large school there may be separate departments for Spanish, French, Japanese, etc).

developmental-level study
Instruction that helps students improve their English and math abilities and prepare them for college-level study. At CBC, developmental-level courses are numbered 99 or below.

diploma
An official document issued by a college or university indicating that a student has earned a certain degree or certificate.

discipline
(1) A subject; field; branch of knowledge or learning ("he teaches in the related disciplines of physics and astronomy")
(2) Orderly behavior ("instructors are responsible for maintaining discipline in their classrooms")
(3) Correction or punishment for disorderly behavior ("she disrupted the class repeatedly, so the college will begin disciplinary action").

College Survival Guide

distance learning or distance education
Instruction which does not require students to come to the campus; can include correspondence courses, televised or videotaped lectures, online courses (Internet and email), etc.

distribution requirements
Course requirements included in an instructional program to make sure that the student is well-rounded and gains some perspective outside his or her specific focus or major.

division
An organizational unit within a college or university consisting of two or more related departments.

drop
To cancel registration in a course after enrolling into it. Students often add and drop courses before settling on a class schedule for a particular quarter. See also withdrawal.

ELA (English Language Acquisition)
Usually refers to developmental-level instruction in English language skills for non-native speakers.

elective
A course that is not required for a particular instructional program. Many programs require a certain number of elective credits, and many recommend certain electives for students to choose from.

enrollment
(1) The process of signing up and paying for courses. See also registration.
(2) The total number of registered students attending classes in a particular instructional program or the whole school.

entry code
The five-digit number students get from the division office allowing them to register for a class that requires prerequisites or "permission of instructor." at a school.

evaluation
(1) The process and standards by which an instructor judges a student's work and assigns a grade.
(2) At CBC, the process of determining that a student has met all requirements to complete a degree or certificate and is ready to graduate.

faculty
The instructors or teaching staff at a school. At CBC, librarians and counselors are considered faculty members along with classroom instructors.

final exam or finals
Final exams are held the last week of each quarter for credit students. The final examination shall make up no more than 33% of your grade.

finals week
The last week in the academic quarter in which final exams are given. Normal class schedules often vary during finals week. Exam schedules are published in the academic calendar every quarter.

financial aid
Money available from various sources to help students pay college expenses. These funds come as loans, grants, or scholarships from the state or federal government or other organizations. Work Study is also a form of financial aid.

FAFSA (Free Application for Federal Student Aid)
The application required for students to be considered for federal student financial aid. The FAFSA is processed free of charge and is used by most state agencies and colleges. There is a form for each academic year. FAFSA forms are available from high schools and on the website www.fafsa.gov.

freshman
A student in the first year of a typical four-year baccalaureate degree program (or one who has earned fewer than 45 quarter credits or 30 semester credits so far).

GED® (General Education Development)
A certificate representing the equivalent of a high-school diploma.

general education
At CBC, a set of requirements designed to help every graduating student achieve competence in a variety of learning outcome areas.

grade
A formal indicator of a student's overall performance in a course, recorded on the official transcript. Traditional letter grades are "A" for outstanding achievement, "B" for high achievement, "C" for satisfactory achievement, etc.

grade-point average (GPA)
The GPA is computed by multiplying the number value of the grade earned in each course (generally, A=4, B=3, C=2, D=1, F=0) times the number credits for each course, then dividing the result by the total number of credits taken.

graduation
The formal completion of an instructional program or course of study. Students graduate after successfully meeting all credit and course requirements and other criteria set by the college or university (compare to commencement).

grant
A type of financial aid that does not have to be paid back after the student leaves school. Grants are available through the federal government, state agencies, and educational institutions.

Health Science Center
Many of CBC's Health Sciences classes are located in a facility in Richland at 891 Northgate Drive. See also Richland campus.

hybrid course
A course that is partially held on campus and partially online.

incomplete
A temporary grade given to a student who is doing satisfactory work but is forced by illness or other emergency to miss an exam or a major assignment. The instructor and student arrange how and when the student will complete the work and have the "I" changed to a final letter grade. At CBC, the student must finish the incomplete work within one academic quarter.

independent study
An arrangement that allows a student to earn college credit through individual study and research, usually planned with and supervised by a faculty member.

internship
A supervised short-term apprenticeship or temporary job in a real world setting closely related to a student's field of study. The student may or may not be paid but earns college credit for the work experience. See also practicum.

junior
A student in the third year of a typical four-year baccalaureate degree program (or one who has earned 90-135 quarter credits or 60-90 semester credits so far).

late start classes
Classes that begin after the official first week of the quarter.

learning outcomes
What students are expected to know and to be able to do as a result of their experience at the college and, more specifically, as a result of completing their general education requirements.

loans
A type of financial aid that must be repaid to the government agency or other lending organization when the student leaves school.

lower division
The courses students are generally expected to complete during the first two years of a typical four-year baccalaureate degree program.

major
Specialization in one academic discipline or field of study. Also called "academic concentration" in a particular subject.

no-show
A student who registers into a course but never goes to class. At CBC, a no-show student will receive an "F" for the class on his or her transcript.

noncredit
Courses or instructional programs which do not require extensive homework or examinations and which do not offer college credit. Students frequently take noncredit courses for basic skills improvement, job training or career enhancement, or personal enrichment.

once-a-week classes
Instruction which only requires students to come to the campus one day a week.

online courses
Instruction which does not require students to come to the campus and uses the Internet and/or email.

open admissions
The policy of some colleges to admit nearly all applicants, regardless of high school grades and admission test scores. It means different things at different schools. Community and technical colleges in Washington state admit anyone who is over 18 or has a high school diploma or GED®.

pass/passing
At most schools, a student will earn credit and "pass" a class with a grade of "A" through "D." A student who earns an "F" grade fails the class and earns no credit. Different schools have different standards, so a student who passes a class with a "D" may or may not be able to use that class to meet prerequisites or fulfill requirements.

placement
The appropriate level to enter a series of courses, based on the student's skills ("since she learned so much Spanish in high school, she can place into Spanish 201 in her first year at college"); often used in the context of basic skills subjects such as mathematics or English composition. See also assessment.

postsecondary
Refers to all educational programs for students past high-school age; it includes community and technical colleges and job training programs as well as baccalaureate colleges and universities.

practicum
A course that includes job-related activities and stresses the practical application of theory in a field of study. See also internship.

prerequisite
A course that must be completed (often with a certain minimum grade) or a skill that must be demonstrated before a student can enroll in a more advanced course (for example, first-year French is a prerequisite for second-year French).

professional/technical
A course or instructional program that emphasizes job skills training for a particular field of work; often called "occupational" or "vocational" education and often contrasted with "academic" or "transfer" education.

program
A very general term used in many ways in a college or university:
(1) The courses that an individual student plans to take ("the academic advisors can help you plan your program each year").
(2) The courses required to complete a particular degree or certificate ("he's almost finished with the Diagnostic Ultrasound program").
(3) The courses that make up a department or the departments that make up a division within the college organization ("the Social Science Division at CBC offers instructional programs in many fields").
(4) Organized activities with a specific function ("CBC offers support programs and services for students of color").

quarter
Some schools (including CBC) organize the academic year into three main periods—fall, winter, and spring quarters—plus a shorter summer quarter (compare to semester).

records
Refers to all the information the college might keep regarding a student; it includes registration activity (enrollment, withdrawal, etc.), grades, payments, awards received, financial aid applications and award notices, and notes on disciplinary actions, as well as address, phone number, and student identification number.

refund
Tuition and fees that are paid back to a student who has withdrawn from a course. At CBC, the amount to be refunded depends on how many credits the student is taking and exactly when the student dropped the course(s). The refund policy is published in the catalog. Refund deadlines are published each quarter in the academic calendar.

register/registration
To sign up or enroll in a course or courses. "Registration activity" includes enrolling, dropping/withdrawing, choosing "pass/fail" in place of letter grades, making payments, etc.

requirements
Minimum standards defined by the college, for example for admission or graduation. See also prerequisite; distribution requirements; general education.

resident
For purposes of calculating a student's tuition and fees, someone who has lived in the state for a specified length of time as shown by specified types of evidence.

Richland campus
Many of CBC's Health Sciences classes are located in a facility in Richland at 891 Northgate Drive. See also Health Science Center.

scholarship
A type of financial aid grant. Organizations may give scholarships according to academic achievement, financial need, or any other basis. Usually there is a competitive application process.

section
A specific class with its own unique days, hours, location, and instructor.
A number of sections of a certain course may be offered during a quarter or semester, each with different days, times, locations, and instructors but presenting the same curriculum.

self-paced
Start and complete competencies, assessments, and assignments at the student's own pace. Learning is not tied to the pace of other students or due dates.

semester
Some schools organize the academic year into two main periods, fall and spring semesters, plus a shorter summer semester (compare to quarter).

senior
A student in the fourth year of a typical four-year baccalaureate degree program (or one who has earned 135-180 quarter credits or 90-120 semester credits so far).

sophomore
A student in the second year of a typical four-year baccalaureate degree program (or one who has earned 45-90 quarter credits or 30-60 semester credits so far).

syllabus
An outline plan for a particular class, including textbook requirements, class meeting dates, reading assignments, examination dates, the instructor's grading standards, etc.

term
A unit of time that can refer to either a quarter or a semester, depending on which system the college or university follows.

TOEFL (Test of English as a Foreign Language)
A standardized test which assesses the English language abilities of students who are not native English-speakers.

trip reduction classes
Courses scheduled in two-day and four-day time blocks to help students reduce trips to campus, saving time and reducing their carbon footprint.

transcript
An official record of the courses and quarter credits a student has taken at a college or university, the grades and degrees or certificates earned, and any awards and honors received.

transfer
To move from one college or university to another and have the second institution recognize and accept some or all of the courses taken and credits earned at the first.

tuition & fees
Tuition is a student's basic payment towards the cost of instruction at a college or university. Most institutions also charge fees for laboratory equipment and materials, computer use, parking, and other miscellaneous costs.

undergraduate
A student who has not yet earned a bachelor's degree; also refers to the courses and instructional programs such a student enrolls in.

upper division
The courses students are generally expected to complete during the last two years of a typical four-year baccalaureate degree program.

wait list
A wait list offers students who sign up a fair and consistent method of being enrolled in a full class if openings occur.

waiver
To waive a right or a claim is to voluntarily give it up.
(1) If a student meets specific criteria, the college may waive some of his or her tuition and fees (that is, some of the money owed to the college will be forgiven).
(2) If a student demonstrates certain knowledge and abilities, the college may waive a course prerequisite (that is, allow the student to take the class even though he or she hasn't completed the listed requirements for it).

withdrawal
The process of formally dropping a class or classes after the quarter has started.

work study
A type of financial aid which pays students to work part-time, often on campus, during the academic year.

Degree & Certificate Requirements

Distribution Codes

Course #	Title [Distribution Code]

Communication

CMST 101	Speech Essentials [C]
CMST 110	Communication Behavior [C]
CMST&210	Interpersonal Communication [C]
CMST&220	Public Speaking [C]
CMST 260	Multicultural Communication [C]
ENGL&101	English Composition I [C]
ENGL&102	Composition II [C]
ENGL&235	Technical Writing [C]
ENGL 315	Writing for Health Professionals [C]
ENGL 410	Professional & Organizational Communication [C]

Humanities

ARAB 121	Arabic I [H]
ARAB 122	Arabic II [H]
ARAB 123	Arabic III [H]
ART& 100	Art Appreciation[H]
ART 116	Art History Ancient World [H]
ART 117	Art History Medieval-Baroque [H]
ART 118	Art History Modern Times [H]
ART 119	Art History of Asia [H]
ART 120	Art History of the Americas [H]
CHIN&121	Chinese I [H]
CHIN&122	Chinese II [H]
CHIN&123	Chinese III [H]
CMST 246	Oral Interpretation [H]
DRMA&101	Intro to Theatre [H]
DRMA 215	Survey of Theatre History [H]
EFL 101	Written English Language I [H]
EFL 111	Written English Language II [H]
ENGL&111	Intro to Literature [H]
ENGL 140	The Cinema [H]
ENGL 160	Women's Literature [H]
ENGL 180	Multicultural Literature [H]
ENGL 195	Bible as Literature [H]
ENGL 203	Mythology [H]
ENGL 210	Intro to Linguistics [H]
ENGL&220	Intro to Shakespeare [H]
ENGL&236	Creative Writing I [H]
ENGL&237	Creative Writing II [H]
ENGL&244	American Literature I [H]
ENGL&245	American Literature II [H]
ENGL&246	American Literature III [H]
ENGL&254	World Literature I [H]
ENGL&255	World Literature II [H]
ENGL&256	World Literature III [H]
ENGL 257	English Grammar [H]
ENGL 264	English Literature [H]
ENGL 265	English Literature [H]
ENGL 266	English Literature [H]
ENGL 280	Gay and Lesbian Studies [H]
FRCH&121	French I [H]
FRCH&122	French II [H]
FRCH&123	French III [H]
FRCH&221	French IV [H]
FRCH&222	French V [H]
FRCH&223	French VI [H]
FRCH 260	French Literature Reading [H]
FRCH 261	French Literature Reading [H]
FRCH 262	French Literature Reading [H]
HEB 121	Hebrew I [H]
HEB 122	Hebrew II [H]
HEB 123	Hebrew III [H]
HIST&126	World Civilizations I [H]
HIST&127	World Civilizations II [H]
HIST&128	World Civilizations III [H]
ICS 120	Survey of Hispanic Culture [H]
ICS 125	Native American Culture [H]
ICS 130	Survey of Asian American Culture [H]
ICS 135	Survey of African American Cultures [H]
ICS 222	Columbia Basin Cultures [H]
ICS 310	American Diversity [H]
JAPN&121	Japanese I [H]
JAPN&122	Japanese II [H]
JAPN&123	Japanese III [H]
JAPN&221	Japanese IV [H]
JAPN&222	Japanese V [H]
JAPN&223	Japanese VI [H]
MUSC&105	Music Appreciation [H]
MUSC 116	History of Jazz [H]
PHIL&101	Intro to Philosophy [H]
PHIL106	Indroduction to Logic [H]
PHIL 131	World Religions [H]
PHIL 150	Introduction to Ethics [H]
PHIL 305	Professional Ethics [H]
PHIL 315	Professional Ethics in Healthcare [H]
RUSS&121	Russian I [H]
RUSS&122	Russian II [H]
RUSS&123	Russian III [H]
SPAN 104	Intensive 1st Year Spanish [H]
SPAN 110	Beginning Spanish for Professionals [H]
SPAN 111	Intermediate Spanish for Professionals [H]
SPAN 112	Advanced Spanish for Professionals [H]
SPAN&121	Spanish I [H]
SPAN&122	Spanish II [H]
SPAN&123	Spanish III [H]
SPAN 205	Spanish for Spanish Speakers [H]
SPAN 206	Spanish for Spanish Speakers [H]
SPAN 207	Spanish for Spanish Speakers [H]
SPAN&221	Spanish IV [H]
SPAN&222	Spanish V [H]
SPAN&223	Spanish VI [H]
SPAN 260	Spanish Literature Readings [H]
SPAN 261	Spanish Literature Readings [H]
SPAN 262	Spanish Literature Readings [H]
WS 155	Women's Cultural Heritage [H]
WS 160	Women in Literature and Art [H]

Mathematical & Natural Sciences

ANTH&205	Biological Anthropology [M/S]
ANTH 214	Biological Anthropology Lab [M/S]
ASTR&101	Intro to Astronomy w/ Lab [M/S]
ASTR 102	Intro to Astronomy - Part II w/ Lab [M/S]
BIOL&100	Survey of Biology w/ Lab [M/S]
BIOL 140	Fundamentals of Botany w/ Lab [M/S]
BIOL 148	Plant Identification w/ Lab [M/S]
BIOL&160	General Biology w/ Lab [M/S]
BIOL&175	Human Biology w/ Lab [M/S]
BIOL 201	Soils w/ Lab [M/S]
BIOL&211	Majors Cellular w/ Lab [M/S]
BIOL&212	Majors Plant w/ Lab [M/S]
BIOL&213	Majors Animal w/ Lab [M/S]
BIOL&241	Human A&P 1 w/ Lab [M/S]
BIOL&242	Human A&P 2 w/ Lab [M/S]
BIOL 252	Insects of Economic Importance w/ Lab [M/S]
BIOL 253	Plant Pathology w/ Lab [M/S]
BIOL&260	Microbiology w/ Lab [M/S]
CHEM&110	Chemical Concepts w/ Lab [M/S]
CHEM&121	Intro to Chemistry w/ Lab [M/S]
CHEM&122	Intro to Organic Chemistry w/ Lab [M/S]
CHEM&123	Intro to Biochemistry w/ Lab [M/S]
CHEM&131	Intro to Organic/Biochemistry w/ Lab [M/S]
CHEM&140	General Chemistry Prep w/ Lab [M/S]
CHEM&161	General Chemistry I w/ Lab [M/S]
CHEM&162	General Chemistry II w/ Lab [M/S]
CHEM&163	General Chemistry III w/ Lab [M/S]
CHEM&241	Organic Chemistry I [M/S]
CHEM&242	Organic Chemistry II [M/S]
CHEM&243	Organic Chemistry III [M/S]
CHEM&251	Organic Chemistry I Lab [M/S]
CHEM&252	Organic Chemistry II Lab [M/S]
CHEM&253	Organic Chemistry III Lab [M/S]
CHEM 254	Quantitative Analysis [M/S]
CHEM 255	Instrumental Analysis [M/S]
CHEM 264	Quantitative Analysis Lab [M/S]
CHEM 265	Instrumental Analysis Lab [M/S]
CHEM 281	Undergraduate Research, Special Topics [M/S]
CHEM 282	Undergraduate Research, Special Topics [M/S]
CHEM 283	Undergraduate Research, Special Topics [M/S]
CHEM 284	Undergraduate Research, Special Topics [M/S]
CHEM 285	Undergraduate Research, Special Topics [M/S]
CHEM 286	Undergraduate Research, Special Topics [M/S]
CHEM 291	Undergraduate Research, Special Topics [M/S]
CHEM 292	Undergraduate Research, Special Topics [M/S]
CHEM 293	Undergraduate Research, Special Topics [M/S]
CHEM 294	Undergraduate Research, Special Topics [M/S]
CHEM 295	Undergraduate Research, Special Topics [M/S]
CHEM 296	Undergraduate Research, Special Topics [M/S]
CS 102	Programming Fundamentals [M/S]
CS& 131	Computer Science I C++ [M/S]
CS& 141	Computer Science I Java w/ Android Devices [M/S]
CS 162	C++2 [M/S]
CS 202	Programming Fundamentals 2 [M/S]
CS 236	Java I/O w/ Android Devices & Integration [M/S]
ENVS&101	Intro to Environmental Science w/ Lab [M/S]
ENVS 174	Intro to Meteorology and the Atmosphere [M/S]
ENVS 310	Environmental Issues [M/S]
GEO 101	Physical Geography [M/S]
GEOL&101	Intro to Physical Geology w/ Lab [M/S]
GEOL&103	Historical Geology w/ Lab [M/S]
GEOL&110	Environmental Geology w/ Lab [M/S]
MATH 113	Geometry/Trigonometry [M/S]
MATH& 171	Math for Elementary Education I [M/S]

Distribution Codes

Course #	Title [Distribution Code]
NUTR&101	Nutrition [M/S]
PHYS&100	Physics for Non-Science Majors [M/S]
PHYS&101	Physics Lab for Non-Science Majors [M/S]
PHYS 102	Physics of Everyday Experience [M/S]
PHYS&124	General Physics Lab I [M/S]
PHYS&125	General Physics Lab II [M/S]
PHYS&126	General Physics Lab III [M/S]
PHYS&134	General Physics I [M/S]
PHYS&135	General Physics II [M/S]
PHYS&136	General Physics III [M/S]
PHYS&231	Engineering Physics Lab I [M/S]
PHYS&232	Engineering Physics Lab II [M/S]
PHYS&233	Engineering Physics Lab III [M/S]
PHYS&241	Engineering Physics I [M/S]
PHYS&242	Engineering Physics II [M/S]
PHYS&243	Engineering Physics III [M/S]

Mathematical & Natural Science *OR* Quantitative/Symbolic Reasoning

MATH&107	Math in Society [M/S] [Q/SR]
MATH&141	Precalculus I [M/S] [Q/SR]
MATH&142	Precalculus II [M/S] [Q/SR]
MATH&144	Precalculus I & II [M/S] [Q/SR]
MATH&146	Introduction to Stats [M/S] [Q/SR]
MATH 147	Finite Math [M/S] [Q/SR]
MATH&148	Business Calculus [M/S] [Q/SR]
MATH&151	Calculus I [M/S] [Q/SR]
MATH&152	Calculus II [M/S] [Q/SR]
MATH&153	Calculus III [M/S] [Q/SR]
MATH&172	Math for Elementary Education II [M/S] [Q/SR]
MATH&173	Math for Elementary Education III [M/S] [Q/SR]
MATH 243	Linear Algebra [MS/] [Q/SR]
MATH 246	Discrete Structures [M/S] [Q/SR]
MATH&254	Calculus IV [M/S] [Q/SR]
MATH 255	Differential Equations [M/S] [Q/SR]

Health & Physical Education

HE 110	Concepts of Fitness [PE]
HE 160	Diet, Exercise & Weight Control [PE]
HE 161	HIV/AIDS Issues and Strategies [PE]
HE 162	HIV/AIDS Education [PE]
HE 170	Health and Wellness [PE]
HE 171	Exercise Prescription [PE]
HE 172	Exercise Prescription Lab [PE]
HE 210	Sports Nutrition [PE]
HE 215	Health and Fitness for Life [PE]
HE 216	Health and Fitness for Life Lab [PE]
HE 220	Drugs and Health [PE]
HE 232	Sports Psychology [PE]
HE 240	Stress Management [PE]
HE 250	Sports Management [PE]
PE 110	Aerobics Step Training I [PE]
PE 111	Aerobics Step Training II [PE]
PE 112	Aerobic Dance I [PE]
PE 113	Aerobic Dance II [PE]
PE 114	Aerobic Dance III [PE]
PE 115	Body Mechanics [PE]
PE 116	Pilates [PE]
PE 117	Yoga I [PE]
PE 118	Step Aerobic Interval Training [PE]
PE 119	Yoga II [PE]
PE 120	Weight Training I [PE]
PE 121	Weight Training II [PE]
PE 127	Fitness Center [PE]
PE 132	Golf I [PE]
PE 133	Golf II [PE]
PE 135	Golf Swing Analysis Strategies [PE]
PE 140	Softball I [PE]
PE 141	Softball II [PE]
PE 142	Softball III [PE]
PE 145	Soccer I [PE]
PE 146	Soccer II [PE]
PE 147	Soccer III [PE]
PE 148	Jogging I [PE]
PE 149	Jogging II [PE]
PE 150	Jogging III [PE]
PE 160	Basketball I [PE]
PE 161	Basketball II [PE]
PE 162	Basketball III [PE]
PE 163	Volleyball I [PE]
PE 164	Volleyball II [PE]
PE 165	Volleyball III [PE]
PE 180	Adaptive PE [PE]
PE 181	Swimming I [PE]
PE 182	Adaptive PE Lab [PE]
PE 187	Baseball I [PE]
PE 188	Baseball II [PE]
PE 189	Baseball III [PE]
PE 190	Cardio Kickboxing I [PE]
PE 201	Exercise and Weights [PE]

Quantitative/Symbolic Reasoning

PHIL& 120	Symbolic Logic [Q/SR]

Social & Behavioral Sciences

ANTH&100	Survey on Anthropology [S/B]
ANTH&204	Archeology [S/B]
ANTH&206	Cultural Anthropology [S/B]
ANTH&234	Religion & Culture [S/B]
ECON 110	Economic Trends, Issues and Policy [S/B]
ECON&201	Micro Economics [S/B]
ECON&202	Macro Economics [S/B]
ECON 291	History of American Economic Development [S/B]
ECON 305	Managerial Economics [S/B]
ECON 315	Economics of Healthcare [S/B]
GEO 150	Cultural Geography [S/B]
HIST 107	Chicano History [S/B]
HIST 108	History of Immigration in the U.S. [S/B]
HIST 110	History of Modern East Asia [S/B]
HIST 111	Colonial Latin America [S/B]
HIST 112	Modern Latin America [S/B]
HIST 113	Mexico Since Independence [S/B]
HIST 115	History of Modern Middle East [S/B]
HIST 116	History of Africa [S/B]
HIST 117	History of India [S/B]
HIST&146	U.S. History I [S/B]
HIST&147	U.S. History II [S/B]
HIST&148	U.S. History III [S/B]
HIST 233	War in History [S/B]
ICS 255	Race and Ethnic Relations [S/B]
POLS 104	State and Local Government [S/B]
POLS&201	Intro Political Theory [S/B]
POLS&202	American Government [S/B]
POLS&203	International Relations [S/B]
POLS&204	Comparative Government [S/B]
POLS 205	American Political Thought [S/B]
PSYC&100	General Psychology [S/B]
PSYC 103	Applied Psychology [S/B]
PSYC&200	Lifespan Psychology [S/B]
PSYC 201	Social Psychology [S/B]
PSYC 205	Psychology of Adjustment [S/B]
PSYC 209	Fundamentals of Psychological Research [S/B]
PSYC 217	Forensic Psychology [S/B]
PSYC&220	Abnormal Psychology [S/B]
PSYC 270	Health Psychology [S/B]
SOC&101	Intro to Sociology [S/B]
SOC 110	Gender, Media, & Popular Culture [S/B]
SOC 150	Marriage-Family [S/B]
SOC&201	Social Problems [S/B]
SOC 269	Sociology of World Cinema [S/B]
SOC 305	Cybercrime: A Sociological Perspective [S/B]
SSCI 290	Social Research Methods [S/B]
SSCI 291	Social Research Methods Lab [S/B]

Degree & Certificate Requirements

Columbia Basin College

Associate in Arts & Sciences (AA) Degree (DTA)

TRANSFER DEGREE

2016-2017 Degree Requirements

Department	Course Number	Course Credits	Quarter Completed	Notes (see Course Selection Worksheet for list of appropriate classes)
Communication		13 Credits		♦ ENGL& 101 (5 credits required). ♦ Select either ENGL& 102 ***or*** 235 (5 credits required). ♦ Select at least 3 credits from Communication Studies courses* (refer to list on Course Selection Worksheet). *Credit not granted for both CMST 101 and CMST& 220. Credit not granted for both CMST 110 and CMST& 210.
English	101	5		
English				
Communication Studies				
Quantitative/Symbolic Reasoning		5 Credits		♦ Select one class from the Quantitative Reasoning ***or*** Symbolic Reasoning courses (refer to list on Course Selection Worksheet).
Humanities		15 Credits		♦ Courses must be selected from at least two of the three groups (refer to list on Course Selection Worksheet). ♦ At least one course must be selected from Group A. ♦ Only one course may be selected from Group C.
Social & Behavioral Sciences		15 Credits		♦ Courses must be selected from two different subject areas (refer to list on Course Selection Worksheet).
Mathematical & Natural Science		15 Credits		♦ At least 10 credits must be from Natural Science courses. ♦ Courses must be selected from two different subject areas (refer to list on Course Selection Worksheet). ♦ One course must be a laboratory science. ♦ A single Math course **cannot** be counted for both a Natural Science and Quantitative/Symbolic Reasoning requirement.
Health & Physical Education		3 Credits		♦ Three credits of Health lecture ***or*** PE activity courses required (refer to list on Course Selection Worksheet). ♦ A maximum of three PE credits may be applied to the degree (consult with advisor about this rule).
Electives		24 Credits		♦ Courses must be numbered 100 ***or*** above. ♦ A maximum of 15 credits from restricted electives may be applied. ♦ Please consult with an advisor/counselor for appropriate course selection.

NOTICE: For transferring students, 75 of the 90 credits must be fully transferable as defined by the Intercollege Relations Commission (ICRC) guidelines for the Direct Transfer Agreement to be honored by four-year institutions in Washington. A maximum of 15 elective credits may be professional/technical courses numbered 100 or above. Due to the specialized nature of many of the listed courses, students should consult their advisor and the catalog of the four-year institution to which they plan to transfer for specific degree requirements.
DISCLAIMER: During the period this guide is in circulation, there may be curriculum revisions and program changes. Students are responsible for consulting the appropriate academic unit or advisor for current and specific information. The information in this guide is subject to change and does not constitute an agreement between the College and the student.

NOTE:
- ♦ Required minimum 90 credits.
- ♦ Required minimum cumulative GPA 2.0.
- ♦ Minimum grade per course 1.0.
- ♦ At least one-third of the college-level, degree applicable credits must be taken at CBC.
- ♦ Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- ♦ Maximum three credits of PE may be applied.

Columbia Basin College

Associate in Arts & Sciences (AA) Degree (DTA)

2016-2017 Course Selection Worksheet

Communication (13 credits)

10 credits in English, plus a minimum of 3 credits in Communication Studies

- **ENGL&** 101 (required)
- **ENGL&** 102, 235
- **CMST** 101 *OR* **CMST&** 220
- **CMST** 110 *OR* **CMST&** 210
- **CMST** 260

Quantitative/Symbolic Reasoning (5 credits)

Select one class from the Quantitative Reasoning *OR* Symbolic Reasoning courses

Quantitative Reasoning

- **MATH&** 107
- **MATH&** 141, 142, 144, 151, 152, 153
- **MATH&** 146
- **MATH** 147, **MATH&** 148
- **MATH&** 172, 173

OR

Symbolic Reasoning

- **PHIL&** 120

Humanities (15 credits)

Group A

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

Group B

- **CMST** 221, 246
- **HIST&** 126, 127, 128
- **ICS** 120, 125, 130, 135, 222
- **PHIL&** 101, **PHIL** 106, 131, 150
- **WS** 155, 160

Group C (World Languages)

- **ARAB** 121, 122, 123
- **CHIN&** 121, 122, 123
- **EFL** 101, 111
- **FRCH&** 121, 122, 123, 221, 222, 223, **FRCH** 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

Social & Behavioral Sciences (15 credits)

- **ANTH&** 100, 204, 206, 234
- **ECON&** 201, 202, **ECON** 110, 291
- **GEO** 150
- **HIST&** 146, 147, 148, **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, 209, 217, 270
- **SOC&** 101, 201, **SOC** 110, 150, 269
- **SSCI** 290/291

Mathematical & Natural Science (15 credits)

- **ANTH** 214, **ANTH&** 205
- **ASTR&** 101, **ASTR** 102
- **BIOL&** 100, 160, 175, 211, 212, 213, 241, 242, 260, **BIOL** 140, 148, 201, 252, 253
- **CHEM&** 110, 121, 122, 123, 131, 140, 161, 162, 163, 241/251, 242/252, 243/253, **CHEM** 254/264, 255/265, 281-286, 291-296
- **CS&** 131, 141, **CS** 102, 162, 202, 236
- **ENVS&** 101, **ENVS** 174
- **GEOL&** 101, 103, 110
- **GEO** 101
- **MATH&** 107, 141, 142, 144, 146, 148, 151, 152, 153, 171, 172, 173, 254, **MATH** 113, 147, 243, 246, 255
- **NUTR&** 101
- **PHYS&** 100/101, 134/124, 135/125, 136/126, 241/231, 242/232, 243/233, PHYS 102

Health & Physical Education (3 credits)

- **HE** 110, 160, 161, 162, 170, 171/172, 210, 215/216, 220, 232, 240, 250, (except 230)
- **PE** 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 127, 128, 129, 132, 133, 135, 140, 141, 142, 145, 146, 147, 148, 149, 150, 160, 161, 162, 163, 164, 165, 180/182, 181, 187, 188, 189, 190, 201

Electives (24 credits)

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

Associate in Applied Science in Accounting

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ACCT&	201	Principles of Accounting I	5		
ACCT&	202	Principles of Accounting II	5		
ACCT&	203	Principles of Accounting III	5		
Select 20 credits from the following:					
BUS	105	Business & Payroll Tax Accounting	5		
BUS	107	Federal Income Taxes	5		
BUS	111	Computerized Accounting	5		
BUS	250	Management Information Systems	5		
BUS	264	Fraud & Accounting Information Systems	5		
		Subtotal	**35**		

Major Support (select a minimum of 32 credits from the following)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BUS&	101	Introduction to Business	5		
BUS	120	Personal Finance ***or***	5		
BUS	210	Managing Personal Finances	5		
PROJ	100	Introduction to Project Management	5		
BUS	165	Investments	5		
BUS&	201	Business Law	5		
BUS	255	Legal Institutions & Processes in Business	5		
BUS	295	Supervised Employment	1-5		
BUS		1 BUS course listed in Major Courses section above	5		
CS	101	Intro to Computers & Information Technology	5		
CS	106	Database Systems	5		
CS	108	Intermediate Spreadsheets	2		
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	**32-35**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II ***or***	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		
Communication Studies (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 Communication	5		
		Subtotal	**23-25**		
		Total Credits Required	**90-95**		

Accounting One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

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

Major Support (a minimum of 12 credits are required)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BUS&	101	Introduction to Business	5		
BUS	107	Federal Income Taxes	5		
BUS	120	Personal Finance ***or***	5		
BUS	210	Managing Personal Finances	5		
PROJ	100	Introduction to Project Management	5		
ACCT&	203	Principles of Accounting III	5		
BUS&	201	Business Law	5		
BUS	255	Legal Institutions & Processes in Business	5		
BUS	264	Fraud & Accounting Information Systems	5		
BUS	295	Supervised Employment	1-5		
BUS		1 BUS course listed in Major Courses section above	5		
CS	101	Intro to Computers & Information Technology	5		
CS	106	Database Systems	5		
CS	108	Intermediate Spreadsheets	2		
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	**12-15**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**50-55**		

Aerospace Machine Maintenance Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
AMM	100	Maintenance Math and Physics I	3		
AMM	102	Maintenance Math and Physics II	3		
AMM	105	Trade Safety	2		
AMM	121	Fundamentals of Hydraulics and Pneumatics I	4		
AMM	125	Applied Mechanics	4		
AMM	131	Fundamentals of Hydraulics and Pneumatics II	4		
AMM	133	Rigging	3		
AMM	135	Bearings and Drives	5		
AMM	147	Computerized Maintenance Management	2		
ENT	171	Technical Drafting	3		
ENT	267	AutoCAD I w/ Lab	3		
ENGL&	101	English Composition I ***or***	5		
ENGL	103	Writing in the Workplace	5		
CMST	103	Workplace Communication ***or***	3		
CMST	110	Communication Behavior	3		
		Total Credits Required	**44**		

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Agriculture (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II	5		
CMST	101	Speech Essentials ***or***	3		
CMST&	220	Public Speaking	5		
		Subtotal	**13-15**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	141	Precalculus I ***or***	5		
MATH&	146	Introduction to Stats	5		
		Subtotal	**5**		

Humanities* (see program advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PSYC&	100	General Psychology	5		
Select 10 credits from the following:					
SOC&	101	Intro to Sociology	5		
ECON&	201	Micro Economics	5		
ECON&	202	Macro Economics	5		
		Subtotal	**15**		

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CHEM&	121	Intro to Chemistry w/ Lab ***or***	5		
CHEM&	161	General Chemistry I w/ Lab	5		
BIOL	201	Soils w/ Lab	5		
BIOL&	211	Majors Cellular w/ Lab ***or***	5		
BIOL	140	Fundamentals of Botany w/ Lab	5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Degree & Certificate Requirements

Electives*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Required:					
AFS	101	Introduction to Agricultural Systems	5		
AG	102	Introduction to Animal Science w/ Lab	5		
HORT	202	Cultivated Plants w/ Lab	5		
HORT	203	Crop Growth & Development w/ Lab	5		
Select a minimum of 5 credits from the following:					
AG	289	Agriculture Business Concepts	5		
CHEM&	162	General Chemistry II w/ Lab ***or***	5		
CHEM&	122	Intro to Organic Chemistry w/ Lab	5		
CHEM&	163	General Chemistry III w/ Lab ***or***	5		
CHEM&	123	Intro to Biochemistry w/ Lab	5		
BIOL&	212	Majors Plant w/ Lab ***or***	5		
BIOL&	213	Majors Animal w/ Lab	5		
BIOL	252	Insects of Economic Importance w/ Lab	5		
ACCT&	201	Principles of Accounting I	5		
ACCT&	202	Principles of Accounting II	5		
CHEM&	140	General Chemistry Prep w/ Lab	5		
		Subtotal	**25**		
		Total Credits Required	**91-93**		

*Course selections must meet the distribution requirements for the AA degree.
Courses with a HORT or AG prefix are considered restricted electives; only 15 credits of restricted electives can be counted toward the degree.
NOTE:
- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Crop & Soil Science (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II	5		
CMST	101	Speech Essentials ***or***	3		
CMST&	220	Public Speaking	5		
		Subtotal	**13-15**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	141	Precalculus I ***or***	5		
MATH&	146	Introduction to Stats	5		
		Subtotal	**5**		

Humanities* (see program advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PSYC&	100	General Psychology	5		
Select 10 credits from the following:					
SOC&	101	Intro to Sociology	5		
ECON&	201	Micro Economics	5		
ECON&	202	Macro Economics	5		
		Subtotal	**15**		

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CHEM&	121	Intro to Chemistry w/ Lab ***or***	5		
CHEM&	161	General Chemistry I w/ Lab	5		
BIOL	201	Soils w/ Lab	5		
BIOL&	211	Majors Cellular w/ Lab ***or***	5		
BIOL	140	Fundamentals of Botany w/ Lab	5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Degree & Certificate Requirements

Electives*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Required:					
BIOL	252	Insects of Economic Importance w/ Lab	5		
HORT	202	Cultivated Plants w/ Lab	5		
HORT	203	Crop Growth & Development w/ Lab	5		
Select a minimum of 10 credits from the following:					
AFS	101	Introduction to Agricultural Systems	5		
AG	102	Introduction to Animal Science w/ Lab	5		
AG	289	Agriculture Business Concepts	5		
CHEM&	162	General Chemistry II w/ Lab ***or***	5		
CHEM&	122	Intro to Organic Chemistry w/ Lab	5		
CHEM&	163	General Chemistry III w/ Lab ***or***	5		
CHEM&	123	Intro to Biochemistry w/ Lab	5		
BIOL&	212	Majors Plant w/ Lab ***or***	5		
BIOL&	213	Majors Animal w/ Lab	5		
ACCT&	201	Principles of Accounting I	5		
ACCT&	202	Principles of Accounting II	5		
CHEM&	140	General Chemistry Prep w/ Lab	5		
		Subtotal	**25**		
		Total Credits Required	**91-93**		

*Course selections must meet the distribution requirements for the AA degree.
Courses with a HORT or AG prefix are considered restricted electives; only 15 credits of restricted electives can be counted toward the degree.
It is recommended that students complete the entire CHEM& 121, 122, 123 or CHEM& 161, 162, 163 series prior to transferring.
NOTE:

- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Associate in Applied Science in Agribusiness

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ACCT&	201	Principles of Accounting I	5		
ACCT&	202	Principles of Accounting II	5		
BUS&	101	Introduction to Business	5		
BUS&	201	Business Law	5		
ECON&	202	Macro Economics	5		
ECON&	201	Micro Economics	5		
CS	101	Intro to Computers & Information Technology	5		
		Subtotal	**35**		

Major Support (select 35 credits)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
AFS	101	Introduction to Agricultural Systems	5		
AG	102	Introduction to Animal Science w/ Lab	5		
BIOL	140	Fundamentals of Botany w/ Lab	5		
BIOL	252	Insects of Economic Importance w/ Lab	5		
BIOL	201	Soils w/ Lab	5		
AG	289	Agriculture Business Concepts	5		
CHEM&	140	General Chemistry Prep w/ Lab	5		
HORT	202	Cultivated Plants w/ Lab	5		
HORT	203	Crop Growth & Development w/ Lab	5		
		Subtotal	**35**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II ***or***	5		
ENGL&	235	Technical Writing	5		
MATH&	146	Introduction to Stats	5		
Psychology *or* Sociology (select 5 credits)					
PSYC&	100	General Psychology ***or***	5		
SOC&	101	Intro to Sociology	5		
Communication Studies (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 Communication	5		
		Subtotal	**23-25**		
		Total Credits Required	**93-95**		

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Anthropology (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II	5		
CMST			3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	146	Introduction to Stats	5		
		Subtotal	**5**		

Humanities* (see Anthropology advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences* (see Anthropology advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PSYC&	100	General Psychology ***or***	5		
SOC&	101	Intro to Sociology	5		
ANTH&	206	Cultural Anthropology	5		
			5		
		Subtotal	**15**		

Mathematical & Natural Science* (see Anthropology advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ANTH&	205	Biological Anthropology	5		
			5		
			5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Electives* (see Anthropology advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ANTH&	204	Archeology (Required)	5		
ANTH&	234	Religion & Culture (Recommended)	5		
			19		
		Subtotal	**24**		
		Total Credits Required	**90**		

*Course selections must also meet the distribution requirements for the AA degree.
NOTE:
- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Bachelor of Applied Science (BAS) in Applied Management

2016-2017 Degree Requirements

General Education (see BAS advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Communication (select 10-15 credits)					
ENGL&	101	English Composition I	5		
ENGL	410	Professional & Organizational Communication	5		
CMST			5		
Humanities (select 10-15 credits)					
ICS	310	American Diversity	5		
PHIL	305	Professional Ethics	5		
			5		
Social & Behavioral Sciences (select 10-20 credits)					
PSYC&	100	General Psychology ***or*** other Social Science course	5		
ECON	305	Managerial Economics[1] (for General Concentration) ***or***	5		
ECON	315	Economics of Healthcare (for Healthcare Concentration)	5		
			5		
Mathematical & Natural Science* (select 15-25 credits)					
		Approved College-Level Math ***or*** Natural Science [2]	5		
MATH&	146	Introduction to Stats	5		
ENVS	310	Environmental Issues[3]	5		
			5		
			5		
		Subtotal	**55**		

Foundation Workforce or Academic Transfer Coursework (see BAS advisor for additional information)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
		Subtotal	**70**		

Degree & Certificate Requirements

Available concentrations: General, Healthcare Administration, or Agriculture
Choose one concentration from below:

General

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
AMGT	300	Management & Organization Theory	5		
AMGT	310	Operations Management	5		
AMGT	320	Leadership & Organization Behavior	5		
AMGT	330	Legal Issues for Business & Managers[4]	5		
AMGT	340	Information Technology and Applications	5		
AMGT	360	Business Planning and Strategy	5		
AMGT	400	Financial and Managerial Accounting[5]	5		
AMGT	430	Fundamentals of Financial Management	5		
AMGT	480	Business Strategy Capstone ***or***	5		
AMGT	490	Small Business Start-up Capstone	5		
General Electives (select 10 credits from the following or other approved electives; see BAS advisor for appropriate selection)					
AMGT	317	BAS Special Topics	5		
AMGT	350	Marketing for Managers	5		
AMGT	389	BAS Independent Study	5		
AMGT	410	Project Management	5		
AMGT	417	BAS Special Topics	5		
AMGT	420	Human Resource Management	5		
AMGT	470	BAS Internship	1-10		
AMGT	489	BAS Independent Study	1-10		
			5		
			5		
		Subtotal	**55**		

Healthcare Administration

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
AMGT	300	Management & Organization Theory	5		
AMGT	320	Leadership & Organization Behavior	5		
AMGT	350	Marketing for Managers	5		
AMGT	400	Financial and Managerial Accounting[5]	5		
AMGT	430	Fundamentals of Financial Management	5		
AMGT		Core Course Electives	7		
HCAD	310	Healthcare Operations Management	5		
HCAD	315	Healthcare Informatics/Information Technology	5		
HCAD	330	Legal Issues in Healthcare	5		
HCAD	420	Human Resources Management & Policy	5		
HCAD	480	Healthcare Administration Capstone	3		
		Subtotal	**55**		
		Total Credits Required	**180**		

Degree & Certificate Requirements

Agriculture

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
AMGT	300	Management & Organization Theory	5		
AG	310	Ag Operations and Supply Chain Management	5		
AMGT	320	Leadership & Organization Behavior	5		
AMGT	330	Legal Issues for Business & Managers[4]	5		
AG	340	Ag Information Technology and Applications	5		
AMGT	360	Business Planning and Strategy	5		
AMGT	400	Financial and Managerial Accounting[5]	5		
AG	430	Fundamentals of Agriculture Financial Management	5		
AG	480	Agriculture Management Capstone	5		
Agriculture Electives (select 10 credits from the following; see BAS advisor for appropriate selection)					
AMGT	317	BAS Special Topics	5		
AMGT	350	Marketing for Managers	5		
AMGT	389	BAS Independent Study	5		
AMGT	410	Project Management	5		
AMGT	417	BAS Special Topics	5		
AMGT	420	Human Resources Management	5		
AG	470	Agriculture Management Internship	5-10		
AMGT	489	BAS Independent Study	5-10		
			5		
			5		
		Subtotal	**55**		
		Total Credits Required	**180**		

*Course selections must meet the distribution requirements for the AA degree; see BAS advisor for appropriate selection.
[1]Combination of ECON& 201 and 202 can be substituted for ECON 305
[2]Students are encouraged but not required to take additional transferrable math coursework beyond the required statistics course (MATH& 146) depending upon graduate school admissions requirements or employment goals
[3]Alternatives include any transferable natural science course with a lab, or other natural science course (see DTA list for natural science options)
[4]BUS& 201 can be substituted for AMGT 330 if taken prior to entering the BAS-AM program
[5]Combination of ACCT& 201, 202, and 203 can be substituted for AMGT 400

Note: to confer the BAS-AM, students must still have a minimum of 55 general education credits, earn a minimum of 180 college-level credits, have at least 45 credits of 300/400-level coursework, and fulfill the BAS-AM knowledge base with an overall cumulative GPA of 2.0 or better.

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Visual Arts (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II	5		
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior	3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
		Subtotal	**5**		

Humanities*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ART&	100	Art Appreciation	5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Electives*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ART	111	Design I	5		
ART	112	3D Design II	5		
ART	113	Drawing I	3		
ART	114	Drawing II	3		
ART		Elective studio courses (see faculty advisor)	20		
Select 10 credits from the following:					
ART	116	Art History Ancient World	5		
ART	117	Art History Medieval-Baroque	5		
ART	118	Art History Modern Times	5		
		Subtotal	**46**		
		Total Credits Required	**112**		

*Course selections must meet the distribution requirements for the AA degree.
It is understood a Visual Arts major will complete more electives than the minimum 24 required for an AA degree.
NOTE:
- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- A minimum of 30 college-level, degree applicable credits taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Associate in Applied Science in Automotive Technology

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
AMT	120	Basic Electrical and Electronics	7		
AMT	121	Suspension, Steering Systems, & Lab	7		
AMT	123	Brake Systems I & Lab	7		
AMT	130	Engine Service & Lab	7		
AMT	133	Engine Repair & Rebuild & Lab	7		
AMT	135	Vehicle Maintenance & Lab	7		
AMT	140	Automotive Internship	7		
AMT	220	Advanced Electrical & Electronics & Lab	7		
AMT	223	Brakes Systems II & Lab	7		
AMT	230	Automatic Transmissions & Lab	7		
AMT	233	Manual Transmissions & Lab	7		
AMT	240	Drivability Diagnostics & Lab	7		
AMT	243	Heating, Ventilation & Air Conditioning Systems	7		
		Subtotal	**91**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
FYI	101	First Year Introduction	1		
		Subtotal	**1**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH	111	Automotive Math	5		
English (select 5 credits)					
ENGL&	101	English Composition I ***or***	5		
ENGL	103	Writing in the Workplace (preferred)	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		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	103	Workplace Communication (preferred) ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	210	Interpersonal Communication ***or***	5		
CMST&	220	Public Speaking ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**16-20**		
		Total Credits Required	**108-112**		

Note: to enter the Automotive Technology program, students must complete AMT 110 or have earned advanced placement.

Automotive Technology Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
AMT	120	Basic Electrical & Electronics & Lab	7		
AMT	121	Suspension, Steering Systems, & Lab	7		
AMT	123	Brake Systems I & Lab	7		
AMT	130	Engine Service & Lab	7		
AMT	133	Engine Repair & Rebuild & Lab	7		
AMT	135	Vehicle Maintenance & Lab	7		
FYI	101	First Year Introduction	1		
		Total Credits Required	**43**		

Note: Students must be admitted into the Automotive Technology program to work on this certificate. Students must complete AMT 110 or have earned advance placement credits as part of the admission requirements.

Basic Automotive Technician Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
AMT	110	Introduction to Automotive Technology & Lab	15		
		Total Credits Required	**15**		

Note: Completion of the Basic Automotive Technician Short-Term Certificate with a 2.0 or higher or advance placement credit is one of the requirements for admission into the Automotive Technology program.

Degree & Certificate Requirements

Associate in Science Transfer (AS-T) Degree Requirements

Biological Sciences/Chemistry/Environmental/Geology/Earth Sciences
2016-2017 Degree Worksheet

Department	Course Number	Course Credits	Quarter Completed	Notes (see reverse side for list of appropriate classes)
Communication		5 Credits		♦ Select either: ENGL& 101 ***or*** 102 (5 credits required).
English				
Math		10 Credits		♦ Two courses at or above calculus. ♦ Select from: MATH& 151, 152, 153, 254, MATH 243, 255
Humanities & Social/ Behavioral Sciences		15 Credits		♦ Complete at least one course from each of the two groups listed on the reverse side. ♦ Courses must be selected from three different subject areas with a total of 15 credits required. ♦ No more than 5 credits in any World Languages.
Pre Major Courses 1. Chemistry		15 Credits		
CHEM&	161			
CHEM&	162			
CHEM&	163			
Pre Major Courses 2. Math		5 Credits		♦ Select either: MATH& 146 ***or*** 153 (5 credits required).
Pre Major Courses 3. Science		15 Credits		♦ BIOL& 211, 212, 213, ***or*** ♦ PHYS& 134/124, 135/125, 136/126, ***or*** ♦ PHYS& 241/231, 242/232, 243/233
Pre Major Courses 4. Additional Science		10 Credits		♦ 10-15 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- or 3-quarter sequence. Refer to list on reverse side.
Electives (Program Specific Under Advisement)		10-15 Credits		Sufficient additional college-level credits so that total credits earned are at least 90 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.

NOTICE: For transferring students, 75 of the 90 credits must be fully transferable as defined by the Intercollege Relations Commission (ICRC) guidelines for the Direct Transfer Agreement to be honored by four-year institutions in Washington. A maximum of 15 elective credits may be professional/technical courses numbered 100 or above. Due to the specialized nature of many of the listed courses, students should consult their advisor and the catalog of the four-year institution to which they plan to transfer for specific degree requirements.
DISCLAIMER: During the period this guide is in circulation, there may be curriculum revisions and program changes. Students are responsible for consulting the appropriate academic unit or advisor for current and specific information. The information in this guide is subject to change and does not constitute an agreement between the College and the student.

Associate in Science Transfer (AS-T) Degree Requirements

Biological Sciences/Chemistry/Environmental/Geology/Earth Sciences
2016-2017 Degree Worksheet

Communication (5 credits)

- **ENGL&** 101 ***or*** 102

Math (10 credits)

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

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.

Group 1:

- **ART&** 100, **ART** 116, 117, 118, 119, 120, 121
- **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
- **ICS** 120, 125, 130, 135, 222
- **MUSC&** 105, **MUSC** 116
- **PHIL&** 101, **PHIL**106, 131, 150
- **WS** 155, 160
- World Languages 121 & above (excluding conversational classes) All World Languages courses count as a single subject.
- **EFL** 101, 111

Group 2:

- **PSYC&** 100, 200, 220, **PSYC** 103, 201, 205, 209, 217, 270
- **SOC&** 101, 201, **SOC** 110, 150, 269
- **ANTH&** 100, 204, 206, 234
- **ECON&** 201, 202, **ECON** 110, 291
- **GEO** 150
- **HIST&** 146, 147, 148, **HIST** 107, 108, 110, 111, 112, 113, 115, 116, 117, 233
- **ICS** 255
- **POLS&** 201, 202, 203, 204, **POLS** 104, 205
- **SSCI** 290/291

Pre Major Courses (45-50 credits)

Pre major 1 (15 credits)

- **CHEM&** 161, 162, 163

Pre major 2 (5 credits)

- **MATH&** 146 ***or*** **MATH&** 153

Pre major 3 (15 credits)

- **BIOL&** 211, 212, 213 ***or***
- **PHYS&** 134/124, 135/125, 136/126 ***or***
- **PHYS&** 241/231, 242/232, 243/233

Pre major 4 (10-15 credits)

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.

Electives (Program Specific Under Advisement)

Sufficient additional college-level credits so that total credits earned are at least 90 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.

The Associate of Science degree does NOT guarantee that the student has met the general education requirements at the transfer baccalaureate institution.

NOTE:

- Required minimum credits 90.
- Required minimum cumulative GPA 2.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others.
- Consult with your counselor or faculty advisor.

Degree & Certificate Requirements

Associate in Arts & Sciences in Business

Direct Transfer Agreement/Major Related Program (DTA/MRP)

TRANSFER DEGREE

2016-2017 Degree Requirements

Some colleges/universities have requirements for admissions to the business major that go beyond those specified below. Students can possibly meet these requirements by careful selection of distribution and additional elective courses. Students should work with a counselor or academic advisor and the catalog of the four-year institution to which they plan to transfer for further guidance specific to their goals. Early in the program, students should check with their intended transfer university/college advisor for specific admissions and business program requirements for course choices where options are listed for Humanities, Mathematical & Natural Science, Social & Behavioral Science, and electives. A cumulative college GPA of 2.0 is required. Some transfer institutions require a higher overall GPA, a higher GPA in a subset of courses, or a specific minimum grade in one or more courses. Check with your planned transfer institution for these requirements.

Communication

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II	5		
		Subtotal	**10**		

Quantitative/Symbolic Reasoning

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH	147	Finite Math	5		
MATH&	148	Business Calculus	5		
		Subtotal	**10**		

Humanities [1 & 2] (no more than 10 credits per discipline area, only 5 credits of world language will apply)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ECON&	201	Micro Economics (required)	5		
ECON&	202	Macro Economics (required)	5		
Social Science Course [3]			5		
		Subtotal	**15**		

Mathematical & Natural Science

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	146	Introduction to Stats	5		
Physical, biological, and/or earth science, including at least one lab course[4]					
			5		
			5		
		Subtotal	**15**		

Business [5]

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ACCT&	201	Principles of Accounting I	5		
ACCT&	202	Principles of Accounting II	5		
ACCT&	203	Principles of Accounting III	5		
BUS&	201	Business Law [5]	5		
		Subtotal	**20**		

Elective[6] (Computer Science Course[6] *or* other appropriate elective)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
		Subtotal	**5**		
		Total Credits Required	**90**		

1 Students intending an international business major should consult their potential transfer institutions regarding the need for world language. Only 5 credits of world language will count for humanities credits.
2 Washington State University (WSU) business students should complete CMST& 220 which for the Business DTA/MRP will count as a humanities class.
3 Check with transfer institution for best selection for third social science course.
4 Students intending the manufacturing management major at Western Washington University (WWU) should consult WWU regarding the selection of natural science courses required for admission to that major.
5 EWU, Central Washington University (CWU), UW, WSU, WWU, Gonzaga, and Seattle Pacific University (SPU) students should enroll in BUS& 201. A lower division business law class is not required at Heritage, Pacific Lutheran University (PLU), SU, and Walla Walla University.
6 Gonzaga, Heritage, PLU, WSU, and SPU have requirements for admission to the business major that goes beyond the above specified courses. Check with other transfer institutions for best elective selection. Students can meet these extra requirements by careful selection of the elective University Course Equivalent to:
- WSU all campuses: Management Information Systems MIS 250
- Gonzaga: Management Information Systems BMIS 235
- PLU: Computer applications CSCE 120, either an equivalent course, or skills test
- WWU: Introduction to Business Computer Systems MIS 220

Degree & Certificate Requirements

Associate in Applied Science in Business Administration

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BUS&	101	Introduction 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. You may pick optional classes from prepared lists of courses. See advisor to make your course selections.)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
		Subtotal	**35**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II ***or***	5		
ENGL&	235	Technical Writing	5		
MATH	106+	MATH 106 ***or*** above	5		
Natural Science with lab (select 5 credits)			5		
Psychology *or* Sociology (select 5 credits)					
PSYC&	100	General Psychology ***or***	5		
SOC&	101	Intro to Sociology	5		
Communication Studies (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 Communication	5		
		Subtotal	**28-30**		
		Total Credits Required	**97-100**		

Degree & Certificate Requirements

Business Administration One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ACCT&	201	Principles of Accounting I	5		
BUS&	101	Introduction to Business	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; see advisor for the list of optional courses and to make your selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
		Subtotal	**23**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**65-68**		

Degree & Certificate Requirements

Associate in Applied Science in Innovation & Design Thinking

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BUS&	101	Introduction 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

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PROJ	100	Introduction to Project Management	5		
BUS	280	Innovation & Design Thinking I	5		
BUS	281	Innovation & Design Thinking II	5		
BUS	282	Innovation & Design Thinking III	5		
BUS	265	Marketing Principles	5		
BUS	267	Marketing Special Projects	3		
Other approved electives (select 7 credits)					
			Subtotal	**35**	

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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		
Communication Studies (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 Communication	5		
			Subtotal	**28-30**	
			Total Credits Required	**97-100**	

Degree & Certificate Requirements

Innovation & Design Thinking One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BUS&	101	Introduction to Business	5		
ACCT&	201	Principles of Accounting I	5		
BUS&	201	Business Law	5		
ECON&	202	Macro Economics	5		
		Subtotal	**20**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PROJ	100	Introduction to Project Management	5		
BUS	280	Innovation & Design Thinking I	5		
BUS	281	Innovation & Design Thinking II	5		
BUS	282	Innovation & Design Thinking III	5		
BUS	265	Marketing Principles	5		
BUS	267	Marketing Special Projects	3		
		Subtotal	**28**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**66-68**		

Innovation & Design Thinking Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BUS	280	Innovation & Design Thinking I	5		
BUS	281	Innovation & Design Thinking II	5		
BUS	282	Innovation & Design Thinking III	5		
BUS	267	Marketing Special Projects	4		
		Total Credits Required	**19**		

Degree & Certificate Requirements

Associate in Applied Science in Criminal Justice

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CJ&	101	Introduction 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	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II ***or***	5		
ENGL&	235	Technical Writing	5		
*MATH	106+	MATH 106 ***or*** above	5		
CA/CS	100+	Computer Science course(s)	4-5		
Communication Studies (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 Communication	5		
Science (10 credits)					
			5		
			5		
Humanities (15 credits)					
			5		
			5		
			5		
Social Science (15 credits)					
			5		
			5		
			5		
		Subtotal	**62-65**		
		Total Credits Required	**104-107**		

*To be approved by department

Degree & Certificate Requirements

Associate in Applied Science in Forensic Science

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

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

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	235	Technical Writing	5		
CS&	131	Computer Science I C++	5		
Humanities, Social Science, Natural Science (select 15 credits, no more than 10 credits from any one department)					
			5		
			5		
			5		
Communication Studies (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 Communication	5		
		Subtotal	**33-35**		
		Total Credits Required	**106-118**		

Commercial Drivers License Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CDL	101	Commercial Drivers License	5		
CDL	110	Range Operations and Maneuvers	1		
CDL	111	Range Operations and Maneuvers Lab	3		
CDL	115	Backing maneuvers	1		
CDL	120	On Street Driving	1		
CDL	130	Driving Proficiency	1		
CDL	140	Transportation Customer Service Skills	3		
CDL	150	Cooperative Work Experience	1		
IHT	100	OSHA-10	1		
INT	101	Forklift Operations	1		
		Total Credits Required	**18**		

C# and Mobile Device Programming One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	102	Programming Fundamentals	5		
CS	106	Database Systems ***or***	5		
CS	225	SQL Server Programming	5		
CS	115	HTML5-Cascading Style Sheets	5		
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service	3		
CS	150	Computer Security	5		
CS	202	Programming Fundamentals 2	5		
CS	250	HTML5-JavaScript/JQuery	5		
CS	262	Game Programming Design and Development	5		
Select 10 additional credits from any CS courses					
CS			5		
CS			5		
		Subtotal	**47-48**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENG&	101+	English Composition ***or*** above	5		
MATH&	141, 142, 144, 146, 148, 151, 152, or 153		5		
Psychology or Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	220	Public Speaking ***or***	5		
CMST&	210	Interpersonal Communication ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**65-68**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Degree & Certificate Requirements

C# and Mobile Device Programming Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	102	Programming Fundamentals	5		
CS	106	Database Systems ***or***	5		
CS	225	SQL Server Programming	5		
CS	115	HTML5-Cascading Style Sheets	5		
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service	3		
CS	150	Computer Security	5		
CS	202	Programming Fundamentals 2	5		
CS	250	HTML5-JavaScript/JQuery	5		
CS	262	Game Programming Design and Development	5		
CS		Select any CS course	5		
		Total Credits Required	**42-43**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

C++ and Mobile Device Programming One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	106	Database Systems ***or***	5		
CS	225	SQL Server Programming	5		
CS	115	HTML5-Cascading Style Sheets	5		
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service	3		
CS&	131	Computer Science I C++	5		
CS	150	Computer Security	5		
CS	162	C++2	5		
CS	250	HTML5-JavaScript/JQuery	5		
CS	260	Data Structures in C++	5		
CS	262	Game Programming Design and Development	5		
CS		Select any CS course	5		
		Subtotal	**47-48**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENG&	101+	English Composition ***or*** above	5		
MATH&	141, 142, 144, 146, 148, 151, 152, or 153		5		
Psychology or Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	220	Public Speaking ***or***	5		
CMST&	210	Interpersonal Communication ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**65-68**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

C++ and Mobile Device Programming Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	106	Database Systems ***or***	5		
CS	225	SQL Server Programming	5		
CS	115	HTML5-Cascading Style Sheets	5		
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service	3		
CS&	131	Computer Science I C++	5		
CS	150	Computer Security	5		
CS	162	C++2	5		
CS	250	HTML5-JavaScript/JQuery	5		
CS	260	Data Structures in C++	5		
CS	262	Game Programming Design and Development	5		

Total Credits Required 42-43

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Computer and Information Technology Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	101	Intro to Computers & Information Technology	5		
CS	106	Database Systems	5		
CS	107	Intermediate Word Processing	2		
CS	108	Intermediate Spreadsheets	2		
CS	117	Computer Ethics	2		
CS	118	Customer Service	3		
CS	123	PC Hardware	5		
CS	127	Windows Configuration	5		
CS	150	Computer Security	5		
		Total Credits Required	**34**		

Note: Certificate prerequisites: ENGL 098 and MATH 083. MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Computer Basic Applications Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	106	Database Systems	5		
CS	107	Intermediate Word Processing	2		
CS	108	Intermediate Spreadsheets	2		
CS	207	Word Implementation	5		
CS	208	Advanced Spreadsheets	5		
		Total Credits Required	**19**		

This short-term certificate provides an opportuntity to learn skills that are commonly needed for office-related jobs. Students who complete this certificate will have the basic skills and knowledge necessary to create professional Word documents, spreadsheets, and databases. Career opportunities: secretarial-related jobs.

