



**CBC**  
Columbia  
Basin College

# CATALOG

## 2020-2021

*Staying on Path - Together*

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# Introduction

## President's Welcome

Welcome to Columbia Basin College! For the past 63 years, CBC has been the gateway to a higher education for thousands of students seeking affordable, high-quality education, and we are thrilled to have you as a part of our family.

Whether you are here to pursue a two-year degree, receive a certificate to begin a new career or earn a bachelor's degree, your educational goals are very important to us and we are here to support you.

We hope your experiences at CBC will be marked with successful achievement, personal growth and memories that you will cherish forever.

### Go Hawks!

**Rebekah Woods, J.D., Ph.D.**  
President, Columbia Basin College

## Mission, Vision and Values

### Mission

Columbia Basin College inspires, educates and supports all students in an environment of academic excellence leading to the completion of degrees, certifications and educational transfers, while fostering meaningful employment, engaged citizenship and a lifelong joy of learning.

### Vision

Columbia Basin College will be the educational home that transforms students' lives through economic and social mobility and strengthens the communities we serve through meeting the ever-changing educational needs of our region and state.

### Values

#### Student Learning

Our first priority is to work collaboratively to ensure student learning, success and completion in an environment of open inquiry, respect, critical thinking and creativity. We strive to create community and belonging where students mature and develop intellectually, emotionally, ethically and physically both inside and outside of the classroom.

#### Culture of Excellence

We provide excellent teaching and services through a theory-driven and data-informed culture of innovation, collaboration, continuous improvement of performance and a commitment to professional growth and development for all employees.

### Diversity, Equity and Inclusion

We celebrate diversity in all its forms and we believe that our many unique perspectives makes us stronger. Diversity among our team enriches our institution and our students' experience. We are dedicated to eliminating barriers to success through intentional and equitable efforts to provide quality learning opportunities.

### Sustainability

We consciously practice and model broadbased sustainability for our students and our communities through the balancing of economic, societal and environmental factors when considering campus development of facilities, processes, programs and curricula.

### Wellbeing

We create a healthy environment that encourages physical and emotional wellness and enjoyment of learning.

## 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 (the V Building) was completed in 1957.

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 including the addition of the College's first applied bachelor's degree in 2010. The enrollment of the College has grown from 299 students in 1955 to more than 7,500 students per quarter today. The faculty includes 138 full-time instructors and 285 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 that 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**

[nwccu.org](http://nwccu.org)

CBC's accreditation reports can be found at [columbiabasin.edu/accreditation](http://columbiabasin.edu/accreditation).

## Research and Instructional Assessment

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

Since the goals of 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 and specialized areas. Learning outcomes exist at the course, program and college-wide levels. Course outcomes are what students are expected to know or do by the end of a course and are listed in the syllabus. Program outcomes identify what students will learn after completing multiple courses that make up a program of study are available on program websites. College-wide learning outcomes will be achieved by all degree-earning students by the end of their time at the college.

CBC's College-Wide Student Learning Outcomes are:

# Introduction

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## 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

## CBC's Bachelor's Degrees

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Columbia Basin College offers two bachelor's degree types, Bachelor of Applied Science and Bachelor of Science. The following is a list of our current offerings:

- Applied Management (with optional concentration in Agriculture or Healthcare Administration) (BAS)
- Cyber Security (BAS)
- Dental Hygiene (BAS)
- Health Physics (BAS)
- Information Technology (BAS)
- Project Management (with optional concentration in Construction) (BAS)
- Teacher Education (with Early Childhood Education Endorsement) (BAS)
- Bachelor of Science in Nursing (RN-BSN)

All of CBC's bachelor's degrees are approved by the Northwest Commission on Colleges and Universities and the Washington State Board for Community and Technical Colleges.

## CBC Locations

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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.

Other Pasco locations include the Columbia Basin Access Center (CBAC), also known as the X Building, on 20th Avenue, which centralizes CBC's English Language Acquisition (ELA) program and the Early Childhood Education program.

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. This campus now hosts a variety of CBC classes. Additionally, the Richland Health Science Center as well as the Medical Science Center nearby support health science programs.

For maps, driving directions and parking information, visit [columbiabasin.edu/map](http://columbiabasin.edu/map).

## CBC Foundation

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The Columbia Basin College Foundation was established in 1984 to raise funds to support students pursuing their education at CBC. What initially began as a way to build scholarships for students, has grown to support college initiatives that enhance the educational experience, enrich faculty and lead to student success. The Foundation is committed to helping the college transform the student experience, connect with the larger community and to seek opportunities for sustainable support. The CBC Foundation is led by a volunteer board of directors that represents a broad spectrum of alumni, business, agriculture, civic and professional leaders. For more information about the CBC Foundation, visit [columbiabasin.edu/foundation](http://columbiabasin.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 Account Statements
- 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 prior to the 30th calendar day of classes of the quarter residency is requested. Documentation received after the 30th calendar day will be considered for the following 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 2020-21

Rates are subject to change. Tuition is set by the State Board for Community and Technical Colleges, which acts upon legislative authority.

	Washington Resident	U.S. Non Resident	Non U.S. Resident International F-1 Visa
<b>Per Credit Charges:</b>			
State Tuition & Fees			
Credits 1-10	111.52	165.51	289.76
Credits 11-18	54.79	62.07	62.07
Credits 18+	101.42	167.09	279.66
CBC Comprehensive Fee	4.00	4.00	4.00
CBC Instructional Support Fee	6.00	6.00	6.00
CBC Technology Fee	5.00	5.00	5.00
Per Credit	282.73	409.67	646.49
<b>Per Quarter Charges:</b>			
AUD, HUB, Safety & Security, Rec Center Fee	82.50	82.50	82.50
<b>Total Charges per Credit:</b>			
1	209.02	263.01	387.26
2	335.54	443.52	692.02
3	462.06	624.04	996.78
4	558.58	804.55	1301.54
5	715.10	985.06	1606.30
6	841.62	1165.57	1911.06
7	968.14	1346.08	2215.82
8	1094.66	1526.60	2520.58
9	1221.18	1707.11	2825.34

10	1347.70	1887.62	3130.10
11	1417.49	1964.69	3207.17
12	1487.28	2041.76	3284.24
13	1557.07	2118.83	3361.31
14	1626.86	2191.90	3438.38
15	1696.65	2272.97	3515.45
16	1762.44	2346.04	3588.52
17	1828.23	2419.11	3661.59
18	1894.02	2492.18	3734.66
19	2006.44	2670.27	4025.32
20	2118.86	2848.36	4315.98
21	2231.28	3026.45	4606.64
22	2343.70	3204.54	4897.30

**CBC's BAS program costs may vary; please visit [columbiabasin.edu/tuition](http://columbiabasin.edu/tuition) 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 result in additional charges. See course materials for details.

## Refund Policy

CBC will refund tuition and refundable fees if official withdrawal from the College or course(s) occurs within the specified timeframe 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.



# Financial Information

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

## Refund Exceptions

### Non-Refundable Fees

The Auditorium/HUB/Safety & Security/ Recreation Center 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 Accounting Services (cash balances permitting).

### Special Courses

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

## Student Balance and Collections Process

All student accounts are required to be paid in full each quarter by tuition deadline or within 24 hours if enrollment takes place after tuition deadline. It is the student's responsibility to ensure that their account is current and that payments are made by the published deadlines. Registration for subsequent quarters will be restricted and accounts may be held if previous balance is not paid in full.

If a student fails to make acceptable payments and their balance is 120 days past due, their account may be forwarded to an outside collection agency.

## Financial Aid

Financial Aid personnel assist Columbia Basin College students and their parents with finding funding for basic educational costs. Consumer information is available at [columbiabasin.edu/consumer](http://columbiabasin.edu/consumer). 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. Students receiving any type of financial aid should visit Hawk Central for specific questions about adding, dropping or withdrawing from classes before taking any such action. Federal and State regulations supersede CBC's refund policy. Warning: withdrawal from the College may result in the student owing amounts to Federal and State financial aid programs AND to CBC.

### How to Apply

Students apply for financial aid by completing a Free Application for Federal Student Aid (FAFSA) at [fafsa.gov](http://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, may apply for Washington State financial aid funding by completing the WA Application for State Financial Aid (WASFA) at [readysatgrad.org/wasfa](http://readysatgrad.org/wasfa). FAFSA/WASFA applications are available every year on October 1. Students are encouraged to apply between October and January prior to the school year they wish to attend. To allow for processing time and financial aid funds to be available by the tuition due date, the FAFSA/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

### Eligibility Requirements

FAFSA applicants must:

- Be a U.S. citizen or an eligible non-citizen
- Be determined to have financial need based upon congressional methodology (except for Unsubsidized Federal Direct Loan and PLUS loans)
- 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 previous federal student grant or be in default on a federal student loan
- Be enrolled for the eligible number of credits and be maintaining satisfactory progress according to the Financial Aid Satisfactory Academic Progress Policy available at [columbiabasin.edu/sap](http://columbiabasin.edu/sap). 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 FAFSA stating that student aid will be used only for educational purposes
- Have satisfied federal guidelines regarding any conviction of illegal drug offense, if applicable

WASFA applicants must:

- Have graduated from a Washington State high school with a diploma, earned a GED® or earned a diploma equivalent

# Financial Information

- Be a Washington State resident—lived in Washington for at least three consecutive years immediately before, and continuously since, earning a high school diploma (or equivalent)
- Be determined to have financial need based upon information provided on the WASFA
- Be seeking one of the eligible degrees or certificates available at CBC
- Not owe a repayment on a previous Washington State student grant
- Be enrolled for the eligible number of credits and be maintaining satisfactory progress according to the Financial Aid Satisfactory Academic Progress Policy available at [columbiabasin.edu/sap](http://columbiabasin.edu/sap). 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

## Financial Aid Programs

Students will be considered for all aid programs for which they are eligible and for which funding is available. Financial aid programs fall into four categories: grants, scholarships, loans and employment.

### Grants

#### Pell Grant

Federal grant program for undergraduate students with financial need.

#### 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.

#### College Bound Scholarship

Washington State program that guarantees state financial aid for resident students who applied for this scholarship in middle school, currently meet financial need and academic criteria and are enrolled in at least three credits.

#### Columbia Basin College Grant

A 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](http://columbiabasin.edu/opportunity).

#### Early Achiever's Opportunity Grant

A state-funded grant for eligible 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](http://columbiabasin.edu/scholarships) for details.

## Loans

### Federal Direct Subsidized 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, the maximum amount is \$3,500 for first-year students and \$4,500 for second-year students. If accepted into one of CBC's bachelor's degree programs, the maximum amount for third- and fourth-year students is \$5,500.

### Federal Direct Unsubsidized 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.

## Employment

*(refer to Human Resources' Student Employment in the Student Resources section of the catalog 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.

## 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

While State Work Study is non-CBC employment, it is an opportunity for CBC students to work off-campus for employers in the community, and in jobs related to the student's major and/or career goals. The Financial Aid Office assists student workers interested in placement for off-campus employment, though students apply through the CBC online application system. For more information, or to apply, visit [columbiabasin.edu/studentemployment](http://columbiabasin.edu/studentemployment).

## Criteria for Work Study

(Refer to Financial Aid Programs for more detail)

Student workers under Federal or State Work Study must be enrolled in at least six degree-required credits during each quarter of employment (fall, winter and spring). Student workers must be enrolled in at least five degree-required credits during summer quarter.

## 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](http://columbiabasin.edu/workerretraining) to determine eligibility.

## Veterans Benefits

Veterans, service members and family members eligible to use educational benefits from the Department of Veterans Affairs must meet with the Veterans school certifying official located in the H Building on the Pasco campus. To schedule an appointment, call 509-542-4880 or email [veterans@columbiabasin.edu](mailto:veterans@columbiabasin.edu).

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

## General Admission to CBC

### 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 placement test scores.

CBC has four quarters: fall, winter, spring and summer. Students may begin any quarter.

Students between the ages of 16 and 18 who are juniors or seniors in high school may be eligible to attend CBC through the Running Start program. For more information and eligibility requirements, please visit [columbiabasin.edu/runningstart](http://columbiabasin.edu/runningstart).

Applicants who are younger than 16 years of age 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. 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.

### How to Apply for General Admission

Applicants must complete and submit an Application for Admission by the quarterly deadline. The Application for Admission may be filled out online at [columbiabasin.edu/apply](http://columbiabasin.edu/apply). When an applicant's file is complete, the applicant will receive notification of acceptance via email with further enrollment instructions.

Applicants transferring from another college must submit an official transcript from each accredited college attended. Processes such as financial aid or admission to certain 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.

## Placement

Placement into math, reading and English is required for degree- and certificate-seeking students. Columbia Basin College offers multiple options for students to meet placement requirements. For more information, please visit [columbiabasin.edu/assessment](http://columbiabasin.edu/assessment). Additionally, students who have prior college-level English or math classes may submit an official transcript(s) to Student Records to determine placement results.

*Candidates requiring accommodations for the GED® examination are encouraged to contact the Pearson Vue Accommodations Team at 877-392-6433 or email [accommodations@GEDtestingervice.com](mailto:accommodations@GEDtestingervice.com).*

*Individuals participating in GED® classes at CBC who require accommodations may contact Disability Support Services at 509-542-4412 or the Washington Relay services for the Deaf and Hard of Hearing at 800-833-6384.*

## Admission to CBC's Bachelor's Degree Programs

Applicants who wish to pursue a Bachelor of Applied Science degree must satisfy one of the following conditions at the time of program start date to become eligible:

- Have earned at least an associate (AA, AS, AAS) degree from a regionally accredited institution
- Have completed a minimum of 90 college-level credits from a regionally accredited institution

Applicants who wish to pursue a Bachelor of Science in Nursing (RN-BSN) degree must have completed an associate degree in Nursing.

Check with the program for specific admission requirements and prerequisites. Program information is available at [columbiabasin.edu/BAS](http://columbiabasin.edu/BAS).

## International Student Admission

Columbia Basin College welcomes qualified international students.

Admission requirements:

- International Student Admission Application and additional documentation
- Official language proficiency scores
- Copy of high school diploma
- Official college/university transcripts, if applicable

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

- Official college/university transcripts

- Copy of all previously issued I-20 forms
- CBC F-1 Transfer-In form

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.

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 health insurance. Students must purchase insurance through Washington State Colleges 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](http://columbiabasin.edu/internationalstudent).

## 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 Columbia Basin Access Center (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 19 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.

# Admissions

## Admission to High School Programs

### 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 eligible for up to 15 tuition-free college credits per quarter based on how many classes they are taking at their high school. They are, however, required to pay lab and comprehensive fees, books, supplies and transportation costs. Students who take classes below college level are charged full tuition and fees.

To be admitted into the program, students can take CBC's placement test or submit: Smarter Balanced Assessment Consortium (SBAC) scores, an official college transcript, an official AP score report, unofficial high school transcripts (math only) or unofficial SAT/ACT scores (math only). Students must test or place into college-level reading and either college-level math or college-level English to qualify. Students who qualify should meet with their high school counselors to determine high school graduation requirements.

Eligible Running Start students must complete and submit:

- A CBC Running Start admission application (after student qualifies)
- A Running Start Enrollment Verification form (every quarter)

### Admission to High School Completion Program

The High School Completion program is offered for individuals 19 years or older and for those whose high school class has graduated. The purpose of this program is to help students complete their high school education by earning a diploma.

Applicants must submit a completed Application for Admission with all official high school transcripts attached and take the placement test. For more information and to access the application, visit [columbiabasin.edu/highschoolcompletion](http://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.

### CTE Dual Credit & College in the High School

CTE Dual Credit and College in the High School programs allow high school students the opportunity to earn college credit while meeting a high school graduation requirement at the same time. Students participate in approved classes in their home high school or at Tri-Tech Skills Center. The courses are taught by qualified high school teachers who work closely with faculty mentors to ensure the high school curriculum is of college rigor and aligns to a similar course taught on campus.

Columbia Basin College currently offers the CTE Dual Credit program locally and accepts transfer credit from other community colleges and universities who offer the College in the High School program. Students can accelerate their academic and career pathways through the use of these programs. CTE Dual Credit-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 of meeting all CTE Dual Credit eligibility requirements, the equivalent CBC course will be transcribed to the students' transcript with the College's course title and number, just as it appears in the catalog. 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. For students transferring credit earned through College in the High School from other institutions, their credit will be evaluated by the Student Records Office and posted to their CBC transcript.

For more information about either dual credit program, please contact the Director of CTE Dual Credit and College in the High School at 509-542-4559.

### 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 19 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.

Candidates requiring accommodations for the GED® examination are encouraged to contact the Pearson Vue Accommodations Team at 877-392-6433 or email [accommodations@GEDtesting.com](mailto:accommodations@GEDtesting.com).

Individuals participating in GED® classes at CBC who require accommodations may contact Disability Support Services at 509-542-4412 or the Washington Relay services for the Deaf and Hard of Hearing at 800-833-6384.

### 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, Finley or Columbia. Included in the packet is a CBC Application for Admission that 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 placement test for placement purposes
- Attend a mandatory orientation

For general information about the HSA program, contact the HSA Office at 509-542-4442.

### Admission to High School Enrichment Program

Eligible high school students may take courses at Columbia Basin College for enrichment or to meet high school graduation requirements. The program is designed to provide students additional learning opportunities not currently available through school district resources. To be eligible for this program, high school students must be 16 years or older and a junior or senior in high school.

Eligible students must:

- Complete and submit an Application for Admission
- Submit an official high school transcript
- Submit the High School Enrichment Release Form signed by parent or legal guardian and by an appropriate high school official
- Complete the College Placement test (if applicable)

High School Enrichment students are eligible to enroll in two courses per quarter and will be responsible to pay full tuition, student/class fees and to purchase other course materials (i.e., books).



# Admissions

## Admission to HEP

### **(High School Equivalency Program)**

The High School Equivalency Program (HEP) is funded by the U.S. Department of Education Grant No. S141A200021 as a secondary migrant education program designed to meet the special needs of migrant and seasonal farmworkers, and their families, 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 immediate family members who:

- Within the past 24 months, have worked a minimum of 75 days in migrant/seasonal farmwork; 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

For more information, call 509-542-4775 or 509-542-4558 or visit [columbiabasin.edu/hep](http://columbiabasin.edu/hep).

## Admission to High School+ (HS+)

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

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.

## Admission to Open Doors

Open Doors is a high school completion program for eligible youth 16-20 years of age who are deficient in high school credits. Students enroll in Transitional Studies classes to work toward earning a GED® and/or high school diploma. Open Doors is a competency based program, which is modeled after the High School+ program. Students meet graduation requirements by their home school district through high school coursework and/or prior learning gained from work and life experience. The student's home high school awards credit based on competencies earned at Columbia Basin College Open Doors and issues the high school diploma. For more information, contact the Transitional Studies Division at 509-542-4701.

## Gold Card Admission

A reduced tuition rate is available to individuals 60 years or older who wish to take classes without credit (audit). Registration is available at Hawk Central.

Registration:

- Gold Card members may register on the third day of the quarter on a space available basis and may not overload a class.
- Gold Card members may not register for class(es) at the state tuition rate in order to reserve a space and then change to the reduced Gold Card tuition rate. Gold Card members registering at the state tuition rate will be charged full tuition and WILL NOT qualify for the Gold Card tuition rate for the course ID that was reserved for the current quarter.
- Gold Card members shall not register for more than two courses per quarter.
- Gold Card members must be Washington State residents.

Fees:

- Gold Card members will pay all applicable course fees, lab fees and other charges as appropriate.

Gold Card members enrolling in Fitness Center classes need to obtain a student photo ID card.

For more information, please visit Hawk Central in the H Building.

# Registration

## Registration Procedures

The registration process includes course selection, enrollment and payment of tuition and fees. Currently enrolled and returning CBC students register prior to the beginning of each quarter based on the number of cumulative credit hours they have earned (a maximum of 60 credit hours transferred from another institution may be applied). New students to CBC will be assigned a registration time after completing the admission and getting started process. Students must be registered in classes in order to attend. The maximum number of credits a student may enroll in is 18 per quarter. Registration for more than 18 credits requires approval from your completion coach. Email [counseling@columbiabasin.edu](mailto:counseling@columbiabasin.edu) for more information.

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 a placement option. Please contact the Assessment Center for more information. Transfer students who have completed math and English from an accredited college will not be required to complete placement, provided an official transcript is submitted that documents the necessary prerequisites.

Students may rearrange their class schedule within the first three days\* of fall, winter or spring quarter. Schedule changes made on the second or third day of the quarter do require instructor approval. Students may withdraw from 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 Student Records for deadline dates.*

*If you need accommodations for placement testing based on a disability, please contact Disability Support Services at 509-542-4412 or the Washington State Relay Service for the Deaf and Hard of Hearing at 800-833-6384.*

## Priority Registration for Veterans

CBC provides current and new student veterans, service members and family members using dependent benefits the ability to register for classes one day before the general student population. This is based on military status documentation provided to the School Certifying Official in the V.E.T.S. Center.

## Student Orientations

All new, degree- and certificate-seeking students, students who have earned zero credits and transfer students 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. 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 register for and complete FYI before beginning their first quarter at CBC.

## Student Identification Card

Students enrolled at Columbia Basin College should obtain a student identification card. A student ID card is required for checking out library materials, including laptops, and using the Fitness Center. Student ID cards may also be used to participate in College and community activities. In order to obtain a CBC Student ID card, students must be enrolled, show photo ID and have paid tuition and fees in full or be enrolled in the Student Tuition Easy Payment Plan (STEPP).

## MyCBC Information System

[columbiabasin.edu/mycbc](http://columbiabasin.edu/mycbc)

**MyCBC is an online student information system where students may perform the following actions:**

- Check registration access times
- Register for classes
- Make schedule changes
- Update address and phone numbers
- Access class schedules, degree audits, financial aid data, grades and transcripts
- Pay tuition online

## 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 and Programs section of this catalog.

Students earn credit only for courses in which they are officially registered for credit. If a course is audited, credit will not be earned.

## Withdrawal Policy & Procedures

### Student-Initiated Withdrawals (W)

If a student wishes to withdraw from all or individual courses, it is their responsibility to do so by the deadline published in the Academic Deadlines calendar. 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 Student Records for withdrawal deadlines.*

Students are encouraged to meet with a Counselor or Completion Coach and to inform instructors prior to withdrawing. Students receiving Financial Aid are strongly advised to speak with a specialist in Hawk Central prior to withdrawing, as withdrawals may negatively impact their ability to receive financial aid in the future and/or may require repayment of money received from a financial aid award. It is the responsibility of the student 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 by 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](http://columbiabasin.edu/ped).

## **College-Initiated Withdrawals (WA)**

On rare occasions, a student may be withdrawn 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, students may be withdrawn 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.

# Transfer Information

## Transcripts

An official transcript is a record of a student's permanent academic work at Columbia Basin College. It bears the Washington State 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 and pay for official transcripts via the College's website at [columbiabasin.edu/transcripts](http://columbiabasin.edu/transcripts). 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](http://columbiabasin.edu/mycbc). Holds on permanent records resulting from failure to return College equipment or material or failure to complete financial aid exit counseling, must be cleared by the student before unofficial or official 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.

## 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 CBC 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 official transcripts from all previously attended institutions

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 at CBC.
- When the evaluation has been completed, students will receive a Worksheet for Evaluation of Transfer Credit showing a course-by-course equivalency and the total number of credits accepted. The evaluation will be sent via U.S. mail and CBC email.
- International transcripts must be translated into English and evaluated on a course-by-course basis by a current member of NACES®. Students may use the list of recognized international transcript evaluation agencies at [columbiabasin.edu/transcripts](http://columbiabasin.edu/transcripts) under Transfer of Credit Process.
- It is recommended that students make an individual appointment with a CBC completion coach to review how transfer credits will apply to CBC degrees and certificates. If students need clarification on an evaluation, they are encouraged to contact the Student Records Office.
- 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.

## Reciprocity Agreement

Washington Community and Technical Colleges (CTCs) offer reciprocity to students transferring within the CTC system who are pursuing the Associate in Arts and Sciences degree (AA-DTA). Students who completed an individual course that met distribution degree requirements or fulfilled an entire area 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. To earn a degree and/or certificate, students must initiate the review process and must be prepared to provide necessary documentation to both the sending and receiving institutions. Students must meet the graduation residency requirement and must be continuously enrolled, as defined under the Catalog Option Policy.

## Transferring to a College/University

### Transfer Intent Students

Students who intend to transfer to a bachelor's institution to complete a four-year degree are strongly recommended to work closely with Columbia Basin College Counselors, Completion Coaches and Retention Specialists when planning their course selection. 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, academic credits for prior learning, 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 Information

transfer requirements of the different baccalaureate institution. Students should meet with their CBC Counselor, Completion Coach or Retention Specialist 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
- Students should apply to the baccalaureate institution according to the institution's procedures and deadlines and provide 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.

## Reverse Transfer

Students who leave CBC without a degree may transfer the required remaining credits from an accredited college/university back to CBC to have their degree\* posted. Students must complete the following:

- Update contact information with Student Records.
- Complete a graduation application with a CBC Counselor, Completion Coach or Retention Specialist.
- Submit official transcript from the college/university to CBC for evaluation of transference of credits.

*\*Please see Catalog Option Policy to determine which degree requirements students must meet.*

## 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).

## 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 (WSU) Tri-Cities through the BRIDGES program can meet with WSU Tri-Cities advisors located in their 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 21 bachelor's degree programs. An important component of this program is the integrated advising that occurs between CBC students, Counselors or completion coaches and WSU Tri-Cities academic advisors utilizing Plans of Study to keep students on track toward a bachelor's degree. On the CBC campus, completion coaches share transfer information via office visits, campus information tables, Future Cougs FYI modules and collaborative workshops.

To meet with a CBC completion coach 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](http://columbiabasin.edu/bridges).

### Eastern Washington University

Columbia Basin College has an articulation agreement with Eastern Washington University (EWU), a partnership created to help students transfer into specific programs or degrees and bring a block of credit. This partnership helps facilitate the transference of credits earned toward an associate degree at CBC to credits leading toward a bachelor's degree at EWU. Articulation agreements are generally facilitated by faculty in conjunction with the Office of Articulation and Transfer Policy.

### 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 T Building.

# Transfer Information

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**For more information:**

Heritage at CBC Office  
T Building, Room T347  
2600 N. 20th Ave., Pasco, WA  
509-542-5506 or [tricities@heritage.edu](mailto:tricities@heritage.edu)

# 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 for excessive absences. Please refer to the course syllabus or addendum for attendance requirements.

Attendance in online distance learning classes is determined by engaging in academic activity required for the course. This may include participating in an online discussion, taking a quiz or viewing a lecture. Solely logging in to Canvas or asking a logistical question of the instructor does not count as attending the online class. If, after 10 days, a student has not engaged in academic activity, the student will be removed from the class upon notification by the instructor to Student Records.

In a hybrid class, attendance can count as either attending the face-to-face class sessions or participating in academic activity in the online portion of the class.

Students should consult individual instructors and course syllabi for specific attendance requirements regarding online portions of courses.

## Grading Policy

Grades are available on the CBC website at [columbiabasin.edu/mycbc](http://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 040, 050, 060, 062, 070 and 072.

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 - 0.0	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.

## 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 by a faculty member

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, FYI and all courses numbered below 100 will be graded in either the P or Z category, except MATH 040, 050, 060, 062, 070 and 072.*

## P (Passing) Grades

Columbia Basin College issues a P (passing) grade in certain predesignated courses or experience-related evaluations for college-level credit. A P grade is earned 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.

Students receiving a P grade may use a maximum of 10 credits\* earned through classroom instruction from a regionally accredited college. These credits will be applied toward degree requirements as follows:

- Associate in Arts and Sciences and Associate in Science Transfer Degrees: electives
- Associate in Applied Science: Major and Major Support (consult with program advisor or completion coach for approval)
- Experiential learning credit, College Level Examination Program (CLEP) and DANTES Subject Standardized Test (DSST) is limited to use within the restricted electives

**\*With the exception of College Board Advanced Placement (AP), International Baccalaureate (IB) and Cambridge.**

Students who earn credit via Academic Credit for Prior Learning (ACPL) and receive a P grade should refer to the ACPL section of this catalog for more information regarding how credits are applied toward degree requirements.

Students planning to transfer to a four-year institution are advised to consult with their transfer institution regarding how P grades are applied toward requirements.

## Incomplete Grades

An incomplete grade (I) indicates work in progress but was not completed before the end of a quarter. Specific arrangements for completing the required work is agreed to by the faculty member and the student. Incomplete grades are subject to instructor's discretion. An incomplete grade will be changed to a failing grade if the work is not completed within the first 20 calendar days of the succeeding quarter. The exception is when the incomplete is given in the spring quarter. In this case, the succeeding quarter is the following fall quarter, not the summer quarter.

## Computation of Grade Point Averages (GPA)

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

## Grade Appeal Process

Students are responsible for reading and understanding Columbia Basin College's academic policies and practices as found in the Washington Administrative Code, CBC Catalog, course syllabi and course policies as established by the individual faculty members. Students are also responsible for meeting the standards of academic performance established by each faculty member in course syllabi and addenda. Evaluations will represent the faculty member's professional judgment of the student's performance in meeting these standards. At the same time, students are protected from academic evaluations that are arbitrary, prejudiced or capricious.

# Academic Information

If a student has documentary evidence that an end-of-course course grade was assigned incorrectly, they may initiate an appeal of that grade. Students should understand, however, that a grade appeal may result in a higher grade, a lower grade or no change to the grade. Students may not use the grade appeal process as a means of voicing non-specific or unsubstantiated complaints about grades, grading policies or grading standards, nor will the College act on such complaints. Students may not appeal a final grade by contesting the grades on individual assignments after the fact or by objecting to the published grading standards after the course has ended. (Questions about grades or grading criteria should be raised as assignments are graded and returned.)

A grade appeal must be initiated within the first 20 calendar days of the academic term succeeding the term in which the grade in question was assigned.

A student who wishes to appeal a grade will take the following steps:

1. The student will gather all relevant documentation regarding the assigned grade, including copies of the course grading policies and standards, all graded assignments that bear on the appeal (with comments, scores, rubrics or other faculty member feedback) and copies of correspondence with the faculty member relevant to the student's grade, especially attempts to clarify or correct the grade.
2. The student will meet with the faculty member to discuss the course grade. If the faculty member is no longer employed by CBC or is otherwise unavailable, the student will meet with the appropriate division dean. Deans will not take action on a grade appeal unless the student has been unable to meet the faculty member and has made a good-faith effort to do so during the specified time period.
3. The student will explain the specific basis for the grade appeal and provide the supporting documentation.

A faculty member who receives a grade appeal will take the following steps:

1. If the student has evidence of an error, the faculty member will meet with the student within the first 30 days of the term succeeding the term in which the grade was assigned.
2. The faculty member will review the evidence and discuss the basis of the student's appeal; if an error is verified, they will recalculate the student's grade as appropriate.
3. If the recalculation results in a different grade, the faculty member will submit a grade change eform to correct the grade.

At his or her discretion, the faculty member may resolve a grade issue informally in discussion with the student.

After this process is followed, students may request a meeting with the dean. The dean will gather and review all relevant information including meeting with the faculty member. The decision made by the dean will be considered final.

Grade appeals may involve final examinations, term papers or other end-of-course assignments that are graded and returned to students in the last week of classes or after the last day of class, for which, as a result of timing, the student does not have time to seek clarification or redress before the term ends.

## Grade Forgiveness Policy

Students may petition to have grade records forgiven for courses taken at CBC. This does not remove 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 GPA. Federal Financial Aid regulations do not recognize grade forgiveness. Some transfer institutions may not accept grade forgiveness and may require the original grades be reposted since each institution interprets transcripts according to its own policies.

Grade forgiveness petitions are available in the Counseling/Advising Center. Students must meet with a Counselor or completion coach no later than one quarter before graduation. Students may use this petition provided:

- They are currently enrolled at CBC
- The grade records to be forgiven 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 following the three-year period

The set aside notation begins at the last quarter completed prior to the three-year absence and includes all courses prior to the notation. Students may not choose specific courses or quarters to be set aside.

Grade records will:

- Not be reinstated once grade forgiveness is granted
- Not have been used toward a previously earned degree or certificate
- Be forgiven only once toward a degree or certificate

## Course Repeat Policy

Courses (except those earning the grade letters P, Z, W, WA, N or Y, which are not used in grade point calculations) 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. Credit will be given only once and the highest grade earned will be used to compute the GPA. 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.

To request a course repeat, a student must complete the intended course, which must be equivalent in credit and content to the initial course, and then submit the Repeated Course Request form found at [columbiabasin.edu/studentforms](http://columbiabasin.edu/studentforms).

A student who takes a course at CBC and repeats the course at another fully accredited college or university shall be granted a repeat, upon request, 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. An R will be posted next to the lowest grade and that grade will be removed for the GPA computation.
- A notation will be entered on the CBC transcript indicating the course was repeated via transfer.

Contact Student Records for further information.

## Quarterly Honors Designations

Students who earn 12 credits in courses within the quarter and achieve a quarterly college-level 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 college-level GPA of 3.85-4.00 will be named to the President's Honor Roll. Pass/Fail graded classes are not included in the 12 credit requirement.



# Academic Information

## Graduation Honors Designations

Students who earn a CBC bachelor's degree, an associate degree or a one-year certificate are eligible to receive scholastic honors as established by the College. The cumulative college-level 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.

Students who earn an associate degree or one-year certificate according to the standards above are eligible to receive honors. The honors designation will be noted on the official transcript and on the diploma or certificate.

Honors — 3.50 – 3.84

High Honors — 3.85 – 4.00

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 CBC bachelor's degree are eligible to receive scholastic honors as established by the College. The cumulative college-level 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 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
- 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 GPA 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 CBC 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 CBC Counselor or Completion Coach so that they can begin to address whatever issues or barriers may be impeding their academic success. The student will remain subject to dismissal status as long as they receive 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 subject to dismissal status when their subsequent quarterly GPA is under 2.0 and the cumulative GPA remains below 2.0. During Academic Dismissal, students 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 (HDEV 110) course;
  3. Petition for reinstatement.
- If the student wishes to return earlier than the four quarter sanction, they may do so by completing CBC's Academic CPR workshop. Workshops are offered each quarter. After passing the workshop, the student may return to CBC the subsequent quarter. Contact the Counseling/Advising Center to schedule an appointment to meet with a Counselor or Completion Coach.
  - 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.

# Academic Information

## 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 their performance during the quarter leading to the academic dismissal. Students 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 Subject to Dismissal (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 Credit for Prior Learning (ACPL) & Dual Credit

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. Students may earn credit and/or advanced placement.

Currently enrolled students may earn college credit when they demonstrate course mastery by examination, evaluation of 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. Each department determines eligible courses and the evaluation method required for students to demonstrate mastery of course content. Academic Credit for Prior Learning can be awarded through one of the following options:

- Experiential Learning
- Course Challenge
- Military Credit and Experience
- College Level Examination Program (CLEP)
- DANTES Subject Standardized Test (DSST)

The following restrictions apply to the awarding of Academic Credit for Prior Learning (ACPL):

- Students must be currently enrolled at CBC and have a CBC academic record before credits will be awarded. Course Challenge and Experiential Learning require 15 or more credits earned at CBC with a 2.0 or better cumulative college-level GPA before credits will be awarded.
- Credits may be awarded only if the learning experiences fall within the courses CBC offers.
- No credit will be awarded if the same course is taken at CBC or any other college.
- No more than one-fourth of the total credits required for a CBC associate degree/certificate or one-fourth of the minimum upper-level course credits required for a CBC bachelor's degree may be earned through the prior learning process.
- Prior learning credits do not count toward the minimum residency requirement.
- Credits for prior learning will be recorded with a P grade (with the exception of course challenge, for which a decimal grade is awarded).
- Credits for prior learning recorded as P graded courses are limited to use within the restricted electives of the Associate in Arts and Sciences degree.
- A non-refundable fee per credit must be paid for Experiential Learning and Course Challenge assessments.
- For Military Credit and Experience only, a maximum of three Physical Education credits will be awarded for physical conditioning. All other military credit is limited to the 15-credit maximum restricted electives for the Associate in Arts and Sciences degree.

Dual credit can be awarded through one of the following options:

- College Board Advanced Placement (AP)
- International Baccalaureate (IB)
- Cambridge International (CI)

The following restrictions apply to the awarding of dual credit:

- Students must be currently enrolled at CBC and have a CBC academic record before credits will be awarded.
- Credit will be awarded on the basis of official (AP, IB, CI) results, not transcript notation.

- No credit will be awarded if the same course is taken at CBC or any other college.
- No more than one-fourth of the total credits required for a CBC associate degree/certificate or one-fourth of the minimum upper-level course credits required for a CBC bachelor's degree may be earned through the dual credit process.
- Dual credit does not count toward the minimum residency requirement.
- Credits for dual credit will be recorded with a P grade and may be used within any discipline, as they're not restricted.

For further information about prior learning or dual credit, visit [columbiabasin.edu/ACPL](http://columbiabasin.edu/ACPL).

## Experiential Learning

Columbia Basin College grants credit for learning that ties prior experiences to the theories, data and skills in the discipline for which the student is seeking credit. 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 are designated as experiential learning eligible courses by each department and 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/ACPL](http://columbiabasin.edu/ACPL).

## Course Challenge

If a student has established a transcript record at CBC and believes their 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 they wish 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/ACPL](http://columbiabasin.edu/ACPL).

## 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 Non-collegiate Sponsored Instruction, provided that the courses are at the college level.

# Academic Information

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

## College Level Examination Program (CLEP)

A score of 50 in the specific examination will grant credit in selected subjects. Students must submit their score reports to the Student Records Office for evaluation. For further information about CLEP credits, visit [columbiabasin.edu/ACPL](http://columbiabasin.edu/ACPL).

## DANTES Subject Standardized Test

A score of 500 may grant credit in selected subjects. Students must submit their score reports to the Student Records Office for evaluation. For further information about DANTES Subject Standardized Test credits, visit [columbiabasin.edu/ACPL](http://columbiabasin.edu/ACPL).

## College Board Advanced Placement (AP)

Washington State community and technical colleges will award **unrestricted elective** credit for an Advanced Placement (AP) score of four or higher. Credit will be awarded on the basis of official AP results, not transcript notation. Credits granted for **general education or major requirements** will be specified by the **receiving institution's AP credit policies**; otherwise, elective credit will be granted. No credit will be awarded if the same course is taken at CBC or any other college.

CBC may award college credit when a student completes the College Board's Advanced Placement examinations with a score of three or higher. AP courses are developed by the College Board and taught by high school teachers. AP exams and their equivalencies at CBC can be found on our website at [columbiabasin.edu/ACPL](http://columbiabasin.edu/ACPL).