Degree & Certificate Requirements

Computer Database Management One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service	3		
CS	140	SharePoint	5		
CS	202	Programming Fundamentals 2	5		
CS	206	Database Design	5		
CS	221	SQL Server Administration	5		
CS	225	SQL Server Programming	5		
CS	228	Windows Server	5		
CS		Select any CS course	5		
		Subtotal	**47-48**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENG&	101+	English Composition ***or*** above	5		
MATH&	141, 142, 144, 146, 148, 151, 152, or 153		5		
Psychology or Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	220	Public Speaking ***or***	5		
CMST&	210	Interpersonal Communication ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**65-68**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Computer Database Management Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service	3		
CS	140	SharePoint	5		
CS	202	Programming Fundamentals 2	5		
CS	206	Database Design	5		
CS	221	SQL Server Administration	5		
CS	225	SQL Server Programming	5		
CS	228	Windows Server	5		

Total Credits Required 42-43

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Computer User Help Support One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	107	Intermediate Word ***or***	2		
CS	108	Intermediate Spreadsheets	2		
CS	111	Web 2.0	5		
CS	117	Computer Ethics	2		
CS	118	Customer Service	3		
CS	127	Windows Configuration	5		
CS	140	SharePoint	5		
CS	150	Computer Security	5		
CS	206	Database Design	5		
Select 5 additional credits from any CS courses					
CS			5		
		Subtotal	**47**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENG&	101+	English Composition ***or*** above	5		
MATH	106+	Business Mathematics ***or*** above	5		
Psychology or Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	220	Public Speaking ***or***	5		
CMST&	210	Interpersonal Communication ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**65-67**		

The Computer User Help Support Certificate curriculum offers a combination of classes that help students gain essential skills in troubleshooting computer software basic applications, operating systems, web issues, hardware, and networks. These are skills required for help desk and technical support jobs. Career opportunities: help desk technician and computer user support technician.

Computer User Help Support Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	107	Intermediate Word ***or***	2		
CS	108	Intermediate Spreadsheets	2		
CS	111	Web 2.0	5		
CS	117	Computer Ethics	2		
CS	118	Customer Service	3		
CS	127	Windows Configuration	5		
CS	140	SharePoint	5		
CS	150	Computer Security	5		
CS	206	Database Design	5		
		Total Credits Required	**42**		

The Computer User Help Support Certificate curriculum offers a combination of classes that help students gain essential skills in troubleshooting computer software basic applications, operating systems, web issues, hardware, and networks. These are skills required for help desk and technical support jobs. Career opportunities: help desk technician and computer user support technician.

Degree & Certificate Requirements

Associate in Applied Science in Database Administrator

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	101	Intro to Computers & Information Technology	5		
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	117	Computer Ethics	2		
CS	118	Customer Service	3		
CS	123	PC Hardware	5		
CS	127	Windows Configuration	5		
CS	150	Computer Security	5		
		Subtotal	**35**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	140	SharePoint	5		
CS	206	Database Design	5		
CS	221	SQL Server Administration	5		
CS	223	UNIX/Linux	5		
CS	225	SQL Server Programming	5		
CS	228	Windows Server	5		
Select 10 credits from the following:					
CS	202	Programming Fundamentals 2	5		
CS	218	ASP.Net	5		
CS	250	HTML5-JavaScript/JQuery	5		
		Subtotal	**40**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101+	English Composition I ***or*** above	5		
MATH&	141, 142, 144, 146, 148, 151, 152, or 153		5		
Psychology *or* Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**93-95**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Degree & Certificate Requirements

Associate in Applied Science in Help Desk Technician

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	101	Intro to Computers & Information Technology	5		
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	117	Computer Ethics	2		
CS	118	Customer Service	3		
CS	123	PC Hardware	5		
CS	127	Windows Configuration	5		
CS	150	Computer Security	5		
		Subtotal	**35**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	107	Intermediate Word Processing	2		
CS	108	Intermediate Spreadsheets	2		
CS	111	Web 2.0	5		
CS	114	HTML5-HTML	5		
CS	140	SharePoint	5		
CS	206	Database Design	5		
CS	207	Word Implementation	5		
CS	208	Advanced Spreadsheets	5		
Select 15 additional credits from any CS courses					
CS			5		
CS			5		
CS			5		
		Subtotal	**49**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101+	English Composition I ***or*** above	5		
MATH	106+	MATH 106 ***or*** above	5		
Psychology *or* Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**102-104**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Degree & Certificate Requirements

Associate in Applied Science in Internet Specialist

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	101	Intro to Computers & Information Technology	5		
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	117	Computer Ethics	2		
CS	118	Customer Service	3		
CS	123	PC Hardware	5		
CS	127	Windows Configuration	5		
CS	150	Computer Security	5		
		Subtotal	**35**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	111	Web 2.0	5		
CS	114	HTML5-HTML	5		
CS	115	HTML5-Cascading Style Sheets	5		
CS	203	Digital Graphics & Design 1	5		
CS	218	ASP.Net	5		
CS	216	XML	5		
CS	243	Web Animation	5		
CS	244	Digital Graphics & Design 2	5		
CS	250	HTML5-JavaScript/JQuery	5		
		Subtotal	**45**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101+	English Composition I ***or*** above	5		
MATH	106+	MATH 106 ***or*** above	5		
Psychology *or* Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**98-100**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Java, Web, and Mobile Device Programming One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	106	Database Systems	5		
CS	114	HTML5-HTML	5		
CS	115	HTML5-Cascading Style Sheets	5		
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service	3		
CS&	141	Computer Science I Java	5		
CS	223	UNIX/Linux	5		
CS	225	SQL Server Programming	5		
CS	236	Advanced Object Oriented Programming	5		
CS	250	HTML5-JavaScript/JQuery	5		
CS		Select any CS course	5		
		Subtotal	**47-48**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENG&	101	English Composition ***or***	5		
ENGL&	102	Composition II	5		
MATH&	141, 142, 144, 146, 148, 151, 152, or 153		5		
Psychology or Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	220	Public Speaking ***or***	5		
CMST&	210	Interpersonal Communication ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**65-68**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Java, Web, and Mobile Device Programming Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	106	Database Systems	5		
CS	114	HTML5-HTML	5		
CS	115	HTML5-Cascading Style Sheets	5		
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service	3		
CS&	141	Computer Science I Java	5		
CS	223	UNIX/Linux	5		
CS	225	SQL Server Programming	5		
CS	236	Advanced Object Oriented Programming	5		
CS	250	HTML5-JavaScript/JQuery	5		

Total Credits Required 42-43

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Associate in Applied Science in Multimedia

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	101	Intro to Computers & Information Technology	5		
Select 30 credits from the following:					
CS	102	Programming Fundamentals	5		
CS	111	Web 2.0	5		
CS	114	HTML5-HTML	5		
CS	115	HTML5-Cascading Style Sheets	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

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ART&	100	Art Appreciation	5		
ART	111	Design 1 (minimum 2.5 grade)	5		
ART	112	3D Design II	5		
ART	113	Drawing 1	3		
ART	211	Graphic Design I	5		
ART	212	Graphic Design II	5		
ART	241	Illustration I	3		
ART	242	Illustration II	3		
ART	201	Photography I	3		
ART	202	Photography II	3		
		Subtotal	**40**		

Major Support - Business Administration

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BUS	27I	Human Relations Business	5		
BUS	267	Marketing Special Projects	1-15		
		Subtotal	**6-20**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101+	English Composition I ***or*** above	5		
MATH	106+	MATH 106 ***or*** above	5		
Psychology *or* Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**95-115**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Degree & Certificate Requirements

Associate in Applied Science in Network Administrator

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	101	Intro to Computers & Information Technology	5		
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	117	Computer Ethics	2		
CS	118	Customer Service	3		
CS	123	PC Hardware	5		
CS	127	Windows Configuration	5		
CS	150	Computer Security	5		
		Subtotal	**35**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	140	SharePoint	5		
CS	223	UNIX/Linux	5		
CS	228	Windows Server	5		
CS	230	Active Directory	5		
CS	232	Network Security	5		
Select 15 credits from the following:					
CS	221	SQL Server Administration	5		
CS	225	SQL Server Programming	5		
CS	231	Network Infrastructure	5		
CISA	200	Computer Forensics Fundamentals	5		
CISA	250	Networking Fundamentals	5		
		Subtotal	**40**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101+	English Composition I ***or*** above	5		
MATH&	141, 142, 144, 146, 148, 151, 152, or 153		5		
Psychology *or* Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**93-95**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Network and Security One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service	3		
CS	127	Windows Configuration	5		
CS	150	Computer Security	5		
CS	221	SQL Server Administration	5		
CS	223	UNIX/Linux	5		
CS	228	Windows Server	5		
CS	230	Active Directory	5		
CS	231	Network Infrastructure	5		
CS	232	Network Security	5		
CS		Select any CS course	5		
		Subtotal	**47-48**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENG&	101+	English Composition ***or*** above	5		
MATH&	141, 142, 144, 146, 148, 151, 152, or 153		5		
Psychology or Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	220	Public Speaking ***or***	5		
CMST&	210	Interpersonal Communication ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**65-68**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Network and Security Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service	3		
CS	127	Windows Configuration	5		
CS	150	Computer Security	5		
CS	221	SQL Server Administration ***or***	5		
CS	225	SQL Server Programming	5		
CS	223	UNIX/Linux	5		
CS	228	Windows Server	5		
CS	230	Active Directory	5		
CS	231	Network Infrastructure	5		
CS	232	Network Security	5		

Total Credits Required 42-43

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Degree & Certificate Requirements

Associate in Applied Science in Programming and Software Development

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	101	Intro to Computers & Information Technology	5		
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	117	Computer Ethics	2		
CS	118	Customer Service	3		
CS	123	PC Hardware	5		
CS	127	Windows Configuration	5		
CS	150	Computer Security	5		
		Subtotal	**35**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS&	141	Computer Science I Java	5		
CS	202	Programming Fundamentals 2	5		
CS	236	Advanced Object Oriented Programming	5		
CS	250	HTML5-JavaScript/JQuery	5		
CS	262	Game Programming Design and Development	5		
Select 15 credits from the following:					
CS	114	HTML5-HTML	5		
CS	115	HTML5-Cascading Style Sheets	5		
CS&	131	Computer Science I C++	5		
CS	162	C++2	5		
CS	206	Database Design	5		
CS	221	SQL Server Administration	5		
CS	225	SQL Server Programming	5		
CS	260	Data Structures in C++	5		
		Subtotal	**40**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101+	English Composition I ***or*** above	5		
MATH&	141, 142, 144, 146, 148, 151, 152, or 153		5		
Psychology *or* Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**93-95**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.0 grade in all CS courses.

Web/Multimedia Management One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	111	Web 2.0	5		
CS	114	HTML5-HTML	5		
CS	115	HTML5-Cascading Style Sheets	5		
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service ***or***	3		
ART		(see CS advisor for course selection)	1-3		
CS	203	Digital Graphics & Design I	5		
CS	218	ASP.Net	5		
CS	244	Digital Graphics & Design 2	5		
CS		Select any CS course	5		
		Subtotal	**46-48**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENG&	101+	English Composition ***or*** above	5		
MATH	106+	Business Mathematics ***or*** above	5		
Psychology or Sociology (select 5 credits)					
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	220	Public Speaking ***or***	5		
CMST&	210	Interpersonal Communication ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**64-68**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Web/Multimedia Management Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	111	Web 2.0	5		
CS	114	HTML5-HTML	5		
CS	115	HTML5-Cascading Style Sheets	5		
CS	117	Computer Ethics ***or***	2		
CS	118	Customer Service ***or***	3		
ART		(see CS advisor for course selection)	1-3		
CS	203	Digital Graphics & Design I	5		
CS	218	ASP.Net	5		
CS	244	Digital Graphics & Design 2	5		

Total Credits Require 41-43

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Degree & Certificate Requirements

Bachelor of Applied Science (BAS) in Cyber Security

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	102	Programming Fundamentals ***or***	5		
CS&	131	Computer Science 1 C++ ***or***	5		
CS&	141	Computer Science 1 Java	5		
CS	106	Database Systems	5		
CS	117	Computer Ethics	2		
CS	140	SharePoint	5		
CS	150	Computer Security	5		
CS	162	C++2 ***or***	5		
CS	202	Programming Fundamentals 2 ***or***	5		
CS	236	Advanced Object Oriented Programming	5		
CS	206	Database Design	5		
CS	221	SQL Server Administration	5		
CS	223	UNIX/Linux	5		
CS	228	Windows Server	5		
CS	231	Network Infrastructure	5		
CS	232	Network Security	5		
CSIA	200	Computer Forensics Fundamentals	5		
CSIA	250	Networking Fundamentals	5		
CSIA	300	Cyber Security and Information Assurance	5		
CSIA	310	E-Commerce Security	5		
CSIA	320	Ethical Hacking	5		
CSIA	330	Wireless Security	5		
CSIA	410	Cryptology	5		
CSIA	420	Cyber Crime and Terrorism	5		
CSIA	430	UNIX Administration and Security	5		
CSIA	440	Cyber Testing and Penetration	5		
CSIA	450	Cyber Security Capstone	5		
CS		Select any CS course	5		
		Subtotal	**117**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PROJ	100	Introduction to Project Management	5		
		Subtotal	**5**		

Degree & Certificate Requirements

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Communication (select 10 credits)					
ENGL&	101	English Composition	5		
ENGL&	102	Composition II ***or***	5		
ENGL&	235	Technical Writing ***or***	5		
ENGL	410	Professional & Organizational Communication	5		
Quantitative/Symbolic Reasoning (select 5 credits from the list below)					
MATH&	141, 142, 144, 146, 148, 151, 152, 153		5		
Social & Behavioral Sciences (select 10 credits) (see program advisor for best selection)					
PSYC&	100	General Psychology ***or***	5		
SOC	305	Cybercrime: A Sociological Perspective ***or***	5		
POLS	305	Future of Warfare ***or***	5		
		Choose any course from this distribution list	5		
Humanities (select 10 credits) (see program advisor for best selection)					
PHIL	305	Professional Ethics	5		
		Choose any course from this distribution list	5		
Mathematical & Natural Science (select 10 credits) (see program advisor for best selection)					
		Choose a lab science from this distribution list	5		
		Choose any course from this distribution list	5		
Additional Electives from the following distribution lists (select 15 credits) (see program advisor for best selection) Communication, Social & Behavioral Sciences, Humanities, ***or*** Mathematical & Natural Science					
			5		
			5		
			5		
		Subtotal	**60**		
		Total Credits Required	**182**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Degree & Certificate Requirements

Associate in Applied Science in Cyber Security

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	101	Intro to Computers & Information Technology	5		
CS	106	Database Systems	5		
CS	117	Computer Ethics	2		
CS&	131	Computer Science 1 C++ ***or***	5		
CS	102	Programming Fundamentals ***or***	5		
CS&	141	Computer Science I Java	5		
CS	140	SharePoint	5		
CS	150	Computer Security	5		
CS	162	C++2 ***or***	5		
CS	202	Programming Fundamentals 2 ***or***	5		
CS	236	Advanced Object Oriented Programming	5		
CS	206	Database Design	5		
CS	221	SQL Server Administration	5		
CS	223	UNIX/Linux	5		
CS	228	Windows Server	5		
CS	231	Network Infrastructure	5		
CS	232	Network Security	5		
CSIA	200	Computer Forensics Fundamentals	5		
CSIA	250	Networking Fundamentals	5		
CS		Select any CS course	5		
		Subtotal	**77**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101+	English Composition I ***or*** above	5		
MATH&	141, 142, 144, 146, 148, 151, 152, or 153		5		
PSYC&	100+	General Psychology ***or*** above ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**95-97**		

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.

Degree & Certificate Requirements

Associate in Applied Science in Dental Hygiene

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
DHYG	110	Dental Anatomy	1		
DHYG	111	Histology/Embryology	2		
DHYG	112	Oral Radiology I	1		
DHYG	101	Oral Radiology I Lab	1		
DHYG	113	Clinical Dental Hygiene Techniques I	2		
DHYG	102	Clinical Dental Hygiene Techniques I Lab	3		
DHYG	114	Dental Health Education	1		
DHYG	115	Dental Materials	1		
DHYG	103	Dental Materials Lab	1		
DHYG	116	Head and Neck Anatomy	2		
DHYG	120	Medical Emergencies in Dentistry	2		
DHYG	121	General Pathology	2		
DHYG	122	Oral Radiology II	1		
DHYG	104	Oral Radiology II Lab	1		
DHYG	123	Clinical Dental Hygiene Techniques II	2		
DHYG	105	Clinical Dental Hygiene Techniques II Lab	4		
DHYG	125	Restorative Dentistry I	1		
DHYG	106	Restorative Dentistry I Lab	1		
DHYG	126	Pain Control in Dentistry	2		
DHYG	107	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	2		
DHYG	108	Clinical Dental Hygiene Techniques III Lab	4		
DHYG	135	Restorative Dentistry II	1		
DHYG	109	Restorative Dentistry II Lab	2		
DHYG	136	Patient Management	2		
DHYG	144	Clinical Dental Hygiene Techniques IV	1		
DHYG	147	Clinical Dental Hygiene Techniques IV Lab	5		
DHYG	246	Restorative Dentistry III	1		
DHYG	220	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	216	Clinical Dental Hygiene Techniques V Lab	6		
DHYG	215	Ethics and Jurisprudence, Practice Management	2		
DHYG	221	Community Oral Health I	2		
DHYG	217	Community Oral Health I Lab	2		
DHYG	222	Periodontics II	2		
DHYG	224	Clinical Dental Hygiene Techniques VI	1		
DHYG	218	Clinical Dental Hygiene Techniques VI Lab	7		
DHYG	234	Clinical Dental Hygiene Techniques VII	1		
DHYG	219	Clinical Dental Hygiene Techniques VII Lab	9		
		Subtotal	**94**		

Degree & Certificate Requirements

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
SOC&	101	Intro to Sociology	5		
NUTR&	101	Nutrition	5		
BIOL&	241	Human A&P 1 w/ Lab	5-6		
BIOL&	242	Human A&P 2 w/ Lab	5-6		
BIOL&	260	Microbiology w/ Lab	5-6		
		Subtotal	**25-28**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
MATH&	146*	Introduction to Stats	5		
PSYC&	100	General Psychology	5		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**137-142**		

Important:
*MATH& 146 may, upon approval, be substituted with the completion of an upper-division social science statistics course with a grade of 2.6 equivalent ***or*** higher ***and*** a college-level mathematics course with a grade of 2.0 equivalent or higher. Please contact the CBC transcripts office for a list of pre-approved statistics substitutions. This substitution only applies to the AAS in Dental Hygiene and does not apply to the Associate in Arts and Sciences Direct Transfer Agreement.

Associate in Applied Science in Early Childhood Education

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ECED	103	Art	3		
ECED&	105	Intro to Early Childhood Education	5		
ECED&	107	Health, Safety, & Nutrition	5		
EDUC&	115	Child Development	5		
ECED&	120	Practicum-Nurturing Relationships	2		
ECED	124	Children's Literature	3		
ECED	122	Math & Science	3-5		
ECED	127	Music & Movement	3		
EDUC&	130	Guiding Behavior	3		
ECED&	132	Infants & Toddlers Care	3		
EDUC&	150	Child/Family/Community	3		
ECED	151	Supervised Practicum	3		
ECED	152	Supervised Practicum Lab	1		
ECED&	160	Curriculum Development	5		
ECED&	170	Environments-Young Child	3		
ECED&	180	Language & Literacy Development	3		
ECED&	190	Observation/Assessment	3		
EDUC&	203	Exceptional Child	3		
		Subtotal	**59-61**		

Major Support

A total of 15 credits required in the major support area. A maximum of 6 credits of ECED Special Studies Lab will be accepted. Other electives may include ECED, EDUC, Humanities, or Social Science courses approved by the ECED faculty advisor. These courses could include:

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ECED&	100	Child Care Basics	3		
EDUC	101	Introduction to Education	4		
ECED	110	Preschool Seminar	1-3		
ECED	116	ECED Special Topics Symposium	1-3		
ECED	117	ECED Seminar	1-3		
ECED	118	Skills Training	1-3		
ECED	119	ECED Workshop	1-3		
ECED&	134	Family Child Care	3		
EDUC&	136	School Age Care	3		
ECED&	139	Administration Early Learning Program	3		
ECED	141	Child Development Associate ***or***	10		
ECED	143-149, 153	Child Development Associate ***or***	1-10		
ECED	201	Multicultural Education	3		
ECED	216	Advanced Special Topics	1-3		
ECED	217	Advanced Seminar	1-3		
ECED	218	Advanced Skills Training	1-3		
ECED	219	Advanced Workshop	1-3		
ECED	221	Strategies for Teaching Special Needs	3		
ECED	222	Sign Language Level 1	3		
ECED	223	Sign Language Level 2	3		
ECED	224	Sign Language Level 3	3		
ECED	280	Special Studies Lab	1-3		
ECED	281-288	Special Studies Lab	1-15		
ECED	289	Special Studies	1-15		
		Subtotal	**15**		

Degree & Certificate Requirements

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I ***or***	5		
ENGL	103	Writing in the Workplace	5		
MATH	108	Math for Early Childhood Education	5		
Psychology *or* Sociology (select 3-5 credits)					
PSYC&	100	General Psychology ***or***	5		
PSYC	103	Applied Psychology ***or***	3		
PSYC	201	Social Psychology ***or***	5		
SOC&	101	Intro to Sociology	5		
Communication Studies (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 Communication	5		
		Subtotal	**16-20**		
		Total Credits Required	**90-96**		

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.

Degree & Certificate Requirements

State Early Childhood Education One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ECED&	105	Intro to Early Childhood Education	5		
ECED&	107	Health, Safety, & Nutrition	5		
EDUC&	115	Child Development	5		
ECED&	120	Practicum-Nurturing Relationships	2		
EDUC&	130	Guiding Behavior ***or***	3		
ECED&	170	Environments-Young Child	3		
EDUC&	150	Child/Family/Community	3		
ECED&	160	Curriculum Development	5		
ECED&	180	Language & Literacy Development	3		
ECED&	190	Observation/Assessment	3		
		Subtotal	**34**		

Major Support

Select 3 credits from the following:

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
EDUC&	130	Guiding Behavior	3		
ECED&	132	Infants & Toddlers Care	3		
ECED&	134	Family Child Care	3		
EDUC&	136	School Age Care	3		
ECED&	139	Administration Early Learning Program	3		
		Subtotal	**3**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I ***or***	5		
ENGL	103	Writing in the Workplace	5		
MATH	108	Math for Early Childhood Education	5		
		Subtotal	**10**		
		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.

State Short Early Childhood Education Certificate of Specialization

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ECED&	105	Intro to Early Childhood Education	5		
ECED&	107	Health, Safety, & Nutrition	5		
EDUC&	115	Child Development	5		
ECED&	120	Practicum-Nurturing Relationships	2		
		Subtotal	**17**		

Available specialitations: General, Infant/Toddler Care, Shool-Age Care, Family Child Care, or Administration

Choose one specialization from below:

Specialization - General

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
EDUC&	130	Guiding Behavior	3		
		Subtotal	**3**		

Specialization - Infant/Toddler Care

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ECED&	132	Infants & Toddlers Care	3		
		Subtotal	**3**		

Specialization - School-Age Care

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ECED&	136	School Age Care	3		
		Subtotal	**3**		

Specialization - Family Child Care

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ECED&	134	Family Child Care	3		
		Subtotal	**3**		

Specialization - Administration

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ECED&	139	Administration Early Learning Program	3		
		Subtotal	**3**		
		Total Credits Required	**20**		

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.

State Initial Early Childhood Education Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ECED&	105	Intro to Early Childhood Education	5		
ECED&	107	Health, Safety, & Nutrition	5		
ECED&	120	Practicum-Nurturing Relationships	2		
		Total Credits Required	**12**		

Child Development Associate (CDA) Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ECED	141	Child Development Associate	10		
		Total Credits Required	**10**		

Advanced EMT Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
EMT	103	Advanced Emergency Medical Technician (AEMT) I	9		
EMT	104	Advanced Emergency Medical Technician (AEMT) II	9		
		Total Credits Required	**18**		

EMT-Basic Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
EMT	101	Emergency Medical Technician-Basic	10		
		Total Credits Required	**10**		

Degree & Certificate Requirements

Associate in Science Transfer (AS-T) Degree Requirements

Engineering/Computer Science/Physics/Atmospheric Sciences
2016-2017 Degree Worksheet

Department	Course Number	Course Credits	Quarter Completed	Notes (see reverse side for list of appropriate classes)
Communication		5 Credits		♦ Select either: ENGL& 101 ***or*** 102 (5 credits required).
English				
Math		10 Credits		♦ Two courses at or above calculus. ♦ Select from: MATH& 151, 152, 153, 254, MATH 243, 255
Humanities & Social/ Behavioral Sciences		15 Credits		♦ Complete at least one course from each of the two groups listed on the reverse side. ♦ Courses must be selected from three different subject areas with a total of 15 credits required. ♦ No more than 5 credits in any World Languages.
Pre Major Courses 1. Science		5 Credits		Refer to the reverse side. ♦ Any Science based on program requirements ***or*** CHEM& 161 for Engineering majors
Pre Major Courses 2. Math		5 Credits		♦ Select either: MATH& 146 ***or*** 153 (5 credits required).
Pre Major Courses 3. Computer Programming Language		5 Credits		♦ As advised for specific discipline/institution.
Pre Major Courses 4. Physics		15 Credits		Select one of the following sequences: ♦ PHYS& 134/124, 135/125, 136/126 ***or*** ♦ PHYS& 241/231, 242/232, 243/233
Electives (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.

NOTICE: For transferring students, 75 of the 90 credits must be fully transferable as defined by the Intercollege Relations Commission (ICRC) guidelines for the Direct Transfer Agreement to be honored by four-year institutions in Washington. A maximum of 15 elective credits may be professional/technical courses numbered 100 or above. Due to the specialized nature of many of the listed courses, students should consult their advisor and the catalog of the four-year institution to which they plan to transfer for specific degree requirements.
DISCLAIMER: During the period this guide is in circulation, there may be curriculum revisions and program changes. Students are responsible for consulting the appropriate academic unit or advisor for current and specific information. The information in this guide is subject to change and does not constitute an agreement between the College and the student.

Associate in Science Transfer (AS-T) Degree Requirements

Engineering/Computer Science/Physics/Atmospheric Sciences

2016-2017 Degree Worksheet

Communication (5 credits)

- **ENGL&** 101 ***or*** 102

Math (10 credits)

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

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.

Group 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
- **ICS** 120, 125, 130, 135, 222
- **MUSC&** 105, **MUSC** 116
- **PHIL&** 101, **PHIL** 106, 131, 150
- **WS** 155, 160
- World Languages 121 & above (excluding conversational classes) All World Languages courses count as a single subject.
- **EFL** 101, 111

Group 2:

- **PSYC&** 100, 200, 220, **PSYC** 103, 201, 205, 209, 217, 270
- **SOC&** 101, 201, **SOC** 110, 150, 269
- **ANTH&** 100, 204, 206, 234
- **ECON&** 201, 202, **ECON** 110, 291
- **GEO** 150
- **HIST&** 146, 147, 148, **HIST** 107, 108, 110, 111, 112, 113, 115, 116, 117, 233
- **ICS** 255
- **POLS&** 201, 202, 203, 204, **POLS** 104, 205
- **SSCI** 290/291

Pre Major Courses (45-50 credits)

Pre major 1 (15 credits)

Any Science based on program requirements ***or*** CHEM& 161 for Engineering majors

Pre major 2 (5 credits)

- **MATH&** 146 ***or*** **MATH&** 153

Pre major 3 (5 credits)

As advised for specific discipline/institution

Pre major 4 (15 credits)

- PHYS& 134/124, 135/125, 136/126 ***or***
- PHYS& 241/231, 242/232, 243/233

Electives (Program Specific Under Advisement)

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.

The Associate of Science degree does NOT guarantee that the student has met the general education requirements at the transfer baccalaureate institution.

NOTE:

- Required minimum credits 90.
- Required minimum cumulative GPA 2.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others.
- Consult with your counselor or faculty advisor.

Degree & Certificate Requirements

Associate in Applied Science in Engineering Technology

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENT	111	Introduction to Engineering	5		
ENT	116	Basic Drafting	5		
ENT	121	Engineering Fundamentals w/ Lab	4		
ENT	122	Materials	3		
ENT	125	Graphical Analysis	5		
ENT	134	Surveying w/ Lab	6		
ENT	135	Statics	5		
ENT	136	Advanced Drafting	4		
ENT	214	Strength of Materials	5		
ENT	216	Mechanical Drafting & Design	5		
ENT	219	Construction Estimating	1		
ENT	224	Structures	5		
ENT	226	Architectural/Structural Drafting	5		
ENT	229	Construction Specifications	2		
ENT	236	Design	5		
ENT	238	Electricity	5		
		Subtotal	**70**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PHYS&	134	General Physics I	4		
PHYS&	124	General Physics Lab I	1		
PHYS&	135	General Physics II	4		
PHYS&	125	General Physics Lab II	1		
Physics/English (select 5 credits)					
PHYS&	136	General Physics III ***&***	4		
PHYS&	126	General Physics Lab III ***or***	1		
ENGL&	235	Technical Writing	5		
		Subtotal	**15**		

General Education

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

Degree & Certificate Requirements

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

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Human Relations (select 3-5 credits)					
PSYC	103	Applied Psychology ***or***	3		
PSYC&	100	General Psychology ***or***	5		
PSYC	201	Social Psychology ***or***	5		
SOC&	101	Intro to Sociology ***or***	5		
BUS	271	Human Relations Business	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	210	Interpersonal Communication ***or***	3		
CMST&	220	Public Speaking ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**6-10**		
		Total Credits Required	**106-110**		

Degree & Certificate Requirements

Computer Aided Drafting One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENT	171	Technical Drafting	3		
ENT	267	AutoCAD I w/ Lab	3		
ENT	268	AutoCAD II w/ Lab	3		
		Subtotal	**9**		

Electives

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CAD Electives (select a minimum of 9 credits)					
ENT	270	3-D w/ Lab	3		
ENT	271	Drawing Production w/ Lab	3		
ENT	272	Advanced 3-D w/ Lab	3		
ENT	273	Advanced AutoCAD Applications w/ Lab	3		
ENT	274	Architectural Residential Drawing w/ Lab	3		
ENT Electives (must meet course prerequisites)					
ENT	111	Introduction to Engineering	5		
ENT	121	Engineering Fundamentals w/ Lab	4		
ENT	122	Materials	3		
ENT	134	Surveying w/ Lab	6		
ENT	219	Construction Estimating	1		
ENT	229	Construction Specifications	2		
ENT	238	Electricity	5		
		Subtotal	**20**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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		
Communication Studies (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 Communication	5		
		Subtotal	**16-20**		
		Total Credits Required	**45-49**		

Degree & Certificate Requirements

Associate in Applied Science in Fire Science

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
FS	100	Introduction to Fire Service	1		
FS	111	Fire Administration	3		
FS	121	Fire Tactics	3		
FS	131	Introduction to Fire Inspections	3		
FS	141	Chemistry of Hazardous Materials	3		
FS	151	Hazardous Materials for First Responders	3		
FS	211	Building Construction	3		
FS	222	Fire Tactics II	3		
FS	231	Fire Protection Equipment	3		
FS	241	Fire Investigation	3		
FS	251	Fire Service Hydraulics	3		
		Subtotal	**31**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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

Minimum of 28 credits appropriate to the career needs of the student. Courses must be college level, 100 or higher. Consult with advisor for course selections.

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
		Subtotal	**28**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
MATH	106+	MATH 106 ***or*** above	5		
PSYC	100+	PSYC 100 ***or*** above	3-5		
Communication Studies (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	5		
		Subtotal	**16-20**		
		Total Credits Required	**90-94**		

Degree & Certificate Requirements

General Studies Certificate Requirements

2016-2017 Degree Worksheet

Department	Course Number	Course Credits	Quarter Completed	Notes (see reverse side for list of appropriate classes)
Communication		8 Credits		♦ ENGL& 101 (5 credits required). ♦ Select 3 additional credits from the following: ♦ ENGL& 102 ***or*** 235 ***or*** ♦ Select from a list of Communication Studies courses. Refer to list on reverse side.
English	101	5		
Humanities		10 Credits		♦ Complete at least 10 credits from the list on the reverse side.
Social & Behavioral Sciences		10 Credits		♦ Complete at least 10 credits from the list on the reverse side.
Mathematical & Natural Science		10 Credits		♦ Complete at least 10 credits from the list on the reverse side.
Electives		52 Credits		♦ Courses must be numbered 100 ***or*** above. ♦ Please consult with an advisor/counselor for appropriate course selection.

♦ Required minimum 90 credits. ♦ Required minimum cumulative GPA 2.0. ♦ At least one-third of the college-level, degree applicable credits must be taken at CBC..

NOTICE: For transferring students, 75 of the 90 credits must be fully transferable as defined by the Intercollege Relations Commission (ICRC) guidelines for the Direct Transfer Agreement to be honored by four-year institutions in Washington. A maximum of 15 elective credits may be professional/technical courses numbered 100 or above. Due to the specialized nature of many of the listed courses, students should consult their advisor and the catalog of the four-year institution to which they plan to transfer for specific degree requirements.

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Columbia Basin College

General Studies Certificate Requirements

2016-2017 Degree Worksheet

Communication (8 credits)

- **ENGL&** 101

Complete at least 3 credits from any of the following courses:

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

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
- **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
- **HEB** 121, 122, 123
- **HIST&** 126, 127, 128
- **ICS** 120, 125, 130, 135, 222
- **JAPN&** 121, 122, 123, 221, 222, 223
- **MUSC&** 105, **MUSC** 116
- **PHIL&** 101, **PHIL** 106, 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

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&** 146, 147, 148, **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, 209, 217, 270
- **SOC&** 101, 201, **SOC** 110, 150, 269
- **SSCI** 290/291

Mathematical & Natural Science (10 credits)

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

- **ANTH&** 205; **ANTH** 214
- **ASTR&** 101; **ASTR** 102
- **BIOL&** 100, 160, 175, 211, 212, 213, 241, 242, 260,
- **BIOL** 140, 148, 201, 252, 253
- **CHEM&** 110, 121, 122, 123, 131, 140, 161, 162, 163, 241/251, 242/252, 243/253, **CHEM** 254/264, 255/265, 281-286, 291-296
- **ENVS&** 101, **ENVS** 174
- **GEOL&** 101, 103, 110
- **GEO** 101
- **MATH&** 107, 141, 142, 146, 144, 148, 151, 152, 153, 171, 172, 173, 254, **MATH** 113, 147, 243, 246, 255;
- **NUTR&** 101
- **PHYS&** 100/101, 134/124, 135/125, 136/126, 241/231, 242/232, 243/233, PHYS 102

Electives (52 credits)

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

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Health & Physical Education (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&			5		
CMST			3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
		Subtotal	**5**		

Humanities*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Mathematical & Natural Science* (select a minimum of 15 credits from the following)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CHEM&	121	Intro to Chemistry w/ Lab	5		
CHEM&	161	General Chemistry I w/ Lab	5		
BIOL&	160	General Biology w/ Lab	5		
BIOL&	211	Majors Cellular w/ Lab	5		
BIOL&	241	Human A&P 1 w/ Lab	6		
		Subtotal	**15-16**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Degree & Certificate Requirements

Electives* (select a minimum of 33 credits from the following; see advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BIOL&	242	Human A&P 2 w/ Lab	6		
PEC	180	Care & Prevention of Athletic Injuries	3		
PEC	184	Care & Prevention of Athletic Injuries II	2		
PEC	185	Care & Prevention of Athletic Injuries II Lab	1		
PEC	188	Athletic Training Internship	2		
PEC	189	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 and BIOL& 242)					
HE	172	Exercise Prescription Lab	1		
PE	180	Adaptive Physical Education	2		
(Recommended: BIOL& 241 and BIOL& 242)					
PE	182	Adaptive Physical Education Lab	1		
HE	210	Sports Nutrition	3		
HE	215	Health and Fitness for Life	2		
HE	216	Health and Fitness for Life Lab	1		
HE	220	Drugs and Health	3		
HE	232	Sports Psychology	3		
HE	240	Stress Management	3		
HE	250	Sports Management	3		
		Subtotal	**33-45**		
		Total Credits Required	**99-111**		

*Course selections must meet the distribution requirements for the AA degree.

NOTE:

- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Healthcare Central Service Technology Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
HCST	100	Foundations of Central Service	6		
HCST	150	Central Service Clinical	12		
		Subtotal	**18**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
HSCI	147	Medical Terminology	5		
		Subtotal	**5**		
		Total Credits Required	**23**		

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in History (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II	5		
CMST			3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	146	Introduction to Stats	5		
		Subtotal	**5**		

Humanities* (see advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
HIST&	126	World Civilizations I	5		
ENGL			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences* (see advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
SOC&	101	Intro to Sociology	5		
HIST&	146	U.S. History I	5		
			5		
		Subtotal	**15**		

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Electives*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
HIST&	127	World Civilizations II	5		
HIST&	128	World Civilizations III	5		
HIST&	147	U.S. History II	5		
HIST&	148	U.S. History III	5		
Select 5 credits from the following:					
HIST	110	History of Modern East Asia	5		
HIST	112	Modern Latin America	5		
HIST	115	History of Modern Middle East	5		
		Subtotal	**25**		
		Total Credits Required	**91**		

*Course selections must meet the distribution requirements for the AA degree.
NOTE:
- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in International Studies (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II	5		
CMST			3		
			Subtotal	**13**	

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	146	Introduction to Stats	5		
			Subtotal	**5**	

Humanities*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
HIST&	128	World Civilizations III	5		
			5		
			5		
			Subtotal	**15**	

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
GEO	150	Cultural Geography	5		
POLS&	204	Comparative Government ***or***	5		
POLS&	203	International Relations	5		
SOC&	201	Social Problems	5		
			Subtotal	**15**	

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENVS&	101	Intro to Environmental Science w/ Lab	5		
			5		
			5		
			Subtotal	**15**	

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
			Subtotal	**3**	

Degree & Certificate Requirements

Electives* (a class can only be used to fulfill one requirement)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
15 credits of World Languages 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 course selections.					
			5		
			5		
			5		
Select 9 credits from the following:					
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		
ICS	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		
		Subtotal	**24**		
		Total Credits Required	**90**		

*Course selections must meet the distribution requirements for the AA degree.
In addition to the above required coursework, it is extremely important to stay in close contact with your faculty advisor.
NOTE:

- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Latino & Latin American Studies (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&			5		
CMST			3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
		Subtotal	**5**		

Humanities*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ICS	120	Survey of Hispanic Culture	5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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)					
PSYC	201	Social Psychology ***or***	5		
SOC&	201	Social Problems	5		
		Subtotal	**15**		

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Degree & Certificate Requirements

Electives* (a class can only be used to fulfill one requirement)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
15 credits of World Languages 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.					
			5		
			5		
			5		
Select 9 credits from the following:					
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		
ICS	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 Communication	5		
		Subtotal	**24**		
		Total Credits Required	**90**		

*Course selections must meet the distribution requirements for the AA degree.

NOTE:

- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Logistics Technician Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
IHT	100	OSHA-10	1		
INT	101	Forklift Operations	1		
INT	130	Logistics Technician	12		
		Total Credits Required	**14**		

Production Technician Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
IHT	100	OSHA-10	1		
INT	101	Forklift Operations	1		
INT	120	Production Technician	12		
		Total Credits Required	**14**		

Degree & Certificate Requirements

Associate in Applied Science in Machine Technology

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MT	111	Basic Machine Technology I	5		
MT	112	Basic Machine Technology I Lab	9		
MT	121	Basic Machine Technology II	5		
MT	122	Basic Machine Technology II Lab	9		
MT	131	Basic Machine Technology III	5		
MT	132	Basic Machine Technology III Lab	9		
MT	211	Advanced Machine Technology I	5		
MT	212	Advanced Machine Technology I Lab	9		
MT	221	Advanced Machine Technology II	5		
MT	222	Advanced Machine Technology II Lab	9		
MT	231	Advanced Machine Technology III	5		
MT	232	Advanced Machine Technology III Lab	9		
		Subtotal	**84**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BPR	204	Blueprint Reading II (MT)	3		
		Subtotal	**3**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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		
Communication Studies (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 Communication	5		
		Subtotal	**16-20**		
		Total Credits Required	**103-107**		

Manual Machining Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
IHT	100	OSHA-10	1		
MT	111	Basic Machine Technology I	5		
MT	112	Basic Machine Technology I Lab	9		
MT	121	Basic Machine Technology II	5		
MT	122	Basic Machine Technology II Lab	9		
MT	131	Basic Machine Technology III	5		
MT	132	Basic Machine Technology III Lab	9		
		Total Credits Required	**43**		

Basic Manufacturing Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
IHT	100	OSHA-10	1		
INT	101	Forklift Operations	1		
MT	111	Basic Machine Technology I	5		
MT	112	Basic Machine Technology I Lab	9		
		Total Credits Required	**16**		

Introduction to CNC Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
IHT	100	OSHA-10	1		
MT	211	Advanced Machine Technology I	5		
MT	212	Advanced Machine Technology I Lab	9		
		Total Credits Required	**15**		

Solid Modeling for Manufacturing Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MT	102	SolidWorks® for Manufacturing Technology I	5		
MT	202	SolidWorks® for Manufacturing Technology II	5		
BPR	204	Blueprint Reading II (MT)	3		
		Total Credits Required	**13**		

Basic Industrial Maintenance Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BPR	106	Blueprint Reading I (WT)	3		
ELT	111	Introduction to Electricity	5		
MNT	110	Fundamentals of Maintenance	7		
WT	151	Gas Metal Arc Welding (MIG) Certificate	3		
		Total Credits Required	**18**		

Basic Industrial Mechanical Maintenance Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ELT	211	Applied Electronics	5		
MNT	111	Intro to Machine Operations	7		
MNT	210	Hydraulic Systems	7		
		Total Credits Required	**19**		

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Mathematics (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&			5		
CMST&			3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	151	Calculus I	5		
		Subtotal	**5**		

Humanities*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	152	Calculus II	5		
MATH&	153	Calculus III	5		
PHYS&	241	Engineering Physics I	4		
PHYS&	231	Engineering Physics Lab I	1		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Emphasis*

A minimum cumulative 2.0 GPA is required for a Mathematics emphasis. Additional electives require departmental approval.

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	254	Calculus IV	5		
PHYS&	242	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		
		Subtotal	**25**		
		Total Credits Required	**91**		

*Course selections must meet the distribution requirements for the AA degree.
NOTE:
- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Associate in Arts & Sciences in Math Education (DTA)

TRANSFER DEGREE

2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II	5		
CMST	101	Speech Essentials ***or***	3		
CMST&	220	Public Speaking	5		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	151	Calculus I	5		
		Subtotal	**5**		

Humanities*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Mathematical & Natural Science*

One course must be a laboratory science.

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	152	Calculus II	5		
PHYS&	134/124	General Physics I/General Physics Lab I	5		
PHYS&	135/125	General Physics II/General Physics Lab II	5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Emphasis Courses

A minimum cumulative 2.0 GPA is required for a Mathematics emphasis. Additional electives require departmental approval.

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	153	Calculus III	5		
MATH&	254	Calculus IV	5		
MATH	243	Linear Algebra	5		
Additional electives with departmental approval					
		Subtotal	**24**		
		Total Credits Required	**90**		

*Course selections must meet the distribution requirements for the AA degree.

NOTE:

- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- A minimum of 30 college-level, degree applicable credits taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Associate in Applied Science in Medical Assistant

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements*

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MA	111	Pharmacology I	5		
MA	114	Human Body Structure, Function, and Diseases I	4		
MA	115	Clinical Procedures Theory I	4		
MA	116	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	216	Clinical Procedures Lab II	4		
MA	240	Administrative Medical Assistant Office Procedures II	6		
MA	241	Externship Seminar	1		
MA	242	Externship	6		
		Subtotal	**54**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Electives (select 15 credits of courses level 100 or above from the Humanities, Social Science, Behavioral Science, or Natural Science distribution list)					
			5		
			5		
			5		
HSCI	147	Medical Terminology	5		
		Subtotal	**20**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
MATH	106+	MATH 106 ***or*** above (except MATH 109)	5		
PSYC&	100	General Psychology	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST&	220	Public Speaking	5		
		Subtotal	**18-20**		
		Total Credits Required	**92-94**		

*Students who complete the Associate in Applied Science in Medical Assistant degree may be able to license as a Category F HealthCare Assistant (WAC 246-826-180).

Medical Assistant One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MA	111	Pharmacology I	5		
MA	114	Human Body Structure, Function, and Diseases I	4		
MA	115	Clinical Procedures Theory I	4		
MA	116	Clinical Procedures Lab I	4		
MA	140	Admin. 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	216	Clinical Procedures Lab II	4		
MA	240	Admin. Medical Assistant Office Procedures II	6		
MA	241	Externship Seminar	1		
MA	242	Externship	6		
		Subtotal	**54**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
HSCI	147	Medical Terminology	5		
		Subtotal	**5**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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	**72-74**		

Students who complete only the One-Year Certificate may be able to license as a Category E Health Care Assistant (WAC 246-826-170).

Bone Densitometry Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
IMAGE	100	Bone Densitometry	4		
IMAGE	110	Bone Densitometry Clinical Practicum	4		
		Total Credits Required	**8**		

Program prerequisite: current enrollment in an approved Radiologic Technology program or ARRT certified radiologic technologist.

Computed Tomography (CT) Technology Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
IMAGE	250	Cross Sectional Anatomy	3		
IMAGE	270	CT Clinical Practicum	12		
IMAGE	280	CT Instrumentation	3		
		Total Credits Required	**18**		

Magnetic Resonance Imaging (MRI) Technology Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
IMAGE	250	Cross Sectional Anatomy	3		
IMAGE	271	MRI Clinical Practicum	12		
IMAGE	281	MRI Instrumentation and Procedures	3		
		Total Credits Required	**18**		

Mammography Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
IMAGE	225	Mammography	4		
IMAGE	229	Mammography Clinical	4		
		Total Credits Required	**8**		

Degree & Certificate Requirements

Associate in Applied Science in Multi-Occupational Trades

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

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 credits

Major Support

Select one of the following with approval from JATC:

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BUS&	101	Introduction 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	Qtr. Completed	Comments/Substitution
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 Communication	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	103	Workplace Communication ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	210	Interpersonal Communication	5		
CMST&	220	Public Speaking ***or***	5		
		Subtotal	**16-20**		

Total hours: 5870-5925/Equivalent Credit Hours: 149-154

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Instrumental Music (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II	5		
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior	3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
		Subtotal	**5**		

Humanities*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MUSC&	105	Music Appreciation	5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Electives*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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	125	Orchestra - 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	6		
		Subtotal	**50**		
		Total Credits Required	**114-116**		

*Course selections must meet the distribution requirements for the AA degree.
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.
NOTE:
- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Vocal Music (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II	5		
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior	3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
		Subtotal	**5**		

Humanities*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MUSC&	105	Music Appreciation	5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Electives*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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		
		Subtotal	**50**		
		Total Credits Required	**114-116**		

*Course selections must meet the distribution requirements for the AA degree.
It is understood a vocal music major will complete more electives than the minimum 24 required for an AA degree.
NOTE:
- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- A minimum of 30 college-level, degree applicable credits taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Associate in Applied Science in Nuclear Technology

Instrumentation and Control Technician Option

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NT	111	Basic Nuclear Math & Physics	5		
NT	114	Introduction to Radiation Safety	5		
NT	121	Reactor Plant Operations ***or***	4		
NT	122	Basic Nuclear Facilities	4		
NT	131	Nuclear Facility Components	4		
NT	141	Basic Reactor Safety, Theory, & Operations ***or***	5		
NT	142	Basic Nuclear Safety & Environmental Compliance	5		
NT	150	Internship Seminar	1		
NT	160	Nuclear Chemistry	3		
NT	170	Mechanical & Fluid Power Transmission	4		
FYI	101	First Year Introduction	1		
Internship/Industry Project (select 5 credits)					
NT	152	Internship ***or***	1-5		
NT	154	Industry Project	1-5		
		Subtotal	**37**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
IC	201	Instrumentation I	5		
IC	202	Instrumentation II	5		
IC	203	Instrumentation III	5		
IC	230	PLC Programming & Computer Interfacing	5		
ELT	124	Direct Current Circuits	5		
ELT	134	Alternating Current Circuits	5		
ELT	154	Semiconductors and Op Amps	5		
ELT	171	Digital Fundamentals	5		
ELT	211	Applied Electronics	5		
		Subtotal	**45**		

Degree & Certificate Requirements

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
English (5 credits)					
ENGL&	101	English Composition I ***or***	5		
ENGL	103	Writing in the Workplace	5		
Science (10 credits)					
PHYS&	100/101+	Physics for Non-Science Majors & Lab ***or*** above	5		
CHEM&	140	General Chemistry Prep w/ Lab	5		
Math (5 credits)					
MATH&	141	Precalculus I	5		
Human Relations (5 credits)					
PSYC&	100	General Psychology	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	103	Workplace Communication (preferred) ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	210	Interpersonal Communication ***or***	5		
CMST&	220	Public Speaking ***or***	5		
CMST	260	Multicultural Communication	5		

Subtotal **28-30**

Total Credits Required **110-112**

Nuclear Technology One-Year Certificate

Instrumentation and Control Technician Option

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NT	111	Basic Nuclear Math & Physics	5		
NT	114	Introduction to Radiation Safety	5		
NT	121	Reactor Plant Operations ***or***	4		
NT	122	Basic Nuclear Facilities	4		
NT	131	Nuclear Facility Components	4		
NT	141	Basic Reactor Safety, Theory, & Operations ***or***	5		
NT	142	Basic Nuclear Safety & Environmental Compliance	5		
NT	150	Internship Seminar	1		
FYI	101	First Year Introduction	1		
		Subtotal	**25**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ELT	124	Direct Current Circuits	5		
ELT	134	Alternating Current Circuits	5		
ELT	154	Semiconductors and Op Amps	5		
		Subtotal	**15**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
English (5 credits)					
ENGL&	101	English Composition I ***or***	5		
ENGL	103	Writing in the Workplace	5		
Science (5 credits)					
CHEM&	140	General Chemistry Prep w/ Lab	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	103	Workplace Communication (preferred) ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	210	Interpersonal Communication ***or***	5		
CMST&	220	Public Speaking ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**13-15**		
		Total Credits Required	**53-55**		

Associate in Applied Science in Nuclear Technology

Non-Licensed Nuclear Operator Option

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NT	111	Basic Nuclear Math & Physics	5		
NT	114	Introduction to Radiation Safety	5		
NT	121	Reactor Plant Operations ***or***	4		
NT	122	Basic Nuclear Facilities	4		
NT	131	Nuclear Facility Components	4		
NT	141	Basic Reactor Safety, Theory & Operations ***or***	5		
NT	142	Basic Nuclear Safety & Environmental Compliance	5		
NT	150	Internship Seminar	1		
NT	160	Nuclear Chemistry	3		
ELT	111	Introduction to Electricity	5		
NT	170	Mechanical & Fluid Power Transmission	4		
FYI	101	First Year Introduction	1		
Internship/Industry Project (select 5 credits)					
NT	152	Internship	1-5		
NT	154	Industry Project	1-5		
		Subtotal	**42**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NOP	111	Hydraulic and Fluid Flows	5		
NOP	221	Electrical Generation and Distribution	5		
NOP	231	Steam Systems	5		
NOP	241	Chemical & Water Treatment Systems	5		
NOP	251	Facility Support Systems	4		
IC	250	Instrumentation & Control for Operators	5		
IC	260	Process Instrumentation	5		
		Subtotal	**34**		

Degree & Certificate Requirements

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
English (5 credits)					
ENGL&	101	English Composition I ***or***	5		
ENGL	103	Writing in the Workplace	5		
Science (10 credits)					
PHYS&	100/101+	Physics for Non-Science Majors & Lab ***or*** above	5		
CHEM&	140	General Chemistry Prep w/ Lab	5		
Math (5 credits)					
MATH&	141	Precalculus I	5		
Human Relations (5 credits)					
PSYC&	100	General Psychology	5		
Communication Studies (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 Communication	5		
		Subtotal	**28-30**		
		Total Credits Required	**104-106**		

Nuclear Technology One-Year Certificate

Non-Licensed Nuclear Operator Option

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NT	111	Basic Nuclear Math & Physics	5		
NT	114	Introduction to Radiation Safety	5		
NT	121	Reactor Plant Operations ***or***	4		
NT	122	Basic Nuclear Facilities	4		
NT	131	Nuclear Facility Components	4		
NT	141	Basic Reactor Safety, Theory & Operations ***or***	5		
NT	142	Basic Nuclear Safety & Environmental Compliance	5		
NT	150	Internship Seminar	1		
ELT	111	Introduction to Electricity	5		
FYI	101	First Year Introduction	1		
		Subtotal	**30**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
English (5 credits)					
ENGL&	101	English Composition I ***or***	5		
ENGL	103	Writing in the Workplace	5		
Science (10 credits)					
PHYS&	100/101+	Physics for Non-Science Majors & Lab ***or*** above	5		
CHEM&	140	General Chemistry Prep w/ Lab	5		
Math (5 credits)					
MATH&	141	Precalculus I	5		
Communication Studies (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 Communication	5		
		Subtotal	**23-25**		
		Total Credits Required	**53-55**		

Degree & Certificate Requirements

Associate in Applied Science in Nuclear Technology

Radiation Protection Technician Option

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NT	111	Basic Nuclear Math & Physics	5		
NT	121	Reactor Plant Operations ***or***	4		
NT	122	Basic Nuclear Facilities	4		
NT	131	Nuclear Facility Components	4		
NT	141	Basic Reactor Safety, Theory, & Operations ***or***	5		
NT	142	Basic Nuclear Safety & Environmental Compliance	5		
NT	150	Internship Seminar	1		
NT	160	Nuclear Chemistry	3		
ELT	111	Introduction to Electricity	5		
NT	170	Mechanical & Fluid Power Transmission	4		
FYI	101	First Year Introduction	1		
Internship/Industry Project (select 5 credits)					
NT	152	Internship ***or***	1-5		
NT	154	Industry Project	1-5		
		Subtotal	**37**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
RPT	111	Radiation Fundamentals	5		
RPT	121	Radiation Monitoring	5		
RPT	131	Radiation Effects	5		
RPT	141	Radioactive Materials Handling	5		
RPT	211	Radiological Safety and Response	5		
RPT	222	Radiation Protection	5		
BIOL&	175	Human Biology w/ Lab	5		
		Subtotal	**35**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
English (5 credits)					
ENGL&	101	English Composition I ***or***	5		
ENGL	103	Writing in the Workplace	5		
Science (10 credits)					
PHYS&	100/101+	Physics for Non-Science Majors & Lab ***or*** above	5		
CHEM&	140	General Chemistry Prep w/ Lab	5		
Math (5 credits)					
MATH&	141	Precalculus I	5		
Human Relations (5 credits)					
PSYC&	100	General Psychology	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	103	Workplace Communication (preferred) ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	210	Interpersonal Communication ***or***	5		
CMST&	220	Public Speaking ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**28-30**		
		Total Credits Required	**100-102**		

Nuclear Technology One-Year Certificate

Radiation Protection Technician Option

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NT	111	Basic Nuclear Math & Physics	5		
NT	121	Reactor Plant Operations ***or***	4		
NT	122	Basic Nuclear Facilities	4		
NT	131	Nuclear Facility Components	4		
NT	141	Basic Reactor Safety, Theory, & Operations ***or***	5		
NT	142	Basic Nuclear Safety & Environmental Compliance	5		
NT	150	Internship Seminar	1		
ELT	111	Introduction to Electricity	5		
FYI	101	First Year Introduction	1		
		Subtotal	**25**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
RPT	111	Radiation Fundamentals	5		
		Subtotal	**5**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
English (5 credits)					
ENGL&	101	English Composition I ***or***	5		
ENGL	103	Writing in the Workplace	5		
Science (10 credits)					
PHYS&	100/101+	Physics for Non-Science Majors & Lab ***or*** above	5		
CHEM&	140	General Chemistry Prep w/ Lab	5		
Math (5 credits)					
MATH&	141	Precalculus I	5		
Communication Studies (select 3-5 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	103	Workplace Communication (preferred) ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	210	Interpersonal Communication ***or***	5		
CMST&	220	Public Speaking ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**23-25**		
		Total Credits Required	**53-55**		