AP scores, even once added to the transcript, are subject to re-evaluation at institutions outside the Community and Technical College system, including baccalaureate institutions inside and outside of Washington State. If a student plans to transfer to one of these schools, we encourage them to explore how AP credits may be applied at that institution.

Students must order their score reports from College Board to be sent to the CBC Student Records Office for evaluation. For more information, please visit [columbiabasin.edu/ACPL](http://columbiabasin.edu/ACPL).

## International Baccalaureate/ Cambridge

### International Baccalaureate (IB)

Washington State community and technical colleges will award unrestricted elective credit for an International Baccalaureate (IB) score of four or higher on standard-level or higher-level IB exams. Credit will be awarded on the basis of official IB results, not transcript notation. Credits granted for **general education or major requirements** will be specified by the **receiving institution's IB credit policies**; otherwise, elective credit will be granted. No credit will be awarded if the same course is taken at CBC or any other college.

CBC may award college credit when a student completes International Baccalaureate examinations with a score of four or higher. The IB program, available in several countries, rigorously prepares students for a college-level liberal arts education while they are still in high school. IB exams and their equivalencies at CBC can be found on our website at [columbiabasin.edu/ACPL](http://columbiabasin.edu/ACPL).

IB scores, even once added to the transcript, are subject to re-evaluation at institutions outside the Community and Technical College system, including baccalaureate institutions inside and outside of Washington State. If a student plans to transfer to one of these schools, we encourage them to explore how IB credits may be applied at that institution.

Students must order their score reports from College Board to be sent to the CBC Student Records Office for evaluation. For more information, please visit [columbiabasin.edu/ACPL](http://columbiabasin.edu/ACPL).

### Cambridge International (CI)

Washington State community and technical colleges will award **unrestricted elective** credit for a Cambridge International (CI) score of E or higher on A and AS level exams. Credit will be awarded on the basis of official CI results, not transcript notation. Credits granted for **general education or major requirements** will be specified by the **receiving institution's CI credit policies**; otherwise, elective credit will be granted. No credit will be awarded if the same course is taken at CBC or any other college. CI exams and their equivalencies at CBC can be found on our website at [columbiabasin.edu/ACPL](http://columbiabasin.edu/ACPL).

CI scores, even once added to the transcript, are subject to re-evaluation at institutions outside the Community and Technical College system, including baccalaureate institutions both inside and outside of Washington State. If a student plans to transfer to one of these schools, we encourage them to explore how CI credits may be applied at that institution.

Students must order their score reports from Cambridge International to be sent to the CBC Student Records Office for evaluation. For more information, please visit [columbiabasin.edu/ACPL](http://columbiabasin.edu/ACPL).

## Education Records

### Confidentiality of Student Records

The Family Educational Rights and Privacy Act (FERPA) affords 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 receives a request for access.

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

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

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

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

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

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

# Academic Information

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The College will provide a written response to student requests, either demonstrating the change in the record that has been made or the decision not to amend the record as requested. In the latter case, the College will notify the student of their 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, phone number, date of birth, email address, dates of attendance, degrees/awards received, participation in activities or sports and weight and height of members of athletic teams. Additionally, per the Solomon Act, the College is required to provide military recruiters with name, address, phone number, age and degree program for enrolled students over age 17.

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 V of the CBC Code of Conduct) 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

## **Records Retention**

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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 Office. For further information, please contact the Assistant Dean for Student Conduct.

## 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 Code of Conduct and employees under applicable policies. Please note: marijuana remains an illicit drug on CBC's campuses. Information regarding CBC's drug and alcohol prevention program under these laws can be found at [columbiabasin.edu/DFSCA](http://columbiabasin.edu/DFSCA).

## 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, grievance process and complaint form can be found at [columbiabasin.edu/nondiscrimination](http://columbiabasin.edu/nondiscrimination).

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 Student Code of 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 by phone at 509-542-5548, by email at [cglatt@columbiabasin.edu](mailto:cglatt@columbiabasin.edu), or in person at the Human Resources Office located in the A Building on the Pasco campus. A Deputy Title IX Coordinator may also be contacted by phone at 509-542-4407 or by email at [mpyligan@columbiabasin.edu](mailto:mpyligan@columbiabasin.edu).

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 Absence for Reasons of Faith and Conscience

Students may request accommodations for absences for reasons of faith or conscience or for organized activities conducted under the auspices of a religious denomination, church or religious organization. Accommodations may include rescheduling examinations or activities necessary to complete the course or program. Any student seeking reasonable accommodations under this policy, must provide written notice to the Office of Instruction at [instruction@columbiabasin.edu](mailto:instruction@columbiabasin.edu) within the first two weeks of the beginning of the course with the specific dates the student requests accommodations for examinations or other activities. The Office of Instruction will notify the student of the approval or denial in accordance with the policy. The policy can be found at [columbiabasin.edu/absenceforfaith](http://columbiabasin.edu/absenceforfaith).

Additional College policies can be found online at [columbiabasin.edu](http://columbiabasin.edu).

# Student Resources

## Academic Success Center

The Academic Success Center (ASC) supports CBC students in pursuit of their learning goals by providing a welcoming space to find academic support, study spaces and engage in active learning. The ASC offers free in-person and online tutoring in high-demand subjects areas like math, science, business, humanities and world languages. Students can access drop-in tutoring for one-on-one or small group assistance as well as access computers, printers, whiteboards and private study rooms.

Online eTutoring provides support in a variety of subjects including writing and is available seven days a week, including evening hours.

For information about the ASC and online tutoring, contact the Academic Success Center at 509-542-4676, email [asc@columbiabasin.edu](mailto:asc@columbiabasin.edu) or visit the website at [columbiabasin.edu/asc](http://columbiabasin.edu/asc).

## Writing Center

The Writing Center offers writing support in all subject areas. Consultations aim to assist students in planning, reorganizing and elaborating drafts as well as revising syntax, usage and mechanics. Students can also receive advice on developing writing skills and seeking resources in general. Appointments can be made by contacting the Academic Success Center or through the ASC's webpage at [columbiabasin.edu/asc](http://columbiabasin.edu/asc).

## Assessment Center

### Assessment

In addition to standardized testing of skills in English, reading and math for appropriate college course placement, the Assessment Center evaluates multiple measures used for course placement.

### GED® Exams

Adults who have not graduated from high school may obtain a Certificate of Educational Competency by passing mathematics, social studies, science and literature tests administered by the Assessment Center. Students seeking assistance in preparing for these exams should contact Adult Basic Education in the Transitional Studies department.

### Other Testing

The Assessment Center proctors several CBC program exams in addition to remote testing. We also offer proctor services to the surrounding communities. For more information, visit [columbiabasin.edu/assessment](http://columbiabasin.edu/assessment).

## Athletics

CBC is a member of the Northwest Athletic Conference. CBC's teams compete in baseball, softball, basketball, golf, soccer 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 GPA.

## Bookstore

Columbia Basin College Bookstore is located in the H Building (HUB) on the Pasco campus. Current store hours, policies and procedures are posted at the store and on our website at [cbcbookstore.com](http://cbcbookstore.com). The bookstore sells required and recommended textbooks, as well as general reading materials and study aids, school supplies, calculators, art and engineering supplies, insignia clothing and merchandise and gift items. You can shop in the store and on the website for textbooks and other select merchandise. CBC Bookstore is owned and operated as a service by Columbia Basin College for students and the community, and welcomes opportunities to serve you. You can contact us at 509-542-4893.

## College Assistance Migrant Program (CAMP)

The College Assistance Migrant Program (CAMP) is a unique educational program designed for students from migrant and seasonal farmworker backgrounds. The program is funded by the U.S. Department of Education Grant No. S149A170001 at just over \$2.1 million over five years.

CAMP's mission is to provide students with the foundation they need to successfully reach their educational and career goals. CAMP provides 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 or visit [columbiabasin.edu/camp](http://columbiabasin.edu/camp).

## 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 including educational planning, academic and transfer advising, career counseling, human development courses and personal counseling.

## 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 teach 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 health professionals, if needed.

To schedule an appointment, please call the Counseling/Advising Center at 509-542-5505.

# Student Resources

## Disability Support Services

Disability Support Services is dedicated to assisting students in reaching their personal and educational goals by offering assistive technology and support to qualified students who need assistance to overcome obstacles. In the spirit of Section 508 and the Americans with Disabilities Act (ADA), our services and technology can support a range of disabilities, including but not limited to, mental health, learning disabilities, deaf/hard of hearing, blind/low vision and mobility impairments. Reasonable accommodations will be determined based on each individual's unique situation. Prospective and current students needing assessment or needing accommodations should contact Disability Support Services at 509-542-4412 or by email at [dss@columbiabasin.edu](mailto:dss@columbiabasin.edu).

## Emergency Need Fund

The CBC Foundation's Emergency Need Fund is funded in partnership with Spokane Teachers Credit Union (STCU) in order to assist students who are experiencing an unforeseen financial crisis that is creating a barrier to their student success. The fund provides small grants to students who are experiencing a one-time financial hardship that is unlikely to occur again. For more information, please contact the Foundation Office at 509-542-4436 or [foundation@columbiabasin.edu](mailto:foundation@columbiabasin.edu).

## Hawk Central

Hawk Central, located in the H Building (HUB), is centralized within Student Services to offer students an opportunity to meet face-to-face with a friendly customer service specialist. The staff in Hawk Central answer 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](http://columbiabasin.edu/hawkcentral) or email your questions to [hawkcentral@columbiabasin.edu](mailto:hawkcentral@columbiabasin.edu).

## Human Resources' Student Employment

The Student Employment Office (SEO) is coordinated through the Human Resources Office. The SEO provides on-campus student employment information to CBC students and normally has more than 150 students per quarter working in departments across campus. Information outlining the hiring process can be found on the Student Employment website: [columbiabasin.edu/studentemployment](http://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.

## 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

While State Work Study is non-CBC employment, it is an opportunity for CBC students to work off-campus for employers in the community, and in jobs related to the student's major and/or career goals. The Financial Aid Office assists student workers interested in placement for off-campus employment, though students apply through the CBC online application system. For more information, or to apply, visit [columbiabasin.edu/studentemployment](http://columbiabasin.edu/studentemployment).

### 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.

## 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 also located in the L Building. The Health Sciences Library is located on the third floor of the CBC Health Science Center in Richland.

The Pasco and Richland libraries provide a wide range of resources, both on-site and online, to support students' research and other information needs. Both facilities provide desktop computer access and laptops for checkout; scanning, printing and copying equipment; and contain individual, group and collaborative study spaces. Databases providing full text access to articles, videos and e-books are available for use on and off campus. The Library also maintains collections of print books and videos for educational and recreational purposes.

Librarians are available during scheduled hours or by appointment to provide research assistance; an online reference chat service is available 24/7. Librarians also work with instructional faculty to provide students with information on effectively finding and using library resources to complete course-related research. The Circulation Desk assists students with borrowing services and access to reserve textbooks for use in the Library; note that not all textbooks are available. The Student HelpDesk is also located in the CBC Library in Pasco and offers students assistance with a variety of computer networking, software and hardware issues.

Visit either Library in person, online at [columbiabasin.edu/library](http://columbiabasin.edu/library), or call 509-542-4887 (Pasco) and 509-544-8336 (Richland) for information about the Libraries' hours, resources and services.

## Mathematics, Engineering, and Science Achievement (MESA)

MESA is funded by a contract with the University of Washington (UW). The UW receives their funding from a National Science Foundation grant. 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 12 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 approximately 100 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 Office at 509-542-4538.

## 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.

# Student Resources

## 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 located on the second floor of the H Building (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: Concert Band, Concert Choir and Chamber Choir, Orchestra, Jazz Choir and Jazz Ensemble. Participation in these groups may require an audition. For detailed information, please contact the Music department at 509-542-5531.

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.

## 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. The Planetarium staff's 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 public pre-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 on Friday evenings and Saturday afternoons; available show times are listed on the website.

Public show schedules, ticket sales and other information can be found on the website at [columbiabasin.edu/planet](http://columbiabasin.edu/planet).

## Student Housing

Student Housing is located across the street from the Pasco campus on the corner of 20th Avenue and Argent Road, providing a walkable commute to classes. The Student Housing facility offers furnished rooms with kitchens and bathrooms for full-time students. Student Housing is committed to providing a safe, comfortable and academic environment where students can live, learn and grow together. For additional information, please visit [housing.columbiabasin.edu](http://housing.columbiabasin.edu) or contact the Student Housing Office at [housing@columbiabasin.edu](mailto:housing@columbiabasin.edu) or 509-542-4550.

## Student Support Services

Student Support Services/TRIO (SSS) is funded by the U.S. Department of Education Grant No. P042A150574. The program helps 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. Students in SSS benefit from individual help with academic advising, transfer, major and career planning, coordination with Disability Support Services and intensive tutoring in math and science.

## Upward Bound

CBC's Upward Bound program is funded by the U.S. Department of Education Grant No. P047A170830 to academically prepare students to become first-generation college graduates through tutoring, mentoring, advising, workshops, cultural events, college visits, community service and summer instruction. After high school graduation, Upward Bound students are eligible to enroll in the BRIDGE program for their first summer of college course work.

### Eligibility

Students are eligible if:

- Neither of their parents have earned a bachelor's degree
- They are currently enrolled at Connell, Pasco or Chiawana High School
- 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 program serves 83 students from three high schools.

## Veterans Education & Transition Services

The Veterans Education and Transition Services (V.E.T.S.) Center is dedicated to supporting military connected students in their transition to CBC through academic advising, education benefits certification, navigating the college system, workshops tailored to veteran student success and access to a VA VITAL counselor. The Center also offers a study space, access to computers and free coffee daily. To learn more about services for military connected students at CBC, visit [columbiabasin.edu/veterans](http://columbiabasin.edu/veterans) or speak to a member of the V.E.T.S. staff at 509-542-4404.

Veterans Benefits Approval Statement: Selected programs of study at Columbia Basin College are approved by the Workforce Training and Education Coordinating Board's State Approving Agency (WTECB/SAA) for enrollment of those eligible to receive benefits under Title 38 and Title 10, USC.

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

Compliance with VA's 85/15 Rule: Schools should limit student enrollment to 85 percent veteran enrollment per cohort. In the event that a veteran wishes to enroll in a class that has already reached the 85 percent cap, they may do that but will not be eligible for VA funding. Chapter 35 and 31 students may still enroll even if the 85 percent has been realized.

In accordance with Title 38 US Code 3679 subsection (e), this school adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA. This school will not:

- Prevent the students enrollment
- Assess a late penalty fee to
- Require student secure alternative or additional funding
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution

However, to qualify for this provision, such students may be required to:

- Produce the Certificate of Eligibility by the first day of class
- Provide written request to be certified
- Provide additional information needed to properly certify the enrollment as described in other institutional policies



# Student Resources

## 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 Zoom (webinar, virtual office). To find out more about online classes and eLearning at CBC, visit [columbiabasin.edu/eLearning](http://columbiabasin.edu/eLearning). The eLearning department can be reached at 509-542-4468 or via email at [eLearning@columbiabasin.edu](mailto:eLearning@columbiabasin.edu).

## Workforce Education Center (WEC)

The Workforce Education Center (WEC) assists students with tuition, book assistance, housing assistance and financial help for other barriers that may keep you from being successful. For students looking to re-career, train while on unemployment or receiving financial assistance from the state, the WEC may have a program that can help you.

## Basic Food, Employment, & Training (BFET)

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 BFET:

- Maintaining eligibility for food stamps while attending school
- Washington State Department of Social and Health Services' child care subsidy programs
- Academic/career planning
- Referrals to on-campus and off-campus resources
- Tuition and other support assistance (according to documented need)

For more information, please call the BFET Office at 509-542-4719.

## Worker Retraining

Tuition assistance and book loans may be available for students who meet one of the following criteria:

- Are currently receiving or have exhausted unemployment benefits within the last 48 months
- Have become a displaced homemaker, meaning they were dependent on another family member's income, that income is no longer available to them and they are either unemployed or underemployed
- Are 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

- Are a dislocated worker who is currently working a temporary stop-gap job with an income loss of 20 percent or more
- Are currently employed but at risk for unemployment, meeting **two of the following criteria**:
  1. Their job is listed as not in demand;
  2. They need training to remain working for your current employer;
  3. And/or they have less than 45 college credits
- Have been self-employed and experienced a lack of work due to the economy

For more information about program eligibility, call CBC Worker Retraining at 509-542-4446 or visit [columbiabasin.edu/workerretraining](http://columbiabasin.edu/workerretraining).

## 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 at 509-542-4719 or 509-542-4531.

## Student Assistance

The following services are available to low-income students attending our college:

- Childcare Reimbursement
- Travel Reimbursement
- Short-term emergency book/tuition/housing loans

To find out more information or apply for assistance, email [moneyforyou@columbiabasin.edu](mailto:moneyforyou@columbiabasin.edu) or visit our webpage.



# 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. Security personnel routinely conduct patrols of CBC facilities and parking lots and provide 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](http://columbiabasin.edu/asafercbc). Prompt reporting will ensure 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

## The Clery Act

The Clery Act requires that colleges provide information to prospective and current students and employees about its campus safety policies, procedures and statistics on certain crimes in an Annual Security and Fire Report. CBC obtains data for the Annual Security and Fire Report that is required by the Clery Act through a collaborated effort with various law enforcement agencies and the local fire department. The Annual Security and Fire Report can be located at the following website: [columbiabasin.edu/safety](http://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](http://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 outlined within the Student Code of Conduct. 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 and Activities 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 for Student Services and the Assistant Dean for Student Conduct and Activities. Notification to the College community will be made pursuant to CBC's Sexual Offender Notification Procedure, which can be located at [columbiabasin.edu/safety](http://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, including sexual misconduct, 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 any form of sexual misconduct to talk to someone about their experience, so they can get the support they need. The College offers information and referrals for victims of sexual misconduct. Victims of sexual misconduct are encouraged to report the incident as soon as possible to the Title IX Coordinator or Deputy Coordinator located in the Human Resources Office in the A Building on the Pasco campus. Reports can also be made by emailing [mpylican@columbiabasin.edu](mailto:mpylican@columbiabasin.edu) or by calling 509-542-4407. More information is available at [columbiabasin.edu/titleix](http://columbiabasin.edu/titleix).

## Severe Weather

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

- CBC Alert via our Emergency Notification System (ENS): sign up ([columbiabasin.edu/ens](http://columbiabasin.edu/ens)) to receive emergency notifications via email and text messaging
- CBC website homepage: [columbiabasin.edu](http://columbiabasin.edu)
- CBC Facebook: [facebook.com/columbiabasincollege](https://facebook.com/columbiabasincollege)
- CBC main line: 509-547-0511; if the College is closed, the message will state that CBC is closed

# Safety & Security Information

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Information will only be posted or announced if CBC should close. Closures, delayed starts or early releases may be announced at any time due to changing weather conditions. However, we make every effort to announce morning closures by 5:15 am and announce evening class cancelations by 3:30 pm. Employees and students are expected to use reasonable judgment regarding traveling in inclement weather/adverse road conditions.

# Graduation Information

## Graduation

Students must submit a graduation application in order to be awarded a degree or certificate upon the fulfillment of the completion requirements. Students are encouraged to meet with their appropriate advisor (Counselor, Completion Coach, Retention Specialist or program advisor) one quarter before they plan to complete all their requirements to graduate. Please note that one graduation application must be filed for each degree or certificate. Graduation applications are available online at [columbiabasin.edu/gradapps](http://columbiabasin.edu/gradapps) and must be completed and signed by the student and appropriate advisor. Students may graduate at the end of any quarter. Students participating in graduation in June will have completed their degree/certificate during the most recent fall, winter or spring quarters or the summer following graduation.