Degree & Certificate Requirements

Bachelor of Science (BSN) in Nursing

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NRS	301	Nursing Roles, Dimensions, and Perspectives	3		
NRS	315	Healthcare Informatics	5		
NRS	320	Nursing Research and Evidence-Based Practice	5		
NRS	350	Pathophysiology, Pharmacology, and Assessment	5		
NRS	410	Nursing Leadership and Management	5		
NRS	420	Populations and Global Health Nursing	3		
NRS	421	Populations and Global Health Nursing Practicum	2		
NRS	460	Leadership Capstone	2		
		Subtotal	**30**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NUTR&	101	Nutrition	5		
		Subtotal	**5**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL	315	Writing for Health Professionals	5		
PHIL	315	Professional Ethics in Healthcare	5		
ICS	310	American Diversity	5		
ECON	315	Economics of Healthcare	5		
		Subtotal	**20**		
		ADN Curriculum	**90**		
		RN Licensure	**35**		
		Total Credits Required	**180**		

Degree & Certificate Requirements

Associate in Applied Science - Transfer in Nursing (ADN)

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NRS	101	Basic Pharmacology Math	1		
NRS	102	Pharmacological Classifications I	1		
NRS	103	Pharmacological Classifications II	1		
NRS	111	Nursing I	7		
NRS	113	Nursing I Lab	4		
NRS	121	Nursing II	5		
NRS	123	Nursing II Lab	5		
NRS	131	Nursing III	5		
NRS	133	Nursing III Lab	5		
NRS	135	Nursing Trends Lab	4		
NRS	201	Pharmacological Classifications III	1		
NRS	211	Nursing IV	5		
NRS	213	Nursing IV Lab	5		
NRS	221	Nursing V	5		
NRS	223	Nursing V Lab	5		
NRS	222	Professional Issues I	1		
NRS	231	Nursing VI	5		
NRS	233	Nursing VI Lab	8		
NRS	232	Professional Issues II	1		
NRS	235	Nursing Trends Lab (1 credit per quarter)	3		
		Subtotal	**77**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CHEM&	121+	Intro to Chemistry w/ Lab ***or*** above	5		
PSYC&	200	Lifespan Psychology	5		
BIOL&	241	Human A&P 1 w/ Lab	5-6		
BIOL&	242	Human A&P 2 w/ Lab	5-6		
BIOL&	260	Microbiology w/ Lab	5-6		
		Subtotal	**25-28**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I ***or***	5		
ENGL&	102	English Composition II	5		
MATH&	146	Introduction to Stats	5		
CMST	101	Speech Essentials ***or***	3		
CMST	103	Workplace Communication ***or***	3		
CMST	110	Communication Behavior ***or***	3		
CMST&	210	Interpersonal Communication ***or***	5		
CMST&	220	Public Speaking ***or***	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**13-15**		
		Total Credits Required	**115-120**		

Degree & Certificate Requirements

Licensed Practical Nurse (LPN) One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NRS	101	Basic Pharmacology Math	1		
NRS	102	Pharmacological Classifications I	1		
NRS	103	Pharmacological Classifications II	1		
NRS	111	Nursing I	7		
NRS	113	Nursing I Lab	4		
NRS	121	Nursing II	5		
NRS	123	Nursing II Lab	5		
NRS	131	Nursing III	5		
NRS	133	Nursing III Lab	5		
NRS	135	Nursing Trends Lab	4		
NRS	141	Practical Nursing	5		
NRS	143	Practical Nursing Lab	6		
		Subtotal	**49**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PSYC&	100	General Psychology ***or***	5		
PSYC&	200	Lifespan Psychology	5		
BIOL&	241	Human A&P 1 w/ Lab	5-6		
BIOL&	242	Human A&P 2 w/ Lab	5-6		
		Subtotal	**15-17**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I ***or***	5		
ENGL&	102	Composition II	5		
		Subtotal	**5**		
		Total Credits Required	**69-71**		

Nursing Assistant Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
NA	100	Nursing Assistant	4		
NA	102	Nursing Assistant Lab	4		
		Total Credits Required	**8**		

Degree & Certificate Requirements

Associate in Applied Science in Paramedicine

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PMD	201	Paramedic I	6		
PMD	210	Paramedic I Lab	2		
PMD	202	Paramedic II	6		
PMD	220	Paramedic II Lab	3		
PMD	203	Paramedic III	6		
PMD	230	Paramedic III Lab	3		
PMD	204	Paramedic IV	6		
PMD	240	Paramedic IV Lab	3		
PMD	205	Paramedic V	6		
PMD	250	Paramedic V Lab	3		
PMD	206	Paramedic VI	6		
PMD	260	Paramedic VI Lab	3		
PMD	235	Professional Issues for the Paramedic	2		
		Subtotal	**55**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
HE	240	Stress Management	3		
BUS	271	Human Relations Business	5		
CS	101	Intro to Computers & Information Technology	5		
HSCI	147	Medical Terminology	5		
BIOL&	241	Human A&P 1 w/ Lab	5-6		
BIOL&	242	Human A&P 2 w/ Lab	5-6		
		Subtotal	**28-30**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	235	Technical Writing	5		
PSYC&	100	General Psychology	5		
MATH&	146	Introduction to Stats	5		
Communication Studies (select 3 credits)					
CMST	101	Speech Essentials ***or***	3		
CMST	110	Communication Behavior	3		
		Subtotal	**23**		
		Total Credits Required	**106-108**		

Paramedic One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PMD	201	Paramedic I	6		
PMD	210	Paramedic I Lab	2		
PMD	202	Paramedic II	6		
PMD	220	Paramedic II Lab	3		
PMD	203	Paramedic III	6		
PMD	230	Paramedic III Lab	3		
PMD	204	Paramedic IV	6		
PMD	240	Paramedic IV Lab	3		
PMD	205	Paramedic V	6		
PMD	250	Paramedic V Lab	3		
PMD	206	Paramedic VI	6		
PMD	260	Paramedic VI Lab	3		
PMD	235	Professional Issues for the Paramedic	2		
		Subtotal	**55**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BIOL&	241	Human A&P 1 w/ Lab	5-6		
BIOL&	242	Human A&P 2 w/ Lab	5-6		
		Subtotal	**10-12**		
		Total Credits Required	**65-67**		

Phlebotomy Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PHLEB	100	Phlebotomy I	4		
PHLEB	101	Phlebotomy I Lab	5		
		Total Credits Required	**9**		

Associate in Arts & Sciences with an Emphasis in Political Science (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&	102	Composition II	5		
CMST			3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH&	146	Introduction to Stats	5		
		Subtotal	**5**		

Humanities* (see advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
HIST&	128	World Civilizations III	5		
ENGL			5		
PHIL&	101	Intro to Philosophy ***or***	5		
PHIL	150	Introduction to Ethics	5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
SOC&	101	Intro to Sociology ***or***	5		
SOC&	201	Social Problems	5		
ECON&	202	Macro Economics	5		
POLS&	202	American Government	5		
		Subtotal	**15**		

Mathematical & Natural Science* (see advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Degree & Certificate Requirements

Electives* (see advisor for appropriate selection)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Select 15 credits from the following:					
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		
Select 9 additional credits					
		Subtotal	**24**		
		Total Credits Required	**90**		

*Course selections must meet the distribution requirements for the AA degree
NOTE:
- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Bachelor of Applied Science (BAS) in Project Management

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PROJ	100	Introduction to Project Management	5		
PROJ	110	Project Planning	5		
PROJ	120	Project Execution & Control	5		
PROJ	130	Introduction to Microsoft Project ***or***	5		
PROJ	140	Introduction to Primavera	5		
PROJ	211	Project Procurement	3		
PROJ	222	Project Quality Management	3		
PROJ	231	Project Risk Management	5		
PROJ	310	Project Contracts & Legal Issues	5		
PROJ	320	Project Monitoring, Control, & Earned Value	5		
PROJ	330	Project HR Management & Communication Skills	5		
PROJ	411	Advanced Microsoft Project ***or***	5		
PROJ	421	Advanced Primavera	5		
PROJ	480	Advanced Project Management Capstone	5		
		Subtotal	**56**		

Major Support (see program advisor for approved courses)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
		Subtotal	**64**		

Degree & Certificate Requirements

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Communication* (10 credits)					
ENGL&	101	English Composition I	5		
ENGL	410	Professional & Organizational Communication	5		
Quantitative/Symbolic Reasoning (select 5 credits from the list below)					
MATH&	107, 141, 142, 144, 146, 148, 151, 152, or 153		5		
Mathematical & Natural Science* (10 credits)					
ENVS	310	Environmental Issues	5		
		Approved lab science from the AA distribution list	5		
Social & Behavioral Sciences* (10 credits) (see program advisor for appropriate selection)					
PSYC&	100	General Psychology ***or***	5		
PSYC	201	Social Psychology ***or***	5		
SOC&	101	Intro to Sociology	5		
ECON	305	Managerial Economics	5		
Humanities* (10 credits)					
ICS	310	American Diversity	5		
PHIL	305	Professional Ethics	5		
Additional Electives from the following distribution lists* (15 credits) Program advisor approved Communication, Social & Behavioral Sciences, Humanities, ***or*** Mathematical & Natural Science					
			5		
			5		
			5		
		Subtotal	**60**		
		Total Credits Required	**180**		

*Course selections must meet the distribution requirements for the AA or BAS degree.

DEGREE NOTES:

- Students must receive minimum 2.0 grade in all Project Management courses.
- Required minimum 180 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per distribution course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Some course choices may be more appropriate than others. Consult with your program advisor for best selection.

Degree & Certificate Requirements

Associate in Applied Science in Project Management

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PROJ	100	Introduction to Project Management	5		
PROJ	110	Project Planning	5		
PROJ	120	Project Execution & Control	5		
PROJ	130	Introduction to Microsoft Project ***or***	5		
PROJ	140	Introduction to Primavera	5		
PROJ	211	Project Procurement	3		
PROJ	221	Project Integration & Communication	3		
PROJ	231	Project Risk Management	5		
PROJ	241	Project Management Capstone	5		
		Subtotal	**36**		

Major Support (see Project Management advisor for approved courses)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
		Subtotal	**36**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
Math (select 5 credits)					
MATH	106	Business Mathematics ***or***	5		
MATH&	107	Math in Society ***or***	5		
any MATH course MATH&141 ***or*** higher			5		
Psychology & Sociology (select 5 credits)					
PSYC&	100	General Psychology ***or***	5		
PSYC	201	Social Psychology ***or***	5		
SOC&	101	Intro to Sociology	5		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**90-92**		

DEGREE NOTES:

- Students must receive minimum 2.0 grade in all Project Management courses.
- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per distribution course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.

Project Management One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
PROJ	100	Introduction to Project Management	5		
PROJ	110	Project Planning	5		
PROJ	120	Project Execution & Control	5		
PROJ	130	Introduction to Microsoft Project ***or***	5		
PROJ	140	Introduction to Primavera	5		
		Subtotal	**20**		

Major Support (see Project Management advisor for approved courses)

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
		Subtotal	**5-7**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
Math (select 5 credits)					
MATH	106	Business Mathematics ***or***	5		
MATH&	107	Math in Society ***or***	5		
any MATH course MATH&141 ***or*** higher			5		
Psychology & Sociology (select 5 credits)					
PSYC&	100	General Psychology ***or***	5		
PSYC	201	Social Psychology ***or***	5		
SOC&	101	Intro to Sociology	5		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**45**		

CERTIFICATE NOTES:

- Students must receive minimum 2.0 grade in all Project Management courses.
- Required minimum 45 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per distribution course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Race, Ethnicity & Immigration (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&			5		
CMST			3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
		Subtotal	**5**		

Humanities*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ICS	120	Survey of Hispanic Culture ***or***	5		
ICS	125	Survey of Native American Cultures ***or***	5		
ICS	130	Survey of Asian American Culture	5		
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ICS	135	Survey of African American Cultures ***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)					
PSYC	201	Social Psychology ***or***	5		
SOC&	201	Social Problems	5		
		Subtotal	**15**		

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Electives* **(a class can only be used to fulfill one requirement)**

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ANTH&	206	Cultural Anthropology	5		
ART	120	Art History of the Americas	5		
ICS	135	Survey of African American Cultures	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		
ICS	100	Cultural and Historical Linked to Travel	1-3		
ICS	120	Survey of Hispanic Culture	5		
ICS	125	Survey of Native American Cultures	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 Communication	5		
		Subtotal	**24**		
		Total Credits Required	**90**		

*Course selections must meet distribution requirements for the AA degree.

NOTE:

- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Associate in Applied Science in Radiologic Technology

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
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	110	Clinical Education I	3		
RATEC	111	Clinical Education II	5		
RATEC	112	Clinical Education III	5		
RATEC	113	Clinical Education IV	5		
RATEC	120	Nursing Procedures	2		
RATEC	121	Patient Care	2		
RATEC	127	Introduction to Sectional Anatomy	2		
RATEC	207	Concept Integration	2		
RATEC	210	Clinical Education V	13		
RATEC	211	Clinical Education VI	8		
RATEC	212	Clinical Education VII	8		
RATEC	213	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	**100**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BIOL&	241	Human A&P 1 w/ Lab	5-6		
BIOL&	242	Human A&P 2 w/ Lab	5-6		
HSCI	147	Medical Terminology	5		
		Subtotal	**15-17**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
MATH&	146	Introduction to Stats	5		
PSYC&	100	General Psychology	5		
CMST	260	Multicultural Communication	5		
		Subtotal	**20**		
		Total Credits Required	**135-137**		

Note: A minimum 2.0 grade is required in all Major Support and General Education courses. A minimum 2.5 grade is required in all Major courses.

Spanish Medical Interpreting Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
HSCI	148	Spanish Medical Interpreting I	5		
HSCI	149	Spanish Medical Interpreting II	5		
		Total Credits Required	**10**		

Degree & Certificate Requirements

Associate in Applied Science in Surgical Technology

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
SURG	101	Introduction to Surgical Technology	4		
SURG	111	Introduction to Surgical Technology Lab	3		
SURG	102	Perioperative Science	3		
SURG	112	Perioperative Science Lab	2		
SURG	103	Perioperative Patient Care	2		
SURG	113	Perioperative Patient Care Lab	1		
SURG	106	Pharmacology for the Surgical Technologist	5		
SURG	107	Surgical Procedures I	8		
SURG	117	Surgical Procedures I Lab	3		
SURG	202	Central Service	1		
SURG	222	Central Service Clinical	1		
SURG	223	Operating Room Practicum I	8		
SURG	207	Surgical Procedures II	8		
SURG	208	Surgical Seminar	3		
SURG	209	Ethics & Professionalism	2		
SURG	224	Operating Room Practicum II	10		
		Subtotal	**64**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
HSCI	147	Medical Terminology	5		
BIOL&	241	Human A&P 1 w/ Lab	5-6		
BIOL&	242	Human A&P 2 w/ Lab	5-6		
BIOL&	260	Microbiology w/ Lab	5-6		
		Subtotal	**20-23**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
MATH	106+	MATH 106 ***or*** above (except MATH 109)	5		
PSYC&	100	General Psychology	5		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**102-107**		

Operating Room Aide One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
SURG	101	Introduction to Surgical Technology	4		
SURG	111	Introduction to Surgical Technology Lab	3		
SURG	102	Perioperative Science	3		
SURG	112	Perioperative Science Lab	2		
SURG	103	Perioperative Patient Care	2		
SURG	113	Perioperative Patient Care	1		
		Subtotal	**15**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
HSCI	147	Medical Terminology	5		
BIOL&	241	Human A&P 1 w/ Lab	5-6		
BIOL&	242	Human A&P 2 w/ Lab	5-6		
BIOL&	260	Microbiology w/ Lab	5-6		
		Subtotal	**20-23**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
MATH	106+	MATH 106 ***or*** above (except MATH 109)	5		
PSYC&	100	General Psychology	5		
Communication Studies (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 Communication	5		
		Subtotal	**18-20**		
		Total Credits Required	**53-58**		

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Acting & Directing (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&			5		
CMST			3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
		Subtotal	**5**		

Humanities*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
Required:					
DRMA&	101	Intro to Theatre ***or***	5		
DRMA	215	Survey of Theatre History	5		
Recommended:					
CMST	246	Oral Interpretation ***or***	5		
ENGL&	220	Intro to Shakespeare	5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Recommended:					
ANTH&	206	Cultural Anthropology	5		
PSYC&	100	General Psychology	5		
SOC&	101	Intro to Sociology	5		
		Subtotal	**15**		

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Recommended:					
BIOL&	100	Survey of Biology w/ Lab	5		
GEOL&	101	Intro to Physical Geology w/ Lab	5		
NUTR&	101	Nutrition	5		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Recommended:					
HE	240	Stress Management	3		
		Subtotal	**3**		

Electives*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Select a minimum of 20 credits from the following:					
DRMA	105-107	Rehearsal and Performance (3 credits required in any combination)	1-3		
DRMA	120	Acting-Beginning	5		
DRMA	121	Acting-Intermediate	3		
DRMA	122	Acting-Advanced	3		
DRMA	126-128	Stagecraft (3 credits required in any combination)	1-3		
DRMA	220-222	Acting Studio (3 credits required in any combination)	1-3		
DRMA	225	Touring Children's Theatre (offered fall only)	1-3		
DRMA	244	Stage Makeup	2		
DRMA	250	Directing for the Stage (offered odd years)	3		
Select 6 credits from the following:					
DRMA	130	Stage Movement	2		
DRMA	216	Acting for the Camera (offered even years)	2		
DRMA	217	Classical Acting	1-3		
DRMA	230	Stage Combat	2		
DRMA	248	Stage Management	2		

Subtotal 26-38

Total Credits Required 92-104

It is understood that a theatre major will acquire more credits than are transferable to complete this degree.
*Course selections must meet the distribution requirements for the AA degree.
NOTE:
- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Degree & Certificate Requirements

Associate in Arts & Sciences with an Emphasis in Technical Theatre & Design (DTA)

TRANSFER DEGREE
Option C
2016-2017 Degree Requirements

Communication*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101	English Composition I	5		
ENGL&			5		
CMST			3		
		Subtotal	**13**		

Quantitative/Symbolic Reasoning*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
		Subtotal	**5**		

Humanities*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
Required:					
DRMA&	101	Intro to Theatre ***or***	5		
DRMA	215	Survey of Theatre History	5		
Recommended:					
ART	116	Art History Ancient World ***&***	5		
ART	117	Art History Medieval-Baroque	5		
10 additional credits selected from other Humanities Electives					
			5		
			5		
		Subtotal	**15**		

Social & Behavioral Sciences*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
			5		
		Subtotal	**15**		

Mathematical & Natural Science*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			5		
			5		
Recommended:					
PHYS&	100	Physics for Non-Science Majors ***&***	4		
PHYS&	101	Physics Lab for Non-Science Majors	1		
		Subtotal	**15**		

Health & Physical Education*

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
			3		
		Subtotal	**3**		

Electives* **(a maximum of 15 credits may be approved professional technology)**

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
DRMA	126-128	Stagecraft	1-3		
DRMA	244	Stage Makeup	2		
DRMA	246	Stage Lighting	3		
DRMA	248	Stage Management	2		
DRMA	245	Sound Design	3		
DRMA	242	Design Essentials	3		
Acting Classes (select 3 credits minimum from the following)					
DRMA	120	Acting-Beginning	3		
DRMA	225	Touring Children's Theatre (offered fall only)	1-3		
Recommended:					
DRMA	243	Stage Costuming	1-3		
ENT	116	Basic Drafting	5		
		Subtotal	**22-36**		
		Total Credits Required	**88-102**		

*Course selections must meet the distribution requirements for the AA degree.

NOTE:

- Required minimum 90 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per course 1.0.
- At least one-third of the college-level, degree applicable credits must be taken at CBC.
- Depending on your major, some course choices may be more appropriate than others. Consult with your counselor or faculty advisor.
- Maximum three credits of PE may be applied.

Traffic Control Short-Term Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CSRE	002	Traffic Control	0		
		Total Credits Required	**0**		

Degree & Certificate Requirements

Associate in Applied Science in Welding Technology

PROFESSIONAL TECHNICAL

2016-2017 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
WT	101	Oxy-Acetylene Process	1		
WT	111	Oxy-Acetylene Process Lab	3		
WT	112*	Introduction to Shield Metal Arc Welding	9-10		
WT	103*	Fund of Major Processes and their Consumables	5		
WT	113*	Advanced Shield Metal Arc Welding	9-10		
WT	141*	Shield Metal Arc Welding Certification ***or***	9-10		
WT	151*	Gas Metal Arc Welding (MIG) Certificate	9-10		
WT	107	Fabrication Principles Review	4		
WT	108	Fabrication Technique I	1		
WT	181	Fabrication Technique I Lab	3		
WT	201*	Weldability of Metals	5		
WT	211*	Introduction to Pipe Welding	9-10		
WT	202*	Welding Inspection	5		
WT	222*	Gas Tungsten Arc Welding (TIG)	9-10		
WT	231*	Pipe Welding Certification	9-10		
WT	208	Fabrication Technique II	1		
WT	281	Fabrication Technique II Lab	3		
		Subtotal	**85-91**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BPR	106	Blueprint Reading I (WT)	3		
BPR	206	Blueprint Reading II (WT)	3		
DRW	106	Mechanical Drawing for Vocational Application	3		
		Subtotal	**9**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH	100	Algebraic Tools for Vocational Application	3		
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		
Communication Studies (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 Communication	5		
		Subtotal	**14-18**		
		Total Credits Required	**108-118**		

*These are variable credit courses. Variable credit courses taken of the same class in the evening must be done within four consecutive quarters.

Degree & Certificate Requirements

Welding Technology One-Year Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
WT	101	Oxy-Acetylene Process	1		
WT	111	Oxy-Acetylene Process Lab	3		
WT	112*	Introduction to Shield Metal Arc Welding	9-10		
WT	103*	Fund of Major Processes and their Consumables	5		
WT	113*	Advanced Shield Metal Arc Welding	9-10		
WT	141*	Shield Metal Arc Welding Certification ***or***	9-10		
WT	151*	Gas Metal Arc Welding (MIG) Certificate	9-10		
WT	108	Fabrication Technique I	1		
WT	181	Fabrication Technique I Lab	3		
		Subtotal	**40-43**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BPR	106	Blueprint Reading I (WT)	3		
DRW	106	Mechanical Drawing for Vocational Application	3		
		Subtotal	**6**		

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
MATH	100	Algebraic Tools for Vocational Application	3		
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		
Communication Studies (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 Communication	5		
		Subtotal	**14-18**		
		Total Credits Required	**60-67**		

*These are variable credit courses. Variable credit courses taken of the same class in the evening must be done within four consecutive quarters.

Welding Technology Certificate

PROFESSIONAL TECHNICAL

2016-2017 Certificate Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
WT	101	Oxy-Acetylene Process	1		
WT	111	Oxy-Acetylene Process Lab	3		
WT	112*	Introduction to Shield Metal Arc Welding	9-10		
WT	103	Fundamentals Major Processes & their Consumables	5		
WT	113*	Advanced Shield Metal Arc Welding	9-10		
WT	108	Fabrication Technique I	1		
WT	181	Fabrication Technique I Lab	3		
		Subtotal	**31-33**		

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
BPR	106	Blueprint Reading I (WT)	3		
DRW	106	Mechanical Drawing for Vocational Application	3		
		Subtotal	**6**		
		Total Credits Required	**37-39**		

*These are variable credit courses. Variable credit courses taken of the same class in the evening must be done within four consecutive quarters.

Courses & Programs

Course descriptions are provided for all classes that may be offered at CBC at various times throughout the year(s). A quarterly class schedule is available in advance of each quarter to help students plan class schedules for that quarter and includes days, times, locations, and instructors for each class being offered that quarter.

Accounting

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 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 knowledge 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 structure including corporation, 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

ACCT& 201 (Formerly BA 251)
Principles of Accounting I • 5 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.

ACCT& 202 (Formerly BA 252)
Principles of Accounting II • 5 Credits

The theory and practice of accounting, including financial statements. Emphasis on partnership and corporate accounting. **Prerequisite: ACCT& 201 or instructor permission.**

ACCT& 203 (Formerly BA 253)
Principles of Accounting III • 5 Credits

A continuation of ACCT& 202. Introduction of manufacturing and cost accounting. Analysis of financial statements, budgeting, and cost volume analysis. **Prerequisite: ACCT& 202.**

Adult Basic Education

columbiabasin.edu/abe

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

ABE 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 within ABE is the GED® test preparation classes. Completion of this program prepares the student for the GED® test. Again, each person is tested and diagnosed for reading, writing, and math levels. Instruction may be individualized or in a classroom. GED® is a registered trademark of the American Council on Education (ACE) and administered exclusively by GED® Testing Service LLC under license. This material [or content] is not endorsed or approved by ACE or GED® Testing Service.

ABE 009
LOC Ed Interviewing • 1 - 3 Credits

The purpose of this course is to improve learner retention, persistence, and performance through research-proven goal setting, problem-solving, and evaluation, intervention, and self-awareness strategies.

ABE 010
ABE Level 1 • 1 - 15 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.

ABE 020
ABE Level 2 • 1 - 15 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.

ABE 030
ABE Level 3 • 1 - 15 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.

ABE 040
ABE Level 4 • 1 - 15 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.

ABE 050
Basic GED® Prep • 1 - 15 Credits

Individualized instruction to prepare students to pass the four official GED® tests with a total score of 600 points or better. The GED® test consists of a battery of four individual tests. The four tests include Language arts-writing, Science, Social Studies, Mathematical Reasoning, and Reasoning Through Language Arts.

ABE 060
Advanced GED® Prep • 1 - 15 Credits

Individual instruction to enable students to successfully complete all four of the GED® tests. Students may already have completed two of the tests and need to pass the two remaining tests. Or the student could have passed all four GED® tests but needs to accumulate more points to reach the necessary total score of 600 points.

ABE 070
GED® Math • 1 - 5 Credits

Individualized instruction to prepare students to pass the official Mathematics Reasoning GED® tests.

ABE 090
I-Best Studies • 1 - 10 Credits

This course integrates Washington Adult Basic Education ABE level 5 and 6 reading, writing, math, and listening standards and indicators with a college-level course. Example: Child Development Associate certificate, Nursing Assistant Certified, or Phlebotomy.

Aerospace Apprenticeship

columbiabasin.edu/apprenticeships

Department Overview: The aerospace industry, with more than 600 first and second tier contractor/supplier companies, is a significant economic driver in Washington state. The Aerospace Apprenticeship program seeks to develop a skilled workforce to continue the health and growth of this industry. Precision machining related to the aerospace industry is the focus of the Aerospace Apprentice program at CBC, including on-the-job training and related instruction on drill presses, lathes, mills, boring mills, welding and cutting, grinding, and CNC programming and operation.

APM 101
Precision Machining 1 • 5 Credits

This course applies fundamental manual machining skills and knowledge required for machining and advanced manufacturing success. Includes advanced manufacturing, standardized manufacturing in aerospace, job plans and drawings, precision tolerances, and application and use of manual tools including saws, drills, lathes, mills, and grinders. This course covers basic materials identification, offload and secondary bench operations, sawing, part finishing, part marking, threading by hand, and hole finishing. **Prerequisite: acceptance into the APM program.**

APM 102
Precision Machining 2 • 5 Credits

An introduction to precision machining in the shop environment with a focus on standard shop vocabulary, basic manual machining techniques, identification and use of cutting tools, and precision measuring tools. Students examine tooling theory and learn to select proper measuring tools. Principles of climb and conventional milling and causes of chatter are explored. There is an emphasis on shop safety, following a job plan, and using measurement tools and various cutters to produce machined metal parts. Students demonstrate proper use of personal protection equipment (PPE) and safety around tools and equipment at all times. **Prerequisite: acceptance into the APM program.**

APM 103
Engineering Drawings • 5 Credits

Students interpret and demonstrate practical application of technical drawings. Students explain linear dimensioning, correct tolerances, lines, symbols and 3rd angle projection. They analyze scales, datums, and orthographic projection, as well as examine parts lists and apply learning to navigate and utilize process specifications. Instruction includes interpreting mechanical/manufacturing blueprints per American Society of Mechanical Engineers Y14 Standards (2009). Emphasis is on practical applications of this standard as applied to reading and interpreting engineering production drawings and updates. **Prerequisite: acceptance into the APM program.**

APM 121
Shop Algebra • 5 Credits

This course covers the application and manipulation of algebraic formulas, simplifying expressions, solving linear equations, adding, subtracting, multiplying, and dividing monomial fractions, ratios, proportions and percentages, as well as working with number lines, absolute and incremental Cartesian coordinates. Students analyze and apply the applications of formulas to common manufacturing and shop problems. **Prerequisite: acceptance into the APM program.**

APM 122
Applied Geometry and Trigonometry • 5 Credits

In this course, students analyze the fundamentals and applications of geometry and geometric figures, including area and volume, trigonometric ratios and function, right angles and non-right angles as they apply to common aerospace and advanced manufacturing problems. Students evaluate basic concepts in geometry, including properties of points, lines, planes, angles, congruent and similar triangles, polygons, and circles. They apply problems of area, perimeter, and volume of common geometric figures, as well as special triangles and the Pythagorean Theorem as they relate to the shop setting. **Prerequisite: acceptance into the APM program.**

APM 123
CNC Operation and Setup • 5 Credits

Students analyze and practice basic G&M programming in this introduction to computer numerical control (CNC) course. Evaluation of CNC equipment theory, functions, and processes, maintenance of the machines, theory and use of a tool presetter, and machine setup is the primary focus of this course. Students demonstrate the basic foundation of setup and operation of CNC lathes and mills. This course, in conjunction with all other 100-level AJAC apprenticeship courses is designed to provide students with the knowledge and skills required for CNC operator certification. **Prerequisite: acceptance into the APM program.**

APM 199
Special Studies • 1 - 10 Credits

A class used to explore new coursework.

APM 201
GD&T and Precision Fits • 5 Credits

Theory and application of the use of standard tolerances and Geometric Dimensioning & Tolerance (GD&T), concentrating on geometric dimensioning and its relation to engineering drawings. This course covers feature control frames and centers on basic dimension, form profile of a line and surface, orientation, location, and total run out. Also covered are Rules1-2 as well as the use of Mylar and Portable Coordinate Measurement (PCM). **Prerequisite: acceptance into the APM program.**

APM 202
CNC Programming Mill • 5 Credits

Students write simple commands and design basic programs for Computer Numerical Control (CNC) mills, including calibration and application of radius cutter commands, cutter compensation, cutter path, part path, roughing cycles, contour cycles, canned cycles, facing, and program verification. Covers mill programming theory, program parts, and tool paths using Computer-aided Manufacturing (CAM) and verification software. **Prerequisite: acceptance into the APM program.**

APM 203
CNC Programming Lathe • 5 Credits

Students write simple commands and design basic programs for Computer Numerical Control (CNC) lathes, including verification of programs and identification of various syntax and logical problems in programming codes. Calibration and application of radius commands, cutter compensation, cutter path, part path, roughing cycles, contour cycles, canned cycles, facing, and program verification. This course also covers lathe programming theory, program parts, and tool paths using Computer-aided Manufacturing (CAM) and verification software. **Prerequisite: acceptance into the APM program.**

APM 221
Materials, Processes, and References • 5 Credits

Students analyze and use the Machinery's Handbook and other industry resources to identify the composition and characteristics of materials, including metals, plastics, ceramics, and other composites. They describe how composition influences each material's behavior, and how to manipulate that behavior through manufacturing processes such as tempering, case hardening, annealing, anodizing, shot-peening, swaging, and casting. **Prerequisite: acceptance into the APM program.**

APM 222
Inspection • 5 Credits

This course covers the science and skill of metrology including measurement systems, units, measurement uncertainty, measurement assurance, traceability, and basic statistics as it relates to aerospace and advanced manufacturing, including the engineering drawings, methods, and instruments used to effectively inspect parts in the shop. Additional topics covered include developing a shop quality management plan, calibration, and the use of advanced inspection equipment to apply concepts. **Prerequisite: acceptance into the APM program.**

APM 223

Advanced Machining Technology • 5 Credits

This course is an introduction to advanced machining technologies, including laser cutting, Electrical Discharge Machining (EDM), and water jet cutting. Identification and characteristics of parts manufactured by advanced machining technologies is covered, as well as reading and evaluating advanced machining manuals and their application to the manufacturing setting. **Prerequisite: acceptance into the APM program.**

Aerospace Machine Maintenance

columbiabasin.edu/aerospace

Department Overview: Aerospace Machine Maintenance is an apprenticeship program.

AMM 100

Maintenance Math and Physics I • 3 Credits

Reviews the practical math and physics needed for careers in aerospace machine maintenance and machining. **Prerequisite: MATH 084 with a grade of 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or test placement, and acceptance into the Aerospace Machine Maintenance program or instructor permission.**

AMM 102

Maintenance Math and Physics II • 3 Credits

A second foundational class reviewing the math and physics applied to aerospace machine maintenance and machining. **Prerequisite: AMM 100 with a 2.0 or better, and acceptance into the Aerospace Machine Maintenance program or instructor permission.**

AMM 105

Trade Safety • 2 Credits

Industry and workplace safety awareness and practices. **Prerequisite: acceptance into the Aerospace Machine Maintenance program or instructor permission.**

AMM 121

Fundamentals of Hydraulics & Pneumatics I • 4 Credits

The first course in the hydraulic/pneumatic series designed to prepare the entry-level maintenance technician with the knowledge and skills necessary to understand elementary hydraulic and pneumatic systems and primary hydraulic and pneumatic schematic symbols. **Prerequisite: acceptance into the Aerospace Machine Maintenance program or instructor permission.**

AMM 125

Applied Mechanics • 4 Credits

Introduces the fundamental mechanical concepts for the installation, operation, and maintenance of industrial machinery. **Prerequisite: acceptance into the Aerospace Machine Maintenance program or instructor permission.**

AMM 131

Fundamentals of Hydraulics and Pneumatics II • 4 Credits

The second course in the hydraulic/pneumatic series designed to prepare the entry-level maintenance technician with the knowledge and skills necessary to understand how to maintain, diagnose, and repair elementary hydraulic and pneumatic systems. **Prerequisite: AMM 121 with a 2.0 or better.**

AMM 133

Rigging • 3 Credits

Covers techniques of assembling, rigging, and installing mechanical equipment. **Prerequisite: acceptance into the Aerospace Machine Maintenance program or instructor permission.**

AMM 135

Bearings and Drives • 5 Credits

Covers mechanical transmission devices, including procedures for installation, removal, and maintenance. **Prerequisite: AMM 125 with a 2.0 or better.**

AMM 147

Computerized Maintenance Management • 2 Credits

Designed to provide an understanding of preventive, predictive, corrective, and reliability-centered maintenance. Students study the development of a comprehensive maintenance program and use a computerized maintenance management system. **Prerequisite: acceptance into the Aerospace Machine Maintenance program or instructor permission.**

Agricultural Food Systems

columbiabasin.edu/afs

Department Overview: Agri-Food Systems give you a broad, interdisciplinary understanding of agriculture systems and allow 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.

AFS 101

Introduction to Agricultural Systems • 5 Credits

Introduction to the disciplines, history, philosophy, theory, 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, global issues, technology innovations, financial management, bioterrorism, crop insurance programs, emerging commodities, biotechnology, and crop innovations.

AFS 199

Special Studies • 1 - 15 Credits

A class used to explore new coursework.

AFS 201

Agricultural & Food Systems w/ Lab • 5 Credits

Introduction to the development of tools and skills in building, evaluating, and applying systems in agricultural production, food manufacturing and distribution, rural society, and society as a whole. Focus is on the types of systems, construction, and analysis including the history, philosophy, and theory of different agricultural systems. **Recommended prerequisite: AFS 101.**

Agriculture

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 Biology, Horticulture, Agricultural Food Systems, and Animal Science for courses required to earn an Associate in Arts and Sciences with an emphasis in Agriculture, an Associate in Arts and Sciences with an emphasis in Crop and Soil Science, and an Associate in Applied Science in Agribusiness.

A Bachelor of Applied Science (BAS) in Applied Management with a concentration in Agriculture is also available. The BAS degree is designed for those who have earned an Associate in Applied Science (AAS) degree but lack the broader business-related education needed to move into leadership positions. Many AAS holders have reached a plateau in their career, unable to advance because they cannot meet the bachelor's degree requirements for many supervisory positions. Recent two-year graduates who wish to continue their education may also find this degree a good alternative. The BAS degree broadens career opportunities and helps graduates climb the career ladder leading to improved chances for promotion to management positions. The Agriculture concentration focuses on management strategies and technologies specific to the agriculture industry.

AG 102
Introduction to Animal Science w/ Lab • 5 Credits
Introductory Animal Science including the history, philosophy, and theory of animal husbandry. Types and breeds of livestock, terminology, methods, management systems, techniques of animal and poultry production, and consumer impact are discussed.

AG 106
Introductory Soils • 0 Credits
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 199
Special Studies • 1 - 20 Credits
A class used to explore new coursework.

AG 201
Soils w/ Lab • 5 Credits
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. **Prerequisite: CHEM& 110 or CHEM& 140 or instructor permission. This course is cross listed with BIOL 201. Students completing AG 201 may not receive graduation credit for BIOL 201.**

AG 210
Applied Agriculture Research • 2 Credits
In the lab, students are directly involved in conducting agricultural research as a member of a research team led by a faculty member. Students 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 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 252
Insects of Economic Importance w/ Lab • 5 Credits
A study designed to introduce students 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. This course is cross listed with BIOL 252. Students completing AG 252 may not receive graduation credit for BIOL 252.

AG 289
Agriculture Business Concepts • 5 Credits
Designed to address issues pertinent to the agricultural community including global competition for markets, water rights and the environment, agricultural co-ops, immigration, foreign trade, fiscal policy, and working with government agencies. It is intended as a capstone course to bring together several concepts related to agriculture business. **Prerequisite: BUS& 101 and AFS 101.**

AG 299
Special Studies • 1 - 20 Credits
A class used to explore new coursework.

AG 310
Ag Operations and Supply Chain Management • 5 Credits
This course is an introduction to agriculture operations and supply chain management. Fundamental topics include supply chain characteristics specific to agriculture, vertical integration, and import and export markets. This course also helps students develop an understanding of the ethical implications of decision-making in business as well as build an appreciation for the value of diverse thinking and perspectives. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AG 340
Ag Information Technology and Applications • 5 Credits
This course encompasses technology innovation and strategy for managers and entrepreneurs including understanding technological change, innovations, and strategies specific to agriculture. Topics include technology evolution, adoption, competitive advantage, costs and benefits, and collaborative strategies such as GIS and GPS, crop modeling, and more. Each student develops and presents a technology plan for a company or business as a final project. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AG 430
Fundamentals of Agriculture Financial Management • 5 Credits
This course covers basic financial tools and principles including short-term and long-term financial and investment decisions. Topics include financial statement analysis, the time value of money, capital budgeting and capital rationing, the cost of capital, dividend policies, analysis of risk and return, business valuation, and working capital management. Students also learn financial management practices specific to agriculture including enterprise budgeting, depreciation schedules for farm operations, and production efficiency indicators. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval, and AMGT 400.**

AG 470
Agriculture Management Internship • 1-10 Credits
This course is designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. This course is cross listed with AGMT 470. Students completing AG 470 may not receive graduation credit for AGMT 470. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval, and AMGT 400.**

AG 480
Agriculture Management Capstone • 5 Credits
This course provides the opportunity for students to demonstrate that they have learned the material and concepts from the program and can apply it in the real world. Students complete a comprehensive analysis of an on-going business that is part of the agriculture sector of the economy. Students also develop a long range, strategic plan including implementation and recommendations for change. This course is cross listed with AGMT 480. Students completing AG 480 may not receive graduation credit for AGMT 480. **Prerequisite: completion of all BAS core courses or instructor approval.**

Anthropology

columbiabasin.edu/anthropology

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.

ANTH 197 (Formerly ANTH 1972)
Field Experience • 1 - 3 Credits
A lab class which incorporates methods and techniques used in excavating archaeological and paleontological sites. Students are able to participate on an excavation site dealing with the Ice Age Floods and a mammoth.

ANTH 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

ANTH 214
Biological Anthropology Lab [M/S] • 1 Credit

Biological Anthropology focuses on the use of empirical evidence to place humans in perspective within our historical and biological world. The Biological Anthropology laboratory is designed to allow students, through examples and hands-on exercises, to understand the evolutionary processes that have produced modern humans. This course is designed to complement the Biological Anthropology course (ANTH& 205). **Prerequisite: have taken or concurrently taking ANTH& 205.**

ANTH 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

ANTH&100 (Formerly ANT 101)
Survey of Anthropology [S/B] • 5 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, students 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?

ANTH&204 (Formerly ANT 130)
Archaeology [S/B] • 5 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, students examine the major concepts, theories, and methods of anthropological archaeology that contribute to an understanding of the human past. This course also includes surveys of past cultures from the Americas, Africa, Asia, and Europe.

ANTH&205 (Formerly ANT 111)
Biological Anthropology [M/S] • 5 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, students 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.

ANTH&206 (Formerly ANT 120)
Cultural Anthropology [S/B] • 5 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.

ANTH&234 (Formerly ANT 128)
Religion & Culture [S/B] • 5 Credits

The cross-cultural study of the relationship between humans and the supernatural world. Unlike other religious studies scholars, 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. This course explores and analyzes 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.

Applied Management

columbiabasin.edu/bas

Department Overview: Columbia Basin College offers a Bachelor of Applied Science (BAS) in Applied Management. This degree is designed for those who have earned an Associate in Applied Science (AAS) degree, but lack the broader business-related education needed to move into leadership positions. Many AAS holders have reached a plateau in their career, unable to advance because they cannot meet the bachelor's degree requirements for many supervisory positions. Recent two-year graduates who wish to continue their education may also find this degree a good alternative. The BAS degree will broaden career opportunities and help graduates climb the career ladder leading to improved chances for promotion to management positions.

The Applied Management program also offers a Healthcare Administration concentration (please see the HCAD section for more information) and an Agriculture concentration (please see the AG section for more information).

AMGT 300
Management & Organization Theory • 5 Credits

This is a survey course in the fundamental principles of management and organization. The course covers the various roles of the manager and the basic managerial functions. It also looks at the fundamentals of organizations from a "macro" (overall) perspective. The final project is a comprehensive analysis of a real organization (profit or non-profit). **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 310
Operations Management • 5 Credits

This course helps students understand the role of operations management in an organization. Students will understand how the operations function transforms inputs to outputs in an efficient manner. The course covers the role of the operations manager in the design, implementation, and control of the organization's transformation processes, as well as the key role that issues of quality play in those processes. As a final project, each student applies techniques of operations management to a real business problem. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 317
BAS Special Topics • 1 - 5 Credits

An opportunity to participate in a class dealing with special topics related to applied management that are not covered in depth in the existing curriculum. Topics chosen relate to emerging issues in management/business or topics of regional interest within the management/business arena. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 320
Leadership & Organization Behavior • 5 Credits

This course examines the theory and practice of leadership and organization behavior as it relates to all types of organizations. The course looks at the organization from the "micro" perspective of groups and teams. The final project requires each student to conduct a complete analysis of their own leadership style and philosophy, and how their leadership style could impact their organization and its members. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 330
Legal Issues for Business & Managers • 5 Credits

This course explores the state and federal laws that affect management behavior and organizational practices including contracts, business organizations, employment law, products liability, safety issues, and environmental regulation. This course pays special attention to issues surrounding business start-up and intellectual property. Each student develops a portfolio/notebook of topics related to their career choice. **Prerequisite: meets the criteria for acceptance into a BAS/BSN progarm, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 340
Information Technology and Applications • 5 Credits
This course encompasses technology innovation and strategy for managers and entrepreneurs including understanding technological change, innovations, and strategy. Topics include: technology evolution, adoption, competitive advantage, costs and benefits, and collaborative strategies including Web 2.0. Each student develops and presents a technology plan, using software, for a company or business as a final project. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 350
Marketing for Managers • 5 Credits
This course helps develop the marketing knowledge and skills necessary for the successful manager of a profit or not-for-profit organization, including business start-ups. Topics include understanding marketing concepts, including the development of and the execution of a marketing strategy. The course focuses on niche, business-to-business and business-to-government marketing as well as the marketing of services. The final project is to develop a marketing plan. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 360
Business Planning and Strategy • 5 Credits
This course provides the fundamentals of strategic planning and business strategy for practicing managers. Topics include the nature and importance of formal planning, strategy formulation and implementation. The final project is completion of a strategic plan for a real organization/business. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 389
BAS Independent Study • 1 - 10 Credits
A class designed to explore a specific topic of special interest. Students are required to work 55 hours to earn one credit hour. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 400
Financial and Managerial Accounting • 5 Credits
This course covers accounting theory, application, and language, with an emphasis from a manager's perspective. Topics include: balance sheets, income statements, and statements of cash flows, financial statement analysis, cost behavior, and capital budgeting. Each student completes an accounting project designed to integrate course topics into a business project. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 410
Project Management • 5 Credits
This course provides students with an understanding of the concepts of project management and its management application using Project Management software tools. Students receive experience in developing and working in a virtual team and also develop a project management assignment for a business/company project. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 417
BAS Special Topics • 1 - 5 Credits
An opportunity to participate in a class dealing with special topics related to applied management that are not covered in depth in the existing curriculum. Topics chosen relate to emerging issues in management/business or topics of regional interest within the management/business arena. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 420
Human Resource Management • 5 Credits
This course examines the major trends in human resources management, including problems and issues faced by organizations and individuals in times of change. Students learn the responsibilities of the human resources department and the roles that that every manager plays, both as a supervisor and as a client of the human resources department. Each student selects a class topic and plans how to apply that to a business/company project. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 430
Fundamentals of Financial Management • 5 Credits
This course covers basic financial tools and principles including short-term and long-term financial and investment decisions. Topics include: financial statement analysis, the time value of money, capital budgeting, the cost of capital, dividend policies, and working capital. A final project is to apply course concepts to a business related to their career choice. **Prerequisite: AMGT 400 or ACTT& 203 and meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 470
BAS Internship • 1 - 10 Credits
This course is designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 480
Business Strategy Capstone • 5 Credits
This course provides the opportunity for students to demonstrate that they have learned the material and concepts from the program and can apply it in the real world. It provides students the opportunity to do a comprehensive analysis of an on-going business and develop a long range, strategic plan including implementation and recommendations for change. **Prerequisite: completion of all BAS-AM core courses.**

AMGT 489
BAS Independent Study • 1 - 10 Credits
A class designed to explore a specific topic of special interest. Students are required to work 55 hours to earn one credit hour. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 490
Small Business Start-up Capstone • 5 Credits
This course is designed to examine strategies for effectively embarking on new business ventures and focuses on the many phases of entrepreneurship. Students begin thinking about and planning a new business start-up from the first day of class. Included is business plan writing using software such as BizBuilder. Students have access to worksheets, templates, and example plans to assist in their planning. The final project is an individually prepared, professionally written business plan. **Prerequisite: completion of all BAS-AM core courses.**

Apprenticeships

columbiabasin.edu/apprenticeships

Department Overview: Apprenticeship is one of the best ways for a worker to acquire the experience and training needed to get established in a career. CBC, in conjunction with labor unions, offers nine registered apprenticeship programs. Upon completion of a prescribed program of technical classes and on-the-job training, the worker receives a completion certificate and is recognized as a journeyman nationwide. Apprentices pay substantially reduced tuition to the College.

Arabic

columbiabasin.edu/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.

ARAB 121
Arabic I [H] • 5 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. **Recommended prerequisite: successful completion of at least ENGL 099.**

ARAB 122
Arabic II [H] • 5 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. **Prerequisite: ARAB 121 or instructor permission.**

ARAB 123
Arabic III [H] • 5 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. **Prerequisite: ARAB 122 or instructor permission.**

Art, Visual

columbiabasin.edu/art

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 artists, arts educators, and non-art majors with a foundation of skills for further growth in the field of art. We also provide educational opportunities for local artists to work with MFA and BFA art instructors for further development of their own work by experiencing new approaches to art making.

The level I and level II studio art courses place emphasis on the development of skills in material usage, design concepts, and the formal and thematic aspects of art. The art appreciation and the survey art history courses provide understanding of the various themes in art, historical perspectives, art language, and terminology. Students will experience the formal and conceptual analysis of works of art through written and verbal communication.

For art majors, the CBC art curriculum affords an opportunity to build a significant portfolio of work in a variety of media and disciplines. It is recommended for students preparing for transfer into programs in the fine arts, art education, art history, digital art/graphic design, architecture, illustration or other commercial art areas, museum studies, or arts management.

ART 111
Design I • 5 Credits

Introduction to the formal elements and principles of design common to all two-dimensional media. Students examine 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 112 (Formerly ART 1121)
3D Design II • 5 Credits

This course of study is an introduction to the visual and tactile elements and principles that relate to three-dimensional forms in space. Students have the opportunity to work with various materials to create three-dimensional forms in space. Students execute various aesthetic design problems that focus on arriving at a better understanding of a three-dimensional dialogue, applicable to sculpture, architecture, and ceramics, and provides a better understanding of three-dimensionality related to digital art and design. **Recommended prerequisite: ART 111.**

ART 113 (Formerly ART 1131)
Drawing I • 3 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 114 (Formerly ART 1141)
Drawing II • 3 Credits

A continuation of ART 113 with emphasis on individual direction, composition, color, expanded technique, and media experiences. **Prerequisite: ART 113 or instructor permission.**

ART 115 (Formerly ART 1151)
Life Drawing • 3 Credits

A continuation of ART 114 with emphasis on human figures and the rendering of the human face; includes structural anatomy, proportion, composition, and abstraction of these subjects for purposes of individual expression. **Recommended prerequisite: ART 113 or instructor permission.**

ART 116
Art History Ancient World [H] • 5 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 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 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 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 [H] • 5 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 198 (Formerly ART 1991)
Special Studies • 1 - 15 Credits
An experimental class to be used to explore new approaches and applications to studio art.

ART 199
Special Studies • 1 - 15 Credits
An experimental class to be used to explore new approaches and applications to art theory.

ART 201 (Formerly ART 2011)
Photography I • 1 - 3 Credits
This course introduces students to the foundations of photography/digital photography and photographic composition through various assignments, case studies, and a final project. Students are introduced to fundamental camera controls and tools used to manipulate or enhance photographic images from image-capture to print. Emphasis is placed on how photography functions as an interpretive medium. Student supplies digital camera and materials. **Recommended prerequisite: ART 111.**

ART 202 (Formerly ART 2021)
Photography II • 1 - 3 Credits
This course further develops the advanced student's technical and interpretive understanding of digital photography. Students choose a photographic topic early in the quarter to investigate and build upon for the remainder of the course. Emphasis is placed on research of historic and contemporary trends, discussion of personal direction, and constructing a photographic portfolio. Student supplies digital camera and materials. **Recommended prerequisite: ART 111 and 201.**

ART 209
Digital Art and Design • 3 Credits
An introduction to the use of digital media in art. This course acquaints students 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 prerequisite: ART 111.**

ART 211
Graphic Design I • 5 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 is extensively used by the students. **Recommended: ART 111, 113, and 209.**

ART 212
Graphic Design II • 5 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 is extensively used by the students. Further use of page layout software is explored. **Prerequisite: ART 211.**

ART 213 (Formerly ART 2131)
Printmaking I • 1 - 3 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 214 (Formerly ART 2141)
Printmaking II • 1 - 3 Credits
A continuation of ART 213 with special emphasis on one of the following: Intaglio, the collagraph screen printing, or lithography. **Prerequisite: ART 213.**

ART 215 (Formerly ART 2151)
Painting I • 1 - 3 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 216 (Formerly ART 2161)
Painting II • 1 - 3 Credits
Continuation of ART 215 with greater emphasis on individual development of subject matter, technique, and personal expression. Oil, acrylic, or mixed media. **Prerequisite: ART 215.**

ART 217 (Formerly ART 2171)
Watercolor I • 1 - 3 Credits
An introduction to traditional watercolor painting with media explorations of transparent and opaque media. Recommended for fine arts, illustration, and graphic art majors.

ART 218 (Formerly ART 2181)
Watercolor II • 1 - 3 Credits
A continuation of ART 217 with emphasis on contemporary composition and illustrative techniques. Recommended for fine arts, illustration, and graphic art majors. **Prerequisite: ART 217.**

ART 220 (Formerly ART 2201)
Sculpture I • 1 - 3 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 prerequisite: ART 111 and 112.**

ART 221 (Formerly ART 2211)
Sculpture II • 1 - 3 Credits
A continuation of ART 220 with emphasis on the techniques of casting, construction, and carving. **Prerequisite: ART 220.**

ART 222 (Formerly ART 2221)
Pottery I • 1 - 3 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 223 (Formerly ART 2231)
Pottery II • 1 - 3 Credits
A continuation of ART 222 with special emphasis on wheel technique, glaze formulation, and design of clay forms. **Prerequisite: ART 222.**

ART 224 (Formerly ART 2241)
Ceramic Sculpture • 1 - 3 Credits
A studio course designed to focus on using clay as a sculptural medium. Students 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 are introduced. Students also apply various glazing techniques and firing processes that are appropriate to their sculptural work.

ART 225 (Formerly ART 2251)
Jewelry I • 1 - 3 Credits
The design and construction of jewelry using a variety of media and traditional fabrication techniques of metal working. **Recommended prerequisite: ART 111.**

ART 226 (Formerly ART 2261)
Jewelry II • 1 - 3 Credits
A continuation of ART 225 with emphasis on advanced fabrication techniques and contemporary jewelry design. **Prerequisite: ART 225.**

ART 230
Professional Practices • 1 - 2 Credits
This course focuses 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 241 (Formerly ART 2411)
Illustration I • 1 - 3 Credits
A studio course that applies the elements of design and drawing to a variety of illustration formats. Focus is on technical skills, application of a wide range of media, and illustrative concepts. **Recommended prerequisite: ART 111 and 113.**

ART 242 (Formerly ART 2421)
Illustration II • 1 - 3 Credits
A continuation of Illustration I with emphasis on individual development of subject, technique, and concept. A variety of illustration styles and applications are explored further. **Prerequisite: ART 241.**

ART 243 (Formerly ART 2431)
Illustration III • 1 - 3 Credits
A continuation of ART 242 with emphasis on the use of mixed media, color, and graphic techniques applied to illustration. **Prerequisite: ART 241 and 242.**

ART 250 (Formerly ART 2501)
Studio Problems • 1 - 3 Credits
Individual, contracted, advanced study in visual arts theory and practice. **Prerequisite: completion of all available studio art within desired area of study and instructor permission.**

ART 251 (Formerly ART 2511)
Studio Problems - Design • 1 - 3 Credits
Individual, contracted, advanced study in design. Studio and seminar.

ART 252 (Formerly ART 2521)
Studio Problems - Graphic • 1 - 3 Credits
Individual, contracted, advanced study in computer graphics. Studio and seminar.

ART 253 (Formerly ART 2531)
Studio Problems - Drawing • 1 - 3 Credits
Individual, contracted, advanced study in drawing. Studio and seminar.

ART 254 (Formerly ART 2541)
Studio Problems - Painting • 1 - 3 Credits
Individual, contracted, advanced study in painting. Studio and seminar.

ART 255 (Formerly ART 2551)
Studio Problems - Sculpture • 1 - 3 Credits
Individual, contracted, advanced study in sculpture. Studio and seminar.

ART 256 (Formerly ART 2561)
Studio Problems - Jewelry • 1 - 3 Credits
Individual, contracted, advanced study in jewelry. Studio and seminar.

ART 257 (Formerly ART 2571)
Studio Problems - Pottery • 1 - 3 Credits
Individual, contracted, advanced study in pottery. Studio and seminar.

ART 258 (Formerly ART 2581)
Studio Problems - Watercolor • 1 - 3 Credits
Individual contracted advanced study in water color. Studio and seminar.

ART 259 (Formerly ART 2591)
Studio Problems - Photography • 1 - 3 Credits
Individual, contracted, advanced study in photography, studio and seminar.

ART 298 (Formerly ART 2991)
Special Studies Lab • 1 - 15 Credits
An advanced experimental class to be used to explore new approaches and applications to studio art.

ART 299
Special Studies • 1 - 15 Credits
An advanced experimental class to be used to explore new approaches and applications to art theory.

ART& 100 (Formerly ART 110)
Art Appreciation [H] • 5 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, themes in art, and the history of art.

Astronomy

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.

ASTR 102
Intro to Astronomy - Part II w/ Lab [M/S] • 5 Credits
The second course of an introductory survey of astronomy including star formation, planetary systems formation, star birth and death, Einstein's special relativity model of the universe, galaxies and their evolution, cosmology and current topics. Several night observation sessions are held at the on-campus Moore Observatory. **Prerequisite: MATH 096 or instructor permission. ASTR& 101 recommended.**

ASTR 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

ASTR 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

ASTR&101 (Formerly AST 101)
Intro to Astronomy w/ Lab [M/S] • 5 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 096 or better or appropriate placement.**

Automotive Technology

columbiabasin.edu/automotive

Department Overview: The Automotive Technology program is a comprehensive two-year course 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 in 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.

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

- Troubleshoot and repair front and rear wheel drive manual and automatic transmissions, transaxles, and differentials
- Diagnose and repair electrical and electronic automotive circuits
- Troubleshoot and repair engine mechanical, cooling, and lubrication systems
- Diagnose and repair brake and electronic braking systems
- Troubleshoot and repair steering and suspension systems
- Diagnose and repair heating, ventilation, and air conditioning systems
- Troubleshoot and repair engine performance related issues and drivability concerns
- Review, interpret, and convey written, verbal, and graphic information to communicate effectively with co-workers, management, and customers
- Act responsibly and ethically as an employee by being punctual, following industry accepted practices, adhering to company policies, and interacting positively and appropriately with co-workers, supervisors, and customers

AMT 100

Basic Automotive Maintenance • 2 Credits

An introduction to general automotive systems and service procedures. This course is designed to familiarize students 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 consists of students applying concepts learned with hands-on experience while working on student owned vehicles and school mockups.

AMT 105 (Formerly AMT 1001)

Basic Automotive Maintenance Lab • 1 - 3 Credits

Lab to be taken concurrently with AMT 100.

AMT 110

Introduction to Automotive Technology & Lab • 15 Credits

This combination class/lab is designed to give students 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: high school diploma or equivalent, valid driver's license, reliable transportation, social security card, and appropriate placement at MATH 096 or better, ENGL& 101 or better, and college-level reading.**

AMT 112

Electrical Systems • 2 Credits

A class covering electrical basics, electronics, test equipment, wiring circuitry, and basic diagnosis of starting and charging systems. Students in the lab diagnose and repair light circuits, wiring systems, and basic starting and charging systems. This course is designed for automotive students.