In order to receive a degree or certificate from CBC, students must fulfill the following requirements:

- Complete all degree/certificate requirements as stated in the College catalog (refer to the Catalog Option Policy for more information regarding catalog degree requirements). No one course can fulfill two distribution requirements.
- Complete at least one-third of the total credits required for an associate degree/certificate or 45 credits for a CBC bachelor's degree in residence at CBC.
- Earn a cumulative college-level\* GPA of 2.0 or above in course work completed at CBC.
- Students transferring credit from an accredited institution: earn a combined cumulative college-level\* GPA of 2.0 or above in courses completed at CBC and transferred-in college-level course work.

*\*College-level courses are numbered 100 and above at CBC. Course numbering at other colleges may vary. For questions regarding transfer credit, please contact Student Records.*

## Catalog Option Policy

Students applying for graduation must comply with the requirements of the College catalog. Students may choose to apply for graduation under the catalog year in effect at the original time of enrollment or any subsequent catalog, provided the student is not absent from CBC for a period of more than four consecutive quarters (including summer quarter). After an absence from CBC of more than four consecutive quarters, the following conditions apply:

- Students may apply for graduation under the catalog year in effect at the time of re-enrollment or any subsequent catalog.
- Any catalog that was in effect prior to re-enrollment would not be eligible.

- Students may use a prior year catalog to apply for graduation after an absence of more than four consecutive quarters only if they completed the degree requirements under that catalog prior to the absence.

For students reverse transferring credits from another institution, those credits must be completed within four consecutive quarters of their absence to apply for graduation under a catalog year in effect during their time at CBC.

## High School Diploma

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. Students must indicate this request on their graduation application. (These individuals are not required to complete the State Board of Education's graduation requirements.)
- An individual, 16 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. Students must indicate this request on their graduation application. (These individuals are not required to complete the State Board of Education's graduation requirements.)

# Degree and Certificate Overview

## Baccalaureate Degrees

*Minimum 180 credits (a minimum of 60 credits must be from 300 and 400 courses, but some baccalaureate degrees may require more)*

Columbia Basin College offers two baccalaureate degree types: Bachelor of Applied Science (BAS) and Bachelor of Science in Nursing (BSN). The BAS degrees are offered in Applied Management (with optional concentrations in Agriculture or Healthcare Administration), Cyber Security, Dental Hygiene, Health Physics, Information Technology, Project Management (with an optional concentration in Construction) and Teacher Education (with early childhood education endorsement).

Many two-year (AA, AS, AAS) 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 Washington State Legislature authorized the community college baccalaureate program to increase access to bachelor's degrees for Washington citizens. In particular, AAS graduates whose credits are generally non-transferable to four-year institutions can pursue these degrees without having to start their college education from scratch, allowing full-time students to complete the upper-level degree in approximately two years.

All BAS and BSN degrees offered at CBC are approved by the Northwest Commission on Colleges and Universities and the Washington State Board for Community and Technical Colleges.

Students pursuing a BAS or BSN degree must complete a minimum of 180 college-level course credits, which includes a minimum of 60 upper-level (300 and 400) course credits and a minimum of 60 general education course credits.

## Associate Degrees

*Upper-level (300 and 400) course credits may not be used to satisfy associate degree requirements*

### Associate in Applied Science Degree (AAS)

*Minimum 90 credits*

The Associate in Applied Science (AAS) degree is earned by students who complete a prescribed two-year professional/technical program. 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. For degree requirements, students should work closely with their program advisor or completion coach.

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

*90 credits*

The Associate in Arts and Sciences (AA) degree is a direct transfer agreement (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 completion coaches early in their academic planning to review the degree options listed below and design a plan that best fits their educational and transfer goals.

### Associate in Business Degree (MRP/DTA)

*90 credits*

As a result of the work by members of the Washington community and technical college system and public baccalaureate institutions, the Major Related Program (MRP) agreements were developed. These direct transfer agreements (DTA) 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.

### Associate in Computer Science Degree (AA/DTA)

*90 credits*

The Associate in Computer Science degree is a direct transfer agreement, created to aid students interested in transferring into a computer science program at a number of baccalaureate institutions. This degree is intended to ensure 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. 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.

### Associate in Math Education Degree (AA/DTA)

*90 to 92 credits*

The Associate in Math Education degree is a direct transfer agreement, 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 ensure 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 for the area of field experience, since teacher certification institutions vary in terms of the quality and quantity of experience required.

### Associate in Science-Transfer Degree (AS-T)

*Minimum 90 credits*

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.

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.

## Certificates

*Upper-level (300 and 400) course credits may not be used to satisfy certificate requirements*

### One-Year Certificate

*45 to 89 credits*

# Degree and Certificate Overview

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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 to 89 credits are eligible to participate in the commencement ceremony and may qualify for honors designation.

## **Certificate**

### ***20 to 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 to 44 credits do not participate in the commencement ceremony or qualify for honors designation.

## **Short-Term Certificate**

### ***0 to 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 to 19 credits do not participate in the commencement ceremony or qualify for honors designation.



# Instructional Divisions

At CBC, as at most colleges and universities, instructional departments offer areas of study (e.g., English, sociology, physics). Related departments are combined into larger divisions, also called Schools (e.g., Arts, Humanities & Communication, Health Sciences, Math, Science & Engineering). 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 instructional office.

## Office of Instruction

A Building, Room A270  
509-543-1495  
[instruction@columbiabasin.edu](mailto:instruction@columbiabasin.edu)  
Vice President: Michael Lee

## School of Arts, Humanities & Communication

P Building, Room P100  
509-542-5531  
[sahc@columbiabasin.edu](mailto:sahc@columbiabasin.edu)  
Dean: Bill McKay

### Instructional Programs

- Communication Studies
- English
- Music
- Reading
- Spanish Medical Interpreting
- Theatre
- Visual Arts
- World Languages:
  - Arabic
  - Chinese
  - French
  - Hebrew
  - Japanese
  - Russian
  - Spanish

## School of Business

B Building, Room B119  
[schoolofbusiness@columbiabasin.edu](mailto:schoolofbusiness@columbiabasin.edu)  
Interim Dean: Soo Park

### Instructional Programs

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

## School of Career & Technical Education

CTE Building, Room CTE 101  
509-542-4804  
[cte@columbiabasin.edu](mailto:cte@columbiabasin.edu)  
Dean: Jesus Mota

### Instructional Programs

- Administrative Office Technology
- Apprenticeships
- Automotive Technology
- Blueprint Reading

- Commercial Driver's License
- Computer Applications
- Culinary
- Electronics
- Hospitality
- Industrial Drawing
- Industrial Hygiene Technology
- Industrial Technology
- Maintenance
- Manufacturing Technology
- Nuclear Technology:
  - Health Physics
  - Instrumentation and Control
  - Non-Licensed Operator
  - Radiation Protection Technician
- Occupational Safety & Health
- Technical Education
- Welding Technology

## School of Computer Science

T Building, Room T551  
Phone: 509-544-2262  
Email: [schoolofcs@columbiabasin.edu](mailto:schoolofcs@columbiabasin.edu)  
Interim Dean: Keri Lobdell

### Instructional Programs

- Computer Science
- Computer Science Information Technology
- Cyber Security

## School of Health Sciences

HSC Building, Room HSC 209  
509-544-8300  
[hsc@columbiabasin.edu](mailto:hsc@columbiabasin.edu)  
Dean: Doug Hughes

### Instructional Programs

- Dental Hygiene
- Diagnostic Ultrasound Technology
- Emergency Medical Technician
- Fire Science
- Firefighter I
- Health Sciences
- Healthcare Central Service Technology
- Medical Assistant
- Medical Imaging Technology
- Medical Records and Healthcare Information
- Medical Simulation
- Nuclear Medicine Technology
- Nursing
- Nursing Assistant
- Paramedic
- Perioperative Nursing
- Phlebotomy
- Radiologic Technology
- Spanish Medical Interpreting
- Surgical Technology

## School of Education

CBAC Building  
509-542-5600  
Dean: Monica Hansen  
Director: Jacob Bang

### Instructional Programs

- Early Childhood Education
- Education

## School of Math, Science & Engineering

T Building, Room T202  
509-542-4783  
[schoolofmse@columbiabasin.edu](mailto:schoolofmse@columbiabasin.edu)  
Dean: Roderick Taylor

### Instructional Programs

- Agricultural Food Systems
- Agriculture
- Astronomy
- Biology
- Chemistry
- Engineering Technology
- Environmental Science
- Exercise Science
- General Engineering
- Geology
- Health Education
- Horticulture
- Mathematics
- Nutrition and Food Science
- Physical Education
- Physical Education Professional
- Physical Geography
- Physics
- Pre-Professional:
  - Occupational Therapy
  - Pre-Dental
  - Pre-Medicine
  - Pre-Pharmacy
  - Pre-Physical Therapy
  - Pre-Vet

## Student Services

H Building, Room HN-136  
509-542-4595  
[lschumacher@columbiabasin.edu](mailto:lschumacher@columbiabasin.edu)  
Associate Dean: Lane Schumacher

### Instructional Programs

- First Year Introduction
- Human Development

## School of Social & Behavioral Sciences

SWL Building, Room SWL 201  
509-544-4914  
[socialscience@columbiabasin.edu](mailto:socialscience@columbiabasin.edu)  
Dean: Monica Hansen

### Instructional Programs

- Anthropology
- Criminal Justice and Forensics
- Cultural Geography
- History
- Intercultural Studies
- Philosophy
- Political Science
- Pre-Professional:
  - Pre-Law
- Psychology
- Social Science

# Instructional Divisions

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- Social Work
- Sociology
- Women's Studies

## Transitional Studies

A Building, Room A235

509-542-4562

[dlarios@columbiabasin.edu](mailto:dlarios@columbiabasin.edu)

Dean: Daphne Larios

## Instructional Programs

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

# College Survival Guide

## **academic concentration**

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

## **academic year**

Refers to an academic school year that is divided into four quarters beginning with summer quarter; followed by fall, winter and spring quarters.

## **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 bachelor's 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 continue on to bachelor's degrees, others prepare students to go directly 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 that can often be earned by following a four-year instructional program. It typically requires 180 or more credits.

## **campus**

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

## **catalog**

A comprehensive resource publication that lists college regulations, program and course descriptions, degree and graduation requirements, transfer requirements and other essential information.

## **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 2021).

## **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.

## **Columbia Basin Access Center (CBAC)**

The CBAC Building, also known as the X Building, houses our English Language Acquisition (ELA) and Education classes. The building is located at 1620 N. 20th Ave in Pasco.

## **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 [sbctc.edu/colleges-staff/programs-services/common-course-numbering/ccn.aspx](http://sbctc.edu/colleges-staff/programs-services/common-course-numbering/ccn.aspx) 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. At CBC, credits are measured on a quarterly basis unless otherwise noted.

## **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 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.

## **developmental-level study**

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

# College Survival Guide

## 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).

## distance learning or distance education

Instruction that 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 their 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 the course 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. A new electronic application is required for each academic year. FAFSA applications are available at [fafsa.gov](http://fafsa.gov).

## freshman

A student in the first year of a typical four-year bachelor's 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 (HSC)

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 bachelor's 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

The knowledge, skills and abilities students will acquire at the course, program and institutional levels.

## 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 bachelor's degree program.

## major

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

## Medical Science Center (MSC)

Many of CBC's Health Sciences classes are located in a facility in Richland at 940 Northgate Drive. The Kadlec Regional Medical Center Family Residency Clinic is co-located at the MSC. See also Richland campus.

# College Survival Guide

## **no-show**

A student who registers into a course but never attends class. A no-show student will receive a failing grade on their transcript, or may be administratively withdrawn at the discretion of the College.

## **noncredit**

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

## **online courses**

A course that is conducted primarily through the Internet and/or email. Students may also be required to make occasional visits to campus or require virtual meetings at scheduled times.

## **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 bachelor's 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 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 completion coaches 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 enroll in a course or courses. Registration activity includes enrolling, dropping/withdrawing, 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 at facilities on Northgate Drive in Richland. See also Health Science Center and Medical Science Center. A variety of classes are offered in the RA Building at 901 Northgate Drive.

## **scholarship**

A type of financial aid. 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 bachelor's 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 bachelor's 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 that assesses the English language abilities of students who are not native English-speakers.

## **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.



# College Survival Guide

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## **tuition & fees**

Tuition is a student's basic payment toward 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 baccalaureate degree program.

## **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 their 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 they haven't completed the listed requirements for it).

## **WASFA (Washington Application for State Financial Aid)**

The application required for undocumented individuals, who are not eligible for federal financial aid through FAFSA, to be considered for state student financial aid. The WASFA is processed free of charge and is used by most Washington State colleges and universities. A new electronic application is required for each academic year. WASFA applications are available at [readysetgrad.org/WASFA](http://readysetgrad.org/WASFA).

## **withdrawal**

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

## **work study**

A type of financial aid earned, paying students to work part time, often on campus, during the academic year.

## **workshop**

A type of class offered by a variety of academic departments throughout the year; many are exploratory or one-time options. Most often they are zero credits.

# Distribution Codes

## Communication [C]

CMST& 101 --- Introduction to Communication Studies  
 CMST 104 --- Speech Essentials  
 CMST 110 --- Communication Behavior  
 CMST&210 --- Interpersonal Communication  
 CMST&220 --- Public Speaking  
 CMST 260 --- Multicultural Communication  
 ENGL&101 --- English Composition I  
 ENGL&102 --- Composition II  
 ENGL&235 --- Technical Writing  
 ENGL 315 --- Writing for Health Professionals  
 ENGL 410 --- Professional & Organizational Communication

## Humanities [H]

ARAB 121 --- Arabic I  
 ARAB 122 --- Arabic II  
 ARAB 123 --- Arabic III  
 ART& 100 --- Art Appreciation  
 ART 116 --- Art History Ancient World  
 ART 117 --- Art History Medieval-Baroque  
 ART 118 --- Art History Modern Times  
 ART 119 --- Art History of Asia  
 ART 120 --- Art History of the Americas  
 CHIN&121 --- Chinese I  
 CHIN&122 --- Chinese II  
 CHIN&123 --- Chinese III  
 CMST 246 --- Oral Interpretation  
 DRMA&101 --- Intro to Theatre  
 DRMA 215 --- Survey of Theatre History  
 EFL 101 --- Written English Language I  
 EFL 111 --- Written English Language II  
 ENGL&111 --- Intro to Literature  
 ENGL 140 --- The Cinema  
 ENGL 160 --- Women's Literature  
 ENGL 180 --- Multicultural Literature  
 ENGL 195 --- Bible as Literature  
 ENGL 203 --- Mythology  
 ENGL 210 --- Intro to Linguistics  
 ENGL&220 --- Intro to Shakespeare  
 ENGL&236 --- Creative Writing I  
 ENGL&237 --- Creative Writing II  
 ENGL&244 --- American Literature I  
 ENGL&245 --- American Literature II  
 ENGL&246 --- American Literature III  
 ENGL&254 --- World Literature I  
 ENGL&255 --- World Literature II  
 ENGL&256 --- World Literature III  
 ENGL 257 --- English Grammar  
 ENGL 264 --- English Literature  
 ENGL 265 --- English Literature  
 ENGL 266 --- English Literature  
 ENGL 275 --- The Lord of the Rings  
 ENGL 280 --- Lesbian, Gay, Bisexual, Trans, Queer Studies  
 FRCH&121 --- French I

FRCH&122 --- French II  
 FRCH&123 --- French III  
 FRCH&221 --- French IV  
 FRCH&222 --- French V  
 FRCH&223 --- French VI  
 FRCH 260 --- French Literature Reading  
 FRCH 261 --- French Literature Reading  
 FRCH 262 --- French Literature Reading  
 HEB 121 --- Hebrew I  
 HEB 122 --- Hebrew II  
 HEB 123 --- Hebrew III  
 HIST&126 --- World Civilizations I  
 HIST&127 --- World Civilizations II  
 HIST&128 --- World Civilizations III  
 ICS 120 --- Survey of Hispanic Culture  
 ICS 125 --- Native American Culture  
 ICS 130 --- Survey of Asian American Culture  
 ICS 135 --- Survey of African American Cultures  
 ICS 222 --- Columbia Basin Cultures  
 ICS 310 --- American Diversity  
 ICS 320 --- Culture and Health  
 JAPN&121 --- Japanese I  
 JAPN&122 --- Japanese II  
 JAPN&123 --- Japanese III  
 JAPN&221 --- Japanese IV  
 JAPN&222 --- Japanese V  
 JAPN&223 --- Japanese VI  
 MUSC&105 --- Music Appreciation  
 MUSC 116 --- History of Jazz  
 PHIL&101 --- Intro to Philosophy  
 PHIL106 --- Introduction to Logic  
 PHIL 131 --- World Religions  
 PHIL 150 --- Introduction to Ethics  
 PHIL 305 --- Professional Ethics  
 PHIL 315 --- Professional Ethics in Healthcare  
 RUSS&121 --- Russian I  
 RUSS&122 --- Russian II  
 RUSS&123 --- Russian III  
 SPAN 104 --- Intensive 1st Year Spanish  
 SPAN 110 --- Beginning Spanish for Professionals  
 SPAN 111 --- Intermediate Spanish for Professionals  
 SPAN 112 --- Advanced Spanish for Professionals  
 SPAN&121 --- Spanish I  
 SPAN&122 --- Spanish II  
 SPAN&123 --- Spanish III  
 SPAN 205 --- Spanish for Spanish Speakers  
 SPAN 206 --- Spanish for Spanish Speakers  
 SPAN 207 --- Spanish for Spanish Speakers  
 SPAN&221 --- Spanish IV  
 SPAN&222 --- Spanish V  
 SPAN&223 --- Spanish VI  
 SPAN 260 --- Spanish Literature Readings  
 SPAN 261 --- Spanish Literature Readings  
 SPAN 262 --- Spanish Literature Readings

WS 155 --- Women's Cultural Heritage

## Mathematical & Natural Sciences [M/S]

ANTH&205 --- Biological Anthropology  
 ANTH 214 --- Biological Anthropology Lab  
 ASTR&101 --- Intro to Astronomy w/ Lab  
 ASTR 102 --- Intro to Astronomy - Part II w/ Lab  
 BIOL&100 --- Survey of Biology w/ Lab  
 BIOL 140 --- Fundamentals of Botany w/ Lab  
 BIOL 148 --- Plant Identification w/ Lab  
 BIOL&160 --- General Biology w/ Lab  
 BIOL&175 --- Human Biology w/ Lab  
 BIOL 201 --- Soils w/ Lab  
 BIOL&211 --- Majors Cellular w/ Lab  
 BIOL&212 --- Majors Plant w/ Lab  
 BIOL&213 --- Majors Animal w/ Lab  
 BIOL&241 --- Human A&P 1 w/ Lab  
 BIOL&242 --- Human A&P 2 w/ Lab  
 BIOL 252 --- Insects of Economic Importance w/ Lab  
 BIOL 253 --- Plant Pathology w/ Lab  
 BIOL&260 --- Microbiology w/ Lab  
 CHEM&110 --- Chemical Concepts w/ Lab  
 CHEM&121 --- Intro to Chemistry w/ Lab  
 CHEM&122 --- Intro to Organic Chemistry w/ Lab  
 CHEM&123 --- Intro to Biochemistry w/ Lab  
 CHEM&131 --- Intro to Organic/Biochemistry w/ Lab  
 CHEM&140 --- General Chemistry Prep w/ Lab  
 CHEM&161 --- General Chemistry I w/ Lab  
 CHEM&162 --- General Chemistry II w/ Lab  
 CHEM&163 --- General Chemistry III w/ Lab  
 CHEM&241 --- Organic Chemistry I  
 CHEM&242 --- Organic Chemistry II  
 CHEM&243 --- Organic Chemistry III  
 CHEM&251 --- Organic Chemistry I Lab  
 CHEM&252 --- Organic Chemistry II Lab  
 CHEM&253 --- Organic Chemistry III Lab  
 CHEM 254 --- Quantitative Analysis  
 CHEM 255 --- Instrumental Analysis  
 CHEM 264 --- Quantitative Analysis Lab  
 CHEM 265 --- Instrumental Analysis Lab  
 CHEM 281 --- Undergraduate Research, Special Topics  
 CHEM 282 --- Undergraduate Research, Special Topics  
 CHEM 283 --- Undergraduate Research, Special Topics  
 CHEM 284 --- Undergraduate Research, Special Topics  
 CHEM 285 --- Undergraduate Research, Special Topics  
 CHEM 286 --- Undergraduate Research, Special Topics  
 CHEM 291 --- Undergraduate Research, Special Topics