AMT 120

Basic Electrical & Electronics & Lab • 7 Credits

This combination class/lab is designed to give students 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. **Prerequisite: AMT 130, valid driver's license, reliable transportation, and social security card.**

AMT 121

Suspension, Steering Systems, & Lab • 7 Credits

This combination class/lab is designed to give students a basic understanding of the theory, diagnosis, and service of automotive steering and suspension systems. The emphasis is on the mechanical portion of those systems. Students work in a manner which exhibits pride, cleanliness, work ethic, and professionalism. Minimum grade of 2.0 is required to advance in program. **Prerequisite: AMT 123, valid driver's license, reliable transportation, and social security card.**

AMT 123

Brake Systems I & Lab • 7 Credits

This combination class/lab is designed to give students a basic understanding of the theory, diagnosis, and service of automotive brake, steering, and suspension systems. The emphasis is on the mechanical portion of those systems. **Prerequisite: AMT 120, valid driver's license, reliable transportation, and social security card.**

AMT 130

Engine Service & Lab • 7 Credits

This combination class/lab is designed to give students a basic understanding of the theory, diagnosis, and service of automotive engine performance systems. Emphasis is on basic engine performance related to engine diagnosis, ignition systems, fuel delivery, emission systems, and routine maintenance. **Prerequisite: AMT 133, valid driver's license, reliable transportation, and social security card.**

AMT 133

Engine Repair & Rebuild & Lab • 7 Credits

This combination class/lab is designed to give students a basic understanding of the theory, diagnosis, and service of internal engines. Students study the operation of an internal combustion engine with an emphasis on failure analysis and proper parts replacement. Students work in a manner which exhibits pride, cleanliness, work ethic, and professionalism. Minimum grade of 2.0 is required to advance in program. **Prerequisite: AMT 110 or five years experience in the automotive repair industry; the department will oversee all requests to determine the validity of experience. Plus valid driver's license, reliable transportation, social security card, and appropriate placement at MATH 096 or better, ENGL& 101 or better, and college-level reading.**

AMT 135

Vehicle Maintenance & Lab • 7 Credits

This combination class/lab is designed to give students basic knowledge and understanding of common automotive maintenance procedures, minor parts replacement, the importance of maintenance, and to work in a manner which exhibits pride, cleanliness, work ethic, and professionalism. Minimum grade of 2.0 is required to advance in program. **Prerequisite: AMT 121, valid driver's license, reliable transportation, and social security card.**

AMT 140

Automotive Internship • 7 Credits

This summer internship program is designed to prepare students for actual shop employment. Students spend a minimum of eight weeks working in an automotive repair facility gaining experience with genuine automotive shop working conditions. This "hands-on" practice enables students to be more prepared for their second year advanced studies and allows them to have verifiable "employed" experience when searching for employment at completion of year two. The internship work site must be instructor approved. The instructor performs on-site visits after students are employed to gather data on the performance of the students. Students work in a manner which exhibits pride, cleanliness, work ethic, and professionalism. Minimum grade of 2.0 is required to advance in program. **Prerequisite: AMT 135, valid driver's license, reliable transportation, and social security card.**

AMT 193
Independent Study • 1 - 15 Credits
A class used to explore new coursework or for a specific topic of special interest.

AMT 199
Special Studies • 1 - 10 Credits
A class used to explore new coursework.

AMT 220
Advanced Electrical & Electronics & Lab • 7 Credits
This combination class/lab is designed to give students a highly developed understanding of the theory, diagnosis, and service of the advanced automotive electrical and electronic operating systems. Students work in a manner which exhibits pride, cleanliness, work ethic, and professionalism. Minimum grade of 2.0 is required to advance in program. **Prerequisite: AMT 140, valid driver's license, reliable transportation, and social security card.**

AMT 223
Brakes Systems II & Lab • 7 Credits
This combination class/lab is designed to give students a highly developed understanding of the theory, diagnosis, and service of the advanced brake systems with a heavy emphasis on the electronic side of those systems. Students work in a manner which exhibits pride, cleanliness, work ethic, and professionalism. Minimum grade of 2.0 is required to advance in program. **Prerequisite: AMT 220, valid driver's license, reliable transportation, and social security card.**

AMT 230
Automatic Transmissions & Lab • 7 Credits
This combination class/lab is designed to give students 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. Students work in a manner which exhibits pride, cleanliness, work ethic, and professionalism. Minimum grade of 2.0 is required to advance in program. **Prerequisite: AMT 223, valid driver's license, reliable transportation, and social security card.**

AMT 233
Manual Transmissions & Lab • 7 Credits
This combination class/lab is designed to give students a basic understanding of the theory, diagnosis, and service of automotive manual transmissions. Students work with a manual transmission and gain knowledge of internal gear transfer paths. In addition, study of clutches, drive axles, and differentials round out this course of study. Students work in a manner which exhibits pride, cleanliness, work ethic, and professionalism. Minimum grade of 2.0 is required to advance in program. **Prerequisite: AMT 230, valid driver's license, reliable transportation, and social security card.**

AMT 240
Drivability Diagnostics & Lab • 7 Credits
This combination class/lab is designed to give students a highly developed understanding of the theory, diagnosis, and service of the drivability automotive systems. Emphasis is on power train computer systems, sensors and outputs, and the proper diagnostic strategies to locate potential problems in these systems. Minimum grade of 2.0 is required to advance in program. **Prerequisite: AMT 233, valid driver's license, reliable transportation, and social security card.**

AMT 243
Heating, Ventilation & Air Conditioning Systems • 7 Credits
This combination class/lab is designed to give students a basic understanding of the theory, diagnosis, and service of automotive heating, ventilation, and air conditioning (HVAC) systems. Emphasis is on proper air conditioning recharging techniques and the electrical portion of the HVAC systems. Minimum grade of 2.0 is required to advance in program. **Prerequisite: AMT 240, valid driver's license, reliable transportation, and social security card.**

Biology

columbiabasin.edu/biology

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

- Prepare students for BIOL& 211 and/or fulfill graduation requirements for the non-science major to obtain an Associate in Arts and Sciences degree or Certificate of General Study (BIOL& 100, BIOL& 160, BIOL& 175, ENVS& 101, BIOL 140)
- Meet the entrance or support course requirements for the Health Sciences (Nursing, Dental Hygiene, Physical & Occupational Therapy, Paramedic/EMT, etc.) programs (BIOL& 160, BIOL& 211, BIOL& 241, BIOL& 242, BIOL& 260)
- 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& 212, BIOL& 213)
- Meet the need for elective and/or general interest to the community (BIOL 140, BIOL 201, BIOL 252, BIOL 253)

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

BIOL 140 (Formerly BIO 140)
Fundamentals of Botany w/ Lab [M/S] • 5 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.

BIOL 148 (Formerly BIO 148)
Plant Identification w/ Lab [M/S] • 5 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.

BIOL 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

BIOL 201 (Formerly BIO 201)
Soils w/ Lab [M/S] • 5 Credits
A course offering students 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. **Prerequisite: CHEM& 110 or CHEM& 140 or instructor permission. This course is cross listed with AG 201. Students completing BIOL 201 may not receive graduation credit for AG 201.**

BIOL 252 (Formerly BIO 252)
Insects of Economic Importance w/ Lab [M/S] • 5 Credits
A study designed to introduce students 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. This course is cross listed with AG 252. Students completing BIOL 252 may not receive graduation credit for AG 252.

BIOL 253 (Formerly BIO 253)
Plant Pathology w/ Lab [M/S] • 5 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 is placed on diseases encountered in the Pacific Northwest. This course is cross linked to AG 253. Students completing BIOL 253 may not receive graduation credit for AG 253.

BIOL 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

BIOL& 100 (Formerly BIO 100)
Survey of Biology w/ Lab [M/S] • 5 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.

BIOL& 160 (Formerly BIO 105)
General Biology w/ Lab [M/S] • 5 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. **Strongly recommended: high school chemistry, or CHEM& 121 or higher, or concurrent enrollment. This course does not satisfy the prerequisite for BIOL& 212 or 213.**

BIOL& 175 (Formerly BIO 110)
Human Biology w/ Lab [M/S] • 5 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 students with sufficient background to make informed decisions relating to the biological aspects of the human species. Primarily for non-science majors.

BIOL& 211 (Formerly BIO 111)
Majors Cellular w/ Lab [M/S] • 5 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. **Prerequisite: a grade of 2.0 or better in CHEM& 121 or higher.**

BIOL& 212 (Formerly BIO 112)
Majors Plant w/ Lab [M/S] • 5 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. **Prerequisite: a grade of 2.0 or better in BIOL& 211 and CHEM& 140 or higher.**

BIOL& 213 (Formerly BIO 113)
Majors Animal w/ Lab [M/S] • 5 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& 241 (Formerly BIO 221)
Human A&P 1 w/ Lab [M/S] • 6 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 or 211. Recommended: CHEM& 121.**

BIOL& 242 (Formerly BIO 222)
Human A&P 2 w/ Lab [M/S] • 6 Credits

Continuation of BIOL& 241: endocrine, digestive, respiratory, circulatory, lymphatic, urinary, and reproductive systems. **Prerequisite: a grade of 2.0 or better in BIOL& 241.**

BIOL& 260 (Formerly BIO 260)
Microbiology w/ Lab [M/S] • 6 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 or BIOL& 211. Strongly recommended: CHEM& 121, BIOL& 241 and BIOL& 242 (for nursing majors) or BIOL& 212 and BIOL& 213 (for biology majors).**

Blueprint Reading

columbiabasin.edu/blueprint

Department Overview: Columbia Basin College offers four Blueprint reading courses. They are tailored specifically for the following programs:

Machine Technology

BPR 204

This course is designed to lead Machine Technology students into reading Machine Shop blueprints. Students are also introduced to Computer Aided Drafting (CAD) software and create blueprints of machining projects using the software.

Welding Technology

BPR 106 and BPR 206

These courses 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.

BPR 106
Blueprint Reading I (WT) • 3 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 students 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 Credits

This course is designed to give students 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 Credits

The second course in the series with the emphasis on pipe isometrics. The course is designed to provide students 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 pipefitters or entry level. **Prerequisite: BPR 106.**

Business

columbiabasin.edu/business

Department Overview: The variety of business courses offered are designed to meet many different needs. Students can complete the AA in Business, can 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.

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

BUS 103 (Formerly BA 103)
Salesmanship • 5 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.

BUS 105 (Formerly BA 105)
Business & Payroll Tax Accounting • 5 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 practice completion of various tax reports and maintenance of accurate tax-related records. Offered spring quarter only. **Prerequisite: ACCT&201 or instructor permission.**

BUS 107 (Formerly BA 107)
Federal Income Taxes • 5 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.**

BUS 111 (Formerly BA 111)
Computerized Accounting • 5 Credits

This course requires 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. **Prerequisite: ACCT& 201 and ACCT& 202 or concurrent enrollment in ACCT& 202.**

BUS 120 (Formerly BA 120)
Personal Finance • 5 Credits

In this introductory course students learn a basic foundation of personal finance knowledge and how to apply it to their life. Students learn the fundamentals of planning, analyzing, managing, and investing personal financial resources. This includes practical knowledge and strategies for many real-life scenarios such as purchasing a home, deciding on a credit card, and buying a car. Other important topics include understanding how credit scores work, budgeting, and insurance, as well as a basic overview of investment tools and strategies. Additionally, students learn how to create a budget and a balance sheet and calculate their net worth. Students are challenged to apply this information to their own life situations by developing a personal financial plan.

BUS 134 (Formerly BA 134)
Public Relations • 5 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.

BUS 150 (Formerly BA 150)
Advertising Principles • 5 Credits

Study of when and how to use the major advertising mediums, with emphasis on local advertising. The course includes media buying, copywriting, layouts, production, market research, and sales promotion.

BUS 165 (Formerly BA 165)
Investments • 5 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 examines investment decision-making within the framework of investment goals including safety, risk, growth, and income. The mechanics of various financial markets are also discussed.

BUS 170
Introduction to Event Planning • 5 Credits

Introduction to event planning including learning about the types of meetings and events, awareness of site location and suitability, logistics of the planning process, importance of market and sales research, and careers options in the event planning industry.

BUS 171
Event Planning Internship • 1 - 6 Credits

To obtain experience in event planning by assisting or being the lead in the completion of an event planning project(s).

BUS 195 (formerly BUS 1952)
Supervised Employment • 1 - 15 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. **Prerequisite: instructor permission.**

BUS 196
Employment Seminar • 1 - 5 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. May be repeated to a maximum of six credits. **Prerequisite: concurrent enrollment in BUS 195.**

BUS 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

BUS 210
Managing Personal Finance • 5 Credits

This course explores how and why individuals make the financial choices and decisions they do. Individual attributes and relationships from a financial perspective are explored. Emergency funds, goals, and financial statements are covered, as well as basic retirement information. Money problems and solutions illustrate real life problems. Careers, mindfulness, and life balance topics round out a holistic approach to finances. A term paper is required to reflect upon individual learning in managing personal finances.

BUS 220 (Formerly BA 220)
Personal Finance • 5 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 permission.**

BUS 250 (Formerly BA 250)
Management Information Systems • 5 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. This course focuses 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 PowerPoint presentation and a Word document from the student's fictional or real business, followed by an Excel spreadsheet and Web 2.0 Google Docs. As a result of taking this course, students will obtain valuable information technology knowledge and skills required for success in business.

BUS 255 (Formerly BA 255, POLS& 200)
Legal Institutions & Processes in Am. Business • 5 Credits

An examination of U.S. governmental roles and processes that affect business and our socio-economic systems. Provides an in-depth look at the U.S. legal structure and legal reasoning of substantive law and procedural and regulatory processes, focusing on legal analysis in facilitating conflict resolution.

BUS 257 (Formerly BA 257)
Governmental Accounting • 5 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.**

BUS 261 (Formerly BA 261)
Human Resources Management • 1 - 5 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.

BUS 262 (Formerly BA 262)
Management Principles • 5 Credits

A study of the essentials of management in merchandising, manufacturing, agriculture, agrichemical business, and service businesses.

BUS 263 (Formerly BA 263)
Principles of Finance • 5 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.

BUS 264 (Formerly BA 264)
Fraud & Accounting Information Systems • 5 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.**

BUS 265 (Formerly BA 265)
Marketing Principles • 5 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.

BUS 267 (Formerly BA 267)
Marketing Special Projects • 1 - 15 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 communication skills as they relate to a final project. **Prerequisite: instructor permission.**

BUS 268 (Formerly BA 268)
Marketing Special Projects II • 1 - 15 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 students 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 are assigned and above skills are expanded. **Prerequisite: instructor permission.**

BUS 269 (Formerly BA 269)
Marketing Special Projects III • 1 - 15 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 students use marketing skills related to effective business promotion and/or product development. Selling skills, creative planning, and implementation training will be utilized for the client's benefit. As in course BUS 268, more technical and advanced projects and research are assigned and the above skills are expanded to client specifications. **Prerequisite: instructor permission.**

BUS 271 (Formerly BA 271)
Human Relations Business • 5 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.

BUS 272 (Formerly BA 272)
Organization Development • 3 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.

BUS 280
Innovation & Design Thinking 1 • 5 Credits

This course combines theory and individual and group assignments to introduce students to the main concepts of innovation creativity and design thinking. Students learn various tools to promote creativity within themselves and others, processes to increase innovation, how to contribute to a creative team, how to manage creativity, and how to establish a culture of creativity within an organization. Students will develop an understanding of and appreciation for the creative/innovative processes and will be prepared to contribute in a unique and productive way to today's entrepreneurial and organizational demands.

BUS 281
Innovation & Design Thinking 2 • 5 Credits

Students complete a comprehensive project including the concept, design, formal proposal, implementation, presentation, and report phases. Students participate in design teams to solve a design challenge based on the IDEO "deep dive" concept. The emphasis in Innovations 2 is on brainstorming, project evaluation, team formation, careers, business, intellectual property, professional organizations, and professional ethics, detailed design and rapid prototyping, including research and development of a prototype and presenting the final product. **Prerequisite: BUS 280.**

BUS 282
Innovation Capstone • 5 Credits

Students integrate theory, concepts, and skills from the previous two innovation courses and apply them in real world situations. Students also demonstrate a comprehensive analysis of on-going innovation needs for an organization/business and then work directly with team(s) and client(s) to apply innovation concepts. Students also assist in the operation of an "open innovation center" that CBC and the larger business/organization community can engage with and participate in innovation activities for the purpose of research, teaching, and the sharing of innovation and design knowledge, thinking, and applications. **Prerequisite: BUS 281.**

BUS 295 (formerly BUS 2952)
Supervised Employment • 1 - 5 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. **Prerequisite: instructor permission.**

BUS 296
Employment Seminar • 1 - 2 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. May be repeated to a maximum of six credits. **Prerequisite: concurrent enrollment in BUS 295.**

BUS 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

BUS& 101 (Formerly BA 101)
Introduction to Business • 5 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.

BUS& 201 (Formerly BA 254)
Business Law • 5 Credits

An introduction to the American legal system including its social, political, and ethical impacts on international and domestic business. The court system and judicial procedures are examined. Class focuses on business and personal liability in the areas of torts, crimes, and contracts, including its application of the Uniform Commercial Code, emphasizing on contractual relations and implications in business forms, employment, agency, regulation, and property.

Chemistry

columbiabasin.edu/chemistry

Department Overview:

- CHEM& 110 is a chemical concepts course intended for non-science majors who want a lab science course that gives a good introduction to chemical topics important in our technological society.
- CHEM& 121, 122, 123 is the allied health sequence (introduction to general, organic, and biochemistry) and is required for health science students and certain agriculture career tracks. CHEM& 121 is a pre-admission requirement for CBC Dental Hygiene program. Pre-nursing students intending to apply to a four-year program should plan to take either the three-quarter sequence (121, 122, 123) or the two-quarter sequence (121, 131).
- CHEM& 131 provides an overview of organic chemistry and biochemistry for health science students that do not need the level of detail provided by CHEM& 122 and 123. This course is accepted for the baccalaureate degree in nursing at some four-year institutions.
- CHEM& 140 is a chemistry prep course intended for science majors who have not had chemistry in high school and need the chemical and mathematical preparation required for the CHEM& 161, 162, 163 series. It can also be used to fulfill the lab science requirement for other majors.
- CHEM& 161, 162, 163 is the general chemistry sequence 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. An honors tract in general chemistry is also offered for students with a strong chemistry background.
- The organic chemistry sequence (CHEM& 241, 242, 243) and accompanying labs (CHEM& 251, 252, 253) are second-year chemistry courses for students majoring in chemistry, chemical engineering, biochemistry, biology, environmental science, and the pre-professional majors listed above.
- Undergraduate research (CHEM 281-286 and 291-296) are offered as technical electives for students majoring in the sciences.

CHEM 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

CHEM 254 (Formerly CHM 251)
Quantitative Analysis [M/S] • 2 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 255 (Formerly CHM 252)
Instrumental Analysis [M/S] • 2 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 255/265 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 254/264.**

CHEM 264 (Formerly CHM 2511)
Quantitative Analysis Lab [M/S] • 3 Credits

Lab to be taken concurrently with CHEM 254.

CHEM 265 (Formerly CHM 2521)
Instrumental Analysis Lab [M/S] • 3 Credits

Lab to be taken concurrently with CHEM 255.

CHEM 281 (Formerly CHEM 2861)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 282 (Formerly CHEM 2862)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 283 (Formerly CHEM 2863)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 284 (Formerly CHEM 2864)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 285 (Formerly CHEM 2865)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 286 (Formerly CHEM 2866)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 291 (Formerly CHEM 2901)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 292 (Formerly CHEM 2902)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or higher or high school chemistry with a grade of B or better.**

CHEM 293 (Formerly CHEM 2903)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or higher or high school chemistry with a grade of B or better.**

CHEM 294 (Formerly CHEM 2904)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or higher or high school chemistry with a grade of B or better.**

CHEM 295 (Formerly CHEM 2905)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or higher or high school chemistry with a grade of B or better.**

CHEM 296 (Formerly CHEM 2906)
Undergraduate Research, Special Topics [M/S] • 1 - 3 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, students 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. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. **Prerequisite: instructor permission and CHEM& 140 with a grade of 2.0 or higher or high school chemistry with a grade of B or better.**

CHEM 299
Special Studies • 1 - 15 Credits

Biochemistry Laboratory. Includes modern techniques for the purification and identification of macromolecules. To be taken with Heritage University CHEM 410 (Biochemistry lectures via Distance Learning - lectures start 8/22/16) or equivalent Biochemistry course. Students should have completed both General Chemistry and Organic Chemistry prior to taking this class. Permission only: to register, contact Jan Hylden at jhylden@columbiabasin.edu.

CHEM& 110 (Formerly CHM 100)
Chemical Concepts w/ Lab [M/S] • 5 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 are used to illustrate chemical principles. Topics include: measurement in science, atoms, molecules, nuclear chemistry, and current chemical issues such as energy, polymers, or foods and drugs among others. Assumes no previous chemistry background. Course intended for non-science majors and may be used to fulfill the general science requirement for the AA degree. **Prerequisite: grade of 2.0 or better in MATH 096 or higher.**

CHEM& 121 (Formerly CHM 110)
Intro to Chemistry w/ Lab [M/S] • 5 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. Course intended for students who plan to pursue an associate degree or enter a four-year baccalaureate program in the Health Sciences. May also be used to fulfill the general science requirement for the AA degree. **Prerequisite: grade of 2.0 or better in MATH 094, MATH 097, or higher. MATH 106 and Vocational Math do not apply.**

CHEM& 122 (Formerly CHM 120)
Intro to Organic Chemistry w/ Lab [M/S] • 5 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 are studied with respect to its structure, behavior, and function. Biochemical applications are integrated into this approach. **Prerequisite: grade of 2.0 or better in CHEM& 121.**

CHEM& 123 (Formerly CHM 130)
Intro to Biochemistry w/ Lab [M/S] • 5 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& 131 (Formerly CHM 135)
Intro to Organic/Biochemistry w/ Lab [M/S] • 5 Credits

The course provides 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 are 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 or CHEM& 121.**

CHEM& 140 (Formerly CHM 101)
General Chemistry Prep w/ Lab [M/S] • 5 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. **Prerequisite: MATH 095 or 098.**

CHEM& 161 (Formerly CHM 111)
General Chemistry I w/ Lab [M/S] • 5 Credits

Fundamental concepts, stoichiometry, atomic structure and chemical bonding, nomenclature, periodic table trends, reactions, oxidation-reduction, and gas laws. Problem-solving techniques stressed. An honors version of this course is also available. **Prerequisite: high school chemistry with a grade of B or better, or CHEM& 140 with a grade of 2.0 or better.**

CHEM& 162 (Formerly CHM 112)
General Chemistry II w/ Lab [M/S] • 5 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. An honors version of this course is also available. **Prerequisite: grade of 2.0 or better in CHEM& 161.**

CHEM& 163 (Formerly CHM 113)
General Chemistry III w/ Lab [M/S] • 5 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. An honors version of this course is also available. **Prerequisite: grade of 2.0 or better in CHEM& 162.**

CHEM& 241 (Formerly CHM 221)
Organic Chemistry I [M/S] • 3 Credits

Stresses nomenclature, structure, stereochemistry, and introduces conceptual material needed to understand reaction mechanisms and synthesis. **Prerequisite: CHEM& 163.**

CHEM& 242 (Formerly CHM 222)
Organic Chemistry II [M/S] • 3 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& 241/251.**

CHEM& 243 (Formerly CHM 223)
Organic Chemistry III [M/S] • 3 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& 242/252.**

CHEM& 251 (Formerly CHM 2211)
Organic Chemistry I Lab [M/S] • 3 Credits

Lab to be taken concurrently with CHEM& 241.

CHEM& 252 (Formerly CHM 2221)
Organic Chemistry II Lab [M/S] • 3 Credits
Lab to be taken concurrently with CHEM& 242.

CHEM& 253 (Formerly CHM 2231)
Organic Chemistry III Lab [M/S] • 3 Credits
Lab to be taken concurrently with CHEM& 243.

Chinese

columbiabasin.edu/chinese

Department 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.

CHIN& 121 (Formerly CHIN 101)
Chinese I [H] • 5 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 prerequisite: successful completion of at least ENGL 099.**

CHIN& 122 (Formerly CHIN 102)
Chinese II [H] • 5 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& 121 or instructor permission.**

CHIN& 123 (Formerly CHIN 103)
Chinese III [H] • 5 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 permission.**

Commercial Drivers License

columbiabasin.edu/cdl

Department Overview: The Commercial Truck Driving program stresses the basic knowledge and skills needed to operate trucks. Includes instruction in safe operation of a trailer, including loading, unloading, and specialized docking. Students also receive instruction on federal, state, and local laws.

CDL 101
Commercial Drivers License • 5 Credits
This course provides an overview of the safety, mechanical components, control systems, and operation overview of the trucks. The basics of the safe operation of a commercial vehicle including defensive driving techniques, managing speed effectively, responding to road and weather conditions, and accident scene management. Also, federal DOT rules and regulations and CDL requirements are covered. **Prerequisite: must be 21 years of age or older, valid Washington state driver's license, must have clean/clear DMV 5-year abstract, DOT physical, and valid CDL permit for Washington state.**

CDL 110
Range Operations and Maneuvers • 1 Credit
Classroom instruction on such topics as safety, vehicle control, starting, shifting, proper cornering, straight backing, docking, and braking. **Prerequisite:** concurrent enrollment in CDL 101 and 111.

CDL 111
Range Operations and Maneuvers Lab • 3 Credits
Students practice backing and maneuvering skills. **Prerequisite: concurrent enrollment in CDL 101 and 110.**

CDL 115
Backing Maneuvers • 1 Credit
This course provides theory and practice of backing skills. **Prerequisite: concurrent enrollment in CDL 101.**

CDL 120
On Street Driving • 1 Credit
On the street practice including space and speed management, up and down hills maneuvers, highway and city driving maneuvers, lane changes, and defensive driving. **Prerequisite: CDL 101 with a 2.0 or better.**

CDL 130
Driving Proficiency • 1 Credit
Students practice advanced backing and maneuvering skills such as 45 degree blind sight backing, 90 degree sight backing, 90 degree blind sight backing and S backing. **Prerequisite: CDL 101 with a 2.0 or better.**

CDL 140
Transportation Customer Service Skills • 3 Credits
This course helps identify the external and internal customers in the transportation industry and focuses on building effective customer service, public relations, listening, conflict resolution, and communication skills.

Communication Studies

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.

CMST 101 (Formerly SPE 101)
Speech Essentials [C] • 3 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, learn to be more effective communicators, and learn how to organize their ideas for effective and efficient oral communication. Credit not granted for both CMST 101 and CMST& 220.

CMST 103 (Formerly SPE 103)
Workplace Communication • 3 Credits
Students in the workforce are able to develop a toolbox of communication strategies and techniques. These tools include interviewing, customer service, cultural diversity, and resolving conflicts topics.

CMST 108 (Formerly SPE 108)
Voice and Articulation • 3 Credits
An introduction to problems of pronunciation and enunciation. Through voice and articulation techniques and the use of the international phonetic alphabet, students gain basic knowledge of phonetics and anatomy of speech. Individual attention is given to minor speech problems.

CMST 110 (Formerly SPE 110)
Communication Behavior [C] • 3 Credits
An introduction to the basic elements that impact our communication with each other. The course is designed to illustrate the reasons for communication failures in two-party and small group situations. Among other areas, active listening, conflict communication, self-esteem, and assertiveness are covered. Credit not granted for both CMST 110 and CMST& 210.

CMST 141 (Formerly SPE 141)
Debate I • 2 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. Students are expected to attend a minimum of two debate tournaments. **Recommended prerequisite: CMST 101 or equivalent.**

CMST 142 (Formerly SPE 142)
Debate II • 2 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. Students are expected to attend a minimum of two debate tournaments. **Recommended prerequisite: CMST 101 or equivalent.**

CMST 143 (Formerly SPE 143)
Debate III • 2 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. Students are expected to attend a minimum of two debate tournaments. **Recommended prerequisite: CMST 101 or equivalent.**

CMST 198 (Formerly CMST 199)
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

CMST 201
Studies in Media & Culture: Rotating Genre Study • 5 Credits

Introduces students to genre-based narrative theories in mass media studies. Each quarter a particular genre of media is selected and students critically analyze a given set of mass media artifacts, possibly including films, television shows, video games, advertisements, books, music videos, or toys. Based on this analysis, students learn to criticize and practically engage the ideologies inherent in their surrounding media environments.

CMST 221 (Formerly SPE 220)
Communication Skills for Conflict Resolution [H] • 5 Credits

This course is highly recommended for those majoring in a number of disciplines including Business, Human Resources, Human Services, Criminal Justice, Pre-Law, Psychology, and those interested in improving their skills in resolving personal and work-related conflict. Employers value those with conflict resolution skills, as interpersonal dispute is cited as the major reason for termination of employees and disruptions to business. Students study conflict theory, practice communication skills, and utilize a basic mediation process plus a face-to-face negotiation technique to engage in active and constructive problem-solving and conflict resolution.

CMST 240 (Formerly SPE 240)
Leadership Development • 5 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.**

CMST 241 (Formerly SPE 241)
Applied Leadership I • 2 Credits

This course explores leadership skills, concepts, and theories as it relates to student involvement on campus. **Prerequisite: instructor permission.**

CMST 242 (Formerly SPE 242)
Applied Leadership II • 2 Credits

A continuation of CMST 241, this course explores leadership skills, concepts, and theories as it relates to student involvement on campus. **Prerequisite: instructor permission.**

CMST 243 (Formerly SPE 243)
Applied Leadership III • 2 Credits

A continuation of CMST 242, this course explores leadership skills, concepts, and theories as it relates to student involvement on campus. **Prerequisite: instructor permission.**

CMST 246 (Formerly SPE 246)
Oral Interpretation [H] • 5 Credits

Students are taught to use their voices more effectively for character interpretation and presentation. Demonstrations, class exercises, and oral reading assignments are employed.

CMST 256 (Formerly SPE 253)
PARL Procedures • 1 - 2 Credits

The theory and study of parliamentary procedures.

CMST 260 (Formerly SPE 260)
Multicultural Communication [C] • 5 Credits

Multicultural Communication teaches students culturally-sensitive methods of identifying basic problems involving communication failures across ethnic and racial settings. Students 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.**

CMST 298 (Formerly CMST 299)
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

CMST& 102 (Formerly JOR 100)
Intro to Mass Media • 5 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.

CMST& 210 (Formerly SPE 111)
Interpersonal Communication [C] • 5 Credits

This course is recommended for students seeking to improve their communication with friends, family, and co-workers. It is designed to heighten the students' 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.

CMST& 220 (Formerly SPE 102)
Public Speaking [C] • 5 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. Students learn to be more effective communicators and organize their ideas for effective and efficient oral communication. Credit not granted for both CMST 101 and CMST& 220.

Community Education

columbiabasin.edu/communityed

Department Overview: The Community Education department offers a variety of opportunities for the lifelong learner to take courses for professional development or personal enrichment.

CSRE 002
Traffic Control • 0 Credits

CBC offers the Evergreen Flagger Training Certification program, which is the most recognized course for flagger training in Washington state. The handbook and instructor's manual are constantly updated and contain all the timely information and requirements. This program is approved by the Washington State Traffic Control Oversight Committee. This is a one-day class in which Evergreen-certified instructors are authorized to issue a Washington State Certified Flagging card upon successful completion of the class and test. This card, which is recognized in Washington, Oregon, and Idaho, is required for flaggers working on WSDOT construction projects. It meets Dept. of Labor & Industries requirements for WAC 296-155-305, "Flagger Training Requirements" for Washington state. Class is held at the Pasco campus from 8:30 a.m. to 4 p.m. The cost is $60. Pre-registration and pre-payment is required and students are asked to bring their payment receipt to class. CBC does not refer positions.

CSRE 003
Traffic Control Recertification • 0 Credits

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 contain all the timely information and requirements. Recertification class must meet certain criteria mandated by Evergreen Safety Council. Please call 509-542-4804 for more information.

CSRE 048
Welding Certification • 0 Credits

This course is primarily for WABO certification. This is a non-instructional course that deals with welder certification. Fees depend on what type of certification test is needed.

CSRE 050
Welding Booth Time • 0 Credits

Designed primarily for tradesmen who need a place to brush-up on their skills. This course allows the tradesmen to practice at their own pace. This is a non-instructional course. Fees to rent the weld booth depend on how many hours are needed to practice.

CSRE 095
Orientation to Correctional Careers • 1 Credit

Introduces students to a basic understanding of how important communicating professionally is to the correctional environment. It introduces four areas that are identified as crucial when working in the corrections profession, and provides a basic understanding of how important observation, listening, verbal, and written communications are for correctional employees and correctional facility smooth operations. This course also provides a basic understanding of being able to communicate clearly and professionally with co-workers. **Prerequisite: criminal background check acceptable to the Department of Corrections.**

CSRE 096
Communication in Corrections • 1 Credit

Introduces students to a basic understanding of how important communicating professionally is to the correctional environment. It introduces four areas that are identified as crucial when working in the corrections profession, and provides a basic understanding of how important observation, listening, verbal, and written communications are for correctional employees and correctional facility smooth operations. This course also provides a basic understanding of being able to communicate clearly and professionally with co-workers. **Prerequisite: criminal background check acceptable to the Department of Corrections.**

CSRE 097
Supervision/Human Relations in Corrections • 1 Credit

Introduces students to the diverse workforce and offender population, and helps them understand the very basics of supervising offenders in a correctional environment. It also 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: criminal background check acceptable to the Department of Corrections.**

Computer Applications

columbiabasin.edu/ca

Department Overview: These courses are offered for students wishing to enhance their knowledge of current software programs. Completing CA 120, CA 140, CA 150, and CA 160 is equivalent to completing CS 101. Students can only receive graduation credit for CS 101 or CA 120, CA 140, CA 150, and CA 160.

CA 100
Introduction to Microcomputers • 4 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 prerequisite: keyboarding experience.**

CA 101
Keyboarding I • 2 Credits

Introduces the fundamentals of touch typing of letters, numbers, symbols, and operational keys using a computer.

CA 102
Keyboarding II • 2 Credits

Reinforces keyboarding skills. Introduces appropriate formatting of business letters, personal letters, memos, reports, and tables using word processing software. **Prerequisite: CA 101 (formerly AOT 101) with a 2.0 or better or instructor permission.**

CA 103
Presentations Graphics Applications • 2 Credits

Introduces the fundamentals of Microsoft PowerPoint. Students 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 120 (Formerly CA 1002)
Intro to Computer & Info Tech - Concepts • 2 Credits

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, and ethics. Topics also include: navigating the Internet, using Windows, computer hardware and software concepts, identification of system board parts, input/output devices, and types of storage.

CA 124
Intermediate Spreadsheet Applications • 2 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. **Prerequisite: CA 100 and eligibility for MATH 106.**

CA 125
Database Applications • 2 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 130 (Formerly CA 1003)
Windows Operating System • 1 Credit

Introduces students to the current Windows operating system. Topics include: screen identification, using Help and Support, arranging and sizing windows, personalizing your PC, and file management.

CA 140 (Formerly CA 1004)
Intro to Computer & Info Tech - MS Word • 1 Credit

Introductory class to Microsoft Word, a word processing software application that enables you to easily create both simple and complex documents.

CA 150 (Formerly CA 1005)
Intro to Computer & Info Tech - MS Excel • 1 Credit

Introductory class to Microsoft Excel, a spreadsheet application typically used to display and manipulate numerical data.

CA 160 (Formerly CA 1006)
Intro to Computer & Info Tech - MS PowerPoint • 1 Credit

Introductory class to Microsoft PowerPoint, a presentation software application that allows you to combine text and graphics for on-screen presentations.

CA 170 (Formerly CA 1007)
Microsoft Outlook • 1 Credit

Basic concepts of learning how to become more effective in your communication through understanding of email features and working with messages; how to view and manage your calendar, create/group contacts, schedule appointments, events, and tasks, and use of reminder options.

CA 172
Word Processing • 5 Credits

Develops employable word processing skills and implements effective application in a business environment using 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: CA 100 required and keyboarding recommended.**

CA 180 (Formerly CA 1008)
Microsoft Access • 1 Credit

Basic concepts of database management systems: creating a new database, sorting and filtering records, using table wizards, creating forms, working with queries, and designing a report.

CA 199
Special Studies • 1 - 5 Credits

A class used to explore new approaches to software applications.

CA 299
Special Studies • 1 - 5 Credits

A class used to explore new approaches to software applications.

Computer Science

columbiabasin.edu/computerscience

Department Overview: The Computer Science (CS) 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 seven options: Internet Specialist, Database Administrator, Network Administrator, Programming and Software Development, Cyber Security, Help Desk Technician, and Multimedia. Furthermore, students may earn one of the many certificates which are a subset of a two-year degree. Students may also earn a four-year Bachelor of Applied Science in Cyber Security degree.

Many courses are designed to help students prepare for industry certifications. Please note that the certification exams are difficult to pass. The Computer Science classes provide the 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.

New students may apply to CBC and begin taking Computer Science classes any quarter of the year. Classes are offered in several formats, day night, online, and hybrid. Many classes can be completed at an accelerated pace.

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 non-traditional programs and will possibly award a student college credit and/or placement in advanced classes. In accordance with the CBC Non-traditional 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.

The Computer Science department 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.

Computer Science Program Outcomes:

- Graduates will be able to analyze a problem, identify, and define the computing tools and techniques relevant to its solution.
- Graduates will be able to develop an efficient algorithm to solve a given problem.
- Graduates will be able to recognize and define concepts of computer systems, database systems, security, hardware, software, programming languages, and networks.
- Graduates will understand the professional, ethical, and societal issues and responsibility.
- Graduates will be able to write, present, and use interpersonal skills to effectively communicate with customers, supervisors, and co-workers.

CS 101
Intro to Computers & Information Technology • 5 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 also learn computer basics using Windows, Word, Excel, PowerPoint, email, and Internet skills to locate, present, and report information. **Prerequisite: MATH 084 with a grade of 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or concurrent enrollment.**

CS 102
Programming Fundamentals [M/S] • 5 Credits

An introduction to programming using current technologies. It is designed for those with little or no programming experience. Topics include: program development cycle, fundamentals of programming and logic, decisions, repetitions, controls, functions, and procedures. **Prerequisite: MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS 106

Database Systems • 5 Credits

This is a beginning database course in which students 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 navigation forms. **Recommended prerequisite: CS 101 with a 2.5 or better. Prerequisite: MATH 084 with a grade of 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or test placement.**

CS 107

Intermediate Word Processing • 2 Credits

Students learn to create documents using the current version of Microsoft Word. Students learn the principles of word processing to produce and revise a variety of business documents including brochures, flyers, and memoranda. These documents include tables, graphics, and custom formatting to effectively convey written information. **Prerequisite: CS 101.**

CS 108

Intermediate Spreadsheets • 2 Credits

Students learn to develop spreadsheets using the current version of Microsoft Excel. Students learn how to use the principles of spreadsheet applications to solve a variety of financial, marketing, manufacturing, and business problems. This course includes 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 111

Web 2.0 • 5 Credits

After an overview of Web 2.0, students learn about the specifics of the various categories of Web 2.0 sites by setting up accounts and then adding types of content to various sites. This allows students to obtain the knowledge and perspective needed to select the proper Web 2.0 sites and technologies to use to meet their needs and requirements. Specifically, students create and use websites, blogs, learn about RSS subscription, use public and private wikis, use social bookmarking, use photo hosting sites, create, edit, and post audio podcasts, use cloud hosting and computing sites; use screen scraping software such as Jing or Camtasia; learn how to storyboard, compose, and shoot movies; learn how to use free software to edit and post video on the Internet and create mashups. **Prerequisite: CS 101 with a 2.5 or better or instructor permission.**

CS 114

HTML5-HTML • 5 Credits

This course provides students with the skills needed to create web pages using HTML5 elements and attributes. Students learn how to include text, pictures, and hypertext links, as well as tables, forms, and frames. They also learn how to create and manipulate image maps and animated GIFs. In addition, students are exposed to the critical design concepts including: visual design, user interface design, designing for accessibility, and designing technically correct (valid) documents. **Prerequisite: CS 101 with a 2.5 or better or instructor permission.**

CS 115

HTML5-Cascading Style Sheets • 5 Credits

Students learn how to use Cascading Style Sheets to control the appearance and layout of HTML and XML documents; how to control text properties such as typeface, size, etc., and box properties such as width, margins, etc. to control layout; to use media queries to build pages that are responsive and mobile friendly; and how to use CSS3 special effects to do things like controlling transparency, rotating objects, and adding glows and shadows, etc. **Prerequisite: CS 114 with a 2.5 or better or instructor permission.**

CS 117

Computer Ethics • 2 Credits

Covers essential topics of information and technology ethics. Students will understand what to do and what not to do as a user and an employee. Topics include: ethics and information technology, IT configured societies, information flow, privacy and surveillance, digital intellectual property, and professional ethics in computing. Students work in small groups to discuss important issues based on scenarios given. **Prerequisite: CS 101 with a 2.5 or better and ENGL 099 or appropriate placement.**

CS 118

Customer Service • 3 Credits

Helps students develop the skills needed to present a professional image and to communicate effectively in everyday customer service transactions, as well as in difficult situations. Students learn about various types of customers and develop strategies for dealing with each. Emphasis is placed on verbal and nonverbal communication, listening to the customer, customer service in a diverse world, managing stress and time, encouraging customer loyalty, and recovering customers after a breakdown in service. **Prerequisite: MATH 084 with a grade of 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or test placement.**

CS 123

PC Hardware • 5 Credits

Students gain the knowledge, skills, and abilities essential to become a successful computer service technician as defined by experts from companies across the industry. Students learn how to troubleshoot and repair hardware problems and install components. Hardware topics include: power supply, CPUs and motherboards, memory, I/O busses, removable and fixed drives, optical drives, graphics and sound, and networking and printers. Other topics include: the DOS operating system, number systems, working safely and professionally, and the customer relations skills necessary for the industry. **Perquisite: CS 101 with a 2.5 or better.**

CS 127

Windows Configuration • 5 Credits

Prepares students to develop the skills needed to deploy and manage a Windows desktop operating system. Students learn about hardware management, network configuration, application management, Windows installation, mobile computing, and system monitoring and maintenance. **Prerequisite: CS 101 with a 2.5 or better.**

CS 140

SharePoint • 5 Credits

Provides students with the knowledge and skills that are needed to use and manipulate fundamental features of SharePoint Server. Students are introduced to core functions of SharePoint Server to gain a deeper insight of the capabilities and use of these functions and features. This information will assist students in effectively applying and securing SharePoint in a business environment. **Prerequisite: CS 101 and CS 228, both with a 2.5 or better.**

CS 150

Computer Security • 5 Credits

This class covers the basics of computer security. Students learn about virus protection, installing security patches, using firewalls to protect networks, cryptography and Public Key Infrastructure (PKI), and legal issues. **Prerequisite: CS 101 with a 2.5 or better and MATH 096 with a 2.0 or better or appropriate placement.**

CS 162

C++2 [M/S] • 5 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 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 with a 2.5 or better.**

CS 173

C# Programming • 5 Credits

An introduction to the C# programming language with an emphasis on creating classes and objects. Topics include: Graphical User Interface Design of forms using various controls, statements, and Object-Oriented Design. Students learn to use conditionals, loops, arrays, and lists in methods of classes to solve problems. In addition, students become familiar with inheritance, object composition, and polymorphism. **Prerequisite: CS 102 or CS& 131 or CS& 141 or instructor permission. All prerequisites must be passed with a 2.0 or better.**

CS 199

Special Studies • 1 - 15 Credits

A class used to explore new coursework. **Prerequisite: as needed.**

CS 202

Programming Fundamentals 2 [M/S] • 5 Credits

This is an intermediate programming course using current technologies. Students learn to write, design, and debug Windows applications using a variety of controls and events, procedures, functions, arrays, structures, files, classes/Object Oriented design, database programming, and calculations to solve problems. Class projects involve writing games and business applications. **Prerequisite: CS 102 with a 2.5 or better.**

CS 203

Digital Graphics & Design 1 • 5 Credits

This class teaches students how to use Photoshop. The focus is on both using the software and the elements of design as they specifically apply to online applications. Students learn color theory, typography, using layers, compression and the various file formats, and preparing images for use on the web. Students learn how to use the basic Photoshop tools, as well as the filters, pen tool, shape tools, and selection tools. Students 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 with a 2.5 or better or instructor permission.**

CS 206

Database Design • 5 Credits

An advanced course designed to help students understand concepts including: SQL, relational algebra, integrity constraints, relational database design, normalization, and physical database design. Students will gain hands-on experience designing a functional relational database. **Prerequisite: CS 106 with a 2.5 or better and MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS 207

Word Implementation • 5 Credits

This class teaches application-specific skills that 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: CS 107 with a 2.5 or better.**

CS 208

Advanced Spreadsheets • 5 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: CS 108 with a 2.5 or better and MATH 096 with a 2.0 or better or appropriate placement.**

CS 216

XML • 5 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 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. **Prerequisite: CS 115 with a 2.5 or better or equivalent advanced HTML skills and MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS 218

ASP.Net • 5 Credits

This course prepares students to develop web applications in the .NET arena. Students learn to create web services sites using Microsoft's Visual Web Developer (VWD). Students 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. **Prerequisite: CS 102 and CS 114, both with a 2.5 or better.**

CS 221

SQL Server Administration • 5 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 helps prepare students for the MCDBA Certificate. **Prerequisite: CS 106 and CS 228, both with a 2.5 or better, and MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS 223

UNIX/Linux • 5 Credits

This course helps prepare students for working with other operating systems. Students learn how to use UNIX/Linux, which is an industry standard, and widely used on the Internet. Covers basic user commands, customizing the user shell, the vi editor, and basic scripting. **Recommended prerequisite: CS 123 with a 2.5 or better. Prerequisite: MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placememt or instructor permission.**

CS 225

SQL Server Programming • 5 Credits

This course provides students with the knowledge and skills to implement a database solution using Transact SQL and Microsoft SQL Server. Topics include: manipulating data using Transact SQL, enforcing referential integrity, managing relationships, and implementing a physical database ensuring data integrity. **Prerequisite: CS 106 with a 2.5 or better and MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS 228

Windows Server • 5 Credits

This course prepares students to work with Windows Server. This course covers topics related to installation, configuration, troubleshooting, and optimization of a Windows Server. Students learn to set up and maintain users, groups, and file systems. Students learn how to use critical thinking and troubleshooting tools to troubleshoot the server, printers, and workstations. This class helps to prepare students to pass one of the Windows exams. **Recommended prerequisite: CS 127 with a 2.5 or better. Prerequisite: MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS 230

Active Directory • 5 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. **Prerequisite: CS 228 with a 2.5 or better and MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS 231
Network Infrastructure • 5 Credits

This course prepares 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 prepares students to manage, monitor, and troubleshoot Network Address Translation and Certificate Services. It also prepares students to pass one of the MCSA/MCSE exams. **Prerequisite: CS 228 with a 2.5 or better and MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS 232
Network Security • 5 Credits

This course builds on the experience users gain in previous network and security classes. The class is designed around the layered security framework concept including setting up perimeter defenses down to protecting your data. The class teaches how to implement the proper security measure at each layer to protect the network from a myriad of threats. **Prerequisite: CS 150 and CS 228, both with a 2.5 or better, and MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS 236
Advanced Object Oriented Programming [M/S] • 5 Credits

An advanced course in Java programming in which students create applications to solve problems using common algorithms and Object Oriented Design. Topics include: classes, methods, interfaces, inheritance, exceptions, stacks, queues, linked lists, recursion, and binary trees. **Prerequisite: CS& 141 with a 2.5 or better.**

CS 243
Web Animation • 5 Credits

This class covers the basics of 2D animation for use on the web. Students learn Flash, a timeline-based 2D animation application. The class introduces the Flash drawing tools, tweening, and cartoon animation techniques. Students are also introduced to actionscript and create a simple game. **Prerequisite: CS 203 with a 2.5 or better and MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS 244
Digital Graphics & Design 2 • 5 Credits

This is the second in a series of classes that teach students how to use Photoshop. Students learn color theory and the various models for storing and representing color. This theory is then applied to improve or fix focus issues, color balance, and contrast. Students 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. **Prerequisite: CS 203 with 2.5 or better and MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS 250
HTML5-JavaScript/JQuery • 5 Credits

An introduction to dynamic client-side website development using JavaScript and JQuery. Students learn JavaScript to manipulate HTML and CSS elements, adding rich features to websites and mobile devices. Other topics include: JSON, HTML DOM, PHP, and Ajax. **Prerequisite: CS 102 or CS& 131 or CS& 141 or CS 114 or CS 115 with a 2.5 or better**

CS 260
Data Structures in C++ • 5 Credits

This course is the third in a series of three in which students learn the C++ programming language and how to implement and use different types of data-structures. This leads students to create data-driven programs and algorithms. Students also 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 with a 2.5 or better.**

CS 262
Game Programming Design and Development • 5 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 102 or CS& 131 or CS& 141 or instructor permission. All prerequisites must be passed with a 2.5 or better.**

CS 299
Special Studies • 1 - 5 Credits

A class used to explore new coursework.

CS& 131 (Formerly CS 161)
Computer Science I C++ [M/S] • 5 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 learn C++ keywords, control structures, functions, arrays, strings, and introduction to classes and objects. **Prerequisite: MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CS& 141 (Formerly CS 215)
Computer Science I Java [M/S] • 5 Credits

Java is an object-oriented programming language that is widely used to enhance information delivery on the web. Topics include: compiling and running a Java program, use of selection, loop structures, arrays, file processing, and introduction to classes and objects. Students learn how to write and debug Java programs with and without graphical user interfaces. **Prerequisite: MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

Computer Science Information Technology

Department Overview: Computer Science Information Technology (CSIT) is a course prefix designated for upper level (300-400) courses. Currently, the CSIT courses are required for the Bachelor of Applied Science in Information Technology (BAS IT) degree.

Information forms the backbone of nearly every modern enterprise. The ability to manipulate this information, using software, is essential to the success of modern enterprises. The BAS IT prepares students to design and develop software and database solutions in the ever changing information technology industry. Upon completion of the program, successful students will be able to:

- Protect an organization's critical information systems and assets by ethically integrating best practices in security, risk management and business continuity throughout an enterprise.
- Design, develop and implement database solutions.
- Understand data retrieval, communication and security issues dealing with data assurance.
- Recognize problems and manipulate data using programming techniques, software tools and technologies to solve problems.
- Formulate, update, and communicate short- and long-term organizational strategies and policies.

CSIT 301
Information Systems • 5 Credits

The course is designed to help students understand the importance and elements of today's information technology (IT) systems. Topics include actual and contemporary examples to clearly illustrate how they can be applied to improve and strengthen IT organizations, IT security, and hands-on scenarios for class projects. **Prerequisite: ENGL& 101 or above, CS 206, and CS 250. All CS prerequisites must be passed with a 2.5 or better.**

CSIT 306

Intro to Big Data and Analysis • 5 Credits

The course provides a comprehensive view on computing architectures in data analytics and data mining. Topics include big data characteristics and algorithms, analyzing tools, data mining techniques, massive databases processing, implementation of machine learning algorithms, and analytics environments. Students learn to conceptualize an analytic environment that is suited to the challenges of today's analytics demands. **Prerequisite: CS 206, CS 221, and either CS 236 or CS 260. All prerequisites must be passed with a 2.5 or better.**

CSIT 311

Python for Data Processing • 5 Credits

This course is designed for students who have an object-oriented programming background. Students learn to use built-in data structures in Python computer language to perform complex data analysis. Students also learn to work with HTML, XML, and JSON data in Python to do basic data visualization. **Prerequisite: CS 250 and either CS 236 or CS 260. All prerequisites must be passed with a 2.5 or better.**

CSIT 316

Cloud Computing HTML5 and PHP • 5 Credits

This course in database-driven websites gives students an understanding of HTML5 with PHP (Hypertext Preprocessor). Students acquire web development techniques that use databases to create content with HTML form objects, database connections, and server side programming. Use of HTML5, MySQL, and PHP5 for programming turns simple static websites into dynamic, database-driven web applications. Course projects involve developing, debugging, PHP, and SQL. **Prerequisite: CS 206 and 250 with a 2.5 or better, and CSIA 310 with a 2.0 or better.**

CSIT 401

Information Systems Analysis and Design • 5 Credits

This course covers web development, service-oriented architecture, traditional, UML, and object-oriented approaches to information technology systems analysis and design. Real world case projects and technologies are provided throughout the course for hands-on exercises. Students apply the concepts learned to develop a conceptual, technical, and managerial foundation for systems analysis design and implementation as well as project management principles for systems development. **Prerequisite: PROJ 100 and CSIT 306, both with a 2.0 or better.**

CSIT 411

Agile Methodology & ePortfolio Planning • 5 Credits

This course represents the integration of previous coursework and practical experience with a focus on authentic demonstration of competencies outlined by the program. This course also covers Agile Methodology practices for teamwork using Scrum techniques. Students use an open source ePortfolio to collect information on performance-based artifacts combined with metacognitive reflection and a professional statement of purpose that reflects their ability to make globally, socially, and ethically responsible information technology and systems decisions that are aligned with the legal and organizational policy requirements. Students also reflect on a previous project and describe in writing how Scrum techniques could have been used to make their project more successful. **Prerequisite: BUS& 101, PROJ 100, and CSIT 401; all with a 2.0 or better.**

CSIT 416

Data Visualization • 5 Credits

This course introduces a data analytics tool used to prepare and analyze data for effective visualizations. Students learn theory and concepts of data analytics and how to display and share data in a meaningful way. Students also learn the principles of preparing, analyzing, and processing data to create desired data visualizations. **Prerequisite: CSIT 306 with a 2.0 or better.**

CSIT 421

IT Capstone • 5 Credits

This course integrates all IT knowledge and skills learned in previous courses into a project. Emphasis is placed on secure information system design, process planning, procedure definition, business continuity, and systems security architecture. Students design and implement a comprehensive information system from the planning and design phase through execution. **Prerequisites: CSIT 411 with a 2.0 or better or concurrent enrollment.**

Criminal Justice and Forensics

columbiabasin.edu/criminaljustice

Department Overview: This program focuses upon 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 the 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

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 in Applied Science degree 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.

CJ 134
Organization/Administration • 5 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 Credits
A study of the history of traffic control, routine and emergency traffic procedures. Fundamentals of traffic accident investigation are covered.

CJ 136
Delinquent Behavior/Youth • 3 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 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 197
Internship • 1 - 5 Credits
A supervised, individual learning experience for students in the law enforcement environment. The experience shall consist of a minimum of six hours per week. The experience assignment is 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. **Prerequisite: instructor permission.**

CJ 198
Special Projects • 1 - 3 Credits
A supervised, individual learning experience for students in the law enforcement environment. The experience shall consist of a minimum of six hours per week. The experience assignment is for the student to conduct a research project that will benefit the student in the criminal justice field. **Prerequisite: instructor permission.**

CJ 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

CJ 222
Alcohol/Drug Pharmacology/Physiology • 3 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 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 permission.**

CJ 234
Criminal Evidence • 3 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 permission.**

CJ 290
Basic Reserve Officer Law Enforcement Academy • 1 - 9 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.

CJ 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

CJ& 101 (Formerly CJ 131)
Introduction to Criminal Justice • 3 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.

CJ& 110 (Formerly CJ 132)
Criminal Law • 5 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.

CJ& 240 (Formerly CJ 242)
Intro to Forensic Science • 5 Credits
An overview of the role of the forensic scientist in criminal investigation. Course subject matter focuses on the crime laboratory, instruments, and methods used by the forensic scientist in analyzing criminal evidence. Specialized careers in forensic science are reviewed.

Cyber Security

columbiabasin.edu/cybersecurity

Department Overview: Cyber Security focuses on the techniques, policies, and procedures that prepare students to secure and defend critical assets. Major areas of study include network fundamentals, ethics, computer forensics, and security. Cybercrime is increasing at a rapid pace thus creating the need for trained cyber security professionals. CBC's curriculum provides the technical skills and knowledge for students who plan to enter the field of information security.

This program provides foundation for many industry certifications such as Network+, Security+, CCNA, SSCP, and CEH. CBC also has a cooperative agreement with University of Washington which allows limited cross enrollment in UW Cyber Security courses.

Cyber Security Program Outcomes:

- Graduates will be able to analyze a problem, identify, and define the computing tools and techniques relevant to its solution.
- Graduates will be able to develop an efficient algorithm to solve a given problem.
- Graduates will be able to recognize and define concepts of computer systems, database systems, security, hardware, software, programming languages, and networks.
- Graduates will understand the professional, ethical, and societal issues and responsibility.
- Graduates will be able to write, present, and use interpersonal skills to effectively communicate with customers, supervisors, and co-workers.

CSIA 200

Computer Forensics Fundamentals • 5 Credits

This course provides students with the fundamentals of computer forensics, cyber crime scene analysis, and electronic discovery, along with associated investigation tools and techniques. Students explore computer forensic theory and focus on various forensic skills including conducting security incident investigations, file system and storage analysis, and data hiding techniques. Students also learn about legal issues and standards. **Prerequisite: CS 150 with a 2.5 or better and MATH 094 or MATH 095 or MATH 098 with a 2.0 or better or appropriate placement.**

CSIA 250

Networking Fundamentals • 5 Credits

This course focuses on implementing, managing, protecting, and troubleshooting small to medium size enterprise branch networks. Topics covered include OSI model, Cisco devices, wireless networks, switching, IP routing, troubleshooting routing, and advanced TCP/IP configuration. This course prepares students for the Cisco Certified Network Associate (CCNA) exam. **Prerequisite: CS 228 and 231. CS 231 can be taken concurrently.**

CSIA 300

Cyber Security and Information Assurance • 5 Credits

This course provides students with the tools and resources needed to develop an understanding of the CISSP certification body of knowledge. Using a variety of pedagogical features, students learn security basics such as security laws, access control, cryptography, and security architecture and design. **Prerequisite: MATH& 141 or better and CS 150, 231, and CSIA 250. CSIA 250 must be passed with a 2.0 or better.**

CSIA 310

E-Commerce Security • 5 Credits

This course provides students with tools and resources they need to develop a thorough understanding of four major aspects of security: policies and procedures, technology orientation, computer and network security, and managing organizations securely. **Prerequisite: MATH& 141 or better with a minimum grade of 2.0 and CS 150, 206, and 232 with a 2.5 or better.**

CSIA 320

Ethical Hacking • 5 Credits

This course provides students with the tools and resources needed to develop an understanding of ethical hacking. Students are taken through an interactive environment where they are shown how to scan, test, hack, and secure information systems. **Prerequisite: MATH& 141 or better and CS 232 with a 2.5 or better and CSIA 300 with a 2.0 or better. CSIA 300 can be taken concurrently.**

CSIA 330

Wireless Security • 5 Credits

This course provides students with the conceptual knowledge and hands-on skills needed to work with wireless technology. Topics include planning, designing, installing, and configuring wireless LANs with an emphasis on security. It also details common wireless LAN uses including maintenance, security, and business applications. It is designed to help students pass the Certified Wireless Network Administrator (CWNA) exam, as well as the new IEEE 802.11 standard. **Prerequisite: MATH& 141 or better and CS 150 with a 2.5 or better and CSIA 250 and 300, both with a 2.0 or better. CSIA 300 can be taken concurrently.**

CSIA 410

Cryptology • 5 Credits

This course provides students with an operational understanding of basic cryptographic systems. Students learn about symmetric cryptography, block ciphers and secure hash functions, asymmetric cryptography, key exchange and public-key systems, and authentication and encryption in an adversarial model. **Prerequisite: MATH& 141 or better, CS 102 or CS& 131 or CS& 141, and CS 228. All CS courses must be passed with a 2.5 or better.**

CSIA 420

Cyber Crime and Terrorism • 5 Credits

This class begins with a broad introduction to the field of computer crime, discussing the history of computer crime, basic criminal techniques, and the relevant laws. It walks students through forensics, litigation, depositions, expert reports, trials, and how to select an appropriate expert witness. This class also covers specific techniques and tricks that hackers use and how to defend against such attacks. **Prerequisite: MATH& 141 or better, CS 232 with a 2.5 or better, and CSIA 250, 300, and 320 all with a 2.0 or better.**

CSIA 430

UNIX Administration and Security • 5 Credits

Students study UNIX and Linux system administration and security. System administration topics include installation, kernel configuration and customization, user administration, package management and backup, automating and scheduling tasks, file system management and maintenance, and system initialization and services. Students also learn how to assess security on UNIX and Linux systems, take appropriate actions to correct security deficiencies, and prepare administrative reports. **Prerequisite: MATH& 141 or better, CS 150 and 223 with a 2.5 or better and CSIA 300 with a 2.0 or better.**

CSIA 440

Cyber Testing and Penetration • 5 Credits

This course covers a broad base of topics in advanced penetration testing and information security analysis. Students are exposed to techniques and tools to perform a thorough penetration test along with legal requirements, rules of engagement, how to plan and schedule a test, how to perform vulnerability analysis, external and internal penetration testing, and techniques to produce a professional report from the engagement. **Prerequisite: CSIA 300, 320, and 330.**

CSIA 450

Cyber Security Capstone • 5 Credits

This course integrates all the various cyber security knowledge and skills learned in previous courses into a project. Emphasis is placed on security policy, process planning, procedure definition, business continuity, and systems security architecture. Upon completion, students should be able to design and implement comprehensive information security architecture from the planning and design phase through implementation. **Prerequisite: CSIA 440 or concurrent enrollment.**

Dental Hygiene

columbiabasin.edu/dentalhygiene

Department Overview: The Dental Hygiene program is a two-year, associate degree program of full-time classroom and clinical instruction. The program has limited enrollment. The educational objective of the program is to prepare the student who, upon graduation and successful completion of the National Board of Dental Hygiene (NBDH) and Western Regional Examination Boards (WREB) in Local Anesthesia, Restorative and Clinical Dental Hygiene, will be licensed to practice dental hygiene in 47 states. For more information, call 509.542.4571.

Program Costs

Including standard student fees, the program requires an expenditure of approximately $23,000 to $25,000 during the two-year program. These figures are estimates and subject to change. Approximately $6,000 is needed prior to the beginning of the first quarter. During the last year of the program, students are eligible to take both the NBDH exam and the WREB exams which have additional costs, prior to being licensed to practice as a dental hygienist. Before 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 in each course.

- Intro to Sociology: SOC& 101
- Nutrition: NUTR& 101
- Human A&P 1 w/ Lab: BIOL& 241
- Human A&P 2 w/ Lab: BIOL& 242

- Microbiology w/ Lab: BIOL& 260
- English Composition I: ENGL& 101
- Introduction to Stats: MATH& 143
- General Psychology: PSYC& 100
- ***One*** Speech Essentials/Communication Behavior: CMST 101/CMST 110/CMST& 220/CMST 260

Pre-admission Requirement

Students applying for admission into the Dental Hygiene program for fall 2007 or later will have the pre-admission requirement of CHEM& 121. CHEM& 110 will no longer be accepted as an alternative pre-admission course. CHEM& 140 and CHEM& 161 are acceptable substitutes for CHEM& 121. Satisfactory physical exam, required immunization records, 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 available online in October and are due by mid-January.

Additional consideration is given during the application process for:

- GPA of 3.4 or higher in all prerequisite courses
- Dental assisting experience, current Certified Dental Assistant Credential
- A standardized test in Critical Thinking Skills
- Special considerations (previous degree, volunteer experience, additional chemistry classes in organic chemistry or biochemistry)
- Accepted applicants will be mailed a letter confirming acceptance and allowing registration. Each accepted applicant is required to submit the following documentation before the first quarter begins: a national criminal history background check by the College approved vendor and current immunization records.

DHYG 101 (Formerly DHYG 1121)
Oral Radiology I Lab • 1 Credit

First in a series of oral radiology labs. Application of protection, film placement, and proper exposure and developing techniques are introduced. Identification of oral structures present in radiographs is introduced. **Prerequisite: acceptance and enrollment in the CBC Dental Hygiene program. Required concurrent enrollment in DHYG 112.**

DHYG 102 (Formerly DHYG 1131)
Clinical Dental Hygiene Techniques I Lab • 3 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. **Prerequisite: acceptance and enrollment in the CBC Dental Hygiene program. Required concurrent enrollment in DHYG 113.**

DHYG 103 (Formerly DHYG 1151)
Dental Materials Lab • 1 Credit

First in a series of lab courses of 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 104 (Formerly DHYG 1221)
Oral Radiology II Lab • 1 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 105 (Formerly DHYG 1231)
Clinical Dental Hygiene Techniques II Lab • 4 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 106 (Formerly DHYG 1251)
Restorative Dentistry I Lab • 1 Credit

Second in a series of courses in restorative dentistry. Provides laboratory experience in performing the clinical practice of expanded functions including amalgam manipulation and placement 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 107 (Formerly DHYG 1261)
Pain Control in Dentistry Lab • 2 Credits

Includes effective techniques in the delivery of anesthetic to the oral cavity and 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 108 (Formerly DHYG 1341)
Clinical Dental Hygiene Techniques III Lab • 4 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 109 (Formerly DHYG 1351)
Restorative Dentistry II Lab • 2 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 110
Dental Anatomy • 1 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 the CBC Dental Hygiene program.**

DHYG 111
Histology/Embryology • 2 Credits

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 the CBC Dental Hygiene program.**

DHYG 112
Oral Radiology I • 1 Credit

First in a series on oral radiology. Focuses on radiation physics, biology, protection, recognition of anatomical landmarks, and evidence of pathologies. **Prerequisite: acceptance and enrollment in the CBC Dental Hygiene program. Required concurrent enrollment in DHYG 101.**

DHYG 113
Clinical Dental Hygiene Techniques I • 2 Credits

Introduces basic principles used in the practice of dental hygiene, including infection control, patient assessment, and treatment. **Prerequisite: acceptance and enrollment in the CBC Dental Hygiene program. Required concurrent enrollment in DHYG 102.**

DHYG 114
Dental Health Education • 1 Credit

This course covers the principles and practices of prevention and control of dental disease with emphasis on biofilm control, motivation, and personal and patient oral hygiene education and techniques. **Prerequisite: acceptance and enrollment in the CBC Dental Hygiene program.**

DHYG 115
Dental Materials • 1 Credit

First in a series of courses in 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 103. 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 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: acceptance and enrollment in the CBC Dental Hygiene program.**

DHYG 120
Medical Emergencies in Dentistry • 2 Credits

This course is the study of commonly encountered medical emergencies in the oral setting that may involve systemic diseases and the etiology, presentation, treatment, and effect of oral treatment on patients who may present with these diseases and other medical conditions. The associated emergency procedures required to treat medical emergencies in the oral setting are 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: current enrollment in the CBC Dental Hygiene program.**

DHYG 121
General Pathology • 2 Credits

This course focuses on the study of commonly encountered systemic diseases: etiology, presentation, treatment, and effect on dental treatment. Emphasizes the principles of inflammation, immunology, healing, and repair. **Prerequisite: acceptance and enrollment in the CBC Dental Hygiene program.**

DHYG 122
Oral Radiology II • 1 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 104. 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 • 2 Credits

Second in a series of clinical dental hygiene techniques. Focuses on dental hygiene treatment planning, effective communication, preventative client education, and skill development in clinical practice. **Prerequisite: concurrent enrollment in DHYG 105. 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 Credit

Second in a series of courses in restorative dentistry. Presents the composition and chemical and physical properties of amalgam and its use as a dental restorative material. Amalgam safety and appropriate handling and placement of this material is practiced on typodonts in a controlled laboratory setting. **Prerequisite: concurrent enrollment in DHYG 106. 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 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 107. 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 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, biotransformation 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 Credits

Oral pathology for the dental hygienist. Focuses on the study of commonly encountered oral diseases; etiology, presentation, recognition, treatment, effect on dental treatment, and documentation for collaborative diagnosis and referral. **Prerequisite: 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 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 and the oral-systemic link of periodontitis and diabetes, heart disease, pregnancy, and other medical conditions. 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 • 2 Credits

Third in a series of courses in dental hygiene techniques. Focuses on expanding the development of clinical dental hygiene skills. **Prerequisite: concurrent enrollment in DHYG 108. 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 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 109. 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 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: current enrollment in the CBC 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 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 147. 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 147 (Formerly DHYG 1441)
Clinical Dental Hygiene Techniques IV Lab • 5 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 199
Special Studies • 1 - 12 Credits

A class used to explore new coursework.

DHYG 211
Nutrition in Dentistry • 1 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. **Prerequisite: successful completion of the first year of the CBC Dental Hygiene program and current enrollment in the second year of the program.**

DHYG 212
Advanced Clinical Topics • 1 Credit

Topics such as the use of lasers, advanced instrumentation techniques, endoscopy use in dentistry, the use of digital radiography, and new technologies in dentistry are included in this course. Alternative practice settings and additional educational pursuits and career tracking are included. Prepares for clinical dental hygiene practice application and expanded work venues. 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 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 216. 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 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 and Dental Hygiene Practice Acts. Focuses on the history of the dental profession, dental specialties, professional 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 216 (Formerly DHYG 2141)
Clinical Dental Hygiene Techniques V Lab • 6 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 217 (Formerly DHYG 2211)
Community Oral Health I Lab • 2 Credits

Supervised clinical practice of dental hygiene students in a variety of community health settings. **Prerequisite: 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 218 (Formerly DHYG 2241)
Clinical Dental Hygiene Techniques VI Lab • 7 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 219 (Formerly DHYG 2341)
Clinical Dental Hygiene Techniques VII Lab • 9 Credits

Seventh in a series of clinical dental hygiene lab courses. Provides an expanded learning experience of dental hygiene care through experience of dental hygiene care through performing prior learning of clinical dental hygiene techniques, and the clinical application of new concepts and skills including critical evaluation of dental hygiene care and restorative treatment. **Prerequisite: current enrollment in DHYG 234.**

DHYG 220 (Formerly DHYG 2461)
Restorative Dentistry III Lab • 2 Credits

Fourth 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.

DHYG 221
Community Oral Health I • 2 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. 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 Credits

Second in a series of courses in periodontology. Provides background knowledge of the advanced treatment of periodontal disease, including concepts concerning treatment planning and evaluation of treatment options and outcomes. Intra-oral digital photography and the development of a periodontal case presentation are included. 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 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 are taught as well as clinical application of new skills and concepts for more difficult AAP patients. Restorative care is added to the clinical portion of the class that is supported by this lecture class. Discussion of restorative care for patients is also included. **Prerequisite: current enrollment in the CBC Dental Hygiene program and successful completion of DHYG 214 and DHYG 216.**

DHYG 234
Clinical Dental Hygiene Techniques VII • 1 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 219. 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 246
Restorative Dentistry III • 1 Credit

Fourth 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. **Prerequisite: enrollment in the CBC Dental Hygiene program and completion of DHYG 135.**

DHYG 299
Special Studies • 1 - 12 Credits

A class used to explore new coursework.

Diagnostic Ultrasound Technology

columbiabasin.edu/ultrasound

Department Overview: The Columbia Basin College Diagnostic Ultrasound program began in 2007. As of December of 2014, 49 students have graduated with an Associate in Applied Science degree in this program.

Because of the large number of graduates from this program over the past seven years, the need for new diagnostic ultrasound technologists in the Tri-Cities area has substantially decreased. As a result, we are suspending this program and will not be accepting new students. We will continue to monitor the need for our community. Please check the website at columbiabasin.edu/ultrasound for updates and announcements regarding future openings in this program.

DUTEC 101
Concepts of Patient Care • 3 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 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. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 106
Pathophysiology II • 3 Credits

Continues Pathophysiology I, with focus on the disease process and disease states relevant to obstetrics, gynecology, and neurology. **Prerequisite: DUTEC 105 and acceptance into program or permission of program chair.**

DUTEC 107
Human Cross-Sectional Anatomy • 2 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
General Ultrasound I: Abdominal • 5 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 111
Echocardiography I • 5 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 112
Pathophysiology III • 3 Credits

Continues Pathophysiology II, emphasizing the physiology and pathology of the cardiovascular and the peripheral vascular system. **Prerequisite: DUTEC 105 and DUTEC 106, and acceptance into program or permission of program chair.**

DUTEC 113
Pathophysiology IV • 3 Credits

Continues Pathophysiology III, emphasizing the physiology and the pathology of the cardiovascular and cerebral vascular system. **Prerequisite: DUTEC 105, DUTEC 106, and DUTEC 112, and acceptance into program or permission of program chair.**

DUTEC 120
General Ultrasound II: Obstetrics & Gynecology • 5 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 121
Echocardiography II • 5 Credits

Continues basic echocardiography. Students concentrate on Doppler echocardiographic techniques and valvular heart disease as relating to the practice of adult echocardiography. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 130
General Ultrasound III: Small Parts • 5 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 131
Echocardiography III • 5 Credits
Examines issues relating to the fetal development of the heart. Course also addresses structural anomalies of the heart and anomalies of cardiac location. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 140
General Ultrasound IV • 5 Credits
Examines issues relating to the clinical practicum in abdominal and obstetrics/gynecology. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 141
Echocardiography IV • 5 Credits
Examines issues relating to the systolic and diastolic function of the heart. Course also addresses quantification of systolic function and dysfunction through dimensions, ejection fraction, and wall scoring. Course includes comprehensive material on diagnosing diastolic function and the treatments available. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 160
Vascular Scanning & Techniques I • 3 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.**

DUTEC161
Vascular Scanning & Techniques II • 3 Credits
Presents current theory and scanning techniques for medical sonographers. Students learn Doppler techniques used to diagnose peripheral venous disease of both the upper and lower extremities. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 162
Vascular Scanning & Techniques III • 3 Credits
Presents current theory and scanning techniques for medical sonographers. Students learn Doppler techniques used to diagnose peripheral arterial disease of both the upper and lower extremities. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 165
Ultrasound Equipment III • 3 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 Credits
Covers acoustical physics, including heat energy, light and sound, wave theory, reflection, refraction, resonance, tissue interaction, transducers, bioeffects, and computers in ultrasonics. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 171
Ultrasound Physics & Instrumentation II • 3 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 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 Credits
Examines issues relating to the clinical practicum in echocardiology and vascular technology. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 185
Electrocardiography (EKG) • 2 Credits
Recognition of ECG tracing with normal and abnormal arrhythmias; treadmill testing, holter monitoring, phonocardiography, and heart auscultation. Review of case examples for analysis and synthesis. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 190
Survey of Echocardiography I • 2 Credits
Continues basic echocardiography. Students concentrate on Doppler echocardiographic techniques and valvular heart disease as relating to the practice of adult echocardiography. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 191
Survey of General Ultrasound I • 2 Credits
Presents the anatomy and pathophysiology of small human body parts. Students learn basic scanning and evaluation skills which apply to thyroid, scrotal, and breast ultrasound. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 192
Survey of Echocardiography II • 2 Credits
Examines basic issues relating to the fetal development of the heart. Course also addresses basic structural anomalies of the heart and anomalies of cardiac location. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 193
Survey of General Ultrasound II • 2 Credits
Presents current theory and scanning techniques for medical sonographers. Students learn basic scanning and interpretive skills of the female pelvis. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 194
Survey of Echocardiography III • 2 Credits
Examines basic issues relating to the systolic and diastolic function of the heart. Course also addresses quantification of systolic function and dysfunction through dimensions, ejection fraction, and wall scoring, as well as basic, entry-level material on diagnosing diastolic function and the treatments available. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 195
Survey of General Ultrasound III • 2 Credits
Examines issues relating to the clinical practicum in abdominal and obstetrics/gynecology. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 199
Special Studies • 1 - 5 Credits
A class used to explore new coursework.

DUTEC 210
Clinical Practicum I • 12 Credits
Provides clinical experience in an ultrasound department under the supervision of a sonographer. **Prerequisite: acceptance into program or permission of program chair.**

DUTEC 220
Clinical Practicum II • 12 Credits
Provides additional clinical experience in an ultrasound department under the supervision of a sonographer. **Prerequisite: DUTEC 210 and acceptance into program or permission of program chair.**

DUTEC 230
Clinical Practicum III • 12 Credits
Provides additional clinical experience in an ultrasound department under the supervision of a sonographer. **Prerequisite: DUTEC 210 and 220 and acceptance into program or permission of program chair.**

DUTEC 240
Clinical Practicum IV • 12 Credits
Provides additional clinical experience in an ultrasound department under the supervision of a sonographer. **Prerequisite: DUTEC 210, 220, and 230 and acceptance into program or permission of program chair.**

DUTEC 250
Ultrasound Physics for Mammographers • 3 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 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 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 and acceptance into program or permission of program chair.**

DUTEC 269
Physics Review • 2 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

columbiabasin.edu/eced

Department Overview: Early Childhood Education (ECED) is a professional technical program designed to prepare students for employment in a variety of early care and educational settings. Course content focuses on the educational and developmental needs of young children from birth to age eight. The ECED 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 ECED 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. **Additional class options are listed in the Education section.**

Degrees and Certificates Offered

- Associate in Applied Science (AAS) in Early Childhood Education degree - 90-96 credits
- State Early Childhood Education One-Year Certificate - 47 credits
- State Short Early Childhood Education Certificate of Specialization - 20 credits
- State Initial Early Childhood Education Short-Term Certificate - 12 credits
- Child Development Associate (CDA) Short-Term Certificate - 10 credits

Program Goals
Upon completion of the program, successful students will demonstrate both practical skills and foundational knowledge of best practices in early care and education in order to:

- Understand and apply the principles of child development and learning for children birth to age eight
- Create a nurturing child-centered environment that considers the needs of the whole child
- Design curriculum and assessments that are developmentally appropriate and responsive to the diverse needs of children
- Practice current first-aid, health, and safety techniques
- Demonstrate the ability to select guidance strategies tailored to the unique needs of each child
- Utilize core knowledge of the early childhood field to demonstrate intentional decision-making about policies and practices for children
- Engage with children, families, colleagues, community, and society ethically and professionally
- Enter the workforce prepared to deliver quality services to young children and their families in a variety of settings

ECED 102 (Formerly ECE 102)
Introduction to Curriculum • 3 Credits
Provides students with both a theoretical and practical understanding of the curriculum content in a developmentally appropriate setting for young children.

ECED 103 (Formerly ECE 103)
Art • 3 Credits
Provides the student with a basic understanding of the methods used for teaching visual art to young children in a developmentally appropriate manner.

ECED 110 (Formerly ECE 1172)
Preschool Seminar • 1 - 3 Credits
Provides an opportunity to participate in a short-term seminar relating to early childhood education.

ECED 112 (Formerly ECE 112)
Introduction to ELL Teaching Strategies • 3 Credits
Provides an overview of the philosophy and stages of language acquisition for English language learners in an early learning setting. A variety of instructional strategies are explored.

ECED 116 (Formerly ECE 116)
ECED Special Topics Symposium • 1 - 3 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.

ECED 117 (Formerly ECE 117)
ECED Seminar • 1 - 3 Credits
Provides an opportunity to participate in an intensive, short-term learning experience relating to early childhood education.

ECED 118 (Formerly ECE 118)
Skills Training • 1 - 3 Credits
Provides an opportunity to participate in a short-term skills training relating to early childhood education.

ECED 119 (Formerly ECE 119)
ECED Workshop • 1 - 3 Credits
An opportunity to participate in a workshop class relating to early childhood education.

ECED 122 (Formerly ECE 122)
Math & Science • 1 - 5 Credits
Provides ideas for introducing developmentally appropriate math and science and concepts to young children. Students have an opportunity to develop and experience math and science learning activities.

ECED 124 (Formerly ECE 120)
Children's Literature • 3 Credits
Increases awareness of various types of literature for young children and explores meaningful ways to share high quality books in early care and education settings.

ECED 127 (Formerly ECE 127)
Music & Movement • 3 Credits

In this interactive class, students learn the importance of providing high quality music and movement activities in an early learning setting.

ECED 141 (Formerly ECE 141)
Child Development Associate • 10 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant & toddler, center-based preschool, or family home 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.

ECED 142 (Formerly ECE 1411)
Child Development Associate • 1 - 10 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 143 (Formerly ECE 1412)
Child Development Associate • 1 - 11 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 144 (Formerly ECE 1413)
Child Development Associate • 1 - 11 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 145 (Formerly ECE 1414)
Child Development Associate • 1 - 11 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 146 (Formerly ECE 1415)
Child Development Associate • 1 - 11 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 147 (Formerly ECE 1416)
Child Development Associate • 1 - 11 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 148 (Formerly ECE 1417)
Child Development Associate • 1 - 11 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 149 (Formerly ECE 1418)
Child Development Associate • 1 - 11 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 151 (Formerly ECE 151)
Supervised Practicum • 3 Credits

Designed to be taken just before completion of an Early Childhood Education certificate or degree, this class must be taken in conjunction with ECED 152. In class, theory is combined with practical experience in an ECE setting. Emphasis is on improving teaching skills through self-evaluation.

ECED 152 (Formerly ECE 1511)
Supervised Practicum Lab • 1 - 6 Credits

Designed to be taken just before completion of an Early Childhood Education certificate or degree, this class must be taken in conjunction with ECED 151. The student is required to spend 33 hours working in an early childhood setting to complete class assignments.

ECED 153 (Formerly ECE 1419)
Child Development Associate • 1 - 11 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 201 (Formerly ECE 201)
Multicultural Education • 3 Credits

Explores the theory and practice of implementing a culturally responsible early childhood program.

ECED 216 (Formerly ECE 216)
Advanced Special Topics • 1 - 3 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.

ECED 217 (Formerly ECE 217)
Advanced Seminar • 1 - 3 Credits

Provides an opportunity to participate in an advanced short-term learning experience relating to early childhood education.

ECED 218 (Formerly ECE 218)
Advanced Skills Training • 1 - 3 Credits

Provides an opportunity to participate in an advanced short-term skills training relating to early childhood education.

ECED 219 (Formerly ECE 219)
Advanced Workshop • 1 - 3 Credits

An opportunity to participate in an advanced workshop class relating to early childhood education.

ECED 221 (Formerly ECE 221)
Strategies for Teaching Special Needs • 3 Credits

An introduction to teaching methods that can be used with children who have special needs in an inclusive early care & education setting. **Prerequisite: EDUC& 203.**

ECED 222 (Formerly ECE 222)
Sign Language Level 1 • 3 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.

ECED 223 (Formerly ECE 223)
Sign Language Level 2 • 3 Credits

The level two 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: ECED 222 or instructor permission.**

ECED 224 (Formerly ECE 224)
Sign Language Level 3 • 3 Credits

Level three 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: ECED 223 or instructor permission.**

ECED 251 (Formerly ECE 251)
Advanced Supervised Practicum • 1 - 3 Credits

Designed to be taken just before completion of an Early Childhood Education certificate or degree, this class combines the Early Childhood Education content learned in previous classes with practical application for students who need further experience. Emphasis is on improving personal teaching skills while gaining on-the-job experience working wiith professionals in an early learning setting.

ECED 252 (Formerly ECE 2511)
Advanced Supervised Practicum Lab • 1 Credit

Designed to be taken just before completion of an Early Childhood Education certificate or degree, this class combines the Early Childhood Education content learned in previous classes with practical application for students who need further experience. Emphasis is on improving personal teaching skills while gaining on-the-job experience working wiith professionals in an early learning setting.

ECED 280 (Formerly ECE 2891)
Special Studies Lab • 1 - 3 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 281 (Formerly ECE 2892)
Special Studies Lab • 1 - 15 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 282 (Formerly ECE 2893)
Special Studies Lab • 1 - 15 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 283 (Formerly ECE 2894)
Special Studies Lab • 1 - 15 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 284 (Formerly ECE 2895)
Special Studies Lab • 1 - 15 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 285 (Formerly ECE 2896)
Special Studies Lab • 1 - 15 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 286 (Formerly ECE 2897)
Special Studies Lab • 1 - 15 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 287 (Formerly ECE 2898)
Special Studies Lab • 1 - 15 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 288 (Formerly ECE 2899)
Special Studies Lab • 1 - 15 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 289 (Formerly ECE 289)
Special Studies • 1 - 15 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED& 100
Child Care Basics • 3 Credits

Designed to meet licensing requirements for early learning lead teachers and family home child care providers, STARS 30 hour basics course recognized in the MERIT system. Topics: child growth/development, cultural competency, community resources, guidance, health/safety/nutrition, and professional practice.

ECED& 105
Intro to Early Childhood Education • 5 Credits

Explore the foundations of early childhood education. Examine theories defining the field, issues and trends, best practices, and program models. Observe children, professionals, and programs in action.

ECED& 107 (Formerly ECE 230)
Health, Safety, & Nutrition • 5 Credits

Develop knowledge and skills to ensure good health, nutrition, and safety of children in group care and education programs. Recognize the signs of abuse and neglect, responsibilities for mandated reporting, and available community resources.

ECED& 120
Practicum-Nurturing Relationships • 2 Credits

In an early learning setting, apply best practice for engaging in nurturing relationships with children. Focus on keeping children healthy and safe while promoting growth and development.

ECED& 132 (Formerly ECE 205)
Infants & Toddlers Care • 3 Credits

Examine the unique developmental needs of infants and toddlers. Study the role of the caregiver, relationships with families, developmentally appropriate practices, nurturing environments for infants and toddlers, and culturally relevant care.

ECED& 134
Family Child Care • 3 Credits

Learn the basics of home/family child care program management. Topics include: licensing requirements, business management, relationship building, health, safety, and nutrition, guiding behavior, and promoting growth and development.

ECED& 139 (Formerly ECE 215)
Administration Early Learning Program • 3 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.

ECED& 160 (Formerly ECE 202)
Curriculum Development • 5 Credits

Investigate learning theory, program planning, and tools for curriculum development promoting language, fine/gross motor, social-emotional, cognitive and creative skills, and growth in young children (birth to age 8).

ECED& 170
Environments-Young Child • 3 Credits

Design, evaluate, and improve indoor and outdoor environments which ensure quality learning, nurturing experiences, and optimize the development of young children.

ECED& 180
Language & Literacy Development • 3 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 are presented, and purposeful ways to involve children in language and literacy activities are explored.

ECED& 190 (Formerly ECE 121)
Observation/Assessment • 3 Credits
Students learn various techniques for observing, recording, and assessing the behavior of young children. A variety of techniques and instruments are reviewed.

Economics

columbiabasin.edu/economics

Department Overview: Economics is the science that 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.

ECON 110 (Formerly EC 110)
Economic Trends, Issues and Policy [S/B] • 5 Credits
This course is intended as a non-technical, issues-orientated 100-level course in economics. This 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. This course includes issues of gender, race, and ethnicity.

ECON 116 (Formerly EC 116)
Economic Development of the United States • 5 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 enables the colonial economy to grow internally and to fit itself into the world economy that nurtured it.

ECON 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

ECON 291 (Formerly EC 291)
History of American Economic Development [S/B] • 1 - 5 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.

ECON 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

ECON 305
Managerial Economics [S/B] • 5 Credits
The course covers allocation of resources, economic systems, economics institutions and incentives, markets structures and prices, productivity, international economics, the global marketplace, aggregate supply and demand, and public policy towards business. As a final project, students, using information from the class, prepare a report as to how economics impacts a specific business/company. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

ECON 310
Comparative Economic System • 5 Credits
ECON 310 first classifies and then examines the major economic systems of the world. The course focuses on a general understanding of how economic systems work and how economic theories of growth and development interact with government policy, history, and culture to explain economic performance of different countries. Economies examined in some detail include several advanced market capitalist countries (e.g., the former Soviet Union, Poland, and China), and other East Asian economies (e.g., South Korea, Malaysia, and India). The economies in Africa and Middle East are also covered. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

ECON 315
Economics of Healthcare [S/B] • 5 Credits
Covers the allocation, production, and distribution of healthcare in our economy. Examines how healthcare demand differs from that of other goods. Major topics include: cost and benefit evaluation methods, the demand for medical care including the law of demand, short run and long run costs of medical care, supply and demand, market structures, and the role of government in healthcare. The various segments of the healthcare industry are also studied. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

ECON&201 (Formerly EC 202)
Micro Economics [S/B] • 5 Credits
Micro economic 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.

ECON&202 (Formerly EC 201)
Macro Economics [S/B] • 5 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.

Education

columbiabasin.edu/education

Department Overview: Education courses provide students the beginning coursework in teacher education that is needed upon transfer to teacher certification programs at Washington state colleges and universities. Most courses are offered in the evenings or on Saturdays to accommodate the varied schedules of working students.

EDUC 101 (Formerly ED 101)
Introduction to Education • 4 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 197.

EDUC 108 (Formerly ED 108)
Paraeducator in Schools • 3 Credits

Explore paraeducator roles and responsibilities in the delivery of educational services to students and certified/licensed staff. Demonstrate knowledge of selected core competencies for paraeducators in order to work effectively with a diverse student population.

EDUC 111 (Formerly ED 111)
Introduction to Instructional Strategies • 5 Credits

An overview of instructional strategies including theory and practical application within the K-12 classroom.

EDUC 112 (Formerly ED 112)
Introduction to ELA Teaching Strategies • 3 Credits

Provides an overview of the philosophy and stages of language acquisition for second language learners, K-12. Models and instructional strategies are explored and language assessment tools are examined.

EDUC 117 (Formerly ED 117)
Seminar • 1 - 3 Credits

Provides an opportunity to participate in an intensive, short-term learning experience relating to the field of early childhood education.

EDUC 128 (Formerly ED 128)
Introduction to Math Instruction • 5 Credits

An introduction to math instruction including math reform philosophy, theory, and practical application within the K-12 system.

EDUC 153 (Formerly EDUC 1532)
Paraeducation Supervised Practicum • 4 Credits

Designed to be taken just before completion of the paraeducation certificate, this class combines the paraeducation course content with practical application. Emphasis is on improving personal teaching skills while gaining on-the-job experience working with professionals in the field.

EDUC 197 (Formerly EDUC 1972)
Field Experience • 1 - 2 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.

EDUC 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

EDUC 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

EDUC& 114 (Formerly ECE 106)
Child Development • 3 Credits

A study of the physical, emotional, social, and cognitive development of children from conception through eight years of age and related theories. Emphasis is given to current early childhood brain development research.

EDUC& 115 (Formerly EDUC 106)
Child Development • 5 Credits

Build a functional understanding of the foundation of child development, prenatal to adolescence. Observe and document physical, social, emotional, and cognitive development of children, reflective of cross cultural and global perspectives.

EDUC& 130 (Formerly ECE 104)
Guiding Behavior • 3 Credits

Examine the principles and theories promoting social competence in young children and creating safe learning environments. Develop skill promoting effective interactions, providing positive individual guidance and enhancing group experiences.

EDUC& 136
School Age Care • 3 Credits

Develop skills to provide developmentally appropriate and culturally relevant activities and care, specifically: preparing the environment, implementing curriculum, building relationships, guiding academic/social skill development, and community outreach.

EDUC& 150 (Formerly ECE 209)
Child/Family/Community • 3 Credits

Assists students to develop strategies for encouraging parent participation in an early childhood setting.

EDUC& 203 (Formerly ECE 107)
Exceptional Child • 3 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.

Electronics

columbiabasin.edu/electronics

Department Overview: Electronics courses are offered in support of degree programs such as Nuclear Technology. Courses are designed to offer a basic understanding of electricity and electrical components.

ELT 111
Introduction to Electricity • 5 Credits

Introduction to the basic concepts of electricity, electrical fundamentals, and electronics. Includes AC and DC currents, heaters and heat tracing, electrical supply and control components, and electronic systems. **Prerequisite: MATH 095 with a 2.0 grade or higher.**

ELT 124
Direct Current Circuits • 5 Credits

Basic principles of electricity and the applications of the fundamental laws to direct current networks. A study of electrical components, magnetism, inductance, capacitance, and elementary network analysis.

ELT 134
Alternating Current Circuits • 5 Credits

Fundamental principles of alternating current: sinusoidal and non-sinusoidal. A study of impedance, phase shift, coupling networks, transformers, and series and parallel resonance using standard vector notation. **Prerequisite: ELT 124.**

ELT 154
Semiconductors and Op Amps • 5 Credits

Introduces semiconductor devices and associated circuits with diodes, special purpose diodes, and various types of transistors (BJT, FETs, Thyristors, etc.), then concludes with Operational Amplifiers (Op Amps). Circuit application and troubleshooting is applied with all components. **Prerequisite: ELT 134.**

ELT 171
Digital Fundamentals • 5 Credits

Builds upon basic instrumentation and control knowledge and skills from previous classes. Focuses on developing the knowledge and skills in number systems, digital logic circuits, implementation technology and logic functions, arithmetic circuits, and sequential logic circuit building blocks. **Prerequisite: ELT 151.**

ELT 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

ELT 211
Applied Electronics • 5 Credits

Broad-based course designed to apply knowledge and skills to the maintenance and operation of electrical components related to power plant instrumentation and controls. **Prerequisite: ELT 124.**

Emergency Medical Services-CPR

columbiabasin.edu/ems

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, students 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.

EMS 100

CPR-Cardiopulmonary Resuscitation • 1 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, students will receive a Health Care Provider card.

EMS 199

Special Studies • 1 - 10 Credits

This course is provided to those students who have completed all of the core requirements of paramedic with a satisfactory grade, to explore additional subjects and skills necessary to attain the status of entry-level paramedic.

Emergency Medical Technician

columbiabasin.edu/emt

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, students 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.

Emergency Medical Technician-Basic (EMT-B) is the certification level that comprises the largest population of EMS responders, and is often considered the backbone of EMS. The EMT performs 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. The EMT-B course is one quarter in length.

Entrance into the EMT-B class is contingent upon the successful completion of a competitive application process. Applications are posted on the CBC website along with detailed instructions for completion of the application, prior to the start of a class.

The responsibilities of the Advanced Emergency Medical Technician (AEMT) are to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. It is not necessary to take the AEMT course in order to progress to the Paramedic program. The AEMT course is offered as needed; determined by the EMS officers and fire chiefs from area rural departments.

The objectives of the AEMT courses are to prepare students to achieve certification as a National Registered Advanced EMT to serve in the rural areas of SE Washington. The courses cover application of protocols, refining EMT skills and knowledge, IV therapy and medication administration of WA state approved medications for the AEMT, necessary psychomotor skills through breakout labs and group exercises, and internships. Students must pass EMT 103 and 104 with a cumulative grade of 2.5 or better to be eligible for a short-term certificate and eligible to take the National Registry Exam.

For additional EMS information, see the Paramedic section in the catalog.

EMT 101

Emergency Medical Technician-Basic • 1 - 10 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. This course focuses on: EMT roles and responsibilities, airway management, patient assessment, medical and trauma emergencies, anatomy and physiology, documentation, lifting and moving, and communications. This 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, students are eligible to take the National Registry Certification Exam. In order to certify as an EMT in the state of Washington, the EMT candidate must affiliate with a state approved pre-hospital care organization. For more information, please see the Washington state Department of Health website.

EMT 103

Advanced Emergency Medical Technician (AEMT) I • 9 Credits

This is the first course of a two-quarter sequence primarily focused on training students to the level of an Advanced Emergency Medical Technician (AEMT). The objectives of this class are to prepare students to take EMT 104 by developing an understanding of the preparatory and fundamental components of the AEMT. This class covers application of protocols, refining EMT skills and knowledge, deepening the understanding of pathophysiology as it relates to medical and trauma patients, IV therapy, and medication administration. In addition, there will be extensive skills evaluation of necessary psychomotor components through breakout labs and group exercises as well as an internship to practice the appropriate skills. **Prerequisite: EMT for one year and actively involved and sponsored by an EMS agency. Recommended: eligibility for ENGL 099 or better and eligibility for MATH 094 or better.**

EMT 104

Advanced Emergency Medical Technician (AEMT) II • 9 Credits

This is the second course of a two-quarter sequence primarily focused on training students to the level of an Advanced Emergency Medical Technician (AEMT). The objectives of the class are to prepare students to achieve certification as a National Registered Advanced EMT by building on the base of knowledge previously established through experience and EMT 103. This class covers application of protocols, documentation, resuscitation, managing the trauma, and OB patients. In addition, there will be extensive skills evaluation of necessary psychomotor components through breakout labs and group exercises as well as an internship to practice the appropriate skills. **Prerequisite: EMT 103 with a 2.0 or better and EMT for one year and actively involved and sponsored by an EMS agency. Recommended: eligibility for ENGL 099 or better and eligibility for MATH 094 or better.**

Engineering Technology

columbiabasin.edu/ent

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
- 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.

ENT 111
Introduction to Engineering • 5 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, or instructor permission.**

ENT 116 (Formerly ENT 1161)
Basic Drafting • 5 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 w/ Lab • 4 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 122
Materials • 3 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 125 (Formerly ENT 1261)
Graphical Analysis • 5 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 116.**

ENT 134
Surveying w/ Lab • 6 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 permission.**

ENT 135
Statics • 5 Credits
Vectors, types of forces, vector addition, moments, conditions for equilibrium, free-body diagrams and conventions, coplanar force systems, and load analysis of basic trusses and frames. **Prerequisite: MATH 113, ENT 121, or instructor permission.**

ENT 136 (Formerly ENT 1361)
Advanced Drafting • 4 Credits
An introduction to the fundamentals of computer-aided drafting (CAD) including extensive use of the draw and modify commands for sketches and mechanical drawings. **Prerequisite: ENT 125 or instructor permission.**

ENT 171 (Formerly ENT 1711)
Technical Drafting • 3 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 199
Special Studies • 1 - 15 Credits
An experimental class to be used to explore new approaches and applications to engineering technology. **Prerequisite: student must be enrolled in the ENT program and have instructor permission.**

ENT 214
Strength of Materials • 5 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 permission.**

ENT 216 (Formerly ENT 2161)
Mechanical Drafting & Design • 5 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 and 3-D drawings using AutoCAD. **Prerequisite: ENT 136 or instructor permission.**

ENT 219 (Formerly ENT 2191)
Construction Estimating • 1 Credit
An overview of the techniques used in estimating material quantities in construction projects. **Prerequisite: ENT 122 or instructor permission.**

ENT 224
Structures • 5 Credits
Load analysis and design of basic structural members using timber and steel. **Prerequisite: ENT 214.**

ENT 226 (Formerly ENT 2261)
Architectural/Structural Drafting • 5 Credits
A drafting and design course covering construction techniques, architectural drawings, organization of drawing sets, and design projects. **Prerequisite: ENT 136.**

ENT 229
Construction Specifications • 2 Credits
A study of construction specifications using the CSI format. **Prerequisite: ENT 219 and completion of or concurrent enrollment in ENT 226 or instructor permission.**

ENT 236 (Formerly ENT 2361)
Design • 5 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. **Prerequisite: ENT 224, ENT 226, and enrollment in the ENT program.**

ENT 238
Electricity • 5 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 enrollment in the ENT program or instructor permission.**

ENT 267
AutoCAD I w/ Lab • 3 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 116 or equivalent.**

ENT 268
AutoCAD II w/ Lab • 3 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 270
3-D w/ Lab • 3 Credits
The focus of this course is three-dimensional drawings using AutoCAD. After completion, students are proficient in wire line and surface 3-D modeling. There is also a brief overview of rendering and transferring of rendered information to other presentation software. **Prerequisite: ENT 268 or instructor permission.**

ENT 271
Drawing Production w/ Lab • 3 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 permission.**

ENT 272
Advanced 3-D w/ Lab • 3 Credits
The focus of this course is three-dimensional solid modeling using a 3-D CAD program. After completion, students are proficient in 3-D solids modeling, mass property takeoffs, and the uses of three-dimensional media across software platforms. **Prerequisite: ENT 268.**

ENT 273
Advanced AutoCAD Applications w/ Lab • 3 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 other programs. Advanced features of attributes, xrefs, and layouts, etc. Express Tools are also covered. **Prerequisite: ENT 268 or instructor permission.**

ENT 274
Architectural Residential Drawing w/ Lab • 3 Credits
A drafting and design course covering architecture, residential drawings, and the organization of drawing sets incorporating design projects. **Prerequisite: ENT 267.**

ENT 280 (Formerly ENT 2801)
Extended CAD Lab • 1 - 3 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 a variable credit, continued enrollment class. **Prerequisite: ENT 267 or instructor permission.**

ENT 299
Special Studies • 1 - 15 Credits
An experimental class to be used to explore new approaches and applications to engineering technology. **Prerequisite: student must be enrolled in the ENT program and have instructor permission.**

English

columbiabasin.edu/english

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.

ENGL 086 (Formerly ENG 086)
Writing Skills • 1 - 3 Credits
This class is for students needing individualized instruction to improve their proficiency in basic writing skills. After interpreting diagnostic testing, the instructor develops a program for each student. Grade is pass/no credit.

ENGL 090 (Formerly ENG 090)
Writing Express • 1 - 3 Credits
An intensive composition course designed to prepare students for college reading and writing. Successful completion of this course makes the student eligible for ENGL& 101. **Prerequisite: successful completion of ENGL 098 or ENGL 099 placement.**

ENGL 091 (Formerly ENG 091)
Grammar Skills • 5 Credits
A review of basic grammar including sentence writing and editing, sentence structure, usage, and mechanics. Grade is pass/no credit. **Prerequisite: appropriate placement.**

ENGL 095 (Formerly ENG 095)
English Review • 5 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.

ENGL 098 (Formerly ENG 098)
Writing Prep I • 5 Credits
This course is designed to teach the basics of writing well-developed and grammatically correct single and multiple paragraph papers. **Prerequisite: ENGL 098 placement or successful completion of ENGL 091.**

ENGL 099 (Formerly ENG 099)
Writing Prep II • 5 Credits
An intensive composition course designed to prepare students for college reading and writing. Successful completion of this course makes the student eligible for ENGL& 101. **Prerequisite: successful completion of ENGL 098 or ENGL 099 placement.**

ENGL 100 (Formerly ENG 100)
Reading and Writing in College • 5 Credits
This is an intensive reading and writing course designed to prepare students for the reading and writing they will do in college. Students respond to and make connections between thematically-linked texts. Successful completion of this course makes students eligible for ENGL& 101. **Prerequisite: successful completion of ENGL 098 or placement into ENGL 099.**

ENGL 103 (Formerly ENG 103)
Writing in the Workplace • 5 Credits
This course is designed to teach writing tasks encountered in the workplace including resumes, business letters, memos, reports, instructions, and policies. **Prerequisite: successful completion of ENGL 099 or placement into ENGL& 101.**

ENGL 136 (Formerly LIT 136)
Intro to Drama • 3 Credits
The reading and analysis of various dramas, with emphasis on understanding its constituent parts, meanings, and methods. **Strongly recommended: completion of ENGL& 101.**

ENGL 140 (Formerly LIT 140)
The Cinema [H] • 5 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.**

ENGL 160 (Formerly LIT 160)
Women's Literature [H] • 5 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.**

ENGL 180 (Formerly LIT 180)
Multicultural Literature [H] • 5 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.**

ENGL 195 (Formerly LIT 195)
Bible as Literature [H] • 5 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.**

ENGL 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

ENGL 203 (Formerly LIT 203)
Mythology [H] • 5 Credits
The theory of mythology and the use of Greco-Roman myths in art and literature. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

ENGL 210 (Formerly ENG 210)
Intro to Linguistics [H] • 5 Credits
An introduction to the study of human language from the standpoint of sounds and sound patterns, word formation, and sentence structure. Students learn about the similarities and differences among the world's languages and are introduced to the various sub-disciplines of the field of linguistics. **Prerequisite: ENGL& 101 or concurrent enrollment in ENGL& 101.**

ENGL 257 (Formerly ENG 255)
English Grammar [H] • 5 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.**

ENGL 264 (Formerly LIT 264)
English Literature [H] • 5 Credits
A survey of English literature from Beowulf to 1640. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

ENGL 265 (Formerly LIT 265)
English Literature [H] • 5 Credits
A survey of English literature from 1640 to 1800. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

ENGL 266 (Formerly LIT 266)
English Literature [H] • 5 Credits
A survey of English literature from 1800 to the present. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

ENGL 275 (Formerly LIT 275)
The Lord of the Rings • 5 Credits
Students study J.R.R. Tolkien's trilogy and Peter Jackson's films, analyzing their literary, theological, and philosophical elements. Students read the novels in their entirety over the course of the quarter. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

ENGL 280 (Formerly LIT 280)
Gay and Lesbian Studies [H] • 5 Credits
An introduction to the 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 are used to understand connections between sexual orientation and the humanities. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

ENGL 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

ENGL 315
Writing for Health Professionals [C] • 5 Credits
This course provides writing instruction for students preparing for careers in the health sciences. Students develop skills needed to research health-related topics and communicate technical information in genres appropriate for diverse audiences, such as health professionals, patients, clients, and the public. **Prerequisite: ENGL& 101 or ENGL& 102 or ENGL&235 with a grade of 2.0 or higher. Meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree, or instructor approval.**

ENGL 410
Professional & Organizational Communication [C] • 5 Credits
A study of the skills necessary to communicate effectively in the workplace. Topics include selection of the proper channel and medium for information delivery, business etiquette, and professionalism. Students analyze and prepare correspondence, proposals, and reports. **Prerequisite: successful completion of ENGL& 101 and acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

ENGL& 101 (Formerly ENG 101)
English Composition I [C] • 5 Credits
Study and application of the principles of writing clear exposition with emphasis on organizing unified and coherent essays. **Prerequisite: passing grade in ENGL 090 or 099 or placement into ENGL& 101.**

ENGL& 102 (Formerly ENG 201)
Composition II [C] • 5 Credits
An advanced expository writing course focusing on research essays and other aspects of college writing. **Prerequisite: ENGL& 101 with a 1 or better.**

ENGL& 111 (Formerly LIT 150)
Intro to Literature [H] • 5 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.**

ENGL& 220 (Formerly LIT 270)
Intro to Shakespeare [H] • 5 Credits
Introduction to Shakespeare's artistic writings. Emphasis is on understanding the culture, language, and ideas. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

ENGL& 235 (Formerly ENG 205)
Technical Writing [C] • 5 Credits
This course emphasizes students' technical communication skills for use in the workplace and other academic settings. Students employ various methods of analyzing and writing for different audiences and purposes. Students also use traditional and online resources for problem-solving, research, documentation, and editing. **Prerequisite: ENGL& 101 with a 1 or better.**

ENGL& 236 (Formerly ENG 240)
Creative Writing I [H] • 5 Credits
A study of creative writing, emphasizing diverse styles and techniques. **Strongly recommended: ENGL& 101.**

ENGL& 237 (Formerly ENG 241)
Creative Writing II [H] • 5 Credits
A continuation of ENGL& 236. **Prerequisite: ENGL& 236.**

ENGL& 244 (Formerly LIT 225)
American Literature I [H] • 5 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.**

ENGL& 245 (Formerly LIT 226)
American Literature II [H] • 5 Credits
A survey of American literature from Civil War to World War I. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

ENGL& 246 (Formerly LIT 227)
American Literature III [H] • 5 Credits
A survey of American literature from World War I to the present. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

ENGL& 254 (Formerly LIT 205)
World Literature I [H] • 5 Credits
A survey of world literature from ancient times through the Roman Empire. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

ENGL& 255 (Formerly LIT 206)
World Literature II [H] • 5 Credits
A survey of world literature emphasizing European Medieval and Renaissance and Enlightenment literature. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

ENGL& 256 (Formerly LIT 207)
World Literature III [H] • 5 Credits
A survey of world literature emphasizing Romanticism, Realism, and Modernism. **Prerequisite: eligible for ENGL& 101 or currently enrolled in ENGL 099.**

English As A Foreign Language

columbiabasin.edu/ela

Department Overview: The English as a Foreign Language (EFL) 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.

EFL 090
Spelling & Pronunciation • 3 Credits
This course is designed for non-native speakers of English to develop an understanding of the patterns in English spelling and pronunciation.

EFL 091
Vocabulary • 5 Credits
This course is designed for non-native speakers of English to increase their ability to recognize, use and learn new vocabulary through an understanding of affixes, collocations, idioms, and phrasal verbs.

EFL 092
Grammar I • 5 Credits
This course is designed for non-native speakers of English to strengthen their understanding of the parts of speech and their usage. Emphasis is on the use of nouns, verbs, articles, and prepositions and their roles in sentences.

EFL 093
Grammar II • 5 Credits
This course is designed for non-native speakers of English to strengthen their understanding of sentences, their forms, structures and usage. Emphasis is on the use of clauses, subjects and predicates, punctuation, variety and style. **Prerequisite: successful completion of EFL 092 or instructor permission.**

EFL 094
Speaking & Listening • 5 Credits
This course is designed for non-native speakers of English to strengthen their ability to speak clearly, create oral presentations, participate in academic discussions, and develop skills for taking notes from a lecture.

EFL 095
Reading & Writing I • 5 Credits
This course is designed for non-native speakers of English to strengthen their ability to effectively read basic academic texts, develop vocabulary, improve speed and comprehension, and identify relationships between ideas. The writing component focuses on the creation and use of effective sentences to express ideas in a paragraph. **Prerequisite: additional testing required through Adult Basin Education or instructor permission.**

EFL 096
Reading & Writing II • 5 Credits
This course is designed to teach non-native speakers of English the fundamentals of writing a well-developed and grammatically correct paragraph and increase their ability to read and comprehend academic texts. **Prerequisite: additional testing required through Adult Basic Education or instructor permission.**

EFL 097
Reading & Writing III • 5 Credits
This course is designed to strengthen the academic reading and writing skills of non-native speakers of English. Emphasis is on writing a well-developed and grammatically correct essay and reading academic texts. **Prerequisite: EFL 096 or instructor permission.**

EFL 101
Written English Language I [H] • 5 Credits
This course is part one of a two-step sequence dealing with written English skills. The course addresses rhetorical styles in writing essays as well as journal writing to increase fluency in writing. Students 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 are addressed, including verb tense choice, verb form, and article usage. **Prerequisite: P grade in ENGL 098, MTELP score 70 or more, TOEFL score 500 or more, or instructor permission.**

EFL 102
Spoken English • 5 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, pronunciation work, and oral presentation skills. This course may be taken concurrently with either EFL 101 or EFL 111. **Prerequisite: P grade in developmental ELA, MTELP 70 or more, TOEFL score of 500 or more, or instructor permission.**

EFL 111
Written English Language II [H] • 5 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 is continued and further research is encouraged. More problematical structures are explained. **Prerequisite: completion of EFL 101, MTELP score of 85 or more, TOEFL score of 520 or more, or instructor permission.**

EFL 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

English Language Acquisition

columbiabasin.edu/ela

Department Overview: The English Language Acquisition (ELA) 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. ELA courses coded below 090 are tuition free with non-transferable credits. **A $25 tuition fee per quarter is required for registration in ELA classes up to 18 credits.**

ELA 009
ELA ED Interviewing • 1 - 3 Credits
The purpose of this course is to improve learner retention, persistence, and performance through research-proven goal-setting, problem-solving, evaluation, intervention, and self-awareness strategies.

ELA 010
ELA Level 1 • 1 - 18 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.

ELA 020
ELA Level 2 • 1 - 18 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.

ELA 030
ELA Level 3 • 1 - 18 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.

ELA 040
ELA Level 4 • 1 - 18 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.

ELA 050
ELA Level 5 • 1 - 18 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.

ELA 053
ELA Writing Workshop • 4 Credits
This multi-level class is designed to teach non-native speakers of English the fundamentals of good English writing. Students 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 ELA Level 3 students and above.

ELA 054
ELA Civics • 2 Credits
A study of U.S. history and government to prepare students who wish to pass a civics test for permanent residency.

ELA 056
ELA Computer Lab • 1 - 6 Credits
A course with a computer lab setting to help non-native speakers of English transition to college level academic or vocational courses. Coursework is individualized to fit the needs of each student. The lab may be taken in conjunction with an ELA class or independently.

ELA 057
ELA Conversation • 4 Credits
This course is designed to develop ELA students' listening and speaking skills and to improve their social and intercultural communication skills.

ELA 059
ELA Technology • 0.9 Credits
This course is designed to provide instruction for students who need help with technology including computer skills, computer basics, and keyboarding skills. These skills will better prepare students for transition into post-secondary education.

ELA 060
ELA Level 6 • 1 - 18 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.

ELA 090
I-Best Studies • 1 - 10 Credits
This course integrates Washington English Language Acquisition level 5 and 6 reading, writing, speaking, and listening standards and indicators with a college-level course. Example: Child Development Associate, Nursing Assistant Certified, or Phlebotomy.

ELA 199
Special Studies • 1 - 7 Credits
A class used to explore new coursework.

Environmental Science

columbiabasin.edu/enviroscience

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 system's ability to replenish them.

ENVS 174
Intro to Meteorology and the Atmosphere [M/S] • 5 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. **Prerequisite: MATH 095 or MATH 098.**

ENVS 310
Environmental Issues [M/S] • 5 Credits
Basic concepts of ecology and environmental science are discussed and illustrated through lab experiences and then further elaborated through discussing environmental issues from a strategic business perspective. Discussions include how environmental pressures (e.g. sustainable development) and environmental problems (e.g. global warming, air pollution, waste-disposal), impact corporate mission, competitive strategy, technology choices, product development decisions, production processes, and corporate responsibility. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

ENVS&101 (Formerly ENVS 100)
Intro to Environmental Science w/Lab [M/S] • 5 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.

Fire Science

columbiabasin.edu/firescience

Department Overview: Beyond any other profession, firefighting exemplifies responsibility and courage. The desire to work in this profession is fueled by a value of life and an instinct to protect it. The Fire Science offerings at CBC assist students in beginning or propelling a career in fire service. By building new skills and strengthening those that already exist, an education at CBC better prepares students to protect their community while giving them an edge in the well-respected, well-compensated career fields.

CBC offers an Associate in Applied Science degree in Fire Science. Students enrolled in the Fire Science program will complete general education courses in industrial, social, political, and economic concepts relating to the field of fire science. In addition, students will be exposed to courses in fire administration, tactics, inspection, investigation, hazardous materials, and more. Firefighters possessing such a comprehensive background will increase their chances of career advancement and will be better prepared to protect the community. The updated degree requirements also provide flexibility to students wanting to prepare for multiple career options, including paramedic.

To earn an Associate in Applied Science degree, candidates must accumulate the required credit hours in the Fire Science program. Classes are held in the evenings on a two-year rotation.

FS 100
Introduction to Fire Service • 1 Credit
This course is designed to give students a broad understanding of the fire service in the United States. The course focuses on history, organization, and the primary components that make up the various forms of fire protection services in America today. This course is required for those students having no previous exposure to the fire service such as Tri-Tech Fire Science courses or experience as a firefighter.

FS 111
Fire Administration • 1 - 3 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 - 3 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 - 3 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
Chemistry of Hazardous Materials • 3 Credits
This course is a survey of hazardous materials, their physical properties, chemical properties, and how they relate to emergency first responders who are called to manage events related to the release of hazardous materials. This course is intended for individuals who are majoring in Fire Science or who are enrolled in the Washington State Firefighter Apprenticeship program.

FS 151
Hazardous Materials for First Responders • 3 Credits
An applied course covering special firefighting situations involving hazardous materials. This course is intended for individuals who are majoring in Fire Science or who are enrolled in the Washington State Firefighter Apprenticeship program.

FS 193
Fire Science Independent Studies • 1 - 15 Credits
A class used to explore new coursework or for a specific topic of special interest.

FS 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

FS 211
Building Construction • 1 - 3 Credits
A course covering basic building construction, outlining the specific weaknesses of various constructions.

FS 222
Fire Tactics II • 3 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 - 3 Credits
Designed to give students a clear understanding of the principles and limitations of fire suppression and detection systems.

FS 241
Fire Investigation • 1 - 3 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 are discussed.

FS 251
Fire Service Hydraulics • 3 Credits
This course is designed to give the firefighter an understanding of municipal water systems, principles of fluids, water in motion, formulas for calculating water flow and pressure, fire flow requirements, and basic fire stream calculations. This course prepares students, in part, for fire apparatus pump operations.

FS 293
Fire Science Independent Studies • 1 - 10 Credits
A class used to explore new coursework or for a specific topic of special interest.

FS 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

Firefighter I

columbiabasin.edu/firescience

Department Overview: The Firefighter I (FCA) courses were utilized for a previous degree structure and have been replaced by courses under the Fire Protection Technology degree. For additional information, please see the Fire Protection Technology degree program.

FCA 105
Hydraulics • 3 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 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 Credits
Designed to give a clear understanding of the principles and limitations of fire suppression and detection systems.

FCA 152
Building Construction • 3 Credits
A course covering basic building construction, outlining the specific weaknesses of various types of construction.

FCA 160
Fire Ground Tactics • 3 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 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 are presented.

FCA 190
Introduction to Fire Inspection and Codes • 3 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 - 23 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 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

columbiabasin.edu/fyi

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 attend seminars where topics like college terminology, study skills, and learning styles are discussed. There are also a number of diverse modules to choose from ranging from career planning, to computer survival skills, to time management. Students 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
- Begin the educational planning process for each student
- Create a stronger sense of responsibility among students for their education
- Emphasize the importance of 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

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 acclimating students to the college environment and improving student persistence in college.

FYI 101
First Year Introduction • 1 Credit
FYI is an introduction to academic culture and student success strategies, as well as expectations, resources, procedures, and policies of CBC. FYI supports students in their transition to college. FYI is required for all degree and certificate seeking students in the first quarter of classes.

FYI 199
Special Studies • 1 - 2 Credits
A class used to explore new coursework.

French

columbiabasin.edu/french

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.

FRCH 150 (Formerly FR 150)
Beginning Conversational French • 1 - 5 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. **Recommended prerequisite: successful completion of at least FRCH& 121.**

FRCH 151 (Formerly FR 151)
Beginning Conversational French • 1 - 5 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. **Recommended prerequisite: successful completion of at least FRCH& 121.**

FRCH 152 (Formerly FR 152)
Beginning Conversational French • 1 - 5 Credits
Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. **Recommended prerequisite: successful completion of at least FRCH& 121.**

FRCH 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

FRCH 250 (Formerly FR 250)
Intermediate Conversational French • 1 - 5 Credits
Intensive practice in speaking French for students who have already gained a knowledge of beginning level grammar and vocabulary. Class is conducted entirely in French. **Prerequisite: instructor permission.**

FRCH 251 (Formerly FR 251)
Intermediate Conversational French • 1 - 5 Credits
Intensive practice in speaking French for students who have already gained a knowledge of beginning level grammar and vocabulary. Class is conducted entirely in French. **Prerequisite: instructor permission.**

FRCH 252 (Formerly FR 252)
Intermediate Conversational French • 1 - 5 Credits
Intensive practice in speaking French for students who have already gained a knowledge of beginning level grammar and vocabulary. Class is conducted entirely in French**. Prerequisite: instructor permission.**

FRCH 260 (Formerly FR 260)
French Literature Reading [H] • 1 - 3 Credits
Selected readings of French literature. **Prerequisite: FRCH& 223 or instructor permission.**

FRCH 261 (Formerly FR 261)
French Literature Reading [H] • 1 - 3 Credits
Selected readings of French literature. **Prerequisite: FRCH& 223 or instructor permission.**

FRCH 262 (Formerly FR 262)
French Literature Reading [H] • 1 - 3 Credits
Selected readings of French literature. **Prerequisite: FRCH& 223 or instructor permission.**

FRCH 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

FRCH& 121 (Formerly FR 101)
French I [H] • 5 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 prerequisite: successful completion of at least ENGL 099.**

FRCH& 122 (Formerly FR 102)
French II [H] • 5 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 permission.**

FRCH& 123 (Formerly FR 103)
French III [H] • 5 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 permission.**

FRCH& 221 (Formerly FR 201)
French IV [H] • 5 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 permission.**

FRCH& 222 (Formerly FR 202)
French V [H] • 5 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 permission.**

FRCH& 223 (Formerly FR 203)
French VI [H] • 5 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 permission.**

General Engineering

columbiabasin.edu/engineering

Department Overview: General Engineering courses are required for various engineering degrees and fulfill the requirements for transfer to four-year institutions.

ENGR 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

ENGR 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

ENGR& 111 (Formerly GE 101)
Engineering Graphics 1 • 3 Credits

Principles of mechanical drawing: geometric construction, orthographic projection, sectional views, auxiliary views, isometric and oblique drawings, dimensions, threads, fasteners, and lettering.