# Distribution Codes

CHEM 292 --- Undergraduate Research, Special Topics  
 CHEM 293 --- Undergraduate Research, Special Topics  
 CHEM 294 --- Undergraduate Research, Special Topics  
 CHEM 295 --- Undergraduate Research, Special Topics  
 CHEM 296 --- Undergraduate Research, Special Topics  
 CS 102 --- Programming Fundamentals  
 CS& 131 --- Computer Science I C++  
 CS& 141 --- Computer Science I Java w/ Android Devices  
 CS 162 --- C++2  
 CS 202 --- Programming Fundamentals 2  
 CS 236 --- Java I/O w/ Android Devices & Integration  
 ENVS&101 --- Intro to Environmental Science w/ Lab  
 ENVS 174 --- Intro to Meteorology and the Atmosphere  
 ENVS 310 --- Environmental Issues  
 GEO 101 --- Physical Geography  
 GEOL&101 --- Intro to Physical Geology w/ Lab  
 GEOL&103 --- Historical Geology w/ Lab  
 GEOL&110 --- Environmental Geology w/ Lab  
 MATH 113 --- Geometry/Trigonometry  
 MATH& 171 --- Math for Elementary Education I  
 NUTR&101 --- Nutrition  
 PHYS 102 --- Physics of Everyday Experience  
 PHYS&110 --- Physics for Non-Science Majors w/ Lab  
 PHYS&114 --- General Physics I w/ Lab  
 PHYS&115 --- General Physics II w/ Lab  
 PHYS&116 --- General Physics III w/ Lab  
 PHYS&221 --- Engineering Physics I w/ Lab  
 PHYS&222 --- Engineering Physics II w/ Lab  
 PHYS&223 --- Engineering Physics III w/ Lab

## Mathematical & Natural Science OR Quantitative/Symbolic Reasoning [M/S] [Q/SR]

MATH&107 --- Math in Society  
 MATH&141 --- Precalculus I  
 MATH&142 --- Precalculus II  
 MATH&144 --- Precalculus I & II  
 MATH&146 --- Introduction to Stats  
 MATH 147 --- Finite Math  
 MATH&148 --- Business Calculus  
 MATH&151 --- Calculus I  
 MATH&152 --- Calculus II  
 MATH&153 --- Calculus III  
 MATH&172 --- Math for Elementary Education II  
 MATH&173 --- Math for Elementary Education III  
 MATH 243 --- Linear Algebra

MATH 246 --- Discrete Structures  
 MATH&254 --- Calculus IV  
 MATH 255 --- Differential Equations

## Health & Physical Education [PE]

HE 110 --- Concepts of Fitness  
 HE 160 --- Diet, Exercise & Weight Control  
 HE 161 --- HIV/AIDS Issues and Strategies  
 HE 162 --- HIV/AIDS Education  
 HE 170 --- Health and Wellness  
 HE 171 --- Exercise Prescription  
 HE 172 --- Exercise Prescription Lab  
 HE 210 --- Sports Nutrition  
 HE 215 --- Health and Fitness for Life  
 HE 216 --- Health and Fitness for Life Lab  
 HE 220 --- Drugs and Health  
 HE 232 --- Sports Psychology  
 HE 240 --- Stress Management  
 HE 250 --- Sports Management  
 PE 110 --- Aerobics Step Training I  
 PE 111 --- Aerobics Step Training II  
 PE 112 --- Aerobic Dance I  
 PE 113 --- Aerobic Dance II  
 PE 114 --- Aerobic Dance III  
 PE 115 --- Body Mechanics  
 PE 116 --- Pilates  
 PE 117 --- Yoga I  
 PE 118 --- Step Aerobic Interval Training  
 PE 119 --- Yoga II  
 PE 120 --- Weight Training I  
 PE 121 --- Weight Training II  
 PE 122 --- Weight Training III  
 PE 127 --- Fitness Center  
 PE 132 --- Golf I  
 PE 133 --- Golf II  
 PE 135 --- Golf Swing Analysis Strategies  
 PE 140 --- Softball I  
 PE 141 --- Softball II  
 PE 142 --- Softball III  
 PE 145 --- Soccer I  
 PE 146 --- Soccer II  
 PE 147 --- Soccer III  
 PE 148 --- Jogging I  
 PE 149 --- Jogging II  
 PE 150 --- Jogging III  
 PE 160 --- Basketball I  
 PE 161 --- Basketball II  
 PE 162 --- Basketball III  
 PE 163 --- Volleyball I  
 PE 164 --- Volleyball II  
 PE 165 --- Volleyball III  
 PE 180 --- Adaptive PE  
 PE 181 --- Swimming I  
 PE 182 --- Adaptive PE Lab  
 PE 187 --- Baseball I  
 PE 188 --- Baseball II

PE 189 --- Baseball III  
 PE 190 --- Cardio Kickboxing I  
 PE 201 --- Exercise and Weights

## Quantitative/Symbolic Reasoning [Q/SR]

PHIL& 120 --- Symbolic Logic

## Social & Behavioral Sciences [S/B]

ANTH&100 --- Survey on Anthropology  
 ANTH&204 --- Archaeology  
 ANTH&206 --- Cultural Anthropology  
 ANTH&234 --- Religion & Culture  
 CJ& 101 --- Introduction to Criminal Justice  
 CMST& 102 --- Intro to Mass Media  
 ECON 110 --- Economic Trends, Issues and Policy  
 ECON&201 --- Micro Economics  
 ECON&202 --- Macro Economics  
 ECON 291 --- History of American Economic Development  
 ECON 305 --- Managerial Economics  
 ECON 315 --- Economics of Healthcare  
 GEO 150 --- Cultural Geography  
 HIST 107 --- Chicano History  
 HIST 10 --- History of Immigration in the U.S.  
 HIST 110 --- History of Modern East Asia  
 HIST 111 --- Colonial Latin America  
 HIST 112 --- Modern Latin America  
 HIST 113 --- Mexico Since Independence  
 HIST 115 --- Intro to Middle East History & Society  
 HIST&146 --- U.S. History I  
 HIST&147 --- U.S. History II  
 HIST&148 --- U.S. History III  
 HIST 233 --- War in History  
 ICS 220 --- Globalization  
 ICS 255 --- Race and Ethnic Relations  
 POLS 104 --- State and Local Government  
 POLS&201 --- Intro Political Theory  
 POLS&202 --- American Government  
 POLS&203 --- International Relations  
 POLS&204 --- Comparative Government  
 PSYC&100 --- General Psychology  
 PSYC&200 --- Lifespan Psychology  
 PSYC 201 --- Social Psychology  
 PSYC 209 --- Fundamentals of Psychological Research  
 PSYC&220 --- Abnormal Psychology  
 SOC&101 --- Intro to Sociology  
 SOC 115 --- Gender, Media, & Popular Culture  
 SOC 115 --- Intro to Middle East History & Society  
 SOC 150 --- Marriage, Family, and Relationships  
 SOC 160 --- Gender Studies  
 SOC&201 --- Social Problems  
 SOC 220 --- Globalization

# Distribution Codes

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SOC 221 --- Sociology of Deviance and Crime  
SOC 269 --- Sociology of World Cinema  
SOC 305 --- Cybercrime: A Sociological  
Perspective  
SSCI 290 --- Social Research Methods  
SSCI 291 --- Social Research Methods Lab



# Degree & Certificate Requirements

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

### TRANSFER

### 2020-2021 Degree Requirements

#### Communication

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>English - select 5 additional credits from the following:</b>				
ENGL&102	Composition II [C]	5		
ENGL&235	Technical Writing [C]	5		
<b>Communication Studies - select a minimum of 3 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
Note: Credit not granted for both CMST 104 and CMST& 220.				
Note: Credit not granted for both CMST 110 and CMST& 210.				
<b>Subtotal</b>		<b>13</b>		

#### Quantitative/Symbolic Reasoning

Select one course from either the Quantitative Reasoning or Symbolic Reasoning courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Quantitative Reasoning:</b>				
MATH&107	Math in Society [M/S] [Q/SR]	5		
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
MATH&254	Calculus IV [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH 147	Finite Math [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&172	Math for Elementary Education II [M/S] [Q/SR]	5		
MATH&173	Math for Elementary Education III [M/S] [Q/SR]	5		
MATH 243	Linear Algebra [M/S] [Q/SR]	5		
MATH 246	Discrete Structures [M/S] [Q/SR]	5		
MATH 255	Differential Equations [M/S] [Q/SR]	5		
<b>Symbolic Reasoning:</b>				
PHIL&120	Symbolic Logic [Q/SR]	5		
Note: A single Math course cannot be counted for both a Natural Science and Quantitative/Symbolic Reasoning requirement.				
<b>Subtotal</b>		<b>5</b>		

# Degree & Certificate Requirements

## Humanities

Select three courses from the list below. Courses must be selected from at least two of the three groups. At least one course must be selected from Group A. Only one course may be selected from Group C.

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Group A - at least one course must be selected from this group; a maximum of two of your three courses may be selected from this group:</b>				
ART& 100	Art Appreciation [H]	5		
ART 116	Art History Ancient World [H]	5		
ART 117	Art History Medieval-Baroque [H]	5		
ART 118	Art History Modern Times [H]	5		
ART 119	Art History of Asia [H]	5		
ART 120	Art History of the Americas [H]	5		
DRMA&101	Intro to Theatre [H]	5		
DRMA 215	Survey of Theatre History [H]	5		
ENGL&111	Intro to Literature [H]	5		
ENGL 140	The Cinema [H]	5		
ENGL 160	Women's Literature [H]	5		
ENGL 180	Multicultural Literature [H]	5		
ENGL 195	Bible as Literature [H]	5		
ENGL 203	Mythology [H]	5		
ENGL 210	Intro to Linguistics [H]	5		
ENGL&220	Intro to Shakespeare [H]	5		
ENGL&236	Creative Writing I [H]	5		
ENGL&237	Creative Writing II [H]	5		
ENGL&244	American Literature I [H]	5		
ENGL&245	American Literature II [H]	5		
ENGL&246	American Literature III [H]	5		
ENGL&254	World Literature I [H]	5		
ENGL&255	World Literature II [H]	5		
ENGL&256	World Literature III [H]	5		
ENGL 257	English Grammar [H]	5		
ENGL 264	English Literature [H]	5		
ENGL 265	English Literature [H]	5		
ENGL 266	English Literature [H]	5		
ENGL 275	The Lord of the Rings [H]	5		
ENGL 280	Lesbian, Gay, Bisexual, Trans, Queer Studies [H]	5		
MUSC&105	Music Appreciation [H]	5		
MUSC 116	History of Jazz [H]	5		
<b>Group B - a maximum of two of your three courses may be selected from this group:</b>				
CMST 221	Communication Skills for Conflict Resolution [H]	5		
CMST 246	Oral Interpretation [H]	5		
HIST&126	World Civilizations I [H]	5		
HIST&127	World Civilizations II [H]	5		
HIST&128	World Civilizations III [H]	5		
ICS 120	Survey of Hispanic Culture [H]	5		
ICS 125	Native American Culture [H]	5		
ICS 130	Survey of Asian American Culture [H]	5		
ICS 135	Survey of African American Cultures [H]	5		
ICS 222	Columbia Basin Cultures [H]	5		

# Degree & Certificate Requirements

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PHIL&101	Intro to Philosophy [H]	5		
PHIL 106	Introduction to Logic [H]	5		
PHIL 131	World Religions [H]	5		
PHIL 150	Introduction to Ethics [H]	5		
WS 155	Women's Cultural Heritage [H]	5		
<b>Group C - only one of your three courses may be selected from this group:</b>				
ARAB 121	Arabic I [H]	5		
ARAB 122	Arabic II [H]	5		
ARAB 123	Arabic III [H]	5		
CHIN&121	Chinese I [H]	5		
CHIN&122	Chinese II [H]	5		
CHIN&123	Chinese III [H]	5		
EFL 101	Written English Language I [H]	5		
EFL 111	Written English Language II [H]	5		
FRCH&121	French I [H]	5		
FRCH&122	French II [H]	5		
FRCH&123	French III [H]	5		
FRCH&221	French IV [H]	5		
FRCH&222	French V [H]	5		
FRCH&223	French VI [H]	5		
FRCH 260	French Literature Reading [H]	1–3		
FRCH 261	French Literature Reading [H]	1–3		
FRCH 262	French Literature Reading [H]	1–3		
HEB 121	Hebrew I [H]	5		
HEB 122	Hebrew II [H]	5		
HEB 123	Hebrew III [H]	5		
JAPN&121	Japanese I [H]	5		
JAPN&122	Japanese II [H]	5		
JAPN&123	Japanese III [H]	5		
JAPN&221	Japanese IV [H]	5		
JAPN&222	Japanese V [H]	5		
JAPN&223	Japanese VI [H]	5		
RUSS&121	Russian I [H]	5		
RUSS&122	Russian II [H]	5		
RUSS&123	Russian III [H]	5		
SPAN&121	Spanish I [H]	5		
SPAN&122	Spanish II [H]	5		
SPAN&123	Spanish III [H]	5		
SPAN&221	Spanish IV [H]	5		
SPAN&222	Spanish V [H]	5		
SPAN&223	Spanish VI [H]	5		
SPAN 104	Intensive 1st Year Spanish [H]	15		
SPAN 110	Beginning Spanish for Professionals [H]	5		
SPAN 111	Intermediate Spanish for Professionals [H]	5		
SPAN 112	Advanced Spanish for Professionals [H]	5		
SPAN 205	Spanish for Spanish Speakers [H]	5		

# Degree & Certificate Requirements

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
SPAN 206	Spanish for Spanish Speakers [H]	5		
SPAN 207	Spanish for Spanish Speakers [H]	5		
SPAN 260	Spanish Literature Readings [H]	3		
SPAN 261	Spanish Literature Readings [H]	3		
SPAN 262	Spanish Literature Readings [H]	3		
<b>Subtotal</b>		<b>15</b>		

# Degree & Certificate Requirements

## Social & Behavioral Sciences

Courses must be selected from two different subject areas

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ANTH&100	Survey of Anthropology [S/B]	5		
ANTH&204	Archaeology [S/B]	5		
ANTH&206	Cultural Anthropology [S/B]	5		
ANTH&234	Religion & Culture [S/B]	5		
CJ& 101	Introduction to Criminal Justice [S/B]	5		
CMST&102	Intro to Mass Media [S/B]	5		
ECON 110	Economic Trends, Issues and Policy [S/B]	5		
ECON&201	Micro Economics [S/B]	5		
ECON&202	Macro Economics [S/B]	5		
ECON 291	History of American Economic Development [S/B]	1–5		
GEO 150	Cultural Geography [S/B]	5		
HIST 107	Chicano History [S/B]	5		
HIST 108	History of Immigration in the U.S. [S/B]	5		
HIST 110	History of Modern East Asia [S/B]	5		
HIST 111	Colonial Latin America [S/B]	5		
HIST 112	Modern Latin America [S/B]	5		
HIST 113	Mexico Since Independence [S/B]	5		
HIST 115	Intro to Middle East History & Society [S/B]	5		
HIST&146	U.S. History I [S/B]	5		
HIST&147	U.S. History II [S/B]	5		
HIST&148	U.S. History III [S/B]	5		
HIST 233	War in History [S/B]	5		
ICS 220	Globalization [S/B]	5		
ICS 255	Race and Ethnic Relations [S/B]	5		
POLS 104	State and Local Government [S/B]	5		
POLS&201	Intro Political Theory [S/B]	5		
POLS&202	American Government [S/B]	5		
POLS&203	International Relations [S/B]	5		
POLS&204	Comparative Government [S/B]	5		
POLS 205	American Political Thought [S/B]	5		
PSYC&100	General Psychology [S/B]	5		
PSYC&200	Lifespan Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
PSYC 209	Fundamentals of Psychological Research [S/B]	5		
PSYC&220	Abnormal Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
SOC 110	Gender, Media, & Popular Culture [S/B]	5		
SOC 115	Intro to Middle East History & Society [S/B]	5		
SOC 150	Marriage, Family, and Relationships [S/B]	5		
SOC 160	Gender Studies [S/B]	5		
SOC& 201	Social Problems [S/B]	5		
SOC 220	Globalization [S/B]	5		
SOC 221	Sociology of Deviance and Crime [S/B]	5		
SOC 269	Sociology of World Cinema [S/B]	5		
SSCI 290	Social Research Methods [S/B]	4		



# Degree & Certificate Requirements

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
and				
SSCI 291	Social Research Methods Lab [S/B]	1		

**Subtotal 15**

# Degree & Certificate Requirements

## Mathematical & Natural Science

**Courses must be selected from two different subject areas. At least 10 credits must be from Natural Science courses. One course must be a laboratory science.**

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Mathematical - a maximum of 5 of your 15 credits may be selected from the following:</b>				
CS 102	Programming Fundamentals [M/S]	5		
CS& 131	Computer Science I C++ [M/S]	5		
CS& 141	Computer Science I Java [M/S]	5		
CS 162	C++2 [M/S]	5		
CS 202	Programming Fundamentals 2 [M/S]	5		
CS 236	Advanced Object Oriented Programming [M/S]	5		
MATH&107	Math in Society [M/S] [Q/SR]	5		
MATH 113	Geometry/Trigonometry [M/S]	5		
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH 147	Finite Math [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
MATH&171	Math for Elementary Education I [M/S]	5		
MATH&172	Math for Elementary Education II [M/S] [Q/SR]	5		
MATH&173	Math for Elementary Education III [M/S] [Q/SR]	5		
MATH 243	Linear Algebra [M/S] [Q/SR]	5		
MATH 246	Discrete Structures [M/S] [Q/SR]	5		
MATH&254	Calculus IV [M/S] [Q/SR]	5		
MATH 255	Differential Equations [M/S] [Q/SR]	5		
Note: A single Math course cannot be counted for both a Natural Science and Quantitative/Symbolic Reasoning requirement.				
<b>Natural Science (non labs) - a maximum of 10 of your 15 credits may be selected from the following:</b>				
ANTH&205	Biological Anthropology [M/S]	5		
CHEM 281	Undergraduate Research, Special Topics [M/S]	1–3		
CHEM 282	Undergraduate Research, Special Topics [M/S]	1–3		
CHEM 283	Undergraduate Research, Special Topics [M/S]	1–3		
CHEM 284	Undergraduate Research, Special Topics [M/S]	1–3		
CHEM 285	Undergraduate Research, Special Topics [M/S]	1–3		
CHEM 286	Undergraduate Research, Special Topics [M/S]	1–3		
CHEM 291	Undergraduate Research, Special Topics [M/S]	1–3		
CHEM 292	Undergraduate Research, Special Topics [M/S]	1–3		
CHEM 293	Undergraduate Research, Special Topics [M/S]	1–3		
CHEM 294	Undergraduate Research, Special Topics [M/S]	1–3		
CHEM 295	Undergraduate Research, Special Topics [M/S]	1–3		
CHEM 296	Undergraduate Research, Special Topics [M/S]	1–3		
ENVS 174	Intro to Meteorology and the Atmosphere [M/S]	5		
GEO 101	Physical Geography [M/S]	5		
NUTR&101	Nutrition [M/S]	5		
PHYS 102	Physics of Everyday Experience [M/S]	5		
<b>Natural Science (labs) - a minimum of 5 of your 15 credits must be selected from the following:</b>				