ENGR& 214 (Formerly GE 281)
Statics • 5 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. P**rerequisite: PHYS& 241/231 and MATH& 151.**

ENGR& 215 (Formerly GE 291)
Dynamics • 5 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.**

Geography

columbiabasin.edu/geography

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 Associate in Arts and Sciences degree, 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 skill-building 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.

GEO 101
Physical Geography [M/S] • 5 Credits

Physical Geography provides 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 150
Cultural Geography [S/B] • 5 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.

GEO 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

GEO 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

Geology

columbiabasin.edu/geology

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 in Arts and Sciences degree, and personal interest opportunities for the community.

Intro to Physical Geology 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 ever-increasing collision course between humans and our geologic environment, including flooding, landslides, earthquakes, pollution, and volcanic eruptions. Historical Geology is the study of earth's continents, oceans, and life forms through time. The Geology offerings promote extensive skill-building 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.

GEOL 115
Geology of the National Parks • 5 Credits
The U. S. national parks and wilderness monuments preserve spectacular natural wonders. Their beauty is a direct result of their underlying geology. In this course, we explore the processes and forces by which the park lands were formed and transformed over geologic time, and their current geologic significance. This includes volcanism, plate tectonics, mountain-building, and alpine glaciations.

GEOL 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

GEOL 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

GEOL& 101 (Formerly GEL 101)
Intro to Physical Geology w/ Lab [M/S] • 5 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 groundwater processes. Outline of geologic development of the Pacific Northwest, including field studies. Lecture and lab must be taken concurrently. **Prerequisite: MATH 084 with a grade of 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or test placement.**

GEOL& 103 (Formerly GEL 203)
Historical Geology w/ Lab [M/S] • 5 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 or instructor permission.**

GEOL& 110 (Formerly GEL 211)
Environmental Geology w/ Lab [M/S] • 5 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 are 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 or instructor permission.**

Health Education

columbiabasin.edu/healtheducation

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.

HE 110
Concepts of Fitness [PE] • 2 Credits
Physiological, kinesiological, and energy aspects of movement activities and exercises related to health and physical fitness. The course is lecture/lab.

HE 160
Diet, Exercise & Weight Control [PE] • 2 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 students' total well-being.

HE 161
HIV/AIDS Issues and Strategies [PE] • 2 Credits
A comprehensive overview of the virus HIV and AIDS, including: biological, epidemiological, historical, universal precautions, economic, legal, ethical, social, and behavioral aspects.

HE 162 (formerly HE 1611)
HIV/AIDS Education [PE] • 1 Credit
This lab is designed to provide additional information on HIV/AIDS and activities that prepare students to give presentations about health issues related to HIV/AIDS to classes and other student groups on campus.

HE 170
Health and Wellness [PE] • 3 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 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 172 (formerly HE 1711)
Exercise Prescription Lab [PE] • 1 Credit
Lab to be taken concurrently with HE 171.

HE 199
Special Studies • 1 - 15 Credits
An experimental class to be used to explore new approaches and applications to Health Education.

HE 210
Sports Nutrition [PE] • 3 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 are studied.

HE 215
Health and Fitness for Life [PE] • 2 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 216 (formerly HE 2151)
Health and Fitness for Life Lab [PE] • 1 Credit
Lab to be taken concurrently with HE 215.

HE 220
Drugs and Health [PE] • 3 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 • 3 Credits
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 Credits
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 are studied.

HE 240
Stress Management [PE] • 3 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 Credits
This course is an introduction to the history, current global perspectives, trends, and research regarding the field of sports management. Students gain an understanding of marketing, organization, and financial aspects of sports management.

Health Sciences

columbiabasin.edu/healthsciences

Department Overview: The Health Sciences (HSCI) courses provide both specialized multi-healthcare education and certification as well as general courses to meet a broad spectrum of healthcare program needs.

HSCI 147 (Formerly AOT 147, HIT 147)
Medical Terminology • 5 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; 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.

HSCI 148
Spanish Medical Interpreting I • 5 Credits
This course provides students who are already fluent in English and Spanish with the vocabulary and phraseology necessary to communicate effectively and professionally with Spanish-speaking patients and family members in clinical settings. Students who successfully complete this class are eligible to enroll in Spanish Medical Interpreting II. Students who successfully complete both courses with a GPA of 2.5 or higher will receive a Short-Term Certificate in Spanish Medical Interpreting and are eligible to take the Washington State Department of Social and Health Services Language Testing and Certification if they wish to become a state certified medical interpreter. **Prerequisite: for consideration into this two-quarter training, contact the Health Science Center at 509.544.8300 for more details regarding entrance interview and appointment.**

HSCI 149
Spanish Medical Interpreting II • 5 Credits
This is the second class in a two-course certificate. This course provides students with the skills required to master the three modes of interpreting; sight translation, consecutive interpreting, and simultaneous interpreting in clinical settings. Students who successfully complete this course with a GPA of 2.5 or higher will receive a Short-Term Certificate in Spanish Medical Interpreting. **Prerequisite: HSCI 148.**

HSCI 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

HSCI 220
ACLS Initial • 2 Credits
Through the Advanced Cardiac Life Support course, healthcare providers enhance their skills in the treatment of the adult victim of a cardiac arrest or other cardiopulmonary emergencies. The emphasis is 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. **Prerequisite: current healthcare provider BLS card and completion of prerequisite checklist.**

HSCI 221
ACLS Renewal • 0.9 Credits
This course is offered to provide an update to current ACLS providers and to renew ACLS provider status. **Prerequisite: current Healthcare Provider BLS card, current ACLS Provider Card, and completed ACLS precourse checklist.**

HSCI 222
ACLS Experienced Provider • 1 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. **Prerequisite: current Healthcare Provider BLS card and current ACLS Provider Card.**

HSCI 223
ACLS Instructor Course • 1 Credit
One credit class to prepare individuals to become instructors in advanced cardiovascular life support. **Prerequisite: 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 Credits
The goal of the Pediatric Advanced Life Support (PALS) 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. **Prerequisite: current Healthcare Provider BLS card and completed PALS precourse checklist.**

HSCI 231
PALS Renewal • 0.9 Credits
This course is offered to provide an update to current PALS providers and to renew PALS provider status. **Prerequisite: current Healthcare Provider BLS card, current PALS Provider card, and completed PALS precourse checklist.**

HSCI 233
PALS Instructor Course • 1 Credit
One credit class to prepare individuals to become instructors in pediatric advanced life support. **Prerequisite: 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 Credits
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 Credits
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 Credits
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 Credits
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 Credits
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 Credits
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 are the primary focus of the course. **Prerequisite: current certification as paramedic.**

HSCI 246
ALS/OTEP Burns & Soft Tissue Trauma • 0.3 Credits
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 are covered. Additionally, the pathophysiology, assessment, and management of all severities of burns is addressed. At the completion of the course, students are 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 Credits
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 are covered in depth. At the completion of the course, students are 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 Credits
The focus of this course is the epidemiology and pathophysiology of head and facial trauma. Specific assessment and management techniques are reviewed and discussed within the course. At the completion of the course, students are 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 Credits
The focus of this course is the epidemiology and pathophysiology of neck and spinal trauma. Specific assessment and management techniques are reviewed and discussed within the course. At the completion of the course, students are 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 Credits
The focus of this course is the epidemiology and pathophysiology of chest and abdominal trauma. Specific assessment and management techniques are reviewed and discussed within the course. At the completion of the course, students are 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 Credits
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 Credits
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 Credits
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 Credits
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 Credits
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 Credits
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 Emerg & the Violent Patient • 0.3 Credits
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 Credits
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 Credits
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 Credits
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 Credits
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 Credits
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 Credits
This course is intended for the EMT-Intermediate as a supplement to his/her EMT-B OTEP courses. This course focuses 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 Credits
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.**

HSCI 293
Current Topics • 1 - 15 Credits
This course is an elective credit for on-the-job firefighting training and experience.

HSCI 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

Healthcare Administration

columbiabasin.edu/hcad

Department Overview: The Healthcare Administration concentration within the Bachelor of Applied Science in Applied Management degree is designed to provide in-depth prepared healthcare specialists that are knowledgeable and skilled in management and leadership within the healthcare sector. There are a wide range of exciting careers in health services management, including assistant department head, assistant hospital administrator, or management positions in residential care facilities and practitioners' offices.

HCAD 300
Healthcare Systems, Strategic Thinking,&Strategy • 5 Credits
Foundational introduction to the healthcare administration profession. Examination of system/strategic thinking, strategy making, styles of leadership and administration, and management theories as applied to healthcare organizations. Additional focus is placed on evolving trends in healthcare delivery due to healthcare policy changes such as the Affordable Care Act and the role of other federal, state, and local government healthcare public policy impact on health services. Best practices in healthcare such as evidenced-based practice, wellness models, treating the whole person, innovation, and the application of change management and decision science are also discussed. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval, and AMGT 300.**

HCAD 310
Healthcare Operations Management • 5 Credits
This course addresses use of operations management concepts and skills in healthcare organizations. Students learn how to analyze, design, plan, and identify support for healthcare delivery services and to effectively and efficiently meet patient needs. Theory is addressed and explored through the use of case studies. Topics also include healthcare quality assurance, performance management, healthcare facilities, management skills, supply chain management, and patient flow logistics. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

HCAD 315
Healthcare Informatics/Information Technology • 5 Credits
This course provides an introduction to health information technology and to the science of informatics as applied to healthcare. Emphasis is placed on how healthcare facilities use information technology to select and utilize electronic information management systems and to integrate data from patient health records. Topics include: use of computer networks, system protocols and policies, data and system architecture and congruency, communication and legal issues, basic computer security and safety, mobile applications, multi-system integration, stand-alone applications, data collection methods and integrity, legal document compliance, and consistent documentation to prevent errors. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval. This course is cross linked to NRS 315. Students completing HCAD 315 may not receive graduation credit for NRS 315.**

HCAD 330
Legal Issues in Healthcare • 5 Credits
This course covers laws and regulations that affect healthcare administration including torts and crimes, contracts, HIPAA and Stark laws, and federal and state laws and regulations such as the Affordable Health Act. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent or instructor approval.**

HCAD 350

Healthcare Marketing • 5 Credits

Examines marketing as a management tool and the application of marketing to healthcare, the marketing process, marketing resources, and strategies for accomplishing marketing objectives. This course involves analysis, evaluation, and implementation of marketing strategies within healthcare and managed-care environments. This course is also designed to develop skills in segmenting customer and medical markets, brand products and services, enhance a communication strategy to the consumer, and develop pricing approaches. Methods and models of marketing fundamentals are introduced. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

HCAD 420

Human Resources Management & Policy • 5 Credits

Course topics include healthcare personnel policies and programs, human resources requirements, recruitment, onboarding new staff, talent management, performance appraisal, salary and wage administration, communicating with and motivating of healthcare personnel, and management/labor relations in healthcare industries. Healthcare policy, politics, and the role of federal, state and local government on healthcare public policy and its impact on healthcare services are also considered. The basic principles for policy development are discussed. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

HCAD 480

Healthcare Administration Capstone • 3 Credits

Provides students the opportunity to integrate and synthesize the required healthcare administration and applied management coursework. The focus is the application of healthcare leadership and management components, theories, and concepts. Provides the theoretical foundations of program planning and evaluation (including needs assessment, program monitoring, and outcome evaluation), and their applications. Students develop a comprehensive strategic plan for a healthcare organization, complete a major project, and/or complete an approved internship. **Prerequisite: AMGT 300, 400, 420, 430, and HCAD 300, 315, 330, and 350.**

Healthcare Central Service Technology

columbiabasin.edu/hcst

Department Overview: The CBC Healthcare Central Service Technology program prepares students for an entry-level career in sterile processing and materiel management. Commonly referred to as sterile processing technicians, central service technicians perform decontamination and sterilization procedures required to ensure proper reprocessing of invasive therapeutic and diagnostic equipment, surgical instrumentation, and medical supplies. Additional duties include assembly and inspection of surgical instruments, maintenance and delivery of patient equipment, inventory control and supply ordering, and preoperative case preparation.

Central service technicians are typically employed in hospital central service, sterile processing, and materiel management departments but may also be stationed in outpatient surgery centers and other medical device related facilities. Many central service technicians will work a 40-hour week, but may also need to be available during weekends, evenings, holidays, or on-call.

CBC's Healthcare Central Service Technology program is a two-quarter program beginning in spring quarter. The Healthcare Central Service Technology program is a selective admission program. You must apply to the College and also to the program. Applicants are screened according to timely coursework completion and grades completed through winter quarter. During the course of the program, enrolled students will gain extensive hands-on training and acquire 400 hours of applied technical experience in clinical settings. Upon successful completion of all certificate and program requirements, students will obtain a Healthcare Central Service Technology Short-Term Certificate.

HCST 100

Foundations of Central Service • 6 Credits

This course is designed to prepare students for entry-level opportunities within the central service and material management setting. Fundamentals of sterile processing are discussed in the context of today's diverse perioperative environment. Students learn basic technical concepts within the scope of the central service department. Topics include supply chain management, purchasing and inventory management concepts, recommended standards of practice for instrument and equipment processing, safety regulations, and the impact of effective customer service on quality patient care. **Prerequisite: HSCI 147 with a 2.0 or better and acceptance into the Healthcare Central Service Technology program.**

HCST 150

Central Service Clinical • 12 Credits

This course provides students the opportunity to apply central service and material management concepts within the context of a clinical internship. Students perform technical skills within the scope of the central service department. Skills include cleaning and disinfecting medical devices, preparing items for sterilization, inspecting and assembling surgical instrumentation, operating sterilization equipment, and storing surgical equipment and supplies. **Prerequisite: HCST 100 with a 2.0 or better.**

Hebrew

columbiabasin.edu/hebrew

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.

HEB 121

Hebrew I [H] • 5 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. **Recommended prerequisite: successful completion of at least ENGL 099.**

HEB 122

Hebrew II [H] • 5 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 121 or instructor permission.**

HEB 123

Hebrew III [H] • 5 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 permission.**

History

columbiabasin.edu/history

Department Overview: The History department is comprised of professors 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 a historical awareness that allows the student to think and write critically about human society. CBC offers a two-year Associate in Arts and Sciences (AA) degree with an emphasis in History.

HIST 107 (Formerly HIS 107)
Chicano History [S/B] • 5 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.

HIST 108 (Formerly HIS 108)
History of Immigration in the U.S. [S/B] • 5 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 U.S. The course also examines and compares the experience of the various groups once they are in the United States.

HIST 110 (Formerly HIS 110)
History of Modern East Asia [S/B] • 5 Credits
A history of East Asia. Major emphasis is on the history of China, an analysis of modernization in Japan, and issues of colonialism and nationalism in East Asia.

HIST 111 (Formerly HIS 111)
Colonial Latin America [S/B] • 5 Credits
The primary objective of the course is to familiarize students with the major phases in colonial Latin American history, including 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.

HIST 112 (Formerly HIS 112)
Modern Latin America [S/B] • 5 Credits
A survey of the political, social, and economic history of Latin America from the last decades of the nineteenth century to the present.

HIST 113 (Formerly HIS 113)
Mexico Since Independence [S/B] • 5 Credits
This course provides 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.

HIST 115 (Formerly HIS 115)
History of Modern Middle East [S/B] • 5 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.

HIST 116 (Formerly HIS 116)
History of Africa [S/B] • 5 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.

HIST 117 (Formerly HIS 117)
History of India [S/B] • 5 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.

HIST 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

HIST 233 (Formerly HIS 233)
War in History [S/B] • 5 Credits
A study of the history of warfare in the Western world from the Ancient period to the present. Students are introduced to the study of war in terms of its social, political, economic, technological, and cultural roots and its effects on these various fields.

HIST 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

HIST& 126 (Formerly HIS 101)
World Civilizations I [H] • 5 Credits
A study of world civilizations from their origins through late antiquity. Emphasis is placed upon Western, East Asian, and South Asian civilizations. Philosophies, religions, and political and social systems are covered.

HIST& 127 (Formerly HIS 102)
World Civilizations II [H] • 5 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 are covered with emphasis upon Europe, Asia, and Africa.

HIST& 128 (Formerly HIS 103)
World Civilizations III [H] • 5 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.

HIST& 146 (Formerly HIS 104, HIST&136)
U.S. History I [S/B] • 5 Credits
Survey of American history from the colonial period through the Civil War. Emphasis is placed on Native Americans, early colonial development, the American Revolution, the building of the nation, territorial expansion, slavery, and the Civil War.

HIST& 147 (Formerly HIS 105, HIST&137)
U.S. History II [S/B] • 5 Credits
Survey of U.S. history from the Civil War through World War II. Emphasis is placed on Reconstruction, industrialization, immigration, American foreign policy, Progressive Reform, the twenties, the Great Depression, the New Deal, and World War II.

HIST& 148
U.S. History III [S/B] • 5 Credits
Survey of U.S. History from World War II to the present. Emphasis is placed on the Cold War era, Vietnam, Civil Rights, the liberal consensus, the rise of modern conservatism, minority relations, the 1990s, and post 9-11 American society.

HIST& 214 (Formerly HIS 251)
Pacific Northwest History • 5 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.

Horticulture

columbiabasin.edu/horticulture

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 Associate in Arts and Sciences with an Emphasis in Agri-Business.

HORT 202
Cultivated Plants w/ Lab • 5 Credits
The goal of the course is to introduce students to the morphology, anatomy, growth, and development of agronomic and horticultural crops. **Recommended prerequisite: BIOL& 211.**

HORT 203
Crop Growth & Development w/ Lab • 5 Credits

Basic scientific principles of crop growth and development, including external abiotic (light, temperature, water, and nutrients) influences and their interaction with internal influences (genes, proteins, and hormones) from the cellular to the whole plant level. Consideration of how the application of such scientific knowledge has and can lead to crop improvement for efficient and sustainable crop production is emphasized. **Recommended prerequisite: HORT 202.**

HORT 251
Plant Propagation w/ Lab • 5 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.

Human Development (HDEV)

columbiabasin.edu/humandev

Department Overview: Human Development (HDEV) courses at Columbia Basin College provide students with a theoretical and practical foundation for human growth and development across the life span. Encompassing a broad spectrum of inter- and intra-personal skills that enhance professional and personal relationships, these courses address such topics as learning theory, tools and techniques to succeed in college and life, career exploration and planning, decision-making, and interpersonal communication. These classes are open to all CBC students and can be taken for personal development or as college-level restricted elective credits towards the Associate in Arts and Sciences degree.

HDEV 100 (Formerly ED 100, EDUC 100)
College Success • 3 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 are incorporated throughout the course.

HDEV 101
Creating Academic Success • 4 Credits

Designed to help students identify and understand the fundamental characteristics and learning strategies needed to achieve their goals for college and beyond. Students explore the role that personal responsibility, behaviors, and beliefs play in academic and personal achievement. Students utilize campus tools and resources to develop academic plans that support their career and educational goals.

HDEV 102
College Connections • 3 Credits

A seminar exploration of Columbia Basin College, college-level skills, behaviors, and expectations. Designed to empower students with a holistic, strengths-based approach to navigate career and college success. Students develop the skills necessary to perform academic planning and campus navigation. **Prerequisite: placement into college-level reading and math. Recommended: computer skills and the ability to navigate online.**

HDEV 110
Academic CPR • 1 Credit

Academic CPR is a course designed for students who have been dismissed from CBC. This course focuses on providing students with the tools and resources to raise their grades so that they may become academically successful and ultimately meet their educational goals. Some of the topics covered are: learning styles, an examination of personal academic records, time management, study strategies, developing problem-solving skills, self-exploration, career interests, and the creation of an action plan to achieve sound educational goals. Successful completion (i.e. earning a 3.0 grade or higher) in this course allows students in dismissal status to return to CBC prior to sitting out four quarters and to enroll without a substantial tuition penalty.

HDEV 120
Career Experience • 2 Credits

This course focuses on experiential learning to assist students in developing educational and occupational goals. Topics include professionalism, networking strategies, innovative approaches to job seeking, and effective use of online resources in professional development. Students "try on a career" through job shadowing and conduct informational interviews with individuals in occupations that interest them. These real world experiences allow students to develop professionally and generate solid career possibilities that will increase the likelihood of making satisfying occupational choices.

HDEV 124
Dependable Strengths • 1 Credit

Discover core strengths to increase confidence and employability using the Dependable Strengths Articulation Process (DSAP). Students plan for a successful future by identifying core strengths from past experiences that aid in overall life and career satisfaction. Students explore the connection between their strengths and career choice. Topics include highly effective approaches to well-being and resiliency and more.

HDEV 128
Maximizing Choices • 1 Credit

Introduces effective decision making and goal setting models as they pertain to choosing a college major, a career, and other key life decisions. Students practice using these models in various decisions, from every day ones, to those that will lay the foundation for determining their educational, career, and life goals.

HDEV 135 (Formerly ED 135, EDUC 135)
College Major/Career Planning • 3 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.

HDEV 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

Human Services

columbiabasin.edu/humanservices

Department Overview: The Human Services program is designed to provide the necessary education and skills for those interested in joining the helping profession or that are 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, Intercultural Studies, Political Science, Sociology, or transfer degree requirements. The course structure provides essential theory and practice of helping skills for providing services to clients, consumers, and students most effectively and efficiently.

HS 101
Introduction to Social Work • 5 Credits
An overview of social work experience including history, purpose and tasks, practice settings, and future trends of social work profession.

Industrial Drawing

columbiabasin.edu/industrialdrawing

Department Overview: Columbia Basin College offers two Industrial Drawing courses. They are tailored specifically for the following programs:

Manufacturing Technology

This course is designed to lead Manufacturing Technology students into reading basic machine shop blueprints. Students are also introduced to Computer Aided Drawing (CAD) software.

Welding Technology

This course is designed to teach sketching and drawing for welding shop fabrication along with an introduction to blueprint reading.

DRW 106
Mechanical Drawing for Vocational Application • 3 Credits
A basic course in the technique of sketching and drawing. Welding students learn to create orthographic, oblique, and isometric renderings. This course also teaches dimensioning for the welding shop fabrication drawings.

Industrial Hygiene Technology

columbiabasin.edu/iht

Department Overview: Industrial Hygiene Technology courses focus on implementing and enforcing safety standards. Currently, IHT courses support safety practices in existing programs.

IHT 100
OSHA-10 • 1 Credit
Provides the Occupational Safety and Health Administration (OSHA) 10-hour safety awareness training certification.

Industrial Technology

Department Overview: This department offers basic and specialized skills required for multiple industry areas.

INT 101
Forklift Operations • 1 Credit
Training and preparation for powered forklift operations.

INT 120
Production Technician • 12 Credits
This course provides an overview of five critical work functions within industry production: safety, quality practices and measurement, manufacturing processes and production, and maintenance awareness. **Prerequisite: instructor permission.**

INT 130
Logistics Technician • 12 Credits
This course provides an overview of the world of supply chain logistics and good workplace habits in the context of the industry, including global supply chain life cycle, logistics environment, material handling equipment and safety, safety principles, quality control teamwork, communication, and using computers. **Prerequisite: instructor permission.**

INT 250
Principles of Troubleshooting • 4 Credits
This course is designed to teach today's technicians a logical approach to solving problems. The course consists of both lecture and hands-on practice using computer simulations of industrial systems and related test equipment. Using the Path of Influence and Four-Step process along with the troubleshooting simulation, the technician analyzes the fault and chooses maintenance actions such as continuity tests, bench checking, and swapping that might correct the problem. The logic used is evaluated as well as the time and expenses incurred by the technician to solve the problem. **Prerequisite: any one of the following: AMT 120, ELT 111, ENT 238, equivalent coursework, or instructor permission.**

INT 251
Troubleshooting for Technicians • 2 Credits
This course is designed to supplement experienced technicians' knowledge of troubleshooting using a logical approach to solving problems. The course consists of using computer simulations of industrial systems and related test equipment. Using the Path of Influence and Four-Step process along with the troubleshooting simulations, the technician analyzes the fault and chooses maintenance actions such as continuity tests, bench checking, and swapping that might correct the problem. The logic used is evaluated as well as the time and expenses incurred by the technician to solve the problem. **Prerequisite: any one of the following: AMT 120, ELT 111, ENT 238, equivalent coursework, or instructor permission.**

Instrumentation and Control

columbiabasin.edu/ic

Department Overview: Instrumentation and control courses support the Nuclear Technology program. Instrumentation and control requires highly skilled people who understand electrical, mechanical, hydraulic, and pneumatic principles in the installation, operation, and maintenance of instrumentation, and process control systems.

IC 201
Instrumentation I • 5 Credits
The first of three courses focused on the in-depth knowledge required for specific jobs tailored to the instrumentation and control maintenance discipline. It builds upon the general and system component knowledge gained in the first level of the program. Both generic and plant specific equipment are included in the instruction. **Prerequisite: ELT I54; NT 170 recommended.**

IC 202
Instrumentation II • 5 Credits
The second of three courses focused on the in-depth knowledge and skills needed to maintain instrumentation in a nuclear power plant. Includes training on specific components of the power plant. **Prerequisite: IC 201.**

IC 203
Instrumentation III • 5 Credits
The third of three courses focused on the in-depth knowledge and skills needed to maintain instrumentation in a nuclear power plant. Includes training on specific components of the power plant. **Prerequisite: IC 202.**

IC 230
PLC Programming & Computer Interfacing • 5 Credits
Designed to prepare the instrumentation maintenance technician to program, trouble shoot, and maintain Programmable Logic Controllers (PLCs) and computer interfaces associated with the nuclear power plant. **Prerequisite: IC 203.**

IC 250
Instrumentation & Control for Operators • 5 Credits
Basic introduction to instrumentation and control processes for operators. Topics include basic control circuits, pneumatic devices, sensors, and hydraulic controls. **Prerequisite: NT 111 and ELT 111 or ELT 124.**

IC 260
Process Instrumentation • 5 Credits
Topics build upon basic instrumentation knowledge and skills in previous course. Focus is on developing the knowledge and skills related to valve operations and components associated with strainers and filters. **Prerequisite: IC 250.**

Intercultural Studies

columbiabasin.edu/interculturalstudies

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.

ICS 100
Cultural and Historical Linked to Travel • 1 - 3 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.

ICS 120
Survey of Hispanic Culture [H] • 5 Credits
An introduction to the culture and civilization of the Spanish-speaking world; taught in English.

ICS 125 (Formerly HIST&219)
Native American Culture [H] • 5 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.

ICS 130
Survey of Asian American Culture [H] • 5 Credits
An introduction to the history and people of Asian descent in the United States. This class covers 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 135 (Formerly HIS 106, HIST&220)
Survey of African American Cultures [H] • 5 Credits
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 issue facing the African American community today.

ICS 199
Special Studies • 1 - 5 Credits
A class used to explore new coursework.

ICS 222
Columbia Basin Cultures [H] • 5 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 Credits
Relationships among various ethnic and racial groups in America, patterns of immigration, assimilation and mobility, and inter-ethnic conflicts and coalitions are examined. Although the perspective is historical, contemporary data is used to explore the question of the persisting impact of ethnicity. Special attention is paid to the relationship between ethnicity and social class.

ICS 310
American Diversity [H] • 5 Credits
This course examines race, ethnicity, class, gender, disability, sexuality, and other forms of diversity, with the goal of understanding how diversity is changing the contours of American society and reshaping the American workplace. Students explore diversity with an aim towards applying that knowledge to workplace and social relationships in our pluralistic society. By the end of the course, students will have a greater understanding of the diverse context of American society and will be conversant in the ongoing debates regarding race, class, gender, disability, and sexuality in our society today. Finally, students will become aware of their own cultural assumptions, perspectives, and habits so that they might engage respectfully with others who do not share their opinions, viewpoints, and cultural worldview. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

International Studies

columbiabasin.edu/internationalstudies

Department Overview: This program 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. Students choosing to study International Studies can earn an AA degree with that emphasis by taking specific courses in History, Geography, Political Science, Environmental Science, and Sociology. See degree plans for more information about requirements and specific programs for course descriptions.

Japanese

columbiabasin.edu/japanese

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.

JAPN& 121 (Formerly JPSE 101)
Japanese I [H] • 5 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 prerequisite: successful completion of at least ENGL 099.**

JAPN& 122 (Formerly JPSE 102)
Japanese II [H] • 5 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. **Prerequisite: JAPN& 121 or instructor permission.**

JAPN& 123 (Formerly JPSE 103)
Japanese III [H] • 5 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. **Prerequisite: JAPN& 122 or instructor permission.**

JAPN& 221 (Formerly JPSE 201)
Japanese IV [H] • 5 Credits
Extensive practice in all four language skills (reading, writing, speaking, and listening). This course includes cultural readings and includes an in-depth review of basic Japanese grammar, expansion of basic vocabulary, and a broadening of students' understanding of Japanese culture (including geography, customs, daily life, and heritage). **Prerequisite: JAPN& 123 or instructor permission.**

JAPN& 222 (Formerly JPSE 202)
Japanese V [H] • 5 Credits

Extensive practice in all four language skills (reading, writing, speaking, and listening). This course includes cultural readings and in-depth review of basic Japanese grammar, expansion of basic vocabulary, and a broadening of students understanding of Japanese culture. **Prerequisite: JAPN& 221 or instructor permission.**

JAPN& 223 (Formerly JPSE 203)
Japanese VI [H] • 5 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 students understanding of Japanese culture. **Prerequisite: JAPN& 222 or instructor permission.**

Latino & Latin American Studies

columbiabasin.edu/latinostudies

Department Overview: In our increasingly multiethnic 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. Students choosing to study Latino & Latin American Studies can earn an AA degree by taking specific courses in History, Intercultural Studies, Political Science, Anthropology, Psychology, and Sociology. See degree plans for more information about requirements and specific programs for course descriptions.

Maintenance

columbiabasin.edu/maintenance

Department Overview: The Maintenance program offers two short-term certificates to provide students a foundation in the fundamentals of maintenance, blueprint reading, hydraulic systems, electricity, welding, and machine operations. Maintenance mechanics are responsible for the management and operation of production machinery.

MNT 110 (Formerly AGET 110)
Fundamentals of Maintenance • 7 Credits

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 demonstrate the ability to follow written instruction, complete business forms, and perform basic math skills. Includes a review of the student rights and responsibilities. **Prerequisite: RDG 099, and ENGL 099, and MATH 084 with a grade of 2.0 or better or MATH 084 with a grade of P if taken before spring 2016, or test placement.**

MNT 111 (Formerly MOP 111)
Intro to Machine Operations • 7 Credits

This course is designed to give students skills using measuring instruments and the concepts of machining with a metal lathe.

MNT 210 (Formerly AGET 210)
Hydraulic and Pneumatic Systems • 7 Credits

This course is designed to teach the systems operation and the testing, adjusting, maintenance, and repair procedures for pneumatic and hydraulic systems including load sensing pressure compensated systems, electro-hydraulic systems, and hydrostatic systems. Students identify system components and discuss their operation and application. Students identify different systems, trace the flow through the systems, and state the systems operation and application. Students use onboard diagnostic systems, T adapter kits, digital volt/ohm meters, flow meters, pressure gauges, and manufacturer specific tools to diagnose hydraulic and pneumatic system malfunctions. **Prerequisite: instructor permission.**

Manufacturing Technology

columbiabasin.edu/manufacturingtech

Department Overview: Every manufactured part from aerospace and automobiles, to computers, cell phones, and motorcycles, virtually everything man-made is touched by machinists.

A machinist is a skilled metal worker who makes parts out of metal, plastic, and composites with machine tools such as lathes, milling machines, precision grinders, and Computer Numerical Controlled (CNC) machines. A machinist can set up and operate most types of machines and has an understanding of what the various machine tools do. Machinists turn a block of material into intricate parts that meet precise specifications. Machinists use precision-measuring instruments such as micrometers, optical comparators, and gages to measure the accuracy of their work to thousandths of an inch.

The CBC Manufacturing Technology curriculum includes trade support theory courses in conjunction with laboratory training and general education courses. For more information, call 509.544.2267.

The department requires students achieve a minimum grade of 2.0 to be able to continue enrollment in major courses. The Associate in 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.

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

- Demonstrate machining skills on manual machine tools such as lathes, milling machines, surface grinders, drill presses, sawing machines, and measuring tools, as well as blueprint reading, and other skills
- Operate high tech equipment, such as computer coordinate measuring systems (CMM)
- Set-up, operate, and maintain Computer Numerical Control (CNC) machines
- Demonstrate skills in computer-aided drafting (CAD) and computer-aided manufacturing (CAM)
- Use math and problem-solving skills to produce parts with machining tools
- Inspect and measure parts to specified tolerances
- Demonstrate appropriate employment skills necessary for industry employment

MT 102
SolidWorks for Manufacturing Technology I • 5 Credits

An introduction to SolidWorks design software. The 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. The principles of geometric construction and constraints such as perpendicularity, concentricity, and parallelism are stressed so students are able to understand the workings of a precision model. **Prerequisite: CA 100 or instructor permission.**

MT 111
Basic Machine Technology I • 5 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, students should know how to turn and measure diameters within .001", cut threads, knurl, and cut tapers.

MT 112 (Formerly MT 1111)
Basic Machine Technology I Lab • 1 - 9 Credits
Work on projects using the lathe to practice the concepts taught in the class.

MT 121
Basic Machine Technology II • 5 Credits
This course is designed to build skills and knowledge on vertical and horizontal milling machine. Upon completion, students should be able to set up a milling machine to cut features with a tolerance of .001". **Prerequisite: MT 111 or instructor permission.**

MT 122 (Formerly MT 1211)
Basic Machine Technology II Lab • 1 - 9 Credits
Work on projects using the lathe and milling machine to practice the concepts taught in class. **Prerequisite: MT 112 or instructor permission.**

MT 131
Basic Machine Technology III • 5 Credits
This course is designed to allow students to learn about job planning, scheduling, and estimating parts as well as producing a product suggested by the instructor. **Prerequisite: successful completion of MT 102, MT 111/MT 112, and MT 121/MT 122 with a 2.0 or higher, or instructor permission.**

MT 132 (Formerly MT 1311)
Basic Machine Technology III Lab • 1 - 9 Credits
Work on projects using the lathe and milling machine to practice the concepts taught in class. **Prerequisite: MT 122 or instructor permission.**

MT 193
Independent Study • 1 - 15 Credits
A class used to explore new coursework or for a specific topic of special interest.

MT 201
Introduction to Engineering Material Science • 5 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 bachelor program at a four-year institution. Instruction begins with the basics of how materials are organized on the atomic, microscopic, and macroscopic levels, how and why these produce a finished project. Though this course is more practical to the common processes used today, it also introduces 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 202
SolidWorks for Manufacturing Technology II • 5 Credits
This course prepares students to take the Certified SolidWorks Associate Exam. **Prerequisite: MT 102 or instructor permission.**

MT 211
Advanced Machine Technology I • 5 Credits
This course is designed to build skills and knowledge in Computer Numerical Controlled (CNC) milling. Upon completion of this course, students should be able to program, set up, and operate a CNC milling machine. **Prerequisite: MT 131 or instructor permission.**

MT 212 (Formerly MT 2111)
Advanced Machine Technology I Lab • 1 - 9 Credits
Work on projects using the lathe and milling machine to practice the concepts taught in class. **Prerequisite: MT 132 or instructor permission.**

MT 221
Advanced Machine Technology II • 5 Credits
This course is designed to build skill and knowledge in CNC. Upon completion of this course, students should be able to program, set up, and operate CNC equipment. **Prerequisite: MT 211 or instructor permission.**

MT 222 (Formerly MT 2211)
Advanced Machine Technology II Lab • 9 Credits
Work on projects using the CNC to practice the concepts taught in class. **Prerequisite: MT 212 or instructor permission.**

MT 231
Advanced Machine Technology III • 5 Credits
This course is designed to build skill and knowledge in Computer Aided Manufacturing (CAM). Upon completion of this course, students 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 permission.**

MT 232 (Formerly MT 2311)
Advanced Machine Technology III Lab • 1 - 9 Credits
Work on projects using SolidWorks, CAM system, and CNC milling machine to practice the concepts taught in class. **Prerequisite: MT 222 or instructor permission.**

Mathematics

columbiabasin.edu/mathematics

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 degrees and certificates and students seeking to transfer to baccalaureate institutions. Additionally, courses are provided for students who require developmental math.

MATH 083 (Formerly MTH 083)
Review Basics • 5 Credits
A review of whole numbers, fractions, decimals, ratio proportions, percents, power and square roots, measurement and metrics, word problems (fractions, decimals, percentages), and tables and graphs. **Prerequisite: placement via test score.**

MATH 084 (Formerly MTH 084)
Algebra/Geometry • 5 Credits
This introductory course includes signed number operations, algebraic concepts, ratio and proportion, rectangular coordinates, angles, triangles, and perimeter area and volume. For students who have never taken algebra or who need a refresher before enrolling in MATH 096. **Prerequisite: MATH 083 with a grade of 2.0 or better, or MATH 083 with a grade of P if taken before spring 2016, or placement test score.**

MATH 092
Special Topics in Mathematics • 1 - 10 Credits
This course is designed to give special mathematical topics to those students whose needs are not met with the existing curriculum.

MATH 094
Intermediate Algebra Topics with Combinatorics • 5 Credits
This course covers topics from elementary algebra, intermediate algebra, counting techniques, and probability. Topics include: proportions, graphs of functions, domain and range, solving systems of equations in two unknowns, sets and intervals, solving absolute value equations and inequalities in one unknown, solving compound inequalities in one variable, graphing two-variable systems of linear inequalities, solving and graphing quadratic equations, counting techniques, basic probability, odds, and applications of the aforementioned topics. This course will not satisfy the intermediate algebra entrance requirement at the University of Washington. **Prerequisite: MATH 096 with a grade of 2.0 or better, or test placement, or instructor permission.**

MATH 095 (Formerly MTH 095, MTH 1010)
Intermediate Algebra • 5 Credits

This course covers topics from elementary and intermediate algebra. Topics include: simplifying rational expressions, solving rational equations, graphs of functions, domain and range, solving systems of equations in two unknowns, sets and intervals, solving absolute value equations and inequalities in one unknown, solving compound inequalities in one variable, graphing two-variable systems of linear inequalities, rational exponents, radical expressions and equations, complex numbers, completing the square, the quadratic formula, quadratic functions, polynomial and rational inequalities, exponential and logarithmic equations and functions, composition of functions, and applications of the aforementioned topics. A grade of 2.0 or better in this class satisfies the Intermediate Algebra Proficiency requirement for the AA degree. **Prerequisite: grade of 2.0 or better in MATH 097 or appropriate placement.**

MATH 096 (Formerly MATH 091, MTH 096)
Algebra Review 1 • 5 Credits

This course covers topics from elementary and intermediate algebra. Topics include: simplification of algebraic expressions, solving linear equations and inequalities in one unknown, graphs and slopes of two-variable linear equations, polynomial operations and factoring, scientific notation, solving quadratic equations by factoring, and applications of the aforementioned topics. **Prerequisite: MATH 084 with a gradeof 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or test placement.**

MATH 097 (Formerly MTH 097)
Algebra Review 2 • 5 Credits

This course covers topics from elementary and intermediate algebra. Topics include: factoring polynomials (brief review), simplifying rational expressions, solving rational equations, graphs of functions, domain and range, solving systems of equations in two unknowns, sets and intervals, solving absolute value equations and inequalities in one unknown, solving compound inequalities in one variable, graphing two-variable systems of linear inequalities, and applications of the aforementioned topics. **Prerequisite: grade of 2.0 or better in MATH 096 or appropriate placement.**

MATH 098 (Formerly MTH 098)
Algebra Review 3 • 5 Credits

This course covers topics from elementary and intermediate algebra. Topics include: rational exponents, radical expressions and equations, complex numbers, completing the square, the quadratic formula, quadratic functions, polynomial and rational inequalities, exponential and logarithmic equations and functions, composition of functions, and applications of the aforementioned topics. A grade of 2.0 or better in this class satisfies the Intermediate Algebra Proficiency requirement for the AA degree. **Prerequisite: grade of 2.0 or better in MATH 097.**

MATH 100 (Formerly MTH 100)
Algebraic Tools for Vocational Application • 3 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 linear equations. **Prerequisite: MATH 097 or appropriate placement.**

MATH 106 (Formerly MTH 106)
Business Mathematics • 5 Credits

Mathematical concepts used in business such as interest, annuities, mortgages, investments, and taxes. Required by some majors for the AAS degree; does not satisfy math requirement for AA degree. **Prerequisite: MATH 084 with a grade of 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or test placement.**

MATH 108 (Formerly MTH 108)
Math for Early Childhood Education • 5 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 with a grade of 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or test placement.**

MATH 109 (Formerly MTH 109)
Trigonometric Tools for Vocational Application • 3 Credits

The third course of a three-quarter sequence designed to introduce vocational students 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: grade of 2.0 or higher in MATH 102.**

MATH 111 (Formerly MTH 111)
Automotive Math • 5 Credits

Mathematical concepts listed in the automotive trades including algebraic functions, geometry, interest, and discounts. Brief review of micrometer reading, and the physics of engine design. Required by Automotive for AAS degree; does not satisfy math requirement for AA degree. **Prerequisite: MATH 084 with a grade of 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or test placement.**

MATH 112 (Formerly MTH 112)
Machinist Math • 5 Credits

A mathematic course designed to assist machine students 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, and right angle and oblique 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 098, or permission of program lead with input from instructor.**

MATH 113 (Formerly MTH 103, MTH 113)
Geometry/Trigonometry [M/S] • 5 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& 134. **Prerequisite: grade of 2.0 or better in MATH 095, MATH 098, or appropriate placement.**

MATH 147 (Formerly MTH 147, MTH 200)
Finite Math [M/S] [Q/SR] • 5 Credits

A course especially suited for students in behavioral, managerial, and social sciences. Topics include: matrices, systems of linear equations and inequalities, finance, probability and counting techniques, exponential, and logarithmic functions. **Prerequisite: 2.0 or better in MATH 095 or MATH 098 or appropriate placement or permission from department lead.**

MATH 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

MATH 243 (Formerly MTH 213, MTH 243)
Linear Algebra [M/S] [Q/SR] • 5 Credits

Designed for 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.**

MATH 246 (Formerly MTH 216, MTH 246)
Discrete Structures [M/S] [Q/SR] • 5 Credits

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 is beneficial but is not required.**

MATH 255 (Formerly MTH 254)
Differential Equations [M/S] [Q/SR] • 5 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.**

MATH 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

MATH& 107 (Formerly MTH 110, MTH 130)
Math in Society [M/S] [Q/SR] • 5 Credits
This course is designed for students who have successfully completed intermediate algebra coursework. This course will introduce students to mathematical applications in a variety of disciplines and will satisfy the quantitative/symbolic reasoning requirement for the AA degree. **Prerequisite: grade of 2.0 or better in MATH 094, 095, or 098, or appropriate placement.**

MATH& 141 (Formerly MTH 104, MTH 154)
Precalculus I [M/S] [Q/SR] • 5 Credits
Designed to prepare students for entry into basic calculus. Precalculus I together with Precalculus II is designed to prepare students 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 or appropriate placement. Students completing MATH& 141 may not receive graduation credit for MATH& 144.**

MATH& 142 (Formerly MTH 105, MTH 155)
Precalculus II [M/S] [Q/SR] • 5 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, or appropriate placement. Students completing MATH& 142 may not receive graduation credit for MATH& 144.**

MATH& 144 (Formerly MTH 107, MTH 157)
Precalculus I & II [M/S] [Q/SR] • 5 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: appropriate placement or instructor permission. Students completing MATH& 144 may not receive graduation credit for MATH& 141 and/or MATH& 142.**

MATH& 146 (Formerly MTH 143)
Introduction to Stats [M/S] [Q/SR] • 5 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, including: measures of central tendency, probability, sampling methods, hypothesis testing, estimation, linear regression, and correlation. **Prerequisite: grade of 2.0 or better in MATH 094, 095, or 098, or appropriate placement.**

MATH& 148 (Formerly MTH 210)
Business Calculus [M/S] [Q/SR] • 5 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: 2.0 or better in MATH 147 or MATH& 141 or appropriate placement or permission from department lead.**

MATH& 151 (Formerly MTH 201, MTH 231)
Calculus I [M/S] [Q/SR] • 5 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 and exponential and logarithm functions; the derivatives of algebraic, trigonometric functions, and their inverses; exponential and logarithm functions; hyperbolic functions and their inverses; applications of the derivative, and an introduction to antiderivatives and the definite and indefinite integral. **Prerequisite: grade of 2.0 or better in MATH& 141 and MATH& 142 or MATH& 144, or appropriate placement.**

MATH& 152 (Formerly MTH 202, MTH 232)
Calculus II [M/S] [Q/SR] • 5 Credits
A continuation of MATH& 151. Topics include: the fundamental theorem of calculus; techniques of integration; trigonometric integrals and substitution; applications of the definite integral including areas, average values, and volumes; improper integrals; and parametric equations, polar coordinates, arc length, and surface area with polar functions. **Prerequisite: grade of 2.0 or better in MATH& 151 or equivalent.**

MATH& 153 (Formerly MTH 203, MTH 233)
Calculus III [M/S] [Q/SR] • 5 Credits
A continuation of MATH& 152. Topics include: infinite sequences and series; MacLaurin, Taylor, and power series; conic sections, vectors, and the calculus of vector functions in two and three dimensions with applications. **Prerequisite: grade of 2.0 or better in MATH& 152 or equivalent.**

MATH& 171 (Formerly MATH 121)
Math for Elementary Education I [M/S] • 5 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. **Prerequisite: a passing score on the MATH& 171 Competency Exam (80% level) within one year prior to registering and a grade of 2.0 or better in MATH 095, MATH 098, or appropraite placement. Please contact Meg Bartrand at mbartrand@columbiabasin.edu for more information regarding the Competency Exam.**

MATH& 172 (Formerly MATH 122)
Math for Elementary Education II [M/S] [Q/SR] • 5 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& 171 (previously MATH 121) has also been successfully completed. **Prerequisite: grade of 2.0 or better in MATH& 171.**

MATH& 173 (Formerly MATH 123)
Math for Elementary Education III [M/S] [Q/SR] • 5 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& 171 (previously MATH 121) has been successfully completed. **Prerequisite: grade of 2.0 or better in MATH& 171.**

MATH& 254 (Formerly MTH 204, MTH 234)
Calculus IV [M/S] [Q/SR] • 5 Credits
An introduction to the calculus applied to functions of two or three variables. Topics include: functions of several variables, partial derivatives, directional derivatives, multiple integration, integration using cylindrical and spherical coordinates, vector fields, line integrals, surfaces and surface integrals, Green's Theorem, Stoke's Theorem, and the Divergence Theorem. **Prerequisite: grade of 2.0 or better in MATH& 153 or equivalent.**

Medical Assistant

columbiabasin.edu/medicalassistant

Department Overview: Both Columbia Basin College and the Medical Assistant program are independently accredited. CBC is accredited through the premier regional accrediting body, Northwest Commission on Colleges and Universities and the Medical Assistant program is nationally accredited.

The Columbia Basin College Medical Assistant Certificate program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Only graduates of a Commission on Accreditation of Allied Health Education Programs (CAAHEP) or an Accrediting Bureau of Health Education Schools (ABHES) accredited program are eligible to take the CMA (AAMA) Certification Exam. Upon passing the certification exam, graduates are eligible to apply for licensure as a Medical Assistant-Certified (MA-C) in the state of Washington.

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 in 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 for the two-year Associate in Applied Science degree either before or after completion of the Medical Assistant Certificate major courses.

Prerequisites that are considered for acceptance into the Medical Assistant program include: PSYCH& 100, ENGL& 101, CMST& 101 or CMST& 220, and HSCI 147. Students are expected to type a minimum of 25 words per minute.

A Medical Assistance program application is required for consideration. Medical Assistant program application should include a copy of the following healthcare documentation:

- Certificate of Completion for seven hours of HIV/AIDS Bloodborne Pathogen Training
- A current American Heart Association CPR card for Healthcare Provider
- A current First Aid card
- Accepted applicants will be mailed a letter confirming registration and are required to provide the following additional documentation:
- Program specific immunization records (details provided with admission into the program).
- Satisfactory criminal history background check using a college approved vendor. Criminal history background information is required of all Medical Assistant students. Information obtained will be considered in determining student eligibility to complete clinical coursework. Inability to participate in clinical experiences due to the information obtained from the background check may result in the student's inability to satisfactorily complete program degree requirements. Any infraction while enrolled in the Medical Assistant program should be self-reported to the coordinator/director. Questions regarding this policy should be directed to the Dean for Health Sciences at 509.544.8310.

After review of the applications, applicants will be mailed a letter informing them of their status.

More information is available from the Health Sciences Division office at 509.544.8300.

MA 111
Pharmacology I • 5 Credits

Provides 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 and immunizations. **Prerequisite: placement into MATH 083. Required admission into the Medical Assistant program.**

MA 114
Human Body Structure, Function, and Diseases I • 4 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, and the senses. Common diseases related to each of these body systems is presented as well as pathology and expected medical treatment. **Prerequisite: HSCI 147 and required admission into the Medical Assistant program**.

MA 115
Clinical Procedures Theory I • 4 Credits

This class provides a theoretical foundation in medical asepsis, infection control, vital signs, phlebotomy, the medical record, cardiopulmonary procedures, colon procedures, introduction to the clinical laboratory, urinalysis, and a theoretical foundation for the gynecological exam, prenatal care, and pediatric exams. **Prerequisite: MA 111, 114, and 140. This course to be taken concurrently with MA 116 (lab course).**

MA 116 (Formerly MA 1151)
Clinical Procedures Lab I • 4 Credits

This lab class provides for a practice in basic patient exam techniques, procedures, lab tests, and injections commonly performed in the physician's office or clinic. **Prerequisite: MA 111, 114, and 140. This course to be taken concurrently with MA 115 (theory course).**

MA 140
Admin. Medical Assistant Office Procedures I • 5 Credits

This course defines the front office roles and responsibilities in a medical office. Major topics covered are a history of the medical assistant profession; written, verbal, and non-verbal communication; patient education; medical law and ethics, the medical record and introduction to the electronic medical record; and performing daily administrative office duties including: appointment scheduling, coordinating outpatient procedures, managing referrals for patients, and utilizing the computer and electronic medical record. **Prerequisite: acceptance into the Medical Assisting program.**

MA 141
Career Development for Medical Assistants • 2 Credits

This class covers professionalism in a medical office, successful job search, interview techniques, the importance of networking, and how to be successful on the job. **Prerequisite: MA 115, 116, 211, and 214.**

MA 211
Pharmacology II • 5 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; measurement, conversions of medications for administration, calculating dosages and solutions, and immunization schedules. **Prerequisite: MA 111, 114, and 140.**

MA 214

Human Body Structure, Function, and Diseases II • 4 Credits

This is the second of two body structure, function, and disease courses 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, mental disorders, and disorders and conditions resulting from trauma. Common diseases are presented for each of these body systems as well as pathology and expected medical treatment. **Prerequisite: MA 111, 114, and 140.**

MA 215

Clinical Procedures Theory II • 4 Credits

This class provides a theoretical foundation in physical agents to promote tissue healing, radiology, sterilization and disinfection, minor office surgery, eye and ear assessment and procedures, the physical examination, hematology, blood chemistry and serology, medical microbiology, and medical office emergencies. **Prerequisite: MA 115, 116, 211, and 214. This course to be taken concurrently with MA 216 (lab cour se).**

MA 216 (Formerly MA 2151)

Clinical Procedures Lab II • 4 Credits

This class provides for a practice in basic patient exam techniques, procedures, lab tests, and basic sterile techniques commonly performed in the provider's office or clinic. **Prerequisite: MA 115, 116, 211, and 214. This course to be taken concurrently with MA 215 (theory coUrse).**

MA 240

Admin. Medical Assistant Office Procedures II • 6 Credits

This course expands on front office roles and responsibilities of an Administrative Medical Assistant. Major topics covered include: introductory-level bookkeeping, medical billing, medical banking services and procedures, management of practice finances, and the use of computers in the medical office including electronic medical record, and emergency preparedness. **Prerequisite: MA 115, 116, 211, and 214.**

MA 241

Externship Seminar • 1 Credit

This course is to be taken concurrently with the externship for Medical Assistants. The seminar provides current information regarding workplace issues, technologies, and advancements in healthcare pertinent to the externship experience. Students engage in discussions based on their experiential learning opportunities within the externship. **Prerequisite: successful completion of all other Medical Assistant courses with a GPA of 2.0 or higher.**

MA 242 (Formerly MA 2413)

Externship • 6 Credits

This class provides an opportunity to apply the theory learned in the classroom setting to a healthcare setting through practical, hands-on experience. **Prerequisite: successful completion of all other Medical Assistant courses with a GPA of 2.0 or higher.**

Medical Imaging Technology

columbiabasin.edu/image

Department Overview: The IMAGE courses are designed to prepare students for advanced level ARRT certification examinations in the following three areas:

- Computed Tomography (CT)
- Bone Densitometry
- 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 to be licensed by the ARRT in radiography [R.T. (R)] in the specialized area of mammography. Lecture, lab, and academic coursework are required for the advanced level certification exam offered by the ARRT in Mammography. Students will need additional supervised work experience to satisfy the minimum number of exams in order to be eligible for registry. This certificate includes the following documented training contact hours required by MQSA while under the supervision of a qualified instructor: eight hours of digital education in mammography modality while performing mammography exams, and 40 hours of Initial Training.

For more information, contact the Health Science Center at 509.544.8300.

IMAGE100

Bone Densitometry • 4 Credits

An in-depth analysis of bone densitometry positioning, exposure techniques, quality control, film critiquing, and radiation safety. **Prerequisite: currently enrolled in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.**

IMAGE110

Bone Densitometry Clinical • 4 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. **Prerequisite: currently enrolled in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.**

IMAGE225

Mammography • 4 Credits

Preparation for certification by the ARRT in mammography. In addition to didactic education, this course includes laboratory sessions in a mammography department. This course fulfills MQSA requirements of eight hours of digital education in mammography modality while performing mammography exams and 40 hours of Initial Training. Training in breast anatomy, physiology, positioning, compression, quality assurance/quality control techniques, and imaging of patients with breast implants. **Prerequisite: currently enrolled in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.**

IMAGE229
Mammography Clinical • 4 Credits
Preparation for certification by the ARRT in mammography. This course includes clinical and laboratory sessions while in a mammography department. Special education in mammographic examinations under the supervision of a qualified mammographer. Training in breast anatomy, physiology, positioning, compression, quality assurance/quality control techniques, and imaging of patients with breast implants. This course requires documented performance of 25 examinations that include eight hours of training in each mammography modality while performing mammography exams. Documentation includes time sheets and competencies to be verified by the student and the clinical site. Students are assigned to a mammography clinical site to complete 132 hours. These hours are required to satisfy clinical competency requirements with MQSA and eligibility with ARRT to sit for the ARRT advanced-level exam in mammography. **Prerequisite: currently enrolled in an approved Radiologic Technology program or an ARRT Certified Radiologic Technologist.**

IMAGE250
Cross Sectional Anatomy • 3 Credits
Course presents normal human anatomy in various planes using CT and MRI images. **Prerequisite: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.**

IMAGE251
Advanced Sectional Anatomy • 2 Credits
Designed for students having completed a cross-sectional anatomy course. Neuro and vascular anatomy and sectional images of joint and extremity body areas are presented with CT and MRI images. **Prerequisite: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.**

IMAGE265
Body Pathophysiology • 3 Credits
Presents pathologies of the abdomen, chest, and neck with physiological implications pertinent to CT, MR, Interventional, and Cardiac Cath imaging modalities. **Prerequisite: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.**

IMAGE266
Neuropathophysiology • 3 Credits
Presents neurological based pathologies and the related diagnostic/interventional procedures applied in evaluation and treatment of them. **Prerequisite: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.**

IMAGE270
CT Clinical Practicum I • 1 - 12 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. **Prerequisite: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.**

IMAGE271
MRI Clinical Practicum • 1 - 12 Credits
Provides hands-on experience in the clinical setting. Students perform designated tasks associated with MRI scanning and procedures under direct and indirect supervision. **Prerequisite: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.**

IMAGE280
CT Instrumentation • 3 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. **Prerequisite: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.**

IMAGE281
MRI Instrumentation and Procedures • 3 Credits
Presents the physics of magnetization, image production, image weighting, pulse responses, scanning procedures, magnet safety, and the role of the technologist. **Prerequisite: currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.**

Music

columbiabasin.edu/music

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.

MUSC 100 (Formerly MUS 100)
Music Fundamentals • 3 Credits
Non-major course covering basic concepts of rhythm, melody, keyboards, scales, and harmony.

MUSC 116 (Formerly MUS 116)
History of Jazz [H] • 5 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.

MUSC 118 (Formerly MUS 118)
Band • 1 - 2 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.

MUSC 122 (Formerly MUS 122)
Applied Music • 1 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.

MUSC 123 (Formerly MUS 123)
Applied Music • 1 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. **Prerequisite: instructor permission.**

MUSC 124 (Formerly MUS 124)
Applied Music • 1 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.

MUSC 125 (Formerly MUS 125)
Orchestra • 1 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. **Prerequisite: orchestra instrument background and instructor permission.**

MUSC 134 (Formerly MUS 134)
Piano Class • 2 Credits

Group piano instruction for all students interested in beginning piano. Students may take more than one quarter.

MUSC 135 (Formerly MUS 135)
Piano Class • 2 Credits

Group piano instruction for music majors and minors who cannot meet entrance requirements in piano and for all students interested in beginning piano.

MUSC 136 (Formerly MUS 136)
Piano Class • 2 Credits

Group piano instruction for music majors and minors who cannot meet entrance requirements in piano and for all students interested in beginning piano.

MUSC 137 (Formerly MUS 137)
Jazz Band • 1 - 3 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 permission.**

MUSC 138 (Formerly MUS 141)
Voice Class • 2 Credits

An introduction to the principles of voice production, vocal literature, and vocal techniques.

MUSC 139 (Formerly MUS 142)
Voice Ensemble • 1 - 3 Credits

Emphasis on vocal ensemble literature. May include different types of ensembles/styles according to available voicing. **Prerequisite: instructor permission.**

MUSC 140 (Formerly MUS 140)
Vocal Jazz • 1 - 3 Credits

Emphasis on swing and vocal jazz concepts within a performance ensemble. Performances required on and off campus. Auditions for this ensemble are held in May and June for the following academic year. Contact instructor for materials. In all performing groups a maximum of six elective credits from this course can be applied to an AA degree. **Prerequisite: audition and/or instructor permission.**

MUSC 147 (Formerly MUS 147)
Instrument Ensemble • 1 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.

MUSC 151 (Formerly MUS 151)
Brass Techniques • 1 - 3 Credits

Class instruction in fundamentals and materials for beginning students on brass instruments. Cornet, trumpet, French horn, baritone horn, trombone, sousaphone, and tuba.

MUSC 152 (Formerly MUS 152)
Percussion Techniques • 2 Credits

Class instruction in fundamentals and materials for beginning students on percussion instruments.

MUSC 153 (Formerly MUS 153)
Woodwind Techniques • 2 Credits

Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon.

MUSC 154 (Formerly MUS 154)
Woodwind & Flute • 2 Credits

Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon.

MUSC 155 (Formerly MUS 155)
Wood/Oboe/Bassoon • 2 Credits

Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon.

MUSC 156 (Formerly MUS 156)
Wood/Oboe/Bassoon • 2 Credits

Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon.

MUSC 161 (Formerly MUS 161)
Beginning Folk Guitar • 2 Credits

Group guitar instruction in the fundamentals of folk guitar playing for the beginner, including basic strums, chords, and note reading.

MUSC 162 (Formerly MUS 162)
Intermediate Folk Guitar • 2 Credits

Group intermediate guitar instruction for intermediate students. Students cover various techniques in strumming, picking, movable chords, and musical styles; i.e., Calypso, Latin Strum, Bossa Nova.

MUSC 171 (Formerly MUS 171)
Ear Training Fundamentals • 1 Credit

This class focuses 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.

MUSC 172 (Formerly MUS 172)
Ear Training Fundamentals • 1 Credit

This class focuses on developing the skills to correctly identify triads in first and second inversion, basic chord progressions, and cadences. This class should be taken concurrently with MUSC& 142. Offered winter quarter only.

MUSC 173 (Formerly MUS 173)
Ear Training Fundamentals • 1 Credit

This class focuses 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.

MUSC 181 (Formerly MUS 181)
Chorus • 1 - 3 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.

MUSC 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

MUSC 216 (Formerly MUSC 2152)
Studio Problems - Conducting • 3 Credits

Individual study for advanced students relating to conducting. **Prerequisite: instructor permission and successfully completed classes in area of individual study and/or demonstrated proficiency in area of individual study.**

MUSC 217 (Formerly MUSC 2153)
Studio Problems - Composition • 3 Credits

Individual study for advanced students relating to composition. **Prerequisite: instructor permission and successfully completed classes in area of individual study and/or demonstrated proficiency in area of individual study.**

MUSC 218 (Formerly MUSC 2154)
Studio Problems - Performance • 3 Credits

Individual study for advanced students relating to performance. **Prerequisite: instructor permission and successfully completed classes in area of individual study and/or demonstrated proficiency in area of individual study.**

MUSC 225 (Formerly MUS 225)
Applied Music • 2 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. **Prerequisite: instructor permission.**

MUSC 227 (Formerly MUS 227)
Applied Music • 2 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.

MUSC 236 (Formerly MUS 236)
Piano Class/Music Majors • 2 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.

MUSC 240 (Formerly MUS 240)
Jazz Theory and Improvisation • 1 - 2 Credits

A combination of jazz theory and improvisation techniques for the small group setting. The emphasis is on individual solving skills. Performance required at various CBC concerts and jazz festivals.

MUSC 244 (Formerly MUS 242)
Advanced Vocal Jazz • 1 - 3 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. Auditions for this ensemble are held in May and June for the following academic year. Contact instructor for materials. In all performing groups, a maximum of six elective credits from this course can be applied to an AA degree. **Prerequisite: audition and/or instructor permission.**

MUSC 274 (Formerly MUS 274)
Advanced Ear Training • 1 Credit

This class focuses on developing the skills to correctly identify chord progressions and melodic dictation, and continued work with ear training concepts. This class should be taken concurrently with MUSC& 241. Offered fall quarter only.

MUSC 275 (Formerly MUS 275)
Advanced Ear Training • 1 Credit

This class focuses 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.

MUSC 276 (Formerly MUS 276)
Advanced Ear Training • 1 Credit

This class focuses 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.

MUSC 281 (Formerly MUS 281)
Advanced Chorus • 1 - 3 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 permission.**

MUSC 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

MUSC& 105 (Formerly MUS 115)
Music Appreciation [H] • 5 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.

MUSC& 141 (Formerly MUS 101)
Music Theory I • 5 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.

MUSC& 142 (Formerly MUS 102)
Music Theory II • 5 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. Offered winter quarter only. **Prerequisite: MUSC& 141.**

MUSC& 143 (Formerly MUS 103)
Music Theory III • 5 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. Offered spring quarter only. **Prerequisite: MUSC& 142.**

MUSC& 241 (Formerly MUS 204)
Music Theory IV • 5 Credits

Melody harmonization, harmonic dictation, chromatic harmony, advanced modulation, 20th century techniques, and oral composition. Offered fall quarter only. **Prerequisite: MUSC& 143. This course should be taken concurrently with MUSC 274.**

MUSC& 242 (Formerly MUS 205)
Music Theory V • 5 Credits

Melody harmonization, harmonic dictation, chromatic harmony, advanced modulation, 20th century techniques, and oral composition. Offered winter quarter only. **Prerequisite: MUSC& 241.**

MUSC& 243 (Formerly MUS 206)
Music Theory VI • 5 Credits

Melody harmonization, harmonic dictation, chromatic harmony, advanced modulation, 20th century techniques, and oral composition. Offered spring quarter only. **Prerequisite: MUSC& 242.**

Non-Licensed Operator

columbiabasin.edu/nop

Department Overview: Non-Licensed Operator courses support the Nuclear Technology program. Non-licensed operator positions require highly skilled people who understand principles associated with electrical production and distribution, mechanical and electrical components, hydraulic, water and steam systems, heat transfer and fluid flow, HVAC systems, and instrumentation and control, and to use these principles in the monitoring, operation, and minor maintenance of nuclear and auxiliary process systems. Additionally, courses in this curriculum provide principles of conduct of operations, human performance improvement, safety analysis, and environmental compliance.

NOP 111
Hydraulic and Fluid Flows • 5 Credits

Introduction to the basic operations of hydraulic and fluid flows. Focuses on principles associated with lubrication, pumps, manual valves, valve operators, and components associated with strainers and filters. **Prerequisite: NT 111.**

NOP 221
Electrical Generation and Distribution • 5 Credits

Basic introduction to electrical generation and distribution with a focus on transformers, motor and control circuits, generators, and the impact of environmental conditions. **Prerequisite: ELT 111 or ELT 124.**

NOP 231
Steam Systems • 5 Credits

Introduction to steam systems with a focus on steam traps, steam turbines, and heat exchangers.

NOP 241
Chemical & Water Treatment Systems • 5 Credits

Introduction to chemical and water treatment systems with a focus on chemical safety and reactions, ion exchange, UV oxidation, and permitting. **Prerequisite: CHEM& 140 with a 2.0 grade or higher.**

NOP 251
Facility Support Systems • 4 Credits

Introduction to diesel generators, air compressors refrigeration, air conditioning, heating, and ventilation. Topics include classification, principles of operation, and failure mechanisms and symptoms.

Nuclear Medicine Technology

columbiabasin.edu/nuclearmed

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 in 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 Bellevue College 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.

NMTEC 200
Applied Anatomy & Physiology • 1 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 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 • 2 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 Credits

Introduces the use of computers in nuclear medicine, emphasizing analysis of static, dynamic, and tomographic images**. Prerequisite: acceptance into program.**

NMTEC 210
Radiopharmacy • 1 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 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 • 2 Credits
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 Credits
Provides students 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 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 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 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 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 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 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 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 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 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 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 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 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 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.**

Nuclear Technology

columbiabasin.edu/nuctech

Department Overview: Due to an aging workforce and resurgence of interest in nuclear power generation, nuclear technicians are in high demand. The Nuclear Technology program allows students to specialize in nuclear facility clean-up activities at the Hanford Reservation or in reactor plant operation at the Columbia Generating Station. The curriculum follows the common curriculum standards adopted by the nuclear industry.

Enrollment in the Nuclear Technology program is limited and students are selected on a competitive basis. Contact the Career and Technical Education Division for application requirements and deadline.

Program Mission

The mission of the Nuclear Technology program is to provide students the technical expertise, critical and analytical skills, interpersonal skills, and knowledge needed to begin a successful career in the nuclear industry.

Program Goals

Graduates of the Nuclear Technology program will be able to effectively address the needs of the nuclear industry by:

- Applying relevant theory and techniques from mathematics, physics, and chemistry to effectively understand, communicate, and/or operate nuclear systems, structures, and components promoting excellence and safety
- Effectively and accurately applying, understanding, and communicating nuclear technology related concepts
- Effectively and accurately applying, understanding, and communicating basic knowledge of nuclear facilities operations
- Understanding nuclear fundamentals, systems, tools, and equipment
- Applying skills pertinent to each discipline minimizing personnel exposure to radiation and/or hazardous materials

- Applying, understanding, and communicating radiological protection theory and techniques promoting excellence and safety
- Understanding and communicating nuclear facilities, design, theory, and/or operations

NT 111
Basic Nuclear Math & Physics • 5 Credits
Introduction to basic nuclear concepts using mathematics and physics; includes concepts of dimensional analysis, algebra, geometry, trigonometry, mechanical principles, simple machines, including definitions, and basic concepts. Industrial and science applications of nuclear processes, and risk/benefit analysis are included. **Prerequisite: MATH 095 with a 2.0 grade or higher.**

NT 114
Introduction to Radiation Safety • 5 Credits
Topics include types of radiation, radioactive decay, activity, radioactive sources, and interaction of radiation with matter, radiation units, and basic fundamentals of exposure, dose, and personnel dose. The course includes an opportunity to practice basic radiation protection tasks.

NT 121
Reactor Plant Operations • 4 Credits
Introduction to the basics of reactor plant operations. Topics include basic computer operations and knowledge of basic systems associate with a nuclear power plant. **Prerequisite: admission to the Nuclear Technology program.**

NT 122
Basic Nuclear Facilities • 4 Credits
Introduction to tank farms, vitrification, and decommissioning nuclear facilities. **Prerequisite: admission to the Nuclear Technology program.**

NT 131
Nuclear Facility Components • 4 Credits
Introduction to basic mechanical and electrical components used by nuclear power plants such as different types of piping, valves, pumps, ejectors, filters, turbines, heat exchangers, compressors, lubrication systems, valve actuators, breakers, transformers, relays, and other equipment.

NT 141
Basic Reactor Safety, Theory, & Operations • 5 Credits
Introduction to the fission process, reactivity/criticality, basic reactor kinetics, heat removal, reactor types, nuclear power plant chemistry, and elementary thermodynamics. In addition, basic radiation worker training is provided in this course. **Prerequisite: NT 121 or NT 122.**

NT 142
Basic Nuclear Safety & Environmental Compliance • 5 Credits
An introduction to nuclear facility safety, accident analysis, and environmental regulations and compliance standards. **Prerequisite: NT 121 or NT 122.**

NT 150
Internship Seminar • 1 Credit
This class focuses on preparation for the internship. Topics include workplace expectations, safety, and communication skills. Evaluation methods for the internship are explained and discussed.

NT 152
Internship • 1 - 5 Credits
Students serve an internship of approximately 320 hours with a company that uses nuclear technicians in radiation protection, nuclear reactor operations, or nuclear reactor maintenance. Students are expected to apply learned skills and training to be a productive employee and the employer is expected to place students in an environment that builds on the first year of study and enhances knowledge of working in the nuclear industry. **Prerequisite: instructor/department chair approval and cumulative GPA of 2.5 or higher.**

NT 154
Industry Project • 1 - 5 Credits
Students complete an industry project with a company that uses nuclear technicians. Students are expected to apply learned skills and training to be productive employees, and employers are expected to create a project that builds on the students' first year of study and enhances the students' knowledge of working in the nuclear industry. Fifty internship hours generate one credit hour.

NT 160
Nuclear Chemistry • 3 Credits
Designed to give students a broad understanding of nuclear chemistry. Focuses on basic reactor water chemistry fundamentals, basic material properties, brittle fracture characteristics/mechanisms, and plant material problems. **Prerequisite: CHEM& 140.**

NT 170 (Formerly MEC 111)
Mechanical & Fluid Power Transmission • 4 Credits
Introduction to the concepts of mechanical and fluid power transmission including principles of heat, steam, heat transfer, and fluid flow. **Prerequisite: NT 111.**

NT 241
Nuclear Power Plant Instrumentation II • 5 Credits
This course focuses on the in-depth knowledge and skills needed to maintain instrumentation in a nuclear facility. **Prerequisite: NT 230.**

Nursing

columbiabasin.edu/nursing

Department Overview: Columbia Basin College offers an Accreditation Commission for Education in Nursing (ACEN) Career Ladder Nursing program. The curriculum is designed to utilize individual and group teaching strategies. Instruction takes place on the Richland 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 the beginning level for individuals with no experience in nursing education; a new class is admitted each fall quarter. Secondly, Licensed Practical Nurses (LPNs) may enter the Advanced Placement program without having to repeat course material they have already mastered. Both advanced placement and transfer students may be accommodated if space is 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 (three quarters plus an optional summer quarter), students receive a Practical Nurse Certificate and are eligible to take the LPN Licensure exam (NCLEX). Following successful completion of the first and second year (six quarters), students receive an Associate in Applied Science degree and are eligible to take the RN Licensure exam (NCLEX).

Pre-Nursing

Students must first submit a general admission application to CBC and include transcripts from all colleges attended. Application to the Nursing program is to be completed in January/February of the intended year of enrollment. Students are strongly encouraged to complete as many nursing support courses as possible before entering the Nursing program. It is especially helpful to have all science classes completed. These courses provide points for the Admission Index Score used in the application process. If support courses are not completed before entry, students must be eligible to enter those courses while enrolled in Nursing and must complete all course work before receiving the AAS degree from CBC. Students should contact Hawk Central to work with an advisor after first attending a pre-nursing information session. Current information and the schedule for pre-nursing information sessions can be found at columbiabasin.edu/nursing. Please refer to the Entrance Requirements.

Nursing support courses that should be completed prior to entering the Nursing program include the following:

- Chemistry with lab: CHEM& 121 or higher
- Human A&P 1 with lab: BIOL& 241
- Human A&P 2 with lab: BIOL& 242
- English Composition: ENGL& 101 or 102
- Lifespan Psychology: PSYC& 200
- Microbiology with lab: BIOL& 260
- Math: Intro to Statistics, MATH& 146
- Communication Studies: CMST 101, 103, 110, or 260, or CMST& 210 or 220

Entrance Requirements

Students are admitted based on their Admission Index Score. The Admission Index Score includes (A) the cumulative grade point average from four selected courses, (B) the pre-nursing assessment score (TEAS), and (C) the 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 into the program. For further information, please refer to the CBC Nursing website.

Once admitted into the program, each student will be responsible for providing documentation of the following additional requirements:

- Required immunization records
- Current American Heart Association CPR card for Healthcare Provider
- Satisfactory criminal history background check using a college approved vendor. Criminal history background information is required of all Nursing students. Information obtained will be considered in determining student eligibility to complete clinical coursework. Inability to participate in clinical experiences due to the information obtained from the background check may result in the student's inability to satisfactorily complete program degree requirements. Any infraction while enrolled in the Nursing program should be self-reported to the director. Questions regarding this policy should be directed to the Dean for Health Sciences at 509.544.8310.

A minimum GPA of 2.0 per course must be obtained for successful completion of the one-year certificate (Practical Nursing) and the two-year Associate in Applied Science degree. Major courses, major support courses, and general education requirements must be passed with a 2.0 minimum grade.

NRS 101
Basic Pharmacology Math • 1 - 3 Credits

Drug dosage calculations. Emphasis is on mathematic computations for various forms of drug administration utilizing metric and household measures. This course must be completed with a 2.0 or better before advancing to NRS 102, 121, and 123. **Prerequisite: admission to the Nursing program.**

NRS 102
Pharmacological Classifications I • 1 Credit

Provides new information as well as supplements, reviews, and reinforces information previously provided on the pharmacology of drugs introduced in Nursing I. Students review drug classifications and pharmacological principles associated with medication administration while relating this information to corresponding patient diagnoses as well as understanding related nursing implications. This course must be completed with a 2.0 or better before advancing to NRS 103, 131, and 133. **Prerequisite: NRS 101 and 111/113 with a 2.0 or better and concurrent enrollment in NRS 121/123.**

NRS 103
Pharmacological Classifications II • 1 Credit

Provides new information as well as supplements, reviews, and reinforces information previously provided on the pharmacology of drugs introduced in Nursing I and II. Students review drug classifications and pharmacological principles associated with medication administration while relating this information to a corresponding patient diagnoses as well as understanding the related nursing implications. **Prerequisite: NRS 102 and 121/123 with a 2.0 or better and concurrent enrollment in NRS 131/133.**

NRS 111
Nursing I • 1 - 7 Credits

This is the first theoretical course in the associate degree curriculum. Theoretical concepts include the fundamentals of nursing care and the introduction of the nursing process. Concepts of lifespan growth and development, culture and ethnicity, basic pharmacological concepts, and beginning professional communication techniques are presented. Emphasis is on safety, health maintenance, professional responsibility, and the organizations that affect the practice of nursing. **Prerequisite: admission to the Nursing program.**

NRS 113 (Formerly NRS 1111)
Nursing I Lab • 1 - 4 Credits

Clinical lab to be taken concurrently with NRS 111. This is the first clinical course in the associate degree curricular sequence. This course provides for the application of theoretical concepts to nursing care for adult patients in the long-term care setting. Students are introduced to basic nursing care practices. Emphasis is on therapeutic communication and application of the nursing process. **Prerequisite: admission to the Nursing program.**

NRS 121
Nursing II • 1 - 5 Credits

This course builds on the theoretical concepts presented in NRS I. Learning experiences are directed toward increasing student knowledge of nursing care of individuals experiencing basic alterations in health. Emphasis is on the introduction of alterations in physical and emotional health throughout the life span. The nursing process is used as a framework for the development of knowledge. Students are introduced to nursing literature. **Prerequisite: NRS 101 and 111/113 with a 2.0 or better.**

NRS 123 (Formerly NRS 1211)
Nursing II Lab • 1 - 5 Credits

Clinical lab to be taken concurrently with NRS 121. This clinical course provides for the application of introductory theoretical concepts to the nursing care of adults and children in the acute care setting. Emphasis is on collaboration with members of the healthcare team and continued application of the nursing process in developing individualized plans of care. Nursing informatics is introduced as a method for documentation and communication. **Prerequisite: NRS 101 and 111/113 with a 2.0 or better.**

NRS 131
Nursing III • 1 - 5 Credits

This course builds on the theoretical concepts from NRS I and II. Learning experiences provide further exploration of physical illness throughout the life span. Emphasis is on alterations in gastrointestinal, cardiac, and fluid balance. Maternal child nursing concepts are introduced. There is a continued emphasis on the use of the nursing process and nursing research to plan, deliver, and evaluate nursing care. **Prerequisite: NRS 102 and 121/123 with a 2.0 or better.**

NRS 133 (Formerly NRS 1311)
Nursing III Lab • 1 - 5 Credits

Clinical lab to be taken concurrently with NRS 131. This clinical course provides for the application of theoretical concepts to the nursing care of adults, children, and the family unit. Emphasis is on caring for multiple clients in the acute care setting and in health facilities outside the acute care model. There is expanded application of the nursing process to promote adaptation and wellness in developing individualized plans of care. **Prerequisite: NRS 102 and 121/123 with a 2.0 or better.**

NRS 135 (Formerly NRS 1351)
Nursing Trends Lab • 1 - 2 Credits

A campus laboratory experience designed to allow nursing students to gain proficiency in nursing skills before actual practice in the acute care setting. Students enrolled in the Nursing program register for this pass/fail class each quarter. **Prerequisite: enrollment in the Nursing program.**

NRS 141
Practical Nursing • 1 - 5 Credits

This optional theory course is offered to students desiring to obtain a Licensed Practical Nurse (LPN) certificate of completion. Emphasis is on theory and practice at the Practical Nurse level in the acute care setting. Legal and professional roles of the LPN are explored. Students satisfactorily completing this course are eligible to take the NCLEX LPN exam. **Prerequisite: NRS 103 and 131/133 with a 2.0 or better.**

NRS 143 (Formerly NRS 1411)
Practical Nursing Lab • 1 - 6 Credits

This optional clinical lab course is offered to students desiring to obtain a Licensed Practical Nurse certificate of completion. This course provides for application of theoretical concepts to the nursing care of adults and children in the acute care setting. Team-leading and delegation principles are introduced and students participate in structured team-leading activities. Community health nursing is introduced. **Prerequisite: NRS 103 and 131/133 with a 2.0 or better.**

NRS 151
Advanced Placement • 1 - 11 Credits

The LPN advanced placement process is designed for Licensed Practical Nurses who seek to further their education and advance in the nursing profession. This program begins summer quarter and students are admitted on a space available basis. The course provides the opportunity to orient students for transition into the RN program the subsequent fall quarter. The program recognizes knowledge previously obtained from other practical nursing education programs. All students requesting entrance into the LPN Advanced Placement program must have graduated from an accredited Practical Nursing program and passed the LPN NCLEX examination. Students must also hold an unencumbered Washington State LPN license and have current experience in acute care. The advanced placement program builds on the practical nursing foundation by broadening theoretical knowledge, enhancing nursing skills, and increasing critical thinking to prepare the LPN for role change responsibilities.

NRS 201
Pharmacological Classifications III • 1 Credit

Provides new information as well as supplements, reviews, and reinforces information previously provided on the pharmacology of drugs introduced in Nursing I, II, and III. Students review selected drug classifications and pharmacological principles associated with medication administration while relating this information to a corresponding patient diagnoses as well as understanding related nursing implications. This course must be completed with a 2.0 or better before advancing to NRS 221/223. **Prerequisite: NRS 103 with a 2.0 or better and concurrent enrollment in NRS 211/213.**

NRS 211
Nursing IV • 1 - 5 Credits

This theory course is the first course in the second year of the associate degree curriculum. Learning experiences are directed toward expanding the student's knowledge of nursing care of individuals experiencing alterations in health. Emphasis is on application of the nursing process in delivery of care to children and families, clients with mental health problems, and those with respiratory and immunological disorders. Concepts of patient education strategies are expanded upon through the formation of patient teaching plans. **Prerequisite: NRS 103 and 131/133 or advanced placement standing with an active LPN license. Continuation in the Nursing program requires a minimum cumulative 2.5 GPA in all Nursing courses and a 2.0 or better in all supporting courses.**

NRS 213 (Formerly NRS 2111)
Nursing IV Lab • 1 - 5 Credits

Clinical lab to be taken concurrently with NRS 211. This clinical course provides for application of theoretical concepts to the nursing care of adults and children in acute care and psychiatric settings. Emphasis in on the use of the nursing process to develop individualized plans of care for patients across the lifespan. During the psychiatric nursing rotation, emphasis is on developing interpersonal and therapeutic communication skills and caring for the mentally ill client. **Prerequisite: NRS 103 and 131/133 with a 2.0 or better.**

NRS 221
Nursing V • 1 - 5 Credits

This course builds on the theoretical concepts presented in NRS I, II, III, and IV. Learning experiences are directed toward increasing the student's knowledge of nursing care of individuals experiencing alterations in health. Emphasis is on application of the nursing process in the delivery of care to individuals experiencing complex health issues associated with neurological, cardiac and oncological illnesses. Concepts of advanced leadership, delegation, and research are expanded. **Prerequisite: NRS 201 and 211/213 with a 2.0 or better.**

NRS 222
Professional Issues I • 1 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. **Prerequisite: concurrent enrollment in NRS 221/223.**

NRS 223 (Formerly NRS 2211)
Nursing V Lab • 1 - 5 Credits

Clinical lab to be taken concurrently with NRS 221. This clinical course provides for application of theoretical concepts to the nursing care of adults and children in acute care and psychiatric settings. Emphasis in on implementing delegation/leadership skills and utilizing the nursing process to develop individualized plans of care for patients across the lifespan. During the psychiatric nursing rotation, emphasis is on developing interpersonal communication skills and caring for the mentally ill client. **Prerequisite: Nursing 201 and 211/213 with a 2.0 or better.**

NRS 231
Nursing VI • 1 - 5 Credits

This course builds on the theoretical concepts presented in NRS I, II, III, IV, and V. Learning experiences are directed toward increasing the student's knowledge of nursing care of individuals experiencing alterations in health. Emphasis is on application of the nursing process in the delivery of care to individuals experiencing complex health issues including reproductive and endocrine disorders and those requiring emergent care. Concepts of leadership, delegation, and community service are reinforced. **Prerequisite: NRS 222 and 221/223 with a 2.0 or better.**

NRS 232
Professional Issues II • 1 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. **Prerequisite: NRS 222 and 221/213 with a 2.0 or better and concurrent enrollment in NRS 231/233.**

NRS 233 (Formerly NRS 2311)
Nursing VI Lab • 1 - 8 Credits

Clinical lab to be taken concurrently with NRS 231. This is the final clinical learning experience of the associate degree curriculum. This course provides for application of theoretical concepts to the care of adults and children in acute care and community settings. A preceptor experience is offered during this quarter. All students are expected to progress towards competence in thinking critically, using the nursing process, performing nursing skills, providing leadership, and delegating care at an associate degree nurse entry level. Students will also participate in various community service events. Prerequisites: NRS 222 and 221/223 with a 2.0 or better.

NRS 235 (Formerly NRS 2351)
Nursing Trends Lab • 1 Credit

A campus laboratory experience designed to allow nursing students to gain proficiency in nursing skills before actual practice in acute care settings. Students enrolled in the Nursing program register for this pass/fail class each quarter. **Prerequisite: enrollment in the Nursing program.**

NRS 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

Nursing Assistant

columbiabasin.edu/nursingassistant

Department Overview: The Nursing Assistant program 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 all required competencies. Students that successfully complete these requirements will receive a Certification of Completion issued by DSHS, notation posted to their CBC transcript, and will be eligible to take the NNAAP exam and apply for licensure as an NA-C.

Course Lecture Requirements

In order to complete the NA 100 class lecture hours, students are required to meet three to four days a week and attendance is mandatory.

Course Clinical Requirements

Students are required to complete 50 clinical hours during the quarter. These hours include time in the campus laboratory and a minimum of 36 clinical hours in a local healthcare facility. Students are required to complete these hours during shifts that may start as early as 7 a.m. These hours are arranged by the instructor with the facility. Students need to make arrangements to attend these required shifts; attendance is mandatory.

Applicants are required to provide the following documentation:

- A current American Heart Association Healthcare CPR card for Healthcare Provider
- A current First Aid card
- After review of the applications, applicants will be mailed a letter informing them of their status. Once admitted into the program, each student will be responsible for providing documentation of the following additional requirements:
- Program specific immunization records (details provided with admission into the program)
- Satisfactory criminal history background check using a college-approved vendor. Criminal history background information is required of all Health Science students. Information obtained will be considered in determining student eligibility to complete clinical coursework. Inability to participate in clinical experiences due to the information obtained from the background check may result in the student's inability to satisfactorily complete the Nursing Assistant program requirements. Any infraction while enrolled in the Nursing Assistant program should be self-reported to the director. Questions regarding the criminal background policy should be directed to the Dean for Health Sciences at 509.544.8310.

More information regarding this program is available from the Health Sciences Division office at 509.544.8300.

NA 100
Nursing Assistant • 4 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, seven hours of HIV/AIDS Bloodborne Pathogens training, dementia, and cultural awareness. Concurrent enrollment into NA 102 lab is required. Students are required to demonstrate competencies in skills associated with each of the course subjects within the laboratory or clinical setting.

NA 102 (Formerly NA 1001)
Nursing Assistant Lab • 4 Credits

This course provides competencies in skills for laboratory and clinical requirements for the Nursing Assistant lecture course. Students are involved in on-campus learning laboratory experiences as well as clinical rotations within community health facilities.

Nutrition & Food Science

columbiabasin.edu/nutrition

Department Overview: Nutrition & Food Science currently offers a course designed to introduce students to the concept of food and nutrition to maintenance of a healthy life. Students 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 are considered.

NUTR& 101 (Formerly NFS 111)
Nutrition [M/S] • 5 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 lifecycle and special topics of current concern are included.

Paramedic

columbiabasin.edu/paramedic

Department Overview: Beyond EMT-B and Advanced EMT is Paramedic. Paramedic requires substantially more training than EMT-B and represents the advanced life support side of EMS. Paramedic training lasts approximately 18-24 months in duration and prepares the student with the necessary skill set to provide advanced life saving care in the out-of-hospital setting. The Columbia Basin College Paramedic program starts in January of every odd year. Entrance in to the Paramedic program is contingent upon successful completion of the following prerequisites, application, and a competitive interview process.

The Paramedic program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), upon the recommendation of the Committee on Accreditation of Education Programs of the Emergency Medical Services Professions (COAEMSP).

Applicants to both the Certificate and AAS program must meet the following criteria:

CBC Paramedic program entrance requirements:

- Current EMT-Basic certification for at least one year
- Proof of attendance at a program information session
- Proof of appropriate placement in Math and English
- Application to the CBC Paramedic program and completion of acceptance interview

- **Completion of the following classes or equivalent with a minimum 2.0 GPA:**
  - BIOL& 241 Human A&P 1 w/ Lab
  - BIOL& 242 Human A&P 2 w/ 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. (See HSCI.)

The goal of the Paramedic program is to prepare graduates with the skills and knowledge necessary for entry-level paramedic positions in agencies providing pre-hospital emergency services.

Successful applicants will be notified of their acceptance and will be required to provide the documentation for the following additional requirements:

- Program specific immunization records (details provided with admission into the program)
- Satisfactory criminal history background check using a college-approved vendor. Criminal history background information is required of all Health Science students. Information obtained will be considered in determining student eligibility to complete clinical coursework. Inability to participate in clinical experiences due to the information obtained from the background check may result in the student's inability to satisfactorily complete the Paramedic program requirements. Any infraction while enrolled in the Paramedic program should be self-reported to the coordinator/director. Questions regarding criminal background policy should be directed to the Dean for Health Sciences at 509.544.8310.

More information regarding this program is available from the Health Sciences Division office at 509.544.8300 or from the Paramedic website at columbiabasin.edu/paramedic.

PMD 201
Paramedic I • 6 Credits

This is the first course in a six-quarter sequence intended to prepare paramedic students in the areas of medical, legal, ethics, roles and responsibilities, principles of pathophysiology, pharmacology, intravenous access, and medication administration. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for Paramedics. It is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic exam. **Prerequisite: acceptance into the program. See CBC Paramedic program entrance requirements at columbiabasin.edu/paramedic.**

PMD 202
Paramedic II • 6 Credits

The second course in the Paramedic sequence, intended to train students in the areas of advanced airway management, physical assessment, field assessment, clinical decision-making, documentation, and the assessment and management of respiratory emergencies. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for 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 201/210 with a grade of 2.0 or better.**

PMD 203
Paramedic III • 6 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 are certified in ACLS. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for 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 202/220 with a grade of 2.0 or better.**

PMD 204
Paramedic IV • 6 Credits

This is the fourth course in the Paramedic sequence. It provides skills and knowledge necessary to assess and manage trauma emergencies, specifically: mechanism of injury, soft tissue and burn injuries, as well as head, neck, chest, abdominal, and other musculoskeletal trauma. At the successful completion of this course, students are certified in PHTLS. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic Exam. At the end of this course, the areas of neonate and pediatric care will begin, with completion in PMD 205. **Prerequisite: completion of PMD 203/230 with a grade of 2.0 or better.**

PMD 205
Paramedic V • 6 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 are certified in PALS. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for 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 204/240 with a grade of 2.0 or better.**

PMD 206
Paramedic VI • 6 Credits

Sixth and final major course in the Paramedic sequence. This 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 complete a term paper and oral presentation. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic Exam. Students continue the field/ambulance clinical competencies. **Prerequisite: PMD 205/250 with a 2.0 or better.**

PMD 210 (Formerly PMD 2013)
Paramedic I Lab • 2 Credits

Lab to be taken concurrently with PMD 201. Introduces 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.

PMD 220 (Formerly PMD 2023)
Paramedic II Lab • 3 Credits

Lab to be taken concurrently with PMD 202. The lab portion of the course introduces students to the policies and procedures of the field and hospital internship sites where they continue to work on their minim um competencies in same-day surgery, operating room, emergency department, as well as beginning their field/ambulance experience.

PMD 230 (Formerly PMD 2033)
Paramedic III Lab • 3 Credits

Lab to be taken concurrently with PMD 203. The lab portion of this course introduces 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.

PMD 235
Professional Issues for the Paramedic • 2 Credits

A course designed to provide Paramedic students the opportunity to explore professional issues important to the success of a certified paramedic. The focus is on advanced directives of terminally ill patients, documentation considerations, advanced cardiac life-support skills, and advanced trauma skills and other advanced procedures.

PMD 240 (Formerly PMD 2043)
Paramedic IV Lab • 3 Credits

Lab to be taken concurrently with PMD 204. The lab portion of this course introduces 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.

PMD 250 (Formerly PMD 2053)
Paramedic V Lab • 3 Credits

Lab to be taken concurrently with PMD 205. The lab portion of this 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.

PMD 260 (Formerly PMD 2063)
Paramedic VI Lab • 3 Credits

Lab to be taken concurrently with PMD 206. The lab portion of the course focuses on the completion of hospital internship where students 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, psychiatric rotations, and field internship.

PMD 270 (Formerly PMD 2103)
Extended Paramedic Internship • 1 - 3 Credits

This extension course is provided to current paramedic students who are working to complete field and/or hospital internship requirements as required by the program. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for Paramedics, and allows students 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. Placement into this course is at the discretion of the Paramedic Director.**

Philosophy

columbiabasin.edu/philosophy

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.

PHIL 106 (Formerly PHIL&106)
Introduction to Logic [H] • 5 Credits

A study of the principles of formal and informal thinking: induction, deduction, and language.

PHIL 131 (Formerly PHI 131)
World Religions [H] • 5 Credits

A survey of the major religious systems of the world, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.

PHIL 150 (Formerly PHI 150)
Introduction to Ethics [H] • 5 Credits

An introduction to moral concepts; their assumptions, arguments, implications, and practices. Special consideration is given to topics in the area of medicine, business, war, individual rights, and the future.

PHIL 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

PHIL 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

PHIL 305
Professional Ethics [H] • 5 Credits

This course examines the role of ethics and social responsibility in the management of public and private sector organizations and businesses. An emphasis is on contemporary trends in corporate responsibilities with respect to ethical, legal, economic, and regulatory conditions in the global marketplace. The use of the case study approach is applied to a contemporary business ethical issue. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

PHIL 315
Professional Ethics in Healthcare [H] • 5 Credits

This course examines the role of ethics and social responsibility in the management of public and private healthcare organizations. Topics to be explored include the nature of morality, normative theories of ethics, justice and economic distribution as it relates to healthcare and healthcare-funded programs; the impact of technology on ethics in healthcare; and ethical situations in patient care. This course also examines practical applications of ethical theories in the context of real world scenarios, delving into the "hard work" of maintaining an ethical backbone through the steadfast commitment necessary to maintain accountability and integrity in the workplace. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

PHIL& 101 (Formerly PHI 101)
Intro to Philosophy [H] • 5 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.

PHIL& 120
Symbolic Logic [Q/SR] • 5 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. **Prerequisite: MATH 094, 095, or 098 or appropriate placement.**

Phlebotomy

columbiabasin.edu/phlebotomy

Department Overview: The phlebotomy curriculum is a two-course sequence which prepares individuals with the knowledge, skills, and abilities necessary to function as a member of a laboratory healthcare team in a variety of settings. This training fulfills the Washington state Department of Health (DOH) requirements necessary to be certified as a healthcare professional in a category of Medical Assistant-Phlebotomist. Details are available online at www.doh.wa.gov/LicensesPermitsandCertificates/ProfessionsNewReneworUpdate/MedicalAssistant/ApplicationsandForms.aspx.

Phlebotomy training is a two-course sequence. In the first course, Phlebotomy 100 (PHLEB 100), students must achieve a 75 percent average or better on testing as well as pass the required lab skills competencies to continue into the second course, Phlebotomy 101 (clinical practicum). Malpractice fees are mandatory for all Health Science students and will be added to the registration fees. Applicants are required to provide the following documentation:

- Certificate of Completion for seven hours of HIV/AIDS Bloodborne Pathogen Training
- A current American Heart Association CPR card for Healthcare Provider
- A current First Aid card
- Once admitted into the program, each student will be responsible for providing documentation of the following additional requirements:
- Program specific immunization records (details provided with admission into the program).
- Satisfactory criminal history background check using a college-approved vendor. Criminal history background information is required of all Health Science students. Information obtained will be considered in determining student eligibility to complete clinical coursework. Inability to participate in clinical experiences due to the information obtained from the background check may result in the student's inability to satisfactorily complete the Phlebotomy program requirements. Any infraction while enrolled in the Phlebotomy program should be self-reported to the coordinator/director. Questions regarding this policy should be directed to the Dean for Health Sciences at 509.544.8310.

After review of applications, applicants will be mailed a letter informing them of their status.

More information can be obtained from the Health Sciences Center office at 509.544.8300.

PHLEB 100
Phlebotomy I • 4 Credits

This lecture/lab is the first course of a two-course sequence. Medical terminology and basic anatomy are introduced. Students learn skill development in the performance of blood and specimen collection methods using proper techniques and standard precautions. Emphasis is on safely collecting specimens from clients across the life span utilizing a variety of collection devices. The principles of infection prevention and safety with specimen collection are emphasized. Communication techniques and maintaining patient data are presented. Students must pass this course with 75 percent or better in order to continue into the subsequent course, PHLEB 101. **Prerequisite: acceptance into the Phlebotomy program.**

PHLEB 101
Phlebotomy I Lab • 5 Credits

This clinical course is the second class of the two-course sequence. This class requires 120 hours of supervised clinical experience in various medical facilities throughout the regional area. The 120 clinical hours are arranged by the instructor. Students need to accommodate the hours of the facility where they are assigned, and complete the 120 hours within the quarter. Clinical facility hours may begin as early as 6:00 a.m. and end as late as 6:00 p.m., Monday through Saturday. Students who successfully complete both courses (9 credits total) with a 75 percent or better will receive a certificate of completion from Columbia Basin College with academic credit. **Prerequisite: successful completion of PHLEB 100 with a 75 percent or better.**

Physical Education

columbiabasin.edu/physicaleducation

Department Overview: The Physical Education department offers a variety of classes that can expose the student to leisure activity skills and fitness activities.

PE 103 (Formerly PE 1031)
Physical Fitness I [PE] • 1 Credit

Instruction and practice in exercises that condition the body. Designed to develop a level of strength, flexibility, and endurance.

PE 104 (Formerly PE 1041)
Physical Fitness II [PE] • 1 Credit

This course offers advanced conditioning through the use of strenuous exercises and incorporates techniques recently developed through research. **Prerequisite: PE 103.**

PE 110 (Formerly PE 1101)
Aerobics Step Training I [PE] • 1 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 111 (Formerly PE 1111)
Aerobics Step Training II [PE] • 1 Credit

Continued study and involvement offering a greater level of conditioning through the use of more intense training techniques involved with step training.

PE 112 (Formerly PE 1121)
Aerobic Dance I [PE] • 1 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 are kept.

PE 113 (Formerly PE 1131)
Aerobic Dance II [PE] • 1 Credit

Continued study and advanced techniques of this activity. Dance steps and routines executed to increase cardiovascular rate. Students test and record improvements in pulse rates and pulmonary recovery. **Prerequisite: PE 112.**

PE 114 (Formerly PE 1141)
Aerobic Dance III [PE] • 1 Credit

Advanced study in this activity. Dance steps and routines rigorously executed for improving cardiovascular rate and leading to figure trimming and toning. Improvements are tested and recorded. **Prerequisite: PE 113.**

PE 115 (Formerly PE 1151)
Body Mechanics [PE] • 1 Credit

This course involves special exercise and calisthenics which enhance total fitness, figure improvement, body toning, weight control, and posture.

PE 116 (Formerly PE 1161)
Pilates [PE] • 1 Credit

An introductory course to Pilates emphasizing physical exercises, breathing, core strength and stability, and muscle awareness.

PE 117 (Formerly PE 1171)
Yoga I [PE] • 1 Credit

An introductory course to Hatha Yoga emphasizing physical exercises, breathing exercises, and meditation practice.

PE 118 (Formerly PE 1181)
Step Aerobic Interval Training [PE] • 1 Credit

Using intervals of high intensity exercise followed by recovery periods, this class combines 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 are used to introduce students to the benefits of an interval training program. Greater cardiovascular strengthening as well as muscular strengthening and endurance are introduced and practiced in this class.

PE 119 (Formerly PE 1191)
Yoga II [PE] • 1 Credit

A continuation course to a Hatha Yoga practice including intermediate physical poses, yoga breathing exercises, and selected meditations.

PE 120 (Formerly PE 1201)
Weight Training I [PE] • 1 Credit

Students are exposed to theories of weight training. Emphasis is placed on strength development, muscular endurance, and flexibility. Students design an individual program with the use of free weights and multi-station machines.

PE 121 (Formerly PE 1211)
Weight Training II [PE] • 1 - 2 Credits

An intermediate program with students designing their individual workout program.

PE 122 (Formerly PE 1221)
Weight Training III [PE] • 1 - 2 Credits

An advanced program with the student designing her/his individual workout program.

PE 127 (Formerly PE 1271)
Fitness Center [PE] • 1 - 6 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. Students can earn a maximum of two credits per quarter from Fitness Center classes.

PE 132 (Formerly PE 1321)
Golf I [PE] • 1 Credit

Basic stroke instruction with all clubs to provide students with sufficient skills to enjoy playing the game. The rules, courtesies, and safety factors are taught and tested.

PE 133 (Formerly PE 1331)
Golf II [PE] • 1 Credit

Techniques on special shots such as sand shots, sidehill, and downhill lies are emphasized. **Prerequisite: PE 132.**

PE 134 (Formerly PE 1341)
Golf III • 1 Credit

Course involves student in actual play with a lesson arranged with the instructor. Strategy, club selection, and metal control are covered during the quarter. **Prerequisite: PE 132 or 133.**

PE 135 (Formerly PE 1351)
Golf Swing Analysis Strategies [PE] • 2 Credits

A comprehensive study of the individual parts of the modern golf swing with intensive training directed toward precise control and more power.

PE 140 (Formerly PE 1401)
Softball I [PE] • 1 Credit

Softball I is designed for the beginning softball player. This course offers instruction of basic skills and rules of softball. Skills and knowledge of rules are tested.

PE 141 (Formerly PE 1411)
Softball II [PE] • 1 Credit

Designed for the intermediate softball player. Additional work of strategy, individual, and team offensive/defensive techniques are taught. Skills and knowledge of rules are tested. **Prerequisite: PE 140.**

PE 142 (Formerly PE 1421)
Softball III [PE] • 1 Credit

Designed for the advanced softball player. Additional work of strategy, individual, and team offensive/defensive techniques are taught. Skills and knowledge of rules are tested. **Prerequisite: PE 140 and PE 141.**

PE 145 (Formerly PE 1451)
Soccer I [PE] • 1 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 146 (Formerly PE 1461)
Soccer II [PE] • 1 Credit

Soccer II is designed for the intermediate player. Review of the basic skills taught in the beginning course. Additional work on strategy, defensive techniques. **Prerequisite: PE 145.**

PE 147 (Formerly PE 1471)
Soccer III [PE] • 1 Credit

Soccer III is designed for the advanced player. Advanced strategy, team defensive, and team offensive techniques are taught. Skills and rules are tested. **Prerequisite: PE 146.**

PE 148 (Formerly PE 1481)
Jogging I [PE] • 1 - 2 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 149 (Formerly PE 1491)
Jogging II [PE] • 1 - 2 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 150 (Formerly PE 1501)
Jogging III [PE] • 1 - 2 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 160 (Formerly PE 1601)
Basketball I [PE] • 1 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 161 (Formerly PE 1611)
Basketball II [PE] • 1 Credit

Students expand their knowledge of the skills of basketball, and additional skills are introduced. Team strategy at a more advanced level is emphasized. **Prerequisite: PE 160.**

PE 162 (Formerly PE 1621)
Basketball III [PE] • 1 Credit

Review of advanced basketball skills. Introduction of offensive patterns, defensive sets, and individual style of play. This class also involves usage of fast break and the transition game. **Prerequisite: PE 161.**

PE 163 (Formerly PE 1631)
Volleyball I [PE] • 1 Credit

Covers basic skills, court positions, and strategies for beginning sets along with 4-2 and 5-1 offenses.

PE 164 (Formerly PE 1641)
Volleyball II [PE] • 1 Credit

A continuation of Volleyball I. Intermediate skills, defensive strategies, play sets, and how to play doubles and triples volleyball. **Prerequisite: PE 163.**

PE 165 (Formerly PE 1651)
Volleyball III [PE] • 1 Credit

Emphasis is on team plan and interaction using and applying all volleyball skills. **Prerequisite: PE 164.**

PE 172 (Formerly PE 1721)
Bowling I • 1 Credit

Course is structured to allow the individual to acquire and use proper bowling forms. Students learn to eliminate errors in techniques, follow rules, compute handicaps, and keep scores.

PE 173 (Formerly PE 1731)
Bowling II • 1 Credit

Students should be a 135-average bowler or better and be able to demonstrate good approach form. **Prerequisite: PE 172.**

PE 180
Adaptive PE [PE] • 2 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 181 (Formerly PE 1811)
Swimming I [PE] • 1 Credit

This course is designed to provide students with the basic fundamental skills to become a proficient, safe swimmer. Students learn these skills: 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 182 (Formerly PE 1801)
Adaptive PE Lab [PE] • 1 Credit

Lab to be taken concurrently with PE 180.

PE 187 (Formerly PE 1871)
Baseball I [PE] • 1 - 2 Credits

Introduces students to basic skills of baseball. Students are given instruction in all phases of the game, with main purpose being to gain an understanding of fundamentals.

PE 188 (Formerly PE 1881)
Baseball II [PE] • 1 Credit

Students expand their knowledge of the skills of baseball taught at the beginning level. Team strategy is taught at a more advanced level. **Prerequisite: PE 187.**

PE 189 (Formerly PE 1891)
Baseball III [PE] • 1 Credit

Advanced level of skills are taught, and theory of baseball strategy is introduced in all phases of the game. Specific drills are used for development of specialized skills. **Prerequisite: PE 188.**

PE 190 (Formerly PE 1901)
Cardio Kickboxing I [PE] • 1 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 198 (Formerly PE 1991)
Special Studies • 1 - 15 Credits

An experimental class to be used to explore new approaches and applications to Physical Education.

PE 199
Special Studies • 1 - 15 Credits

An experimental lab class to be used to explore new approaches and applications to Physical Education.

PE 201 (Formerly PE 2011)
Exercise and Weights [PE] • 1 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.

PE 298 (Formerly PE 2991)
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

PE 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

Physical Education Professional

columbiabasin.edu/pep

Department Overview: These courses are designed for the PE major or students interested in a coaching career.

PEC 135 (Formerly PEC 1351)
Swing Analysis and Strategies • 2 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 & Rd. 42 in Pasco.

PEC 180
Care and Prevention of Athletic Injuries • 3 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 184 (Formerly PEC 182)
Care & Prevention of Athletic Injuries II • 2 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 185 (Formerly PEC 1821)
Care & Prevention of Athletic Injuries II Lab • 1 Credit

Lab to be taken concurrently with PEC 184.

PEC 188 (Formerly PEC 183)
Athletic Training Internship • 2 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 189 (Formerly PEC 1831)
Athletic Training Internship Lab • 1 Credit
Lab to be taken concurrently with PEC 188.

PEC 230
Introduction to PE • 3 Credits
This course is the study of the history and foundations of physical education. Emphasis is placed on basic elements, foundations, specialty areas of further study, career opportunities, and the relationship of physical education to other fields. This course will broaden students' understanding of how the philosophies and programs of physical education, exercise, and sport have evolved to their current status.

PEC 235
Fundamentals of Basketball • 2 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 Credits
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 Credits
All elements of basic knowledge of golf fundamentals are reviewed with emphasis on methods and techniques of golf instruction for individuals or groups.

PEC 242
Theory of Basketball • 2 Credits
Advanced concepts and theory in basketball coaching and continuation of fundamentals of basketball 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 Credits
Theory of volleyball for prospective coaches and advanced players with the aspects of philosophy, psychology, methods, and organization.

PEC 244
Sports Officiating • 3 Credits
This course provides students with the knowledge and expertise necessary to officiate in physical education classes, intramurals, and interscholastically.

PEC 246
Sports Officiating • 3 Credits
This course is a continuation of sports officiating with focus on developing an officiating philosophy and understanding the psychology of officiating.

PEC 247
Sports Officiating • 3 Credits
This course is a continuation of sports officiating with focus on being physically prepared to officiate, understanding the responsibilities of officiating, and knowing how and where to work as an official.

PEC 248
Theory of Baseball I • 2 Credits
Introduces students 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 Credits
An introduction of 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. This course includes stroke, match, and best ball strategy and covers weather, game management, and the mental aspects. The complete theory of the mechanics of the golf swing are investigated and explored with reference to the scientific foundation of the maneuver. **Prerequisite: instructor permission.**

PEC 250
Baseball Fundamentals • 3 Credits
Study of the basics involved in the total offensive and defensive scheme of baseball. Methods of instruction and techniques of performance are covered along with specific progress drills.

Physics

columbiabasin.edu/physics

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.

PHYS 102
Physics of Everyday Experience [M/S] • 5 Credits
Designed for non-science majors, this course is a practical introduction to physics and science in everyday life. Lecture demonstrations are used to illustrate physics that we experience in everyday life such as motion, sports, energy and power, gravity and planetary motion, fluids, pressure, aerodynamics, waves, sounds and music, musical instruments, temperature and heat, engines, electricity, lightning, house hold electric circuits, magnets, electric generators, light and colors, images, laser, nuclear energy, radioactivity, and medical imaging technology. This is a lecture only class with no associated lab. **Prerequisite: MATH 084 with a grade of 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or test placement.**

PHYS 199
Special Studies • 1 - 5 Credits
A class used to explore new coursework.

PHYS 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

PHYS& 100 (Formerly PHY 100)
Physics for Non-Science Majors [M/S] • 4 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 098.**

PHYS& 101 (Formerly PHY 1001)
Physics Lab for Non-Science Majors [M/S] • 1 Credit
Lab to be taken concurrently with PHYS& 100.

PHYS& 124 (Formerly PHY 1051, PHYS& 131)
General Physics Lab I [M/S] • 1 Credit
Lab to be taken concurrently with PHYS& 134.

PHYS& 125 (Formerly PHY 1061, PHYS& 132)
General Physics Lab II [M/S] • 1 Credit
Lab to be taken concurrently with PHYS& 135.

PHYS& 126 (Formerly PHY 1071, PHYS& 133)
General Physics Lab III [M/S] • 1 Credit
Lab to be taken concurrently with PHYS& 136.

PHYS& 134 (Formerly PHY 105, PHYS& 121)
General Physics I [M/S] • 4 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 better.**

PHYS& 135 (Formerly PHY 106, PHYS& 122)
General Physics II [M/S] • 4 Credits
Solids and fluids, thermal physics, laws of thermodynamics, vibrations and waves, sound, electric forces and fields, electrical energy, and capacitance. **Prerequisite: PHYS& 134/124.**

PHYS& 136 (Formerly PHY 107, PHYS& 123)
General Physics III [M/S] • 4 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& 135/125.**

PHYS& 231 (Formerly PHY 2011)
Engineering Physics Lab I [M/S] • 1 Credit
Lab to be taken concurrently with PHYS& 241.

PHYS& 232 (Formerly PHY 2021)
Engineering Physics Lab II [M/S] • 1 Credit
Lab to be taken concurrently with PHYS& 242.

PHYS& 233 (Formerly PHY 2031)
Engineering Physics Lab III [M/S] • 1 Credit
Lab to be taken concurrently with PHYS& 243.

PHYS& 241 (Formerly PHY 201, PHYS& 221)
Engineering Physics I [M/S] • 4 Credits
Physics for Engineering or Physical Science majors. Mechanics. **Prerequisite: MATH& 151, or equivalent, with a GPA of 2.0 or better.**

PHYS& 242 (Formerly PHY 202, PHYS& 222)
Engineering Physics II [M/S] • 4 Credits
Mechanics, thermodynamics, and electromagnetism. **Prerequisite: MATH& 152 and PHYS& 241/231.**

PHYS& 243 (Formerly PHY 203, PHYS& 223)
Engineering Physics III [M/S] • 4 Credits
Electromagnetism and optics. **Prerequisite: PHYS& 242/232.**

Political Science

columbiabasin.edu/politicalscience

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. CBC offers a two-year Associate in Arts and Sciences degree with an emphasis in Political Science.

POLS 104 (Formerly PS 104)
State and Local Government [S/B] • 5 Credits
An examination of federal, state, and local government relationships; state executive, legislative, judicial, and political party systems; and forms of local governmental units.

POLS 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

POLS 205 (Formerly PS 151)
American Political Thought [S/B] • 5 Credits
Examines through classical and contemporary texts the crucial, ethical, and philosophical issues that shaped the founding and continues to be debated up to the modern day.

POLS 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

POLS& 201 (Formerly PS 150)
Intro Political Theory [S/B] • 5 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, political rights, and the nature and limits of political authority.

POLS& 202 (Formerly PS 100)
American Government [S/B] • 5 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.

POLS& 203 (Formerly PS 103)
International Relations [S/B] • 5 Credits
An examination of various theoretical approaches to international politics, causes of war, approaches to peace, and sources of conflict in the contemporary world.

POLS& 204 (Formerly PS 101)
Comparative Government [S/B] • 5 Credits
A comparative study of the development and transformation of western democratic, communist, and third world political systems and processes.

Project Management

columbiabasin.edu/projectmanagement

Department Overview: The Project Management program provides knowledge and skills in project management, including fundamentals (e.g., initiating, planning, execution, monitoring, and control), as well as scheduling software, procurements and contracts, managing human resources, and risk management. The program incorporates a hands-on, practical application approach and uses experienced project management practitioner perspectives in the development and execution of the program. The program uses a building block approach of a one-year certificate, two-year Associate in Applied Science degree, and a Bachelor of Applied Science degree where each added step in the education builds on and reinforces the earlier knowledge, skills, and experiences. The goal of the Project Management program is to equip students with sound project management knowledge and skills with practical experience in project scenarios that resemble real-world situations. Students in this program will be able to apply these project management knowledge and skills in the workplace, in volunteer organizations, or life.

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

- Develop familiarity with project management processes, terminology, and concepts
- Develop familiarity with important project planning processes, terminology, and concepts
- Develop familiarity with project execution phase and monitoring/control processes, terminology, concepts, and activities
- Develop skills using Microsoft Project 2010 or Primavera software for creating and using the project schedule
- Examine procurement concepts and practices including solicitation, source selection, and contract administration

- Develop project integration and communication concepts including directing and performing the work defined in the Project Management Plan, activity interrelationships, communicating relevant information to the team and stakeholders, and change control
- Develop and apply risk management concepts including risk identification, qualitative and quantitative risk analyses, risk response planning, and risk monitoring/control
- Integrate project management concepts in a simulated project(s) environment which includes applying project management concepts and practices, creating and using a project schedule, analyzing and communicating project performance, and experiencing and analyzing team behavior

PROJ 100

Introduction to Project Management • 5 Credits

An introduction to foundational knowledge and concepts for the project management profession. Introduces key project definitions, project phases, and the project management knowledge areas. Also introduces students to project management activities such as scope, cost, and schedule management, project leadership skills, and the project team development model. The role of ethics in project management is also discussed.

PROJ 110

Project Planning • 5 Credits

Examines the important planning phase of a project which includes preparing the project management plan, defining the project scope and work breakdown structure; defining the activities and schedule; and estimating the costs and defining the budget. Also addresses planning quality, human resources, communication, risk, and procurement elements of a project. Introduces schedule concepts and is typically taken concurrently with scheduling software course PROJ 130 or 140. **Prerequisite: PROJ 100 or instructor permission.**

PROJ 120

Project Execution & Control • 5 Credits

Presents the project execution phase and corresponding monitoring and control activities. Also addresses project team acquisition and development; performing quality assurance/control activities; distributing information; managing stakeholder expectations; and procurement activities. **Prerequisite: PROJ 110 or instructor permission.**

PROJ 130

Introduction to Microsoft Project • 5 Credits

Provides hands-on skills using Microsoft Project 2010 software for developing and maintaining the project schedule. Uses Project 2010 to develop the project schedule including such things as creating a work breakdown structure; identifying activities, estimates, durations, and relationships; and assignment of resources. Also provides a basic understanding of such things as capturing performance data; preparing outputs and reports; and using baselines. **Prerequisite: PROJ 100 or concurrent enrollment.**

PROJ 140

Introduction to Primavera • 5 Credits

Provides hands-on skills using Primavera software for developing and maintaining the project schedule. Uses Primavera to develop the project schedule including such things as creating a work breakdown structure; identifying activities, estimates, durations, and relationships; and assignment of resources. Also provides a basic understanding of such things as capturing performance data; preparing outputs and reports; and using baselines. **Prerequisite: PROJ 100 or concurrent enrollment.**

PROJ 170

Project Management Internship • 1 - 5 Credits

Designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. **Prerequisite: enrollment in the Project Management program and instructor permission.**

PROJ 211

Project Procurement • 3 Credits

Provides basic understanding of the project procurement management including key processes, roles/responsibilities, and types of contracts. Addresses the various roles people play in the procurement process and how procurement management plays a key part in achieving successful projects. **Prerequisite: PROJ 110 and PROJ 120 or concurrent enrollment in PROJ 120.**

PROJ 222

Project Quality Management • 3 Credits

Provides further understanding of how project quality planning and control contribute to sound project management and improved project results. This course addresses quality tools, skills, and techniques. **Prerequisite: PROJ 110 and PROJ 120 or concurrent enrollment in PROJ 120.**

PROJ 231

Project Risk Management • 5 Credits

Provides additional knowledge and skills for identifying project risks, analyzing risks, and risk responses. Addresses both quantitative and qualitative analysis, risk monitoring and control techniques, risk probability, and risk impacts. **Prerequisite: PROJ 110 and PROJ 120 or concurrent enrollment in PROJ 120.**

PROJ 241

Project Management Capstone • 5 Credits

Integrates all the various project management knowledge and skills learned in previous courses into a simulated project(s) including project initiation, planning, execution, and monitoring/control activities in a team environment. Includes evaluation of project decisions to identify improvement opportunities. **Prerequisite: PROJ 120 or 130 or 140, and PROJ 211 or 221 or 222, and PROJ 231.**

PROJ 270

Project Management Internship • 1 - 5 Credits

Designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. **Prerequisite: enrollment in the Project Management program and instructor permission.**

PROJ 299

Special Studies • 1 - 15 Credits

A class used to explore new coursework.

PROJ 310

Project Contracts & Legal Issues • 5 Credits

Develops concepts beyond PROJ 211 dealing specifically with contracts including advanced contract administration topics such as monitoring/change control and claims. Also addresses project management legal issues. **Prerequisite: PROJ 120 and 211.**

PROJ 320

Project Monitoring, Control, & Earned Value • 5 Credits

Develops monitoring and control issues beyond PROJ 120 including earned value management concepts and skills. **Prerequisite: PROJ 120 and either PROJ 130 or 140, or instructor permission.**

PROJ 330

Project HR Management & Communication Skills • 5 Credits

Addresses project team development, leadership, and dynamics, as well as dealing with conflict. Specifically needed communication skills are identified and developed through appropriate activities (e.g., presentations, role play). **Prerequisite: PROJ 120 and either 221 or 222.**

PROJ 370

Project Management Internship • 1 - 5 Credits

Designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. **Prerequisite: enrollment in the Project Management program and instructor permission.**

PROJ 411
Advanced Microsoft Project • 5 Credits
Develops advanced schedule concepts and practices using Microsoft Project 2010 software, beyond those learned in PROJ 130, including topics such as resource leveling, critical path management, baselining, and progress reporting. The class utilizes scenarios to be addressed using the software. **Prerequisite: PROJ 130.**

PROJ 421
Advanced Primavera • 5 Credits
Develops advanced schedule concepts and practices using Primavera software, beyond those learned in PROJ 140, including topics such as resource leveling, critical path management, baselining, and progress reporting. The class utilizes scenarios to be addressed using the software. **Prerequisite: PROJ 140 or instructor permission.**

PROJ 470
Project Management Internship • 1 - 5 Credits
Designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. **Prerequisite: enrollment in the Project Management program and instructor permission.**

PROJ 480
Advanced Project Management Capstone • 5 Credits
Integrates all the various project management knowledge and skills learned in previous courses into a simulated project(s) including project initiation, planning, execution, and monitoring/control activities in a team environment. This course includes evaluation of project decisions to identify improvement opportunities. **Prerequisite: PROJ 310, 320, and 330, and either PROJ 411 or 421.**

Psychology

columbiabasin.edu/psychology

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.

PSYC 103 (Formerly PSY 100)
Applied Psychology [S/B] • 3 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.