# Degree & Certificate Requirements

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ANTH 214	Biological Anthropology Lab [M/S]	1		
ASTR&101	Intro to Astronomy w/ Lab [M/S]	5		
ASTR 102	Intro to Astronomy - Part II w/ Lab [M/S]	5		
BIOL&100	Survey of Biology w/ Lab [M/S]	5		
BIOL 140	Fundamentals of Botany w/ Lab [M/S]	5		
BIOL 148	Plant Identification w/ Lab [M/S]	5		
BIOL&160	General Biology w/ Lab [M/S]	5		
BIOL&175	Human Biology w/ Lab [M/S]	5		
BIOL 201	Soils w/ Lab [M/S]	5		
BIOL&211	Majors Cellular w/ Lab [M/S]	5		
BIOL&212	Majors Plant w/ Lab [M/S]	5		
BIOL&213	Majors Animal w/ Lab [M/S]	5		
BIOL&241	Human A&P 1 w/ Lab [M/S]	6		
BIOL&242	Human A&P 2 w/ Lab [M/S]	6		
BIOL 252	Insects of Economic Importance w/ Lab [M/S]	5		
BIOL 253	Plant Pathology w/ Lab [M/S]	5		
BIOL&260	Microbiology w/ Lab [M/S]	6		
CHEM&110	Chemical Concepts w/ Lab [M/S]	5		
CHEM&121	Intro to Chemistry w/ Lab [M/S]	5		
CHEM&122	Intro to Organic Chemistry w/ Lab [M/S]	5		
CHEM&123	Intro to Biochemistry w/ Lab [M/S]	5		
CHEM&131	Intro to Organic/Biochemistry w/ Lab [M/S]	5		
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
CHEM&162	General Chemistry II w/ Lab [M/S]	6		
CHEM&163	General Chemistry III w/ Lab [M/S]	6		
CHEM&241/251	Organic Chemistry I [M/S] + Lab	6		
CHEM&242/252	Organic Chemistry II [M/S] + Lab	6		
CHEM&243/253	Organic Chemistry III [M/S] + Lab	6		
CHEM 254/264	Quantitative Analysis [M/S] + Lab	5		
CHEM 255/265	Instrumental Analysis [M/S] + Lab	5		
ENVS&101	Intro to Environmental Science w/Lab [M/S]	5		
GEOL&101	Intro to Physical Geology w/ Lab [M/S]	5		
GEOL&103	Historical Geology w/ Lab [M/S]	5		
GEOL&110	Environmental Geology w/ Lab [M/S]	5		
PHYS&110	Physics for Non-Science Majors w/ Lab [M/S]	5		
PHYS&114	General Physics I w/ Lab [M/S]	5		
PHYS&115	General Physics II w/ Lab [M/S]	5		
PHYS&116	General Physics III w/ Lab [M/S]	5		
PHYS&221	Engineering Physics I w/ Lab [M/S]	5		
PHYS&222	Engineering Physics II w/ Lab [M/S]	5		

# Degree & Certificate Requirements

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PHYS&223	Engineering Physics III w/ Lab [M/S]	5		

**Subtotal**      **15**

# Degree & Certificate Requirements

## Health & Physical Education

Select three credits from either the Health lecture or PE activity courses. A maximum of three PE credits may be applied to the degree (consult with advisor about this rule).

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Health Lecture:</b>				
HE 110	Concepts of Fitness [PE]	2		
HE 160	Diet, Exercise & Weight Control [PE]	2		
HE 161	HIV/AIDS Issues and Strategies [PE]	2		
HE 162	HIV/AIDS Education [PE]	1		
HE 170	Health and Wellness [PE]	3		
HE 171/172	Exercise Prescription [PE] + Lab	3		
HE 210	Sports Nutrition [PE]	3		
HE 215/216	Health and Fitness for Life [PE] + Lab	4		
HE 220	Drugs and Health [PE]	3		
HE 232	Sports Psychology [PE]	3		
HE 240	Stress Management [PE]	3		
HE 250	Sports Management [PE]	3		
<b>PE Activity:</b>				
PE 110	Aerobics Step Training I [PE]	1		
PE 111	Aerobics Step Training II [PE]	1		
PE 112	Aerobic Dance I [PE]	1		
PE 113	Aerobic Dance II [PE]	1		
PE 114	Aerobic Dance III [PE]	1		
PE 115	Body Mechanics [PE]	1		
PE 116	Pilates [PE]	1		
PE 117	Yoga I [PE]	1		
PE 118	Step Aerobic Interval Training [PE]	1		
PE 119	Yoga II [PE]	1		
PE 120	Weight Training I [PE]	1		
PE 121	Weight Training II [PE]	1–2		
PE 122	Weight Training III [PE]	1–2		
PE 127	Fitness Center [PE]	1–6		
PE 132	Golf I [PE]	1		
PE 133	Golf II [PE]	1		
PE 135	Golf Swing Analysis Strategies [PE]	2		
PE 140	Softball I [PE]	1		
PE 141	Softball II [PE]	1		
PE 142	Softball III [PE]	1		
PE 145	Soccer I [PE]	1		
PE 146	Soccer II [PE]	1		
PE 147	Soccer III [PE]	1		
PE 148	Jogging I [PE]	1–2		
PE 149	Jogging II [PE]	1–2		
PE 150	Jogging III [PE]	1–2		
PE 160	Basketball I [PE]	1		
PE 161	Basketball II [PE]	1		
PE 162	Basketball III [PE]	1		
PE 163	Volleyball I [PE]	1		
PE 164	Volleyball II [PE]	1		



# Degree & Certificate Requirements

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PE 165	Volleyball III [PE]	1		
PE 180/182	Adaptive PE [PE] + Lab	3		
PE 181	Swimming I [PE]	1		
PE 187	Baseball I [PE]	1–2		
PE 188	Baseball II [PE]	1		
PE 189	Baseball III [PE]	1		
PE 190	Cardio Kickboxing I [PE]	1		
PE 201	Exercise and Weights [PE]	1		
Subtotal		3		

## Electives

**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.**

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
		5		
		4		
Subtotal		24		
Total Credits Required		90		

## 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, completion coach or faculty advisor.
- Maximum three credits of PE may be applied.

## 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:

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# Degree & Certificate Requirements

## Associate in Science Transfer (AS-T1) in Biology/ Environmental Science/Chemistry/Geology/Earth Sciences TRANSFER

### 2020-2021 Degree Requirements

#### Communication

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL&102	Composition II [C]	5		
<b>Subtotal</b>		<b>5</b>		

#### Mathematics

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Mathematics - select 10 credits from the following:</b>				
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
MATH 243	Linear Algebra [M/S] [Q/SR]	5		
MATH&254	Calculus IV [M/S] [Q/SR]	5		
MATH 255	Differential Equations [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>10</b>		

# Degree & Certificate Requirements

## Humanities & Social/Behavioral Sciences

Select three courses from the list below. Complete at least one course from each of the two groups. 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.

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Group A - at least one course must be selected from this group. Courses must be selected from different subjects.</b>				
ART& 100	Art Appreciation [H]	5		
ART 116	Art History Ancient World [H]	5		
ART 117	Art History Medieval-Baroque [H]	5		
ART 118	Art History Modern Times [H]	5		
ART 119	Art History of Asia [H]	5		
ART 120	Art History of the Americas [H]	5		
CMST 221	Communication Skills for Conflict Resolution [H]	5		
CMST 246	Oral Interpretation [H]	5		
DRMA&101	Intro to Theatre [H]	5		
DRMA 215	Survey of Theatre History [H]	5		
EFL 101	Written English Language I [H]	5		
EFL 111	Written English Language II [H]	5		
ENGL&111	Intro to Literature [H]	5		
ENGL 140	The Cinema [H]	5		
ENGL 160	Women's Literature [H]	5		
ENGL 180	Multicultural Literature [H]	5		
ENGL 195	Bible as Literature [H]	5		
ENGL 203	Mythology [H]	5		
ENGL 210	Intro to Linguistics [H]	5		
ENGL&220	Intro to Shakespeare [H]	5		
ENGL&236	Creative Writing I [H]	5		
ENGL&237	Creative Writing II [H]	5		
ENGL&244	American Literature I [H]	5		
ENGL&245	American Literature II [H]	5		
ENGL&246	American Literature III [H]	5		
ENGL&254	World Literature I [H]	5		
ENGL&255	World Literature II [H]	5		
ENGL&256	World Literature III [H]	5		
ENGL 257	English Grammar [H]	5		
ENGL 264	English Literature [H]	5		
ENGL 265	English Literature [H]	5		
ENGL 266	English Literature [H]	5		
ENGL 275	The Lord of the Rings [H]	5		
ENGL 280	Lesbian, Gay, Bisexual, Trans, Queer Studies [H]	5		
HIST&126	World Civilizations I [H]	5		
HIST&127	World Civilizations II [H]	5		
HIST&128	World Civilizations III [H]	5		
ICS 120	Survey of Hispanic Culture [H]	5		
ICS 125	Native American Culture [H]	5		
ICS 130	Survey of Asian American Culture [H]	5		
ICS 135	Survey of African American Cultures [H]	5		
ICS 222	Columbia Basin Cultures [H]	5		
MUSC&105	Music Appreciation [H]	5		

# Degree & Certificate Requirements

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MUSC 116	History of Jazz [H]	5		
PHIL&101	Intro to Philosophy [H]	5		
PHIL 106	Introduction to Logic [H]	5		
PHIL 131	World Religions [H]	5		
PHIL 150	Introduction to Ethics [H]	5		
WS 155	Women's Cultural Heritage [H]	5		
World Languages numbered 121 and above (excluding conversational classes). All World Languages courses count as a single subject.		5		
<b>Group 2 - at least one course must be selected from this group. Courses must be selected from different subjects.</b>				
ANTH&100	Survey of Anthropology [S/B]	5		
ANTH&204	Archaeology [S/B]	5		
ANTH&206	Cultural Anthropology [S/B]	5		
ANTH&234	Religion & Culture [S/B]	5		
CJ& 101	Introduction to Criminal Justice [S/B]	5		
CMST&102	Intro to Mass Media [S/B]	5		
ECON 110	Economic Trends, Issues and Policy [S/B]	5		
ECON&201	Micro Economics [S/B]	5		
ECON&202	Macro Economics [S/B]	5		
ECON 291	History of American Economic Development [S/B]	1–5		
GEO 150	Cultural Geography [S/B]	5		
HIST 107	Chicano History [S/B]	5		
HIST 108	History of Immigration in the U.S. [S/B]	5		
HIST 110	History of Modern East Asia [S/B]	5		
HIST 111	Colonial Latin America [S/B]	5		
HIST 112	Modern Latin America [S/B]	5		
HIST 113	Mexico Since Independence [S/B]	5		
HIST 115	Intro to Middle East History & Society [S/B]	5		
HIST&146	U.S. History I [S/B]	5		
HIST&147	U.S. History II [S/B]	5		
HIST&148	U.S. History III [S/B]	5		
HIST 233	War in History [S/B]	5		
ICS 220	Globalization [S/B]	5		
ICS 255	Race and Ethnic Relations [S/B]	5		
POLS 104	State and Local Government [S/B]	5		
POLS&201	Intro Political Theory [S/B]	5		
POLS&202	American Government [S/B]	5		
POLS&203	International Relations [S/B]	5		
POLS&204	Comparative Government [S/B]	5		
POLS 205	American Political Thought [S/B]	5		
PSYC&100	General Psychology [S/B]	5		
PSYC&200	Lifespan Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
PSYC 209	Fundamentals of Psychological Research [S/B]	5		
PSYC&220	Abnormal Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		

# Degree & Certificate Requirements

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
SOC 110	Gender, Media, & Popular Culture [S/B]	5		
SOC 115	Intro to Middle East History & Society [S/B]	5		
SOC 150	Marriage, Family, and Relationships [S/B]	5		
SOC 160	Gender Studies [S/B]	5		
SOC& 201	Social Problems [S/B]	5		
SOC 220	Globalization [S/B]	5		
SOC 221	Sociology of Deviance and Crime [S/B]	5		
SOC 269	Sociology of World Cinema [S/B]	5		
SSCI 290	Social Research Methods [S/B]	4		
and				
SSCI 291	Social Research Methods Lab [S/B]	1		

**Subtotal 15**

## Pre-Major Courses - Chemistry

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
CHEM&162	General Chemistry II w/ Lab [M/S]	6		
CHEM&163	General Chemistry III w/ Lab [M/S]	6		

**Subtotal 18**

## Pre-Major Courses - Math

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Select 5 credits from the following:</b>				
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		

**Subtotal 5**

## Pre-Major Courses - Science

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Select one series from the following:</b>				
<b>Biology series:</b>				
BIOL&211	Majors Cellular w/ Lab [M/S]	5		
BIOL&212	Majors Plant w/ Lab [M/S]	5		
BIOL&213	Majors Animal w/ Lab [M/S]	5		
<b>Physics series 1:</b>				
PHYS&114	General Physics I w/ Lab [M/S]	5		
PHYS&115	General Physics II w/ Lab [M/S]	5		
PHYS&116	General Physics III w/ Lab [M/S]	5		
<b>Physics series 2:</b>				
PHYS&221	Engineering Physics I w/ Lab [M/S]	5		
PHYS&222	Engineering Physics II w/ Lab [M/S]	5		
PHYS&223	Engineering Physics III w/ Lab [M/S]	5		

**Subtotal 15**



# Degree & Certificate Requirements

## Pre-Major Courses - Additional Science

**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 two- or three-quarter sequence.**

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		0-5		

Subtotal 10-15

## 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. Select courses based on the requirements or the specific discipline at the baccalaureate institution you plan to attend. \*\*Some baccalaureate programs require physics with calculus. \*\*\*A single course cannot count in two areas.**

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		0-5		

Subtotal 10-15

Total Credits Required 93

## Note:

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

- 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, completion coach or faculty advisor.

## 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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# Degree & Certificate Requirements

## Associate in Science Transfer (AS-T2) in Engineering/ Computer Science/Physics/Atmospheric Sciences TRANSFER 2020-2021 Degree Requirements

### Communication

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL&102	Composition II [C]	5		
<b>Subtotal</b>		<b>5</b>		

### Mathematics

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Mathematics - select 10 credits from the following:</b>				
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
MATH 243	Linear Algebra [M/S] [Q/SR]	5		
MATH&254	Calculus IV [M/S] [Q/SR]	5		
MATH 255	Differential Equations [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>10</b>		

# Degree & Certificate Requirements

## Humanities & Social/Behavioral Sciences

Select three courses from the list below. Complete at least one course from each of the two groups. 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.

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Group 1 - at least one course must be selected from this group. Courses must be selected from different subjects.</b>				
ART& 100	Art Appreciation [H]	5		
ART 116	Art History Ancient World [H]	5		
ART 117	Art History Medieval-Baroque [H]	5		
ART 118	Art History Modern Times [H]	5		
ART 119	Art History of Asia [H]	5		
ART 120	Art History of the Americas [H]	5		
CMST 221	Communication Skills for Conflict Resolution [H]	5		
CMST 246	Oral Interpretation [H]	5		
DRMA&101	Intro to Theatre [H]	5		
DRMA 215	Survey of Theatre History [H]	5		
EFL 101	Written English Language I [H]	5		
EFL 111	Written English Language II [H]	5		
ENGL&111	Intro to Literature [H]	5		
ENGL 140	The Cinema [H]	5		
ENGL 160	Women's Literature [H]	5		
ENGL 180	Multicultural Literature [H]	5		
ENGL 195	Bible as Literature [H]	5		
ENGL 203	Mythology [H]	5		
ENGL 210	Intro to Linguistics [H]	5		
ENGL&220	Intro to Shakespeare [H]	5		
ENGL&236	Creative Writing I [H]	5		
ENGL&237	Creative Writing II [H]	5		
ENGL&244	American Literature I [H]	5		
ENGL&245	American Literature II [H]	5		
ENGL&246	American Literature III [H]	5		
ENGL&254	World Literature I [H]	5		
ENGL&255	World Literature II [H]	5		
ENGL&256	World Literature III [H]	5		
ENGL 257	English Grammar [H]	5		
ENGL 264	English Literature [H]	5		
ENGL 265	English Literature [H]	5		
ENGL 266	English Literature [H]	5		
ENGL 275	The Lord of the Rings [H]	5		
ENGL 280	Lesbian, Gay, Bisexual, Trans, Queer Studies [H]	5		
HIST&126	World Civilizations I [H]	5		
HIST&127	World Civilizations II [H]	5		
HIST&128	World Civilizations III [H]	5		
ICS 120	Survey of Hispanic Culture [H]	5		
ICS 125	Native American Culture [H]	5		
ICS 130	Survey of Asian American Culture [H]	5		
ICS 135	Survey of African American Cultures [H]	5		
ICS 222	Columbia Basin Cultures [H]	5		
MUSC&105	Music Appreciation [H]	5		

# Degree & Certificate Requirements

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MUSC 116	History of Jazz [H]	5		
PHIL&101	Intro to Philosophy [H]	5		
PHIL 106	Introduction to Logic [H]	5		
PHIL 131	World Religions [H]	5		
PHIL 150	Introduction to Ethics [H]	5		
WS 155	Women's Cultural Heritage [H]	5		
World Languages numbered 121 and above (excluding conversational classes). All World Languages courses count as a single subject.		5		
<b>Group 2 - at least one course must be selected from this group. Courses must be selected from different subjects.</b>				
ANTH&100	Survey of Anthropology [S/B]	5		
ANTH&204	Archaeology [S/B]	5		
ANTH&206	Cultural Anthropology [S/B]	5		
ANTH&234	Religion & Culture [S/B]	5		
CJ& 101	Introduction to Criminal Justice [S/B]	5		
CMST&102	Intro to Mass Media [S/B]	5		
ECON 110	Economic Trends, Issues and Policy [S/B]	5		
ECON&201	Micro Economics [S/B]	5		
ECON&202	Macro Economics [S/B]	5		
ECON 291	History of American Economic Development [S/B]	1–5		
GEO 150	Cultural Geography [S/B]	5		
HIST 107	Chicano History [S/B]	5		
HIST 108	History of Immigration in the U.S. [S/B]	5		
HIST 110	History of Modern East Asia [S/B]	5		
HIST 111	Colonial Latin America [S/B]	5		
HIST 112	Modern Latin America [S/B]	5		
HIST 113	Mexico Since Independence [S/B]	5		
HIST 115	Intro to Middle East History & Society [S/B]	5		
HIST&146	U.S. History I [S/B]	5		
HIST&147	U.S. History II [S/B]	5		
HIST&148	U.S. History III [S/B]	5		
HIST 233	War in History [S/B]	5		
ICS 220	Globalization [S/B]	5		
ICS 255	Race and Ethnic Relations [S/B]	5		
POLS 104	State and Local Government [S/B]	5		
POLS&201	Intro Political Theory [S/B]	5		
POLS&202	American Government [S/B]	5		
POLS&203	International Relations [S/B]	5		
POLS&204	Comparative Government [S/B]	5		
POLS 205	American Political Thought [S/B]	5		
PSYC&100	General Psychology [S/B]	5		
PSYC&200	Lifespan Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
PSYC 209	Fundamentals of Psychological Research [S/B]	5		
PSYC&220	Abnormal Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		

# Degree & Certificate Requirements

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
SOC 110	Gender, Media, & Popular Culture [S/B]	5		
SOC 115	Intro to Middle East History & Society [S/B]	5		
SOC 150	Marriage, Family, and Relationships [S/B]	5		
SOC 160	Gender Studies [S/B]	5		
SOC& 201	Social Problems [S/B]	5		
SOC 220	Globalization [S/B]	5		
SOC 221	Sociology of Deviance and Crime [S/B]	5		
SOC 269	Sociology of World Cinema [S/B]	5		
SSCI 290	Social Research Methods [S/B]	4		
and				
SSCI 291	Social Research Methods Lab [S/B]	1		

**Subtotal** 15

## Pre-Major Courses - Science

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

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
Any Science based on program requirements or CHEM& 161 for Engineering majors.		5-6		

**Subtotal** 5-6

## Pre-Major Courses - Math

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Select 5 credits from the following:</b>				
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		

**Subtotal** 5

## Pre-Major Courses - Computer Programming Language

**As advised for specific discipline/institution.**

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		

**Subtotal** 5

## Pre-Major Courses - Physics

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Select one series from the following:</b>				
<b>Physics series 1:</b>				
PHYS&114	General Physics I w/ Lab [M/S]	5		
PHYS&115	General Physics II w/ Lab [M/S]	5		
PHYS&116	General Physics III w/ Lab [M/S]	5		
<b>Physics series 2:</b>				
PHYS&221	Engineering Physics I w/ Lab [M/S]	5		
PHYS&222	Engineering Physics II w/ Lab [M/S]	5		
PHYS&223	Engineering Physics III w/ Lab [M/S]	5		

**Subtotal** 15



# Degree & Certificate Requirements

## 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.

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
		5		
		5		
		5		

Subtotal 30  
Total Credits Required 90-91

### Note:

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

- 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, completion coach or faculty advisor.