PSYC 106 (Formerly PSY 106)
Child Growth & Development • 3 Credits
This course provides an overview of all aspects of child growth and the developmental stages of children from conception to adolescence, including the physical, cognitive, linguistic, emotional, mental, social, and personality development of the child. Provides an understanding of the things and situations that can affect how a child behaves.

PSYC 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

PSYC 201 (Formerly PSY 201)
Social Psychology [S/B] • 5 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.

PSYC 205 (Formerly PSY 205)
Psychology of Adjustment [S/B] • 5 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.

PSYC 209
Fundamentals of Psychological Research [S/B] • 5 Credits
Covers psychological research methodology and techniques. Topics include the logic of hypothesis testing, experimental design, research strategies and techniques, fundamentals of scientific writing, evaluation of research literature in psychology, and ethical issues in psychological research. Students learn to apply computer software to data collected in psychological research, and participate in a class research project. **Prerequisite: PSYC& 100.**

PSYC 217
Forensic Psychology [S/B] • 5 Credits
Introduces students to the interface of psychology and the law. The applications of psychological theory, research, methods, and expertise to issues that come before the legal system are the focus of this course. Topics include forensic assessment; competency and insanity; dangerousness and psychopathy; domestic violence; profiling; child abuse; and sex offenders. Legal standards regarding insanity, civil commitment, and eye-witness and expert testimony will be reviewed.

PSYC 270
Health Psychology [S/B] • 5 Credits
An overview of the psychological, behavioral, and social factors in health and disease. The biopsychosocial approach integrates the understanding and application of biological, psychological, and social factors as they relate to one's health and overall well-being. Some topics covered include stress and wellness, the adoption of healthy behaviors, and the avoidance of maladaptive behaviors. **Recommended prerequisite: PSYC& 100.**

PSYC 280
Positive Psychology • 5 Credits
Historically, psychology has been somewhat negative in orientation, through an emphasis on human weaknesses and liabilities, abnormalities, developmental difficulties, pathology, and treatment modalities. Mental illness, rather than mental health, has been a primary focus for research and practice. This course describes how the scope of psychology has recently been broadened to understand positive emotion, build strength and virtue, and provide a framework for creating what Aristotle called the good life. Topics include happiness (subjective well-being, positive emotions), optimal performance, personal fulfillment, optimal wellness/medical health, emotional intelligence, creativity, optimism, hope, self-efficacy, goals and life commitments, wisdom, spirituality, meaning and purpose in life, and the civic virtues. **Prerequisite: PSYC& 100.**

PSYC 297
Field Experience • 1 - 3 Credits
Students work as volunteers in a community agency and complete a journal and report (usually 1 credit). P**rerequisite: PSYC& 100 and instructor permission.**

PSYC 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

PSYC& 100 (Formerly PSY 101)
General Psychology [S/B] • 5 Credits
Introduction to the scientific study of human behavior and mental processes. Some areas of study are learning theory, neuropsychology, motivation, cognition, memory, and research methods.

PSYC& 180 (Formerly PSY 230)
Human Sexuality • 5 Credits
A survey of human sexuality from biological, psychological, sociocultural, and sociobiological perspectives. Topics include sexual orientation, sexual dysfunction, and sexually transmitted diseases.

PSYC& 200 (Formerly PSY 240)
Lifespan Psychology [S/B] • 5 Credits

A comprehensive survey of psychological development of the human from conception to death using the biopsychosocial approach. **Prerequisite: PSYC& 100.**

PSYC& 220 (Formerly PSY 202)
Abnormal Psychology [S/B] • 5 Credits

Explores the conceptualization of abnormality and mental disorders from sociocultural, biological, psycho-dynamic, cognitive, and behavioral perspectives. Describes maladaptive mental disorders as well as their incidence and treatment. **Prerequisite: PSYC& 100.**

Race, Ethnicity, & Immigration

columbiabasin.edu/rei

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. This program provides students an opportunity to examine these aspects of American society through a combination of courses in history, anthropology, political science, and sociology. Students also examine how the U.S. experience in race, ethnicity, and immigration compares to that of other areas of the world. Students choosing to study Race, Ethnicity, & Immigration can earn an AA degree with that emphasis by taking specific courses in History, Intercultural Studies, Psychology, and/or Sociology. See degree plans for more information about requirements and specific programs for course descriptions.

Radiation Protection Technician

columbiabasin.edu/rpt

Department Overview: The Radiation Protection Technician (RPT) option of the Nuclear Technology program develops technicians who measure and record radiation levels. Technicians also maintain and calibrate radiation protection instruments. A RPT has a key role in fostering a safe work environment for employees working with radioactive materials or in radiation areas. RPTs must be able to assist in the development of procedures for the operation of radiation protection instruments and in the evaluation of plans to limit the dose of radiation workers receive.

RPT 111
Radiation Fundamentals • 5 Credits

This course provides future radiological protection technicians with an overview of radioactivity, sources of radiation, and radioactive decay. Emphasis is placed on plant safety, radiological hazards, and radioactivity containment. **Prerequisite: admission to the Nuclear Technology program.**

RPT 121
Radiation Monitoring • 5 Credits

Principles of radiation detection and measurement principles. Application of radiological survey and analysis instruments, sample collection equipment, and calibration sources and equipment. **Prerequisite: RPT 111.**

RPT 131
Radiation Effects • 5 Credits

Radiation biology, radiation effects on simple chemical systems, biological molecules, cells, organisms, and humans. Stochastic vs. deterministic effects, units of exposure, dose and dose equivalent, external dosimetry, internal dosimetry, control of external and internal exposure, detector and instrumentation systems for measuring dose. **Prerequisite: RPT 111 and BIOL& 175.**

RPT 141
Radioactive Materials Handling • 5 Credits

Radioactive material control and methods to minimize and control external exposure and airborne radioactivity. **Prerequisite: RPT 111.**

RPT 211
Radiological Safety and Response • 5 Credits

This course focuses on contamination control and appropriate responses to radiological events. **Prerequisite: RPT 111.**

RPT 222
Radiation Protection • 5 Credits

Practical applications and demonstrations of radiation protection and health physics. Radiological protection standards, contamination control, radiological incident evaluation and control, decontamination, and environmental monitoring. **Prerequisite: RPT 111.**

Radiologic Technology

columbiabasin.edu/radtech

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, and 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 in Applied Science in Radiologic Technology degree requirements.

The Radiologic Technology program admits students annually during summer quarter for this eight-quarter program. Once admitted into the program, each student will be responsible for providing documentation of the following additional requirements:

- Program specific immunization records (details provided with admission into the program)
- Current American Heart Association CPR card for Healthcare Provider
- Satisfactory criminal history background check using a college approved vendor. Criminal history background information is required of all Health Science students. Information obtained will be considered in determining student eligibility to complete clinical coursework. Inability to participate in clinical experiences due to the information obtained from the background check may result in the student's inability to satisfactorily complete program degree requirements. Any infraction while enrolled in the Radiologic Technology program should be self-reported to the program coordinator. Questions regarding the background policy should be directed to the Dean for Health Sciences at 509.544.8310.

For more information regarding the Radiologic Technology program, please visit columbiabasin.edu/radtech or contact the Health Sciences Division at 509.544.8306 or 509.544.8300.

RATEC 101
Introduction to Radiologic Technology • 1 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 the Radiologic Technology program.**

RATEC 102
Radiographic Physics • 5 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 the Radiologic Technology program.**

RATEC 103
Principles of Radiographic Exposure • 3 Credits

Presents basic elements of radiologic technique and other factors influencing it. Format includes two hours of lecture and a two-hour lab each week. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 104
Advanced Radiographic Procedures • 4 Credits

Examines the theory and principles of contrast media used in radiologic examinations and special positioning. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 105
Introduction to Radiographic Technique • 2 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 the Radiologic Technology program.**

RATEC 106
Computed Imaging • 2 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 the Radiologic Technology program.**

RATEC 107
Positioning and Related Anatomy I • 2 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 two hours of lecture and a two-hour lab each week. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 108
Positioning and Related Anatomy II • 3 Credits

Provides demonstration and film evaluation experience in positioning and related anatomy of the spine, pelvis, and lower extremities. Format includes two hours of lecture and a two-hour lab each week. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 109
Positioning and Related Anatomy III • 3 Credits

Provides demonstration and film evaluation experience in positioning and related anatomy of the cervical and thoracic spine, boney thorax, skull, facial bones, and sinuses. Format includes two hours of lecture and a two-hour lab each week. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 110 (Formerly RATEC 1103)
Clinical Education I • 3 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 the Radiologic Technology program.**

RATEC 111 (Formerly RATEC 1113)
Clinical Education II • 5 Credits

Second in a series of supervised clinical education experiences. Students are assigned to clinical sites, 16 hours per week. Students observe and perform diagnostic radiologic procedures. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 112 (Formerly RATEC 1123)
Clinical Education III • 5 Credits

Third in a series of supervised clinical education experiences. Students are assigned to clinical sites, 16 hours per week. Specific performance objectives are established for each student. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 113 (Formerly RATEC 1133)
Clinical Education IV • 5 Credits

Fourth in a series of supervised clinical education experiences. Students are assigned to clinical sites, 16 hours per week. Specific performance objectives are established for each student. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 114 (Formerly RATEC 1143)
Supplemental Clinical Practicum I • 1 Credit

An optional course that offers supervised clinical education experiences between the fall and winter quarter of the first program year. Students are assigned to clinical sites, 16 hours per week. Students observe and perform diagnostic radiologic procedures. **Prerequisite: acceptance into the Radiologic Technology program and instructor permission.**

RATEC 120
Nursing Procedures • 2 Credits

Presents basic nursing procedures emphasizing the role of the radiologic technologist in various patient-care situations. Incorporates seven hours of AIDS and bloodborne pathogen education. Healthcare provider BLS is included. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 121
Patient Care • 2 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. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 125
Medical Terminology • 1 Credit

Presents a systematic approach to medical terminology combining word roots, prefixes, and suffixes. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 127
Introduction to Sectional Anatomy • 2 Credits

Expands knowledge of anatomy through the introduction of multiple plane orientations. Students review normal anatomy of the brain, chest, abdomen, pelvis, neck, and spine. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 199
Special Studies • 1 - 10 Credits

A class used to explore new coursework.

RATEC 207
Concept Integration • 2 Credits

Prepares students for the American Registry of Radiologic Technologists exam through a comprehensive review. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 210 (Formerly RATEC 2103)
Clinical Education V • 13 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 each student. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 211 (Formerly RATEC 2113)
Clinical Education VI • 8 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 each student. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 212 (Formerly RATEC 2123)
Clinical Education VII • 8 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 each student. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 213 (Formerly RATEC 2133)
Clinical Education VIII • 8 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 each student. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 214 (Formerly RATEC 2143)
Supplemental Clinical Practicum II • 1 Credit

An optional course that offers supervised clinical education experiences between the fall and winter quarter of the second program year. Students are assigned to clinical sites, 16 hours per week. Students observe and perform diagnostic radiologic procedures. **Prerequisite: acceptance and current enrollment in the Radiologic Technology program and instructor permission.**

RATEC 220
Pathology I • 3 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 the Radiologic Technology program.**

RATEC 221
Pathology II • 2 Credits

Continues RATEC 220. Students become familiar with the etiology, symptoms, prognosis, and imaging of disease processes of the cardiovascular, nervous, hemopoetic, endocrine, and reproductive systems. **Prerequisite: acceptance into the Radiologic Technology program.**

RATEC 230
Quality Assurance • 2 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 the Radiologic Technology program.**

RATEC 240
Radiation Biology and Protection • 3 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 the Radiologic Technology program.**

RATEC 296
Special Topics in Radiology • 2 Credits

Allows study of special topics that may be necessary to update students in the field of radiologic technology. **Prerequisite: acceptance into the Radiologic Technology program or instructor permission.**

RATEC 299
Special Studies • 1 - 10 Credits

A class used to explore new coursework.

Reading

columbiabasin.edu/reading

Department Overview: The Reading department offers classes for students who need to build and/or improve college reading skills or who wish to acquire college vocabulary.

RDG 091
Reading Skills • 5 Credits

Reinforces essential reading comprehension skills: recognizing vocabulary in context, locating main ideas, understanding supporting details, identifying transitions, making inferences, outlining and summarizing, and recognizing patterns of organization. This class gives students an opportunity to practice and improve these strategies in a supportive environment. **Prerequisite: appropraite placement or teacher recommendation.**

RDG 099
College Reading Skills • 5 Credits

Breaks reading down into the skills necessary for academic success: learning vocabulary in context, locating main ideas and supporting details, and recognizing inferences, transitions, patterns of organization, purpose and tone, support for argument, and fact and opinion. **Prerequisite: appropriate placement or successful completion of RDG 091, or teacher recommendation.**

RDG 115
Vocabulary Improvement • 1 - 3 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.

RDG 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

RDG 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

Russian

columbiabasin.edu/russian

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.

RUSS& 121 (Formerly RUS 101)
Russian I [H] • 5 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 prerequisite: successful completion of at least ENGL 099.**

RUSS& 122 (Formerly RUS 102)
Russian II [H] • 5 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 permission.**

RUSS& 123 (Formerly RUS 103)
Russian III [H] • 5 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 permission.**

Senior Citizen

Department Overview: The Senior Citizen department offers a variety of opportunities for the lifelong learner to take courses for professional development or personal enrichment.

SNR 015
Senior Fitness • 0 Credits

Class includes total fitness program involving strength, flexibility, muscle toning, and aerobic exercise. Orientation and instructor's permission are required for this class.

Social Science

columbiabasin.edu/socialscience

Department Overview: The program offers courses in undergraduate social science research.

SSCI 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

SSCI 290
Social Research Methods [S/B] • 4 Credits
Introduces the theory, methodology, and some of the specific techniques of social science research. Students 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. This course also explores the philosophical underpinnings and ethical considerations involved in social research. Intended for students majoring in the social or behavioral sciences.

SSCI 291 (Formerly SSCI 2901)
Social Research Methods Lab [S/B] • 1 Credit
Lab to be taken concurrently with SCCI 290.

Sociology

columbiabasin.edu/sociology

Department Overview: The Sociology department is dedicated to offering courses which concern the scientific study of the social group aspect of human life. Our 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.

SOC 110
Gender, Media, & Popular Culture [S/B] • 5 Credits
This course explores how men and women, as well as the qualities of "masculinity" and "femininity," are portrayed in print, visual, and news media, as well as the relationship between gender and cultural experiences, such as technology, sports, and violence.

SOC 150
Marriage-Family [S/B] • 5 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 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 197
Field Experience • 1 - 3 Credits
Arrangements are made for students to receive actual field experience. The number of hours per week determines the credit enrollment. **Prerequisite: SOC& 101 and instructor permission.**

SOC 199
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

SOC 230
Human Sexuality • 3 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 Credits
Introduces 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 are shown and discussed in the course of the quarter.

SOC 297
Field Experience • 1 - 3 Credits
Arrangements are made for students to receive actual field experience. The number of hours per week determines the credit enrollment. **Prerequisite: SOC& 101 and instructor permission.**

SOC 299
Special Studies • 1 - 15 Credits
A class used to explore new coursework.

SOC 305
Cybercrime: A Sociological Perspective [S/B] • 5 Credits
Cybercrime is a deviant behavior involving the illegal use of computer technology and the internet against individuals, social groups, and institutions. This course examines cybercrime and its various types (such as identity theft, bullying, and cyber-terrorism) as a social problem in the United States and the world. The goal of this course is to introduce students to the theories and methods used by sociologists to understand the different dimensions of cybercrime including their causes, costs, and challenges to society, and possible solutions. Topics include: cyber-sociology, crime and deviance, types of cybercrime, challenges to social order, society's responses to cybercrime, and socio-economic and ethical consequences of cybercrime. **Prerequisite: acceptance into the Bachelor of Applied Science program or instructor permission. Recommended: SOC& 101 or 201.**

SOC& 101 (Formerly SOC 101)
Intro to Sociology [S/B] • 5 Credits
An introduction to the scientific study of society. Emphasis on relationship of the individual to society, inequality, social institutions, and deviant behavior.

SOC& 201 (Formerly SOC 201)
Social Problems [S/B] • 5 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) are to be covered.

Spanish

columbiabasin.edu/spanish

Department Overview: Our 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. Guidelines are available from the Spanish faculty to help students select the appropriate course to begin with. Please see Spanish Department Placement Guidelines on the website and/or contact the Spanish department faculty at CBC for help in understanding the guidelines and placement options. Information about Prior Learning Credit and course challenge is also available.

SPAN 104 (Formerly SPA 104)
Intensive 1st Year Spanish [H] • 15 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).

SPAN 110 (Formerly SPA 110)
Beginning Spanish for Professionals [H] • 5 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. This class begins 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.

SPAN 111 (Formerly SPA 111)
Intermediate Spanish for Professionals [H] • 5 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 is followed by activities specifically designed to meet the individual needs and professions of the participants. **Prerequisite: SPAN 110, SPAN& 121, or instructor permission.**

SPAN 112 (Formerly SPA 112)
Advanced Spanish for Professionals [H] • 5 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 is followed by activities specifically designed to meet the individual needs and professions of the participants. **Prerequisite: SPAN 111, SPAN& 122, or instructor permission.**

SPAN 150 (Formerly SPA 150)
Beginning Conversational Spanish • 1 - 5 Credits

Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. **Recommended prerequisite: successful completion of at least SPAN& 121.**

SPAN 151 (Formerly SPA 151)
Beginning Conversational Spanish • 1 - 5 Credits

Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. **Recommended prerequisite: successful completion of at least SPAN& 121.**

SPAN 152 (Formerly SPA 152)
Conversational Spanish • 5 Credits

Intensive practice in speaking and listening with an emphasis on surviving in everyday situations. **Recommended prerequisite: successful completion of SPAN& 121.**

SPAN 199
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

SPAN 205 (Formerly SPA 205)
Spanish for Spanish Speakers [H] • 5 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 spelling, accents, grammar, and vocabulary of standard Spanish. Students are also introduced to a comprehensive and analytical survey of Spanish and Latin American literature.

SPAN 206 (Formerly SPA 206)
Spanish for Spanish Speakers [H] • 5 Credits

Designed for native or near-native speakers of Spanish who learn Spanish at home and wish to reactivate their use of the Spanish language, while expanding their academic Spanish language skills and cultural knowledge. Emphasis on speaking, reading, writing, and listening comprehension, in response to students' specific needs. Special attention is given to advanced grammar and vocabulary of standard Spanish. **Prerequisite: SPAN 205 or instructor permission.**

SPAN 207 (Formerly SPA 207)
Spanish for Spanish Speakers [H] • 5 Credits

Designed for native or near-native speakers of Spanish who learn Spanish at home and wish to reactivate their use of the Spanish language, while expanding their academic Spanish language skills and cultural knowledge. Emphasis on speaking, reading, writing, and listening comprehension, in response to students' specific needs. 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 206 or instructor permission.**

SPAN 250 (Formerly SPA 250)
Intermediate Conversational Spanish • 1 - 5 Credits

Intensive practice in speaking Spanish for students who have already gained a knowledge of beginning-level grammar and vocabulary. Class is conducted entirely in Spanish. **Prerequisite: one year of college-level Spanish or instructor permission.**

SPAN 251 (Formerly SPA 251)
Intermediate Conversational Spanish • 1 - 5 Credits

Intensive practice in speaking Spanish for students who have already gained a knowledge of beginning-level grammar and vocabulary. Class is conducted entirely in Spanish. **Prerequisite: one year of college-level Spanish or instructor permission.**

SPAN 252 (Formerly SPA 252)
Intermediate Conversational Spanish • 1 - 5 Credits

Intensive practice in speaking Spanish for students who have already gained a knowledge of beginning-level grammar and vocabulary. Class is conducted entirely in Spanish. **Prerequisite: one year of college-level Spanish or instructor permission.**

SPAN 260 (Formerly SPA 260)
Spanish Literature Readings [H] • 3 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 permission.**

SPAN 261 (Formerly SPA 261)
Spanish Literature Readings [H] • 3 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 permission.**

SPAN 262 (Formerly SPA 262)
Spanish Literature Readings [H] • 3 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 permission.**

SPAN 299
Special Studies • 1 - 15 Credits

A class used to explore new coursework.

SPAN& 121 (Formerly SPA 101)

Spanish I [H] • 5 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 prerequisite: successful completion of at least ENGL 099**

SPAN& 122 (Formerly SPA 102)

Spanish II [H] • 5 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 permission.**

SPAN& 123 (Formerly SPA 103)

Spanish III [H] • 5 Credits

Introduction to the Spanish language including conversational skills, reading, writing, grammar, Hispanic culture including geography, customs, daily life, and heritage. **Prerequisite: SPAN& 122 or instructor permission.**

SPAN& 221 (Formerly SPA 201)

Spanish IV [H] • 5 Credits

Extensive practice in all four language skills (reading, writing, speaking, and 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 permission.**

SPAN& 222 (Formerly SPA 202)

Spanish V [H] • 5 Credits

Extensive practice in all four language skills (reading, writing, speaking, and 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 permission.**

SPAN& 223 (Formerly SPA 203)

Spanish VI [H] • 5 Credits

"Extensive practice in all four language skills (reading, writing, speaking, and 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 permission.**

Surgical Technology

columbiabasin.edu/surgtech

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 perioperative patient care, aseptic technique, operative procedures, surgical instrumentation, and sterile processing. Clinical practice locations include hospitals and surgical centers.

Admission eligibility requirements include successful completion of the following prerequisite and general education support courses:

- BIOL& 241 Human A&P 1 w/ Lab 6 credits
- BIOL& 242 Human A&P 2 w/ Lab 6 credits
- BIOL& 260 Microbiology w/ Lab 6 credits
- CMST 101 Speech Essentials (may substitute CMST 110 or 260 or CMST& 210 or 220) 3 credits
- HSCI 147 Medical Terminology 5 credits
- MATH 106 Business Mathematics (or higher course, except MATH 109) 5 credits
- PSYC 100 General Psychology 5 credits

Application to the Surgical Technology program is submitted through the Health Sciences Division office from June 21 until July 21 every year.

The program provides a One-Year Operating Room Aide Certificate and a two-year Associate in Applied Science degree in Surgical Technology. Graduates of the Associate in Applied Science degree in Surgical Technology are eligible for national board certification through the National Board of Surgical Technology and Surgical Assisting (NBSTSA). The 2015 NBSTSA Certified Surgical Technologist (CST) examination pass rate for graduates of the CBC Surgical Technology program is 90%*.

Applicants are required to provide the following documentation:

- Certificate of Completion for seven hours of HIV/AIDS Bloodborne Pathogen Training
- A current American Heart Association Basic Life Support (CPR/BLS) certification card for Healthcare Providers
- A current First Aid card
- Students meeting the admissions criteria may be required to attend a formal interview with Surgical Technology program faculty. Accepted applicants will be mailed a letter confirming fall registration and once admitted into the program, each student will be responsible for providing documentation of the following additional requirements:
- Program specific immunization records (details provided with admission into the program)
- Satisfactory criminal history background check using a college-approved vendor. Criminal history background information is required of Health Science students. Information obtained will be considered in determining student eligibility to complete clinical coursework. Inability to participate in clinical experiences due to the information obtained from the background check may result in the student's inability to satisfactorily complete program degree requirements. Any infraction while enrolled in the Surgical Technology program should be self-reported to the program director. Questions regarding the background policy should be directed to the Dean for Health Sciences at 509.544.8310.
- Successful completion of a 10-panel drug screening (may be required for some clinical rotations).

For more information regarding the Surgical Technology program, please visit columbiabasin.edu/surgtech or contact the Health Sciences Division at 509.544.8354 or 509.544.8300.

*Source: 2015 ARC/STSA Annual Report.

SURG 101 (Formerly SRGT 101)

Introduction to Surgical Technology • 4 Credits

This course explores fundamental concepts related to perioperative practice and provides a comprehensive introduction into the field of surgical technology. Areas of emphasis include: historical foundations of surgical sciences, role definition and scope of practice, teamwork, operating equipment and instrumentation, aseptic principles, and perioperative case management. **Prerequisite: completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.**

SURG 102 (Formerly SRGT 110)

Perioperative Science • 3 Credits

This course surveys perioperative sciences specific to the practice of surgical technology. Topics include operation room equipment and furniture, physical and environmental hazards, basic computer skills, electrical concepts and safety, surgical robotics, operative lasers, decontamination and sterilization fundamentals, infection control practices, the disease process, and postoperative wound healing. **Prerequisite: completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.**

SURG 103 (Formerly SRGT 160)
Perioperative Patient Care • 2 Credits

This course explores the duties and responsibilities of the surgical technologist in the assistant circulator role. Additionally, students are introduced to legal and ethical concepts governing perioperative practices related to surgical technology. Topics include: legal concepts and risk management, professional and medical ethics, HIPAA, patient records, medication handling, opening gloving, urinary catheterization, patient positioning, preoperative skin preparation, and emergency management. **Prerequisite: completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.**

SURG 106 (Formerly SRGT 104)
Pharmacology for the Surgical Technologist • 5 Credits

This class provides a basic knowledge of the language of pharmacology including: reading, 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; and medications used in emergency situations in the operating room. **Prerequisite: acceptance into the Surgical Technology program and successful completion of SURG 101, 111, 102, 112, 103, and 113 with a minimum grade of 2.0.**

SURG 107 (Formerly SRGT 150)
Surgical Procedures I • 8 Credits

This course introduces students to surgery and primary surgical procedures within basic specialties including diagnostic procedures, general surgery, obstetrics and gynecology, otorhinolaryngology, genitourinary surgery, and orthopedics. **Prerequisite: acceptance into the Surgical Technology program and successful completion of SURG 101, 111, 102, 112, 103, and 113 with a minimum grade of 2.0.**

SURG 111 (Formerly SRGT 1011)
Introduction to Surgical Technology Lab • 3 Credits

Skills laboratory designed to accompany SURG 101. This course provides students with an opportunity to demonstrate practical skills designed to facilitate operative procedures in the scrub role and ensure high-quality patient care. Practical skills include: identifying surgical equipment and instrumentation, assembling and preparing surgical supplies, establishing and maintaining the sterile field, surgical hand hygiene, gowning and gloving, intraoperative case management, operative counts, and dressing application. **Prerequisite: completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.**

SURG 112 (Formerly SRGT 1101)
Perioperative Science Lab • 2 Credits

Skills laboratory designed to accompany SURG 102. This course provides students with an opportunity to demonstrate practical skills designed to facilitate operative procedures in the scrub role and ensure high-quality patient care. Practical skills include: donning operation room attire and PPE, patient transport, basic computer skills, electrosurgical unit safety, surgical instrument reprocessing, assisting with wound closure techniques, and surgical specimen handling. **Prerequisite: completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.**

SURG 113 (Formerly SRGT 1601)
Perioperative Patient Care Lab • 1 Credit

Skills laboratory designed to accompany SURG 103. This course provides students with an opportunity to demonstrate practical skills designed to facilitate operative procedures in the assistant circulator role and ensure high-quality patient care. Practical skills include: reviewing documentation, medication handling, open gloving, urinary catheterization, patient positioning, preoperative skin preparation, and emergency management. **Prerequisite: completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.**

SURG 117 (Formerly SRGT 1501)
Surgical Procedures I Lab • 3 Credits

This course provides students with an opportunity to perform comprehensive practical skills designed to facilitate operative procedures and ensure high-quality patient care in the clinical setting. **Prerequisite: acceptance into the Surgical Technology program and successful completion of SURG 101, 111, 102, 112, 103, and 113 with a minimum grade of 2.0.**

SURG 202 (Formerly SRGT 120)
Central Service • 1 Credit

This course explores the field of sterile processing and materiel management in the healthcare setting and provides students with the foundational knowledge required to perform the essential job functions of central service personnel. **Prerequisite: acceptance into the Surgical Technology program and successful completion of SURG 106, 107, and 117 with a minimum grade of 2.0.**

SURG 207 (Formerly SRGT 250)
Surgical Procedures II • 8 Credits

A progression from SURG 107. This course introduces students to surgery and primary surgical procedures within basic specialties including ophthalmology, oral and maxillofacial surgery, plastic and reconstructive surgery, cardiothoracic surgery, peripheral vascular surgery, and neurosurgery. **Prerequisite: acceptance into the Surgical Technology program and successful completion of SURG 106, 107, and 117 with a miNimum grade of 2.0.**

SURG 208 (Formerly SRGT 240)
Surgical Seminar • 3 Credits

This course is to be taken concurrently with the SURG 224. The seminar provides current information regarding workplace issues, technologies, and advancements in healthcare pertinent to the practicum experience. Students engage in discussions based on their experiential learning opportunities within the practicum to assist in preparation for the national certifying examination for surgical technologists. **Prerequisite: acceptance into the Surgical Technology program and successful completion of SURG 202, 222, 223, and 207 with a minimum grade of 2.0.**

SURG 209 (Formerly SRGT 103)
Ethics & Professionalism • 2 Credits

This class provides an understanding of ethical and legal concepts related to the practice of surgical technology, including: ethical dilemmas, organizational and professional issues, ethics committees, legal concepts, the law as related to the decision-making process in the healthcare setting, and conflict resolution. **Prerequisite: acceptance into the Surgical Technology program and successful completion of SURG 202, 222, 223, and 207 with a minimum grade of 2.0.**

SURG 222 (Formerly SRGT 1201)
Central Service Clinical • 1 Credit

Clinical rotations are designed to reinforce concepts learned in SURG 202. This course explores the field of sterile processing and materiel management in the healthcare setting and provides students with the foundational knowledge and skills required to perform the essential job functions of central service personnel. **Prerequisite: acceptance into the Surgical Technology program and successful completion of SURG 106, 107, and 117 with a minimum grade of 2.0.**

SURG 223 (Formerly SRGT 1411)
Operating Room Practicum I • 8 Credits

This course provides progressive exposure to and experience with diverse surgical procedures performed in multiple specialties within the clinical setting. Students prepare for and perform assigned surgical procedures under the supervision of facility personnel, clinical preceptors, and clinical college faculty in accordance with patient safety standards and industry best practices. **Prerequisite: acceptance into the Surgical Technology program and successful completion of SURG 106, 107, and 117 with a minimum grade of 2.0.**

SURG 224 (Formerly SRGT 2411)
Operating Room Practicum II • 10 Credits

A progression from SURG 223. This course provides progressive exposure to and experience with diverse surgical procedures performed in multiple specialties within the clinical setting. Students prepare for and perform assigned surgical procedures under the supervision of facility personnel, clinical preceptors, and clinical college faculty in accordance with patient safety standards and industry best practices. Clinical experience focuses on advanced skills intended to assist in the transition from classroom to employment. **Prerequisite: acceptance into the Surgical Technology program and successful completion of SURG 202, 222, 223, and 207 with a minimum grade of 2.0.**

SURG 293 (Formerly SRGT 293)
Independent Study • 1 - 5 Credits

A class used to explore new coursework or for a specific topic of special interest. **Prerequisite: completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.**

Technical Education

Department Overview: Technical Education courses are designed to support new career and technical education instructors' knowledge and application of instructional strategies to provide the best learning opportunities for their students.

EDUT 204
Instruct Strategies for Career & Tech Instrs • 4 Credits

This course is designed to support new career and technical education instructors' knowledge and application of instructional strategies. Students complete an instructional design course and apply the knowledge gained through the completed course while collaborating with CBC instructor(s) and local mentors to employ and reflect on the use of appropriate strategies in their own professional practice. **Prerequisite: instructor permission.**

Theatre

columbiabasin.edu/theatre

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.

DRMA 100 (Formerly DRMA 1001)
Theatre Study Tour • 1 - 3 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.

DRMA 105 (Formerly DRMA 1051)
Rehearsal and Performance • 1 - 3 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, are involved in rehearsals and performances.

DRMA 106 (Formerly DRMA 1061)
Rehearsal and Performance • 1 - 3 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, are involved in rehearsals and performances.

DRMA 107 (Formerly DRMA 1071)
Rehearsal and Performance • 1 - 3 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, is involved in rehearsals and performances.

DRMA 110 (Formerly THA 110)
Creative Dramatics • 3 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 prerequisite: DRMA 225.**

DRMA 120 (Formerly THA 120)
Acting-Beginning • 5 Credits

An introduction to acting course. This course focuses 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.

DRMA 121 (Formerly THA 121)
Acting-Intermediate • 3 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 permission.**

DRMA 122 (Formerly THA 122)
Acting-Advanced • 3 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 broaden their knowledge of dramatic literature and build their repertoire of audition monologues. **Prerequisite: DRMA 120 and 121, or instructor permission.**

DRMA 126 (Formerly DRMA 1261)
Stagecraft • 1 - 3 Credits

A study of the technical aspects of stage craft, and some design, with an emphasis on construction techniques. During lab times, students gain a working knowledge of shop tools, their application, shop safety, and crew protocol.

DRMA 127 (Formerly DRMA 1271)
Stagecraft • 1 - 3 Credits

A study of the technical aspects of stage craft, and some design, with an emphasis on construction techniques. During lab times, students gain a working knowledge of shop tools, their application, shop safety, and crew protocol.

DRMA 128 (Formerly DRMA 1281)
Stagecraft • 1 - 3 Credits

A study of the technical aspects of stage craft, and some design, with an emphasis on construction techniques. During lab times, students gain a working knowledge of shop tools, their application, shop safety, and crew protocol.

DRMA 130 (Formerly THA 130)
Stage Movement • 1 - 3 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 students gain control of their 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.

DRMA 149 (Formerly THA 149)
Special Studies • 1 - 3 Credits

Topics vary from among dramatic literature, acting styles, directing, theory, criticism, aesthetics, history, and design. May be repeated for credit. **Prerequisite: varies.**

DRMA 198 (Formerly DRMA 1991)
Special Studies • 1 - 3 Credits

A class used to explore new coursework.

DRMA 199
Special Studies • 1 - 3 Credits

A class used to explore new coursework.

DRMA 200 (Formerly DRMA 2001)
Theatre Study Tour • 1 - 3 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.

DRMA 215 (Formerly THA 215)
Survey of Theatre History [H] • 5 Credits

This is a survey course that covers significant trends and innovations throughout theatre history from its inception in ancient Greece through the present. The emphasis, however, is on early theatre and its development and evolution.

DRMA 216 (Formerly THA 216)
Acting for the Camera • 3 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 permission.**

DRMA 217 (Formerly THA 217)
Classical Acting • 1 - 3 Credits

An introductory course in basic fundamentals, such as movement, posture, voice work, and delivery and analysis of text is explored through research, scene work, exercises, and the study of classical period practices. **Prerequisite: DRMA 120 or instructor permission.**

DRMA 220 (Formerly DRMA 2201)
Acting Studio • 1 - 3 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 permission.**

DRMA 221 (Formerly DRMA 2211)
Acting Studio • 1 - 3 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 permission.**

DRMA 222 (Formerly DRMA 2221)
Acting Studio • 1 - 3 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 permission.**

DRMA 225 (Formerly DRMA 2251)
Touring Children's Theatre • 1 - 3 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 grade schools.

DRMA 230 (Formerly DRMA 2301)
Stage Combat • 2 Credits

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 students learn the skills that will lay the foundation for future stage combat education.

DRMA 242 (Formerly THA 242)
Design Essential • 3 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.

DRMA 243 (Formerly DRMA 2431)
Stage Costuming • 1 - 3 Credits

An introductory course in the theory and practice of stage costume design and construction.

DRMA 244 (Formerly THA 244)
Stage Makeup • 1 - 2 Credits

A course covering the basics of stage makeup design as an extension of characterization. Students learn the techniques of makeup application, including youth, middle-age, old-age, and specialty makeup.

DRMA 245 (Formerly DRMA 2451)
Sound Design • 1 - 3 Credits

An introduction to sound design for theatre. This class focuses 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 permission.**

DRMA 246 (Formerly DRMA 2461)
Stage Lighting • 1 - 3 Credits

A beginning course in the theory and practice of stage lighting. This course is a "hands-on" approach to design and technical drawing. Lab time involves, "hang and focus" crew techniques and protocol, and special projects.

DRMA 248 (Formerly THA 248)
Stage Management • 2 Credits

Examines the work of a stage manager. This course covers management of the stage and explores the "business" aspects of commercial theatre. Emphasis is on preparing students for stage managing in the commercial theatre and to prepare students for a theatre career with an enlightened view of theatre as a business. **Prerequisite: instructor permission.**

DRMA 249 (Formerly THA 249)
Special Studies • 1 - 3 Credits

Topics vary from among dramatic literature, acting styles, directing, theory criticism, aesthetics, history, and design. May be repeated for credit. **Prerequisite: varies.**

DRMA 250 (Formerly THA 250)
Directing for the Stage • 3 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 120 or instructor permission.**

DRMA 298 (Formerly DRMA 2991)
Special Studies • 1 - 3 Credits

A class used to explore new coursework.

DRMA 299
Special Studies - Scene Painting • 1 - 3 Credits

A class used to explore new coursework.

DRMA& 101 (Formerly THA 115)
Intro to Theatre [H] • 5 Credits

An exploration of the many facets of theatre and the many creative artists who comprise the theatre arts. Students study the history of theatre, styles of production, plays, playwrights, directors, actors, critics, and designers.

Welding Technology

columbiabasin.edu/welding

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 Associate in Applied Science degree will learn welding skills, but also basic math, English, and other communication skills. CBC's welding training, plus general education requirements, prepares 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 in 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.

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

- Obtain all position Structural Steel certification using Shielded Metallic Arc Welding (SMAW)
- Obtain all position pipe certification using Shielded Metallic Arc Welding (SMAW) and Gas tungsten Arc Welding (GTAW) process
- Demonstrate competent cutting procedures and correct operation of equipment
- Demonstrate proper set-up and use of welding and fabricating equipment; troubleshoot and solve basic welding, fabricating, and equipment problems
- Analyze and interpret prints and drawings for welding and fabricating
- Display and communicate knowledge of welding information
- Exhibit and maintain essential employability behaviors

WT 101
Oxy-Acetylene Process • 1 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 beginning, entry-level students. Subject matter focuses on background of the process and safety of this process and equipment, and its uses.

WT 103
Fundamentals Major Processes & their Consumables • 1 - 5 Credits

This is the systems' approach to welded design, the design of welded joints and allowable for welds. Arc welding consumables are covered and students become familiar with various welding processes.

WT 107
Fabrication Principles Review • 4 Credits

Introduces welding students to many mathematical procedures they will face in the fabrication shop. Topics include the manipulation of fractions and decimals along with an instructor handout intended to familiarize students with the reading of tape measures and rulers. Students work problems involving calculating various dimensions from complex shapes, both fractional and decimal. In conjunction with these exercises, students are exposed to various geometry principles that are extremely beneficial in the fabrication shop for calculating sheet meal parameters, areas, volumes, and the weight of the finished product. The geometry portion also teaches how to calculate angles necessary to be cut and fitted in place in order to complete the finished product. **Prerequisite: MATH 084 with a grade of 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or test placement.**

WT 108
Fabrication Technique I • 1 Credit

This course is designed to aid students in understanding the variables that greatly affect welding fabrication. **Prerequisite: WT 107 and 112 or instructor permission.**

WT 111 (Formerly WT 1011)
Oxy-Acetylene Process Lab • 1 - 3 Credits

Gives students hands-on experience in a laboratory situation with the use of oxygen-acetylene equipment. Safety equipment set up/shut down, and manual and automatic cutting are covered, as well as identification of metals.

WT 112 (Formerly WT 1021)
Introduction to Shield Metal Arc Welding • 1 - 10 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: placement at MATH 096 or better, appropriate reading skills, or instructor permission.**

WT 113 (Formerly WT 1031)
Advanced Shield Metal Arc Welding • 1 - 10 Credits

This course develops welding skills to meet AWS and ASME standards using the shielded metal arc process. **Prerequisite: WT 112 or instructor permission.**

WT 131 (Formerly WT 1301)
Metallic Arc Refresher • 1 - 10 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 141 (Formerly WT 1041)
Shield Metal Arc Welding Certification • 1 - 10 Credits

Advanced development of arc welding skills to meet AWS, WABO, and ASME certification standards using the shielded metal process. **Prerequisite: WT 113 or instructor permission.**

WT 144
Welding Upgrade • 0 - 1 Credit

This course provides an opportunity for journeyman welders to upgrade their skills for current employment opportunities. Credits depend on how many hours. **Prerequisite: instructor permission.**

WT 151 (Formerly WT 1051)
Gas Metal Arc Welding (MIG) Certificate • 1 - 10 Credits

An introduction to gas metal arc welding consisting of manipulative skills using the gas metal arc process. **Prerequisite: WT 113 or instructor permission.**

WT 154
WABO Testing • 1 - 2 Credits

This course provides required testing to meet the standards for structural steel welding. When students pass the test, the Welding department submits required test results to the Washington Association of Building Officials (WABO) and they issue certification to the student. Credits depend on what type of test. **Prerequisite: instructor permission.**

WT 181 (Formerly WT 1081)
Fabrication Techniques I Lab • 3 Credits

This course is designed to aid students in understanding the variables that greatly affect welding fabrication. Students get hands-on and field work experience utilizing a welding truck for structural fabrication, including hoisting and rigging. **Prerequisite: WT 112 or instructor permission.**

WT 201
Weldability of Metals • 1 - 5 Credits

This course introduces the concepts that explain the metallurgical behavior and determine the weldability of ferrous and non-ferrous metals. **Prerequisite: WT 141, 108, and 181.**

WT 202
Welding Inspection • 1 - 5 Credits

This course is designed to acquaint students with fundamental information and to help in the preparation for the AWS Welding Inspector Certification examination.

WT 208
Fabrication Technique II • 1 Credit

This course is designed to aid students in understanding the variables that greatly affect welding fabrication. **Prerequisite: MATH 100 and WT 222 or instructor permission.**

WT 211 (Formerly WT 2011)
Introduction to Pipe Welding • 1 - 10 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 141, 151, or instructor permission.**

WT 222 (Formerly WT 2021)
Introduction to Pipe Welding • 1 - 10 Credits

This course is designed for the welding of plate and pipe using the gas tungsten arc welding (GTAW) process. Instruction stresses developing proper manipulative techniques and skills necessary to certify using the GTAW process. **Prerequisite: WT 211 or instructor permission.**

WT 231 (Formerly WT 2031)
Pipe Welding Certification • 1 - 10 Credits

This course emphasizes qualification tests for piping and tubing. **Prerequisite: WT 221 or instructor permission.**

WT 233 (Formerly WT 2301)
Pipe Welding Refresher • 1 - 10 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 281 (Formerly WT 2081)
Fabrication Technique II Lab • 3 Credits

This course is designed to aid students in understanding the variables that greatly affect the welding of pipe fabrication. Students get hands-on and field work experience utilizing a welding truck for pipe fabrication including hoisting and rigging. **Prerequisite: WT 222 or instructor permission.**

Women's Studies

columbiabasin.edu/womensstudies

Department Overview: CBC offers students courses in Women's Studies that focus specifically on women's issues. Students 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.

WS 155
Women's Cultural Heritage [H] • 5 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 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.

Workshop

Department Overview: Workshops are offered by a variety of academic departments throughout the year; many are exploratory or one time options.

WKSP 000
Workshop • 0 Credits

A class used to explore new coursework.

WKSP 089
Bachelor of Applied Science Program Entry • 0 Credits

A class used for registration into BAS classes.

WKSP 090
First Year Introduction for Running Start • 0 Credits

FYI is an introduction to academic culture and student success strategies, as well as expectations, resources, procedures, and policies of CBC. FYI supports students in their transition to college. FYI is required for all degree and certificate seeking students in the first quarter of classes.

WKSP 092
ASCBC Leadership Council • 0 Credits

This free weekly workshop allows interested CBC students to be actively involved in the college's student government program as a registered volunteer. This workshop is no-credit.

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M.A., Eastern Washington University
B.A., Washington State University

Nicole R. Salter (2008)
Worker Retraining Training Specialist, Worker Retraining
B.A.S., A.A., Columbia Basin College

Alice B. Schlegel (2004)
Director for Student Activities, Student Activities
B.A., University of Montevallo

Jason M. Schlegel (2008)
Director for Veterans Services, Veterans Services
M.Ed., Western Washington University
B.A., The Evergreen State College

Charles L. Schmidt (1988)
Director of Plant Operations, Plant Operations

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Associate Dean for Student Retention and Completion, Counseling and Advising
M.Ed., B.A., Northwest Nazarene University

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Assistant Director for System Admin. and Development, Information Services
B.S., Western Governors University
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Deborah A. Severin (2014)
Paralegal, Human Resources
A.A.S., Columbia Basin College

Katrine L. Smith (2013)
Outreach and Retention Specialist for the BAS Applied Management Program, BAS
B.A., Eastern Washington University
A.A., Columbia Basin College

Kelsie J. Smith (2016)
Basic Skills Retention and Transition Specialist, Basic Skills
M.A., Eastern Washington University
B.A., Washington State University

David A. Spiel (2008)
Web Services Design and e-Learning Specialist, Virtual Campus
A.S., A.A., Columbia Basin College
A.A.S., A.S., Spokane Falls Community College

Donna L. Starr (1995)
Assistant Director for Information and Graphic Services, Information Services
B.S., Washington State University

Lynn D. Stedman (2006)
Director for Dental Hygiene Program, Dental Hygiene
M.Ed., B.S., University of Washington
M.A., Antioch University

Erin T. Steinert (2013)
Planetarium Outreach Specialist, Planetarium
B.A., Drury University

Troy H. Stratford (2003)
Director for Emergency Services, Paramedic Program
B.S., University of Idaho

Amy R. Stroud (2006)
Director for Student Support Services, Student Support Services
M.Ed., B.A., Washington State University
A.A., Columbia Basin College

Janese V. Thatcher (2015)
Dean for Computer Science, Engineering and Career Technical Programs, CTE
E.d.D., St. Mary's University of Minnesota
M.S., University of Minnesota
B.S., University of Georgia

Virginia M. Tomlinson (2013)
Vice President for Instruction, Administration
Ph.D., University of Pittsburgh
M.Ed., University of Tennessee
B.S., Birmingham-Southern College

Kimberley A. Tucker (1997)
Director for Nursing Programs, Nursing
M.N., B.S.N., Washington State University

Ana L. Tuiaea-Ruud (2012)
CBC Opportunity Grant Interim Director, Basic Skills
M.S., B.A., Central Washington University
A.A., Columbia Basin College

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A.A., Columbia Basin College

Susan A. Vega (1989)
Upward Bound Project Director, Upward Bound
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Kyle A. Vierck (2011)
Assistant Director for Athletics and Game Management, Athletics
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A.A., Columbia Basin College

Christopher R. Wagar (2013)
Health Administration Specialist, Title V Cooperative
B.A., Washington State University

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WorkFirst Program and Basic Food Education and Training Director, WorkFirst
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B.A., Central Washington University

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Director for Baccalaureate Development, Administration
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A.A., Columbia Basin College

Alissa D. Watkins(2015)
Director of Philanthropy, Foundation
M.S., Pennsylvania State University
B.S., James Madison University

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Dean for Agriculture Education, Research and Development, Agriculture
Ph.D., Oregon State University
M.S., B.S., New Mexico State University

Amanda L. Wysocki (2012)
Institutional Effectiveness Researcher, Institutional Research
M.P.A., University of Washington
B.A., Washington State University

Maricela C. Zuniga (2015)
College Outreach and Recruitment Specialist, College Recruitment
B.S., Eastern Washington University
A.A., Columbia Basin College

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FACULTY

David E. Abbott (1985)
Associate Professor, English
M.A., B.A., Washington State University

Alexandria S. Anderson (2008)
Associate Professor, Mathematics
M.S., B.A., Western Washington University

Cara L. Anderson (2011)
Instructor, Business
J.D., Rutgers School of Law - Camden
M.B.A., Oregon State University
B.A., Washington State University

David F. Arnold (1998)
Professor, History
Ph.D., M.A., University of California, Los Angeles
B.A., Washington State University

Adam C. Austin (2014)
Assistant Professor, Psychology
Ph.D., M.A., University of North Dakota
B.A., Saint Cloud State University

Julie L. Bacon (2014)
Assistant Professor, Communication Studies
M.S., Central Washington University
B.A., Washington State University

Stephen P. Badalamente (1994)
Associate Professor, Library Services
M.L.S., B.A., University of Washington

A. Lorena Barboza (2010)
Associate Professor, Spanish
Ph.D., Kansas State University
M.A., Florida International University
B.A., Universidad de Costa Rica

Kathleen E. Barr (2000)
Associate Professor, Psychology
M.S., Eastern Washington University
B.A., Central Washington University

Margaret A. G. Bartrand (1992)
Professor, Mathematics
Ph.D., M.S., Washington State University
B.A., Whitman College

Joshua T. Bee (2002)
Assistant Professor, Computer Science
B.S., Heritage University

Kerrin A. Bleazard (2007)
Associate Professor, Agriculture
M.S., B.S., Washington State University

Matthew A. Boehnke (2015)
Assistant Professor, Computer Science
M.A., Embry-Riddle Aeronautical University
B.A., Eastern Washington University

Chaoura Bourouh (2008)
Associate Professor, Sociology
Ph.D., M.A., American University

Michael A. Brady (2006)
Associate Professor, Biology
M.S., B.A., Central Washington University
A.G.S., Big Bend Community College

Donna T. Brouns (1990)
Associate Professor, Counseling
M.S.W., Eastern Washington University
B.A., Washington State University
A.A., Columbia Basin College

Gary B. Bullert (1992)
Associate Professor, Political Science
Ph.D., M.A., Claremont Graduate School
B.A., Stanford University

Janie K. Burlingame (2014)
Instructor, Nutrition and Food Science
M.S., University of Washington
B.A., Pepperdine University

Laura J. Burns (1998)
Associate Professor, Nursing
M.N., B.S.N., Montana State University

A.D.N., College of St. Mary

Ronald E. Campbell
Associate Professor, Theatre
M.F.A., Humboldt State University
B.F.A., University of Idaho

David L. Cazier (1993)
Associate Professor, Music
M.M., B.A., Central Washington University
A.A., Columbia Basin College

Debjani Chakrabarti (2004)
Associate Professor, Sociology
Ph.D., Mississippi State University
M.A., Delhi School of Economics
B.A., Presidency College

Robert B. Chisholm (2000)
Associate Professor, History/Political Science
Ph.D., University of Pittsburgh
B.A., M.A., Queen's University, Ontario, Canada

Jason S. Clizer (2001)
Associate Professor, ESL
M.A., Gonzaga University
B.A., Eastern Washington University

Nicholas D. Criddle (2006)
Associate Professor, Mathematics
M.S., B.S., Washington State University
A.A., Columbia Basin College

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Associate Professor, Spanish
M.A., B.A., Washington State University

Donald W. Curry (2005)
Associate Professor, Welding
A.A.S., Columbia Basin College
Certified Welder

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CBE English Instructor, Competency Based Education
M.A., National University
M.Ed., Pennsylvania State University
B.A., Biola University

Melissa DeHaan (1985)
Associate Professor, Computer Science
B.A., Washington State University
A.A., A.A.S., Columbia Basin College

Carolyn Deleon (2000)
Associate Professor, Counseling
M.Ed., Washington State University
B.A., University of Massachusetts
A.A., Endicott College

Heidi C. Desmarais (2015)
Assistant Professor, Dental Hygiene
B.A., University of Washington
A.A.S., Shoreline Community College

Adam R. Diaz (2015)
CBE Accounting Instructor, Competency Based Education
M.Tx., University of Denver
B.S., University of Idaho
A.A.S., Columbia Basin College

Steven M. Dye (2009)
Instructor, Worker Retraining
B.A., Washington State University

Carolyn D. Fazzari (2001)
Instructor, Early Childhood Education
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Katherine Feliciano- Nguyen (2013)
Assistant Professor, Nursing
B.S., Washington State University
A.A.S., Columbia Basin College

Melissa B. Filkowski (2014)
Instructor, Human Development
Ed.D., University of Washington
M.A., Pacific Lutheran University
B.S., Washington State University

René Fox (2007)
Associate Professor, Radiologic Technology
M.Ed., Heritage University B.S., Washington State University
A.A.S., Wenatchee Valley College

Jana D. Freese (2008)
Associate Professor, Mathematics
M.Ed., Heritage University
B.A., University of California, Davis

Nicholas R. Gardner (2012)
Associate Professor, Mathematics
M.S., University of Illinois - Chicago
B.S., University of Washington

Carol Gassman (1998)
Associate Professor, Chemistry
M.S., B.S., Virginia Polytechnic Institute and State University

Anissa M. Goehring (2013)
Instructor, Project Management
M.P.M., Keller Graduate School of Management M.S., Mountain State University
M.B.A., Strayer University
B.A., Indiana University

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Instructor, Chemistry
M.S., University of Wisconsin
B.S., Bates College

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Instructor, Chemistry
Ph.D., M.S., The City University of New York
M.P., M.S., University of Hyderabad

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Associate Professor, Welding
A.A.S., Blue Mountain Community College
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Instructor, Spanish
M.A., University of Arizona
B.A., Washington State University
A.A., Walla Walla Community College

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Associate Professor, Biology
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B.A., Central Washington State College

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M.S., Kaplan University
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Associate Professor, Mathematics
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Ph.D., University of Oregon
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Instructor, Bachelor of Science in Nursing Program
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A.D.N., Columbia Basin College

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Assistant Professor, Surgical Technology
M.A., California State University, Fresno
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A.A., Columbia Basin College

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M.S., B.S., University of New York College

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M.S.N., Washington State University
B.S.N., University of Washington

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A.A., Community Colleges of Spokane

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A.A., Walla Walla Community College

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M.Ed., Heritage University
B.S., Washington State University
B.Ed., Srinakarinwirot University

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B.A., Antioch University

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Instructor, Mathematics
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M.S., University of South Carolina
B.A., Eastern Washington University

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Instructor, Business
M.B.A., Syracuse University
B.S., Cornell University

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Instructor, High School Academy
Ph.D., Gonzaga University
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Associate Professor, Automotive Technology
A.A.S., Columbia Basin College

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Associate Professor, Library Services
M.L.S., University of Maryland
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Professor, Theatre and Speech
M.A., B.A., Washington State University

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Assistant Professor, Dental Hygiene
B.S., Eastern Washington University
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Instructor, High School Equivalency Program
M.S., University of Puerto Rico
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Associate Professor, Chemistry
Ph.D., Montana State University
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Instructor, Psychology
M.S., University of Oregon
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A.A., Columbia Basin College

Tracie L. Russell (2012)
Associate Professor, Mathematics
M.S., University of Washington
B.A., Maryville College

Jason D. Ruud (2012)
Instructor, Fitness Center
M.S., B.S., Central Washington University
A.A., Columbia Basin College

Jennifer L. Sainz (2012)
Assistant Professor, English
M.A., San Diego State University
B.A., Concordia University, Irvine

Anthony A. Sako (1995)
Associate Professor, Computer Science
B.S., University of Washington

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B.A., Central Washington University

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Associate Professor, English
M.S., Boise State University
M.A., University of North Carolina
B.A., University of California

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M.S., B.S., University of Abidjan

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Assistant Professor, Music
D.A., University of Northern Colorado
M.A., Brigham Young University
B.A., University of Utah

Richard D. Smith (2010)
Associate Professor, Biology
Ph.D., University of California
B.S., Western Washington University

Heidi L. Snyder (2003)
Instructor, Medical Assistant
Certified Medical Assistant, Pima Medical Institute

John P. Spence (2008)
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Ph.D., University of Washington
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A.D.N., Columbia Basin College

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Ph.D., M.A., Washington State University
B.A., Moorhead State University

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Associate Professor, Automotive Technology
Certificate, National Institute for Automotive Service Excellence Certified ASE Professional

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Associate Professor, Biology
M.S., California Polytechnic State University
B.S., University of Michigan

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Associate Professor, English/Humanities
M.A., San Francisco State University
B.A., University of California
A.A., Modesto Junior College

Bruce A. Walker, Jr. (2014)
Assistant Professor, Music
M.M., Central Washington University
B.M., Southern Illinois University

Tracy L. Walker (2001)
Associate Professor, Art
M.F.A., University of Cincinnati
B.A., M.A., Central Washington University

Tammy D. Wend (2001)
Associate Professor, Business
M.P.Ac., B.S., Montana State University

Gabriela M. Whitemarsh (2007)
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B.A., University of Washington

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Instructor, Chemistry
Ph.D., Brown University

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B.S.W., Heritage University

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A.A.S., Columbia Basin College

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.A., University of Washington

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Associate Professor, Speech
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Associate Professor, Engineering Technology
M.S., Washington State University
B.S., Oklahoma State University

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Ph.D., M.B.A., Washington State University
B.S., Eastern Oregon University
B.S., Iowa State University

Sharon B. Yedidia (2011)
Instructor, College in the High School Language Program
M.A., University of Bath
B.A., Anglia University

Ying Yu (2004)
Associate Professor, Library Services
M.S., University of Illinois at Urbana-Champaign
B.A., Shaanxi Normal University

Limin Zhang (1993)
Professor, Mathematics
Ph.D., M.S., Washington State University
M.S., B.S., Northeast University of Technology

Academic Calendar

Columbia Basin College

September 2016 – August 2017 Academic Calendar

SEPTEMBER 2016

S	M	T	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

OCTOBER 2016

S	M	T	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

NOVEMBER 2016

S	M	T	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

DECEMBER 2016

S	M	T	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JANUARY 2017

S	M	T	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

FEBRUARY 2017

S	M	T	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

MARCH 2017

S	M	T	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

APRIL 2017

S	M	T	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

MAY 2017

S	M	T	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

JUNE 2017

S	M	T	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

JULY 2017

S	M	T	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

AUGUST 2017

S	M	T	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

FALL 2016		
In-Service Days	Teaching & Learning Days	Instructional Days
5	1	54
WINTER 2017		
In-Service Days	Teaching & Learning Days	Instructional Days
0	1	54
SPRING 2017		
In-Service Days	Teaching & Learning Days	Instructional Days
0	1	53

CALENDAR TERMS AND DEFINITIONS

1. ACADEMIC YEAR - Four consecutive quarters beginning with summer quarter.

2. CONTRACT DAY - A day faculty members are expected to be engaged in teaching activities or other designated activities as part of their annual 176 day contract.

3. COMMENCEMENT - Graduation ceremony scheduled by the College. Commencement falls on a contract day for faculty and administrative/exempt staff who are required to participate unless excused by the President of the College.

4. COUNSELOR/LIBRARIAN FACULTY - Faculty who are employed as counselors or librarians.

5. FINALS - Final exam days as designated on the academic calendar. All exams must be given at the times designated in the finals schedule. Any deviation from the published finals schedule must be done in consultation with the division dean. Extended day, weekend, and distance learning class exams may be given during the last scheduled class, or at a time designated by the instructor. Times selected may not conflict with the published finals schedule.

6. INSTRUCTIONAL DAY - A contract day in which classes are scheduled for students and faculty.

7. INSTRUCTIONAL FACULTY - Faculty whose primary assignment is teaching.

8. INSTRUCTIONAL YEAR - Three consecutive academic quarters beginning with fall quarter.

9. IN-SERVICE DAYS - Up to ten contract days for all faculty, three of which are Teaching & Learning Days each year. In-Service days include scheduled activities, trainings and meetings, which promote personal, professional development, and/or support meeting College goals and objectives. Faculty members may have specific work assignments during In-Service days defined by division, department, or program needs.

10. NON-INSTRUCTIONAL DAYS - Days within the instructional year which the College is open, but there are no classes scheduled. These are not contract days for the instructional faculty. They may be contract days for the counselor and librarian faculty.

11. TEACHING & LEARNING DAYS - Three scheduled days each instructional year during which faculty engage in assessment work required by the College's assessment plan for accreditation purposes and/or in scheduled professional development activities related to scholarship of teaching and learning.