### 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, completion coach 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.

# Degree & Certificate Requirements

## Accounting Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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		
<b>Select 20 credits from the following:</b>				
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		
<b>Subtotal</b>		<b>35</b>		

### Major Support

**Select a minimum of 32 credits from the following:**

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS& 101	Introduction to Business	5		
BUS 120	Personal Finance	5		
or				
BUS 210	Managing Personal Finance	5		
PROJ 100	Introduction to Project Management	5		
BUS 165	Investments	5		
BUS& 201	Business Law	5		
BUS 255	Legal Institutions & Processes in Am. 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 [S/B]	5		
ECON&201	Micro Economics [S/B]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH 147	Finite Math [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>32-35</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>English - select 5 additional credits from the following:</b>				
ENGL&102	Composition II [C]	5		
ENGL&235	Technical Writing [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH 106	Business Mathematics	5		
Any MATH course higher than 106		5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      23-25  
**Total Credits Required**      90-95

# Degree & Certificate Requirements

## Accounting One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ACCT&201	Principles of Accounting I	5		
ACCT&202	Principles of Accounting II	5		
<b>Select 2 courses from the following:</b>				
BUS 105	Business & Payroll Tax Accounting	5		
BUS 111	Computerized Accounting	5		
BUS 250	Management Information Systems	5		
<b>Subtotal</b>		<b>20</b>		

### Major Support

**Select a minimum of 12 credits from the following:**

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS& 101	Introduction to Business	5		
BUS 107	Federal Income Taxes	5		
BUS 120	Personal Finance	5		
or				
BUS 210	Managing Personal Finance	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 Am. 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 [S/B]	5		
ECON&201	Micro Economics [S/B]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH 147	Finite Math [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>12-15</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH 106	Business Mathematics	5		
Any MATH course higher than 106		5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      **18-20**  
**Total Credits Required**      **50-55**

# Degree & Certificate Requirements

## Administrative Assistant Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AOT 117	Office Orientation	4		
AOT 142	General Office Procedures	5		
<b>Select 3 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 103	Workplace Communication	3		
CMST 110	Communication Behavior [C]	3		
<b>Subtotal</b>		<b>12</b>		

### Major Support

**Select 0-6 credits from the following:**

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AOT 156	Supervised Employment	2		
AOT 172	Word Processing I	4		
CA 100	Introduction to Microcomputers	4		
<b>Subtotal</b>		<b>0-6</b>		
<b>Total Credits Required</b>		<b>12-18</b>		



# Degree & Certificate Requirements

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## Advanced EMT Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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		

# Degree & Certificate Requirements

## Agribusiness Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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&201	Micro Economics [S/B]	5		
ECON&202	Macro Economics [S/B]	5		
CS 101	Intro to Computers & Information Technology	5		

**Subtotal 35**

### Major Support

Select 35 credits from the following:

Course Number	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 [M/S]	5		
BIOL 252	Insects of Economic Importance w/ Lab [M/S]	5		
BIOL 201	Soils w/ Lab [M/S]	5		
AG 289	Agriculture Business Concepts	5		
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
HORT 202	Cultivated Plants w/ Lab	5		
HORT 203	Crop Growth & Development w/ Lab	5		

**Subtotal 35**

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
ENGL&101	English Composition I [C]	5		

**English - select 5 additional credits from the following:**

ENGL&102	Composition II [C]	5		
ENGL&235	Technical Writing [C]	5		

**Psychology or Sociology - select 5 credits from the following:**

PSYC&100	General Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		

**Communication Studies - select 3-5 credits from the following:**

CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal 23-25**

**Total Credits Required 93-95**

# Degree & Certificate Requirements

## Agriculture (Emphasis) Associate in Arts & Sciences (AA/DTA)

TRANSFER

Option C

2020-2021 Degree Requirements

### Communication\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
ENGL&102	Composition II [C]	5		
<b>Select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST&220	Public Speaking [C]	5		
<b>Subtotal</b>		<b>13-15</b>		

### Quantitative/Symbolic Reasoning\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>5</b>		

### Humanities\*

See program advisor for appropriate selection

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
<b>Subtotal</b>		<b>15</b>		

### Social & Behavioral Sciences\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PSYC&100	General Psychology [S/B]	5		
<b>Select 10 credits from the following:</b>				
SOC& 101	Intro to Sociology [S/B]	5		
ECON&201	Micro Economics [S/B]	5		
ECON&202	Macro Economics [S/B]	5		
<b>Subtotal</b>		<b>15</b>		

### Mathematical & Natural Science\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BIOL 201	Soils w/ Lab [M/S]	5		
<b>Select 5-6 credits from the following:</b>				
CHEM&121	Intro to Chemistry w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
<b>Select 5 credits from the following:</b>				
BIOL&211	Majors Cellular w/ Lab [M/S]	5		
BIOL 140	Fundamentals of Botany w/ Lab [M/S]	5		
<b>Subtotal</b>		<b>15-16</b>		

# Degree & Certificate Requirements

## Health & Physical Education\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		3		
<b>Subtotal</b>		<b>3</b>		

## Electives\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Required:</b>				
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		
<b>Select a minimum of 5 credits from the following:</b>				
AG 289	Agriculture Business Concepts	5		
CHEM&162	General Chemistry II w/ Lab [M/S]	6		
or				
CHEM&122	Intro to Organic Chemistry w/ Lab [M/S]	5		
CHEM&163	General Chemistry III w/ Lab [M/S]	6		
or				
CHEM&123	Intro to Biochemistry w/ Lab [M/S]	5		
BIOL&212	Majors Plant w/ Lab [M/S]	5		
or				
BIOL&213	Majors Animal w/ Lab [M/S]	5		
BIOL 252	Insects of Economic Importance w/ Lab [M/S]	5		
ACCT&201	Principles of Accounting I	5		
ACCT&202	Principles of Accounting II	5		
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
<b>Subtotal</b>		<b>25-26</b>		
<b>Total Credits Required</b>		<b>91-95</b>		

## Note:

\*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.

- 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, completion coach or faculty advisor.
- Maximum three credits of PE may be applied.

# Degree & Certificate Requirements

## Agriculture Production Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AG 101	Crop Production I Field Crops w/ Lab	4		
AG 107	Agriculture Safety	3		
AG 117	Agriculture Mechanics and Machinery w/ Lab	4		
AG 140	Weed Science w/ Lab	4		
AG 181	Irrigation Principles and Management w/ Lab	4		
AG 205	Crop Pests and Diseases w/ Lab	4		
AG 221	Introduction to Precision Agriculture	3		
BIOL 201	Soils w/ Lab [M/S]	5		
AG 222	Advanced Precision Agriculture w/ Lab	4		
AG 250	GPS and GIS Applications w/ Lab	4		
CS 101	Intro to Computers & Information Technology	5		
AG 232	Crop Production II Fruit & Veg Production w/ Lab	4		
HORT 202	Cultivated Plants w/ Lab	5		
HORT 203	Crop Growth & Development w/ Lab	5		
HORT 242	Hydroponic Technology w/ Lab	4		
HORT 235	Greenhouse Production and Management w/ Lab	3		
AG 289	Agriculture Business Concepts	5		
AFS 101	Introduction to Agricultural Systems	5		
AG 297	Agriculture Internship	3		

**Subtotal 78**

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CHEM&110	Chemical Concepts w/ Lab [M/S]	5		
ENGL&101	English Composition I [C]	5		
CMST&220	Public Speaking [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH&107	Math in Society [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		

**Subtotal 20**  
**Total Credits Required 98**

# Degree & Certificate Requirements

## Applied Management Bachelor of Applied Science (BAS)

2020-2021 Degree Requirements

BAS-AM degree requires a minimum of 75 credits of 300- and 400-level courses

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Communication - 10 credits:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 410	Professional & Organizational Communication [C]	5		
<b>Quantitative/Symbolic Reasoning - select 5 credits from the following:</b>				
MATH&107	Math in Society [M/S] [Q/SR]	5		
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH 147	Finite Math [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Humanities - 10 credits:</b>				
ICS 310	American Diversity [H]	5		
PHIL 305	Professional Ethics [H]	5		
<b>Social &amp; Behavioral Sciences* - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
Social Science course		5		
<b>Social &amp; Behavioral Sciences - select 5 additional credits from the following:</b>				
ECON 305	Managerial Economics [S/B]	5		
ECON 315	Economics of Healthcare [S/B]	5		
Note: ECON 305 preferred for General Concentration.				
Note: ECON 315 preferred for Healthcare Concentration.				
<b>Mathematical &amp; Natural Science* - select 10 credits from the following:</b>				
ENVS 310	Environmental Issues [M/S]	5		
Natural Science w/ Lab		5		
<b>Additional Electives from the above distribution lists* - select 15 credits:</b>				
Program advisor approved Communication, Quantitative/Symbolic Reasoning, Social & Behavioral Sciences, Humanities or Mathematical & Natural Science				
		5		
		5		
		5		
<b>Subtotal</b>		<b>60</b>		



## Degree & Certificate Requirements

## Major Support\*\*

Course credits used for major support should be (1) related to the core coursework utilized by the student to procure the prerequisite degree, (2) represent excess general education credits and/or (3) be in a related field to the BAS concentration being pursued (e.g., BUS/ACCT for General; BIOL/HSCI for Healthcare Administration; AG/HORT for Agriculture).

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
		5		
		5		
		5		
		5		
		5		
		5		
		5		
		5		
		5		
		5		
<b>Subtotal</b>		<b>60</b>		

**Available concentrations: General, Healthcare Administration or Agriculture**

**Choose one concentration from below:**

## General

Course Number	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	5		
AMGT 340	Information Technology and Applications	5		
AMGT 360	Business Planning and Strategy	5		
AMGT 400	Financial and Managerial Accounting	5		

Note: Combination of ACCT& 201, 202 and 203 can be substituted as equivalent for AMGT 400 for a total of 5 credits counted towards the degree.

Classes/credits used for substitution cannot be used to fulfill other requirements.

AMGT 430	Fundamentals of Financial Management	5		
AMGT 480	Business Strategy Capstone	5		
or				
AMGT 490	Small Business Start-up Capstone	5		

**General Electives - select 15 credits from the following:**

AMGT 317	BAS Special Topics	1–5		
AMGT 350	Marketing for Managers	5		
AMGT 389	BAS Independent Study	1–5		
AMGT 417	BAS Special Topics	1–5		
AMGT 420	Human Resource Management	5		
AMGT 470	BAS Internship	1–5		
AMGT 489	BAS Independent Study	1–5		

Subtotal	60
<b>Total Credits Required</b>	<b>180</b>

# Degree & Certificate Requirements

## Healthcare Administration

Course Number	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		

Note: Combination of ACCT& 201, 202 and 203 can be substituted as equivalent for AMGT 400 for a total of 5 credits counted towards the degree. Classes/credits used for substitution cannot be used to fulfill other requirements.

AMGT 430	Fundamentals of Financial Management	5		
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	5		

### Healthcare Administration Electives - select 10 credits from the following:

AMGT 317	BAS Special Topics	1-5		
AMGT 360	Business Planning and Strategy	5		
AMGT 389	BAS Independent Study	1-5		
AMGT 417	BAS Special Topics	1-5		
AMGT 470	BAS Internship	1-5		
AMGT 489	BAS Independent Study	1-5		

**Subtotal** 60  
**Total Credits Required** 180

## Agriculture

Course Number	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	5		
AMGT 340	Information Technology and Applications	5		
AMGT 360	Business Planning and Strategy	5		
AMGT 400	Financial and Managerial Accounting	5		

Note: Combination of ACCT& 201, 202 and 203 can be substituted as equivalent for AMGT 400 for a total of 5 credits counted towards the degree. Classes/credits used for substitution cannot be used to fulfill other requirements.

AMGT 430	Fundamentals of Financial Management	5		
AG 480	Agriculture Management Capstone	5		

### Agriculture Electives - select 15 credits from the following:

AMGT 317	BAS Special Topics	1-5		
AMGT 350	Marketing for Managers	5		
AMGT 389	BAS Independent Study	1-5		
AMGT 417	BAS Special Topics	1-5		
AMGT 420	Human Resource Management	5		
AG 470	Agriculture Management Internship	1-10		
AMGT 489	BAS Independent Study	1-5		

**Subtotal** 60  
**Total Credits Required** 180

# Degree & Certificate Requirements

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**Note:**

\*Course selections must meet the distribution requirements for the BAS degree.

\*\*Course credits used for major support should be discussed with your completion coach or academic advisor.

- Students must earn a minimum 2.0 grade in all Applied Management courses.
- Required minimum 180 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade per distribution course 1.0.

# Degree & Certificate Requirements

## Automotive Technology Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AMT 107	Parts, Systems, and Components	4		
AMT 109	Tools and Hardware	3		
AMT 113	Maintenance Publications and Records	2		
AMT 114	Preventive Maintenance	5		
INT 105	Precision Measurement	1		
AMT 120	Basic Electrical Systems	4		
AMT 210	Automotive Electronics	4		
INT 251	Troubleshooting for Technicians	2		
AMT 220	Advanced Electrical & Electronics & Lab	7		
AMT 119	Suspension and Steering Systems Theory	2		
AMT 121	Suspension and Steering Systems Servicing	5		
AMT 123	Brake Systems I	5		
AMT 223	Brakes Systems II & Lab	5		
AMT 129	Engine Theory	3		
AMT 130	Engine Servicing	4		
AMT 133	Engine Repair	4		
AMT 134	Engine Rebuild	3		
AMT 233	Manual Transmissions & Lab	7		
AMT 240	Drivability Diagnostics & Lab	7		
AMT 243	Heating, Ventilation & Air Conditioning Systems	7		
<b>Subtotal</b>		<b>84</b>		

### Major Support Hybrid

Select 0-18 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AMT 250	Automotive Technology Systems Review	3		
AMT 251	Hybrid Operations and Safety	3		
AMT 252	High Voltage Basic Operations	3		
AMT 253	Basic Maintenance and Servicing of Hybrids	3		
AMT 254	High Voltage Diagnostics	3		
AMT 255	Component Replacement	3		
<b>Subtotal</b>		<b>0-18</b>		

### Major Support Body and Transmission

Select 2-12 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AMT 104	Diesel Engine Theory	2		
AMT 230	Automatic Transmission	5		
AMT 115	Basic Damage Repair	3		
AMT 116	Corrosion Protection	3		
AMT 117	Introduction to Paint Application	3		
AMT 118	Glass and Plastic Adhesive Repair	3		
<b>Subtotal</b>		<b>2-12</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH 111	Automotive Math	5		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
Note: ENGL 103 preferred				
<b>Human Relations - select 3-5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
PSYC 103	Applied Psychology	3		
BUS 271	Human Relations Business	5		
<b>Communication Studies - select 3 credits from the following:</b>				
CMST 103	Workplace Communication	3		
CMST 110	Communication Behavior [C]	3		
Note: CMST 103 preferred				

**Subtotal**      16-18  
**Total Credits Required**    102-132

# Degree & Certificate Requirements

## Automotive Technology Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AMT 107	Parts, Systems, and Components	4		
AMT 109	Tools and Hardware	3		
AMT 113	Maintenance Publications and Records	2		
AMT 114	Preventive Maintenance	5		
AMT 120	Basic Electrical Systems	4		
AMT 123	Brake Systems I	5		
AMT 129	Engine Theory	3		
AMT 130	Engine Servicing	4		
AMT 133	Engine Repair	4		
AMT 134	Engine Rebuild	3		
INT 105	Precision Measurement	1		

**Total Credits Required      42**

### Note:

Students must be admitted into the Automotive Technology program to work on this certificate. Students must complete the Basic Automotive Technician Short-Term Certificate or have earned advance placement credits as part of the admission requirements.



# Degree & Certificate Requirements

## Basic Automotive Technician Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AMT 107	Parts, Systems, and Components	4		
AMT 109	Tools and Hardware	3		
AMT 113	Maintenance Publications and Records	2		
AMT 114	Preventive Maintenance	5		
INT 105	Precision Measurement	1		

**Total Credits Required**      **15**

### Note:

Students must be admitted into the Automotive Technology program to work on this certificate. Students must complete the Basic Automotive Technician Short-Term Certificate or have earned advance placement credits as part of the admission requirements.

# Degree & Certificate Requirements

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## Basic Industrial Maintenance Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BPR 110	Basic Blueprints and Drawings	3		
ELT 101	Basic Electricity	5		
MNT 110	Fundamentals of Maintenance	7		
WT 100	Basic Welding	3		

**Total Credits Required      18**

# Degree & Certificate Requirements

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## Basic Industrial Mechanical Maintenance Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ELT 201	Basic Electronics	5		
MNT 111	Intro to Machine Operations	7		
MNT 210	Hydraulic and Pneumatic Systems	7		
Total Credits Required		19		

# Degree & Certificate Requirements

## Basic Machining Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
IHT 100	OSHA-10	1		
INT 105	Precision Measurement	1		
MT 111	Basic Machine Technology I	5		
MT 112	Basic Machine Technology I Lab	8		
Select 3 credits from the following:				
BPR 105	Blueprint Reading	3		
BPR 110	Basic Blueprints and Drawings	3		

Subtotal 18

### Major Support

Select 0-1 credit from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
INT 101	Forklift Operations	1		

Subtotal 0-1

Total Credits Required 18-19

# Degree & Certificate Requirements

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## Bone Densitometry Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
IMAGE100	Bone Densitometry	4		
IMAGE110	Bone Densitometry Clinical	4		
Total Credits Required		8		

### Program prerequisite:

Current enrollment in an approved Radiologic Technology program or ARRT certified radiologic technologist.

# Degree & Certificate Requirements

## Business Administration Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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&201	Micro Economics [S/B]	5		
ECON&202	Macro Economics [S/B]	5		
<b>Computer Science/Computer Applications - select 4-5 credits:</b>				
CA/CS 100+	Computer course(s)	4-5		
<b>Subtotal</b>		<b>34-35</b>		

### Major Support

Select 15 credits in your area of interest

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
<b>Subtotal</b>		<b>15</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH 106+	MATH 106 or above	5		
ENGL&101	English Composition I [C]	5		
<b>English - select 5 additional credits from the following:</b>				
ENGL&102	Composition II [C]	5		
ENGL&235	Technical Writing [C]	5		
<b>Natural Science with lab - select 5 credits:</b>				
		5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>28-30</b>		

Available Concentrations: General, Finance & Accounting, Marketing or Management  
Choose one concentration from below:



# Degree & Certificate Requirements

## General

Select 20 credits from courses within any of the three concentrations listed below

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
		5		

Subtotal 20  
Total Credits Required 97-100

## Finance & Accounting

Select 20 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS 105	Business & Payroll Tax Accounting	5		
BUS 107	Federal Income Taxes	5		
BUS 111	Computerized Accounting	5		
BUS 120	Personal Finance	5		
BUS 165	Investments	5		
BUS 210	Managing Personal Finance	5		
BUS 263	Principles of Finance	5		

Subtotal 20  
Total Credits Required 97-100

## Marketing

Select 20 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS 103	Principles of Sales	5		
BUS 265	Marketing Principles	5		
BUS 267	Marketing Special Projects	1-5		
BUS 268	Marketing Special Projects II	1-5		
BUS 280	Innovation & Design Thinking 1	5		
BUS 281	Innovation & Design Thinking 2	5		

Subtotal 20  
Total Credits Required 97-100

## Management

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS 250	Management Information Systems	5		
BUS 262	Management Principles	5		
BUS 263	Principles of Finance	5		
BUS 271	Human Relations Business	5		

Subtotal 20  
Total Credits Required 97-100

# Degree & Certificate Requirements

## Business Administration One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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		
<b>Computer Science/Computer Applications - select 4-5 credits:</b>				
CA/CS 100+	Computer course(s)	4-5		
<b>Subtotal</b>		<b>24-25</b>		

### Major Support

Select 23 credits; see advisor for the list of optional courses and to make your selection

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
		5		
		3		
<b>Subtotal</b>		<b>23</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
MATH 106+	MATH 106 or above	5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>18-20</b>		
<b>Total Credits Required</b>		<b>65-68</b>		

# Degree & Certificate Requirements

## Business Associate in Arts & Sciences (AA/DTA/MRP) TRANSFER

### 2020-2021 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, completion coach 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 \*1

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
ENGL&102	Composition II [C]	5		
Subtotal		10		

#### Quantitative/Symbolic Reasoning

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
Select 5 credits from the following:				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH 147	Finite Math [M/S] [Q/SR]	5		
Note: MATH 147 recommended				
Select 5 credits from the following:				
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
Note: MATH 148 recommended				
Subtotal		10		

#### Humanities \*2 \*3

No more than 10 credits per discipline area; only 5 credits of world language will apply. Course selections must meet the distribution requirements for the AA degree.

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
Subtotal		15		

#### Social & Behavioral Sciences \*4

Course selections must meet the distribution requirements for the AA degree

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ECON&201	Micro Economics [S/B]	5		
ECON&202	Macro Economics [S/B]	5		
Social Science Course		5		
Subtotal		15		

# Degree & Certificate Requirements

## Mathematical & Natural Science \*5

Course selections must meet the distribution requirements for the AA degree

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
Select one physical, biological and/or earth science, including at least one lab course:				
		5		
Select one math, physical, biological or earth science course:				
		5		
<b>Subtotal</b>		<b>15</b>		

## Business \*6

Course Number	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		
<b>Subtotal</b>		<b>20</b>		

## Electives \*7

Computer Science course or other appropriate elective

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS 250	Management Information Systems	5		
Note: BUS 250 recommended				
<b>Subtotal</b>		<b>5</b>		
<b>Total Credits Required</b>		<b>90</b>		

## Note:

\*1 In addition to ENGL& 101, the second English Composition course must be equivalent to Eastern Washington University (EWU)'s English 201 Composition course.

\*2 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.

\*3 Washington State University (WSU) business students should complete CMST& 220 which for the Business DTA/MRP will count as a humanities class.

\*4 Check with transfer institution for best selection for third social science course.

\*5 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.

\*6 EWU, Central Washington University (CWU), University of Washington (UW), WSU, WWU, Gonzaga University, 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. International students who completed a business course specific to their home country must take a business law course at a U.S. Institution in order to demonstrate proficiency in U.S. business law.

\*7 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

Students should contact their potential transfer institution(s) for advice on which general elective course to take.

# Degree & Certificate Requirements

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## Child Development Associate (CDA) Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ECED 141	Child Development Associate	10		

**Total Credits Required**      **10**

# Degree & Certificate Requirements

## Commercial Driver's License Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CDL 101	Commercial Driver's 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	2		
CDL 145	Preventive Maintenance	1		
CDL 150	Cooperative Work Experience	1		

**Subtotal** 15

### Major Support

Select 0-2 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
IHT 100	OSHA-10	1		
INT 101	Forklift Operations	1		

**Subtotal** 0-2

**Total Credits Required** 15-17

# Degree & Certificate Requirements

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## Computed Tomography (CT) Technology Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
IMAGE250	Cross Sectional Anatomy	3		
IMAGE270	CT Clinical Practicum I	12		
IMAGE280	CT Instrumentation	3		
Total Credits Required		18		



# Degree & Certificate Requirements

## Computer Aided Drafting One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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		
<b>Subtotal</b>		<b>9</b>		

### Electives

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>CAD Electives - select a minimum of 9 credits from the following:</b>				
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		
<b>ENT Electives - must meet course prerequisites:</b>				
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		
<b>Subtotal</b>		<b>20</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
MATH 113	Geometry/Trigonometry [M/S]	5		
<b>Human Relations - select 3-5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
PSYC 103	Applied Psychology	3		
PSYC 201	Social Psychology [S/B]	5		
BUS 271	Human Relations Business	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>16-20</b>		
<b>Total Credits Required</b>		<b>45-49</b>		

# Degree & Certificate Requirements

## Computer Basic Applications Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 101	Intro to Computers & Information Technology	5		
CS 107	Intermediate Word Processing	2		
CS 108	Intermediate Spreadsheets	2		
CS 123	PC Hardware	5		
CS 127	Windows Configuration	5		

**Total Credits Required**      **19**

### Note:

This short-term certificate provides an opportunity 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 Science Associate in Arts & Sciences (AA/DTA/MRP) TRANSFER

### 2020-2021 Degree Requirements

Some colleges/universities have requirements for admissions to the Computer Science 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, completion coach 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 Computer Science 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 Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>English *1 or Communication *1 - select 5 additional credits:</b>				
ENGL&102	Composition II [C]	5		
ENGL&235	Technical Writing [C]	5		
CMST&220	Public Speaking [C]	5		
<b>Subtotal</b>		<b>10</b>		

#### Quantitative/Symbolic Reasoning

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&151	Calculus I [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>5</b>		

#### Humanities \*2

**No more than 10 credits per discipline area; only 5 credits of world language will apply. Course selections must meet the distribution requirements for the AA degree.**

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
<b>Subtotal</b>		<b>15</b>		

#### Social & Behavioral Sciences \*3

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

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
<b>Subtotal</b>		<b>15</b>		

#### Mathematical & Natural Science \*4 \*5

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PHYS&221	Engineering Physics I w/ Lab [M/S]	5		
PHYS&222	Engineering Physics II w/ Lab [M/S]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>15</b>		

# Degree & Certificate Requirements

## Major Requirements \*6 \*7

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&153	Calculus III [M/S] [Q/SR]	5		
MATH&254	Calculus IV [M/S] [Q/SR]	5		
<b>Computer Programming I - select 5 credits from the following:</b>				
CS& 131	Computer Science I C++ [M/S]	5		
CS& 141	Computer Science I Java [M/S]	5		
<b>Computer Programming II - select 5 credits from the following:</b>				
CS 162	C++2 [M/S]	5		
CS 236	Advanced Object Oriented Programming [M/S]	5		
<b>Subtotal</b>		<b>20</b>		

## Electives \*8

Course selections must meet the distribution requirements for the AA degree

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
<b>Subtotal</b>		<b>10</b>		
<b>Total Credits Required</b>		<b>90</b>		

## Note:

\*1 Eastern Washington University (EWU) - ENGL&102. Whitworth University - Oral Communications.

\*2 EWU - Introductory Ethics (PHIL 150). Gonzaga University - Philosophy (PHIL& 101), Communications (CMST& 101) and Ethics (PHIL 150) for 15 credits.

\*3 Washington State University (WSU) Vancouver - Macro or Micro Economics (ECON& 201 or ECON& 202) for 5 credits.

\*4 University of Washington (UW) Tacoma - Can substitute PHYS& 222 with any lab-based science for 5 credits.

\*5 UW Tacoma - Statistics (MATH& 146) instead of Calculus II (MATH& 152).

\*6 UW Bothell - Statistics (MATH& 146) instead of Calculus III (MATH& 153) and Calculus IV (MATH& 254). UW Tacoma - Does not require Calculus III (MATH& 153) and Calculus IV (MATH& 254). WSU (all campuses) - Calculus III (MATH& 153) and Calculus IV (MATH& 254).

\*7 Central Washington University (CWU), UW Seattle, Heritage University - Two Java Courses (CS& 141 and CS 236). UW Bothell - Two courses in one language (C Sharp, C++, or Java). UW Tacoma - Intro Programming and Object Oriented Programming (Java). WSU Tri-Cities - Two C++ courses. Other Institutions - Two courses in either C++ or Java.

\*8 EWU - Linear Algebra (MATH 243). Gonzaga - Engineering Physics w/Lab (PHYS& 223) and Discrete Math (MATH 246). Heritage and Whitworth - Engineering Physics III w/Lab (PHYS& 223). Pacific Lutheran University Tacoma, Pacific University and Seattle University - Physical, Biological and/or Earth Sciences w/Lab. WSU (all campuses) and Western Washington University - Physical, Biological and/or Earth Sciences w/Lab and Engineering Physics (PHYS& 223).

# Degree & Certificate Requirements

## Computer and Information Technology Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 101	Intro to Computers & Information Technology	5		
CS 102	Programming Fundamentals [M/S]	5		
CS& 131	Computer Science I C++ [M/S]	5		
CS 106	Database Systems	5		
CS 117	Computer Ethics	2		
CS 118	Customer Service	3		
CS 150	Computer Security	5		
CS 228	Windows Server	5		
Total Credits Required		30		

### Note:

Certificate prerequisites: ENGL 098 and MATH 083. MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 or MATH 072 with a minimum grade of 2.0 is a prerequisite for all programming classes. Students must receive a minimum grade of 2.5 in all Computer Science courses.

# Degree & Certificate Requirements

## Computer and Information Technology One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 101	Intro to Computers & Information Technology	5		
CS 102	Programming Fundamentals [M/S]	5		
CS& 131	Computer Science I C++ [M/S]	5		
CS 106	Database Systems	5		
CS 117	Computer Ethics	2		
CS 118	Customer Service	3		
CS 150	Computer Security	5		
CS 228	Windows Server	5		
<b>Subtotal</b>		<b>30</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
Any PSYC course higher than 100		5		
SOC& 101	Intro to Sociology [S/B]	5		
SOC& 201	Social Problems [S/B]	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>20-21</b>		
<b>Total Credits Required</b>		<b>50-51</b>		

### Note:

MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 or MATH 072 with a minimum grade of 2.0 is a prerequisite for all programming classes. Students must receive a minimum grade of 2.5 in all Computer Science courses.

# Degree & Certificate Requirements

## Criminal Justice Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CJ& 101	Introduction to Criminal Justice [S/B]	5		
CJ& 110	Criminal Law	5		
CJ 134	Organization/Administration	5		
CJ 135	Traffic Control	5		
CJ 136	Delinquent Behavior/Youth	5		
CJ 137	Constitutional Law	5		
CJ 222	Alcohol/Drug Pharmacology/Physiology	3		
CJ 232	Criminal Investigation	5		
CJ 234	Criminal Evidence	5		
CJ& 240	Intro to Forensic Science	5		
<b>Subtotal</b>		<b>42</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
*MATH 106+	MATH 106 or above	5		
CA/CS 100+	Computer Science course(s)	5		
ENGL&101	English Composition I [C]	5		
<b>English - select 5 additional credits from the following:</b>				
ENGL&102	Composition II [C]	5		
ENGL&235	Technical Writing [C]	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Science - select 10 credits:</b>				
		5		
		5		
<b>Humanities - select 15 credits:</b>				
		5		
		5		
		5		
<b>Social Science - select 15 credits:</b>				
		5		
		5		
		5		
<b>Subtotal</b>		<b>62-65</b>		
<b>Total Credits Required</b>		<b>104-107</b>		

\*To be approved by department



# Degree & Certificate Requirements

## Crop & Soil Science (Emphasis) Associate in Arts & Sciences (AA/DTA)

TRANSFER

Option C

2020-2021 Degree Requirements

### Communication\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
ENGL&102	Composition II [C]	5		
<b>Select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST&220	Public Speaking [C]	5		
<b>Subtotal</b>		<b>13-15</b>		

### Quantitative/Symbolic Reasoning\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>5</b>		

### Humanities\*

See program advisor for appropriate selection

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
<b>Subtotal</b>		<b>15</b>		

### Social & Behavioral Sciences\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PSYC&100	General Psychology [S/B]	5		
<b>Select 10 credits from the following:</b>				
SOC& 101	Intro to Sociology [S/B]	5		
ECON&201	Micro Economics [S/B]	5		
ECON&202	Macro Economics [S/B]	5		
<b>Subtotal</b>		<b>15</b>		

### Mathematical & Natural Science\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BIOL 201	Soils w/ Lab [M/S]	5		
<b>Select 5-6 credits from the following:</b>				
CHEM&121	Intro to Chemistry w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
<b>Select 5 credits from the following:</b>				
BIOL&211	Majors Cellular w/ Lab [M/S]	5		
BIOL 140	Fundamentals of Botany w/ Lab [M/S]	5		
<b>Subtotal</b>		<b>15-16</b>		

# Degree & Certificate Requirements

## Health & Physical Education\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		3		
<b>Subtotal</b>		<b>3</b>		

## Electives\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Required:</b>				
BIOL 252	Insects of Economic Importance w/ Lab [M/S]	5		
HORT 202	Cultivated Plants w/ Lab	5		
HORT 203	Crop Growth & Development w/ Lab	5		
<b>Select a minimum of 10 credits from the following:</b>				
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 [M/S]	6		
or				
CHEM&122	Intro to Organic Chemistry w/ Lab [M/S]	5		
CHEM&163	General Chemistry III w/ Lab [M/S]	6		
or				
CHEM&123	Intro to Biochemistry w/ Lab [M/S]	5		
BIOL&212	Majors Plant w/ Lab [M/S]	5		
or				
BIOL&213	Majors Animal w/ Lab [M/S]	5		
ACCT&201	Principles of Accounting I	5		
ACCT&202	Principles of Accounting II	5		
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		

**Subtotal**    **25-27**  
**Total Credits Required**    **91-96**

## Note:

\*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

- 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, completion coach or faculty advisor.
- Maximum three credits of PE may be applied.

# Degree & Certificate Requirements

## Crop and Soil Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AG 101	Crop Production I Field Crops w/ Lab	4		
AG 107	Agriculture Safety	3		
AG 117	Agriculture Mechanics and Machinery w/ Lab	4		
AG 140	Weed Science w/ Lab	4		
AG 181	Irrigation Principles and Management w/ Lab	4		
AG 205	Crop Pests and Diseases w/ Lab	4		
AG 221	Introduction to Precision Agriculture	3		
BIOL 201	Soils w/ Lab [M/S]	5		
Total Credits Required		31		

# Degree & Certificate Requirements

## Cyber Security Associate in Applied Science (AAS)

### PROFESSIONAL TECHNICAL

### 2020-2021 Degree Requirements

#### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 101	Intro to Computers & Information Technology	5		
CS 102	Programming Fundamentals [M/S]	5		
or				
CS& 131	Computer Science I C++ [M/S]	5		
CS 106	Database Systems	5		
CS 117	Computer Ethics	2		
CS 118	Customer Service	3		
CS 150	Computer Security	5		
CS 228	Windows Server	5		

**Subtotal**      **30**

#### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 162	C++2 [M/S]	5		
or				
CS 202	Programming Fundamentals 2 [M/S]	5		
CS 206	Database Design	5		
CS 221	SQL Server Administration	5		
CS 223	UNIX/Linux	5		
CS 231	Network Infrastructure	5		
CS 232	Network Security	5		
CSIA 200	Computer Forensics Fundamentals	5		
CSIA 250	Networking Fundamentals	5		

**Subtotal**      **40**

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
Any PSYC course higher than 100		5		
SOC& 101	Intro to Sociology [S/B]	5		
SOC& 201	Social Problems [S/B]	5		
<b>Communication Studies - select 5-6 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      **20-21**  
**Total Credits Required**      **90-91**

### Note:

MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 or MATH 072 with a minimum grade of 2.0 is a prerequisite for all programming classes. Students must receive a minimum grade of 2.5 in all Computer Science courses.

# Degree & Certificate Requirements

## Cyber Security Bachelor of Applied Science (BAS)

2020-2021 Degree Requirements

BAS degrees require a minimum of 60 credits of 300- and 400-level courses

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 101	Intro to Computers & Information Technology	5		
CS 102	Programming Fundamentals [M/S]	5		
or				
CS& 131	Computer Science I C++ [M/S]	5		
CS 106	Database Systems	5		
CS 117	Computer Ethics	2		
CS 118	Customer Service	3		
CS 150	Computer Security	5		
CS 162	C++2 [M/S]	5		
or				
CS 202	Programming Fundamentals 2 [M/S]	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		

**Subtotal 115**

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PROJ 100	Introduction to Project Management	5		

**Subtotal 5**

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>Communication - select 5 additional credits from the following:</b>				
ENGL&102	Composition II [C]	5		
ENGL&235	Technical Writing [C]	5		
ENGL 410	Professional & Organizational Communication [C]	5		
<b>Quantitative/Symbolic Reasoning - select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Social &amp; Behavioral Sciences - select 10 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
Choose any course from this distribution list		5		
SOC 305	Cybercrime: A Sociological Perspective [S/B]	5		
<b>Humanities - 10 credits:</b>				
PHIL 305	Professional Ethics [H]	5		
ICS 310	American Diversity [H]	5		
<b>Mathematical &amp; Natural Science - select 10 credits from the following:</b>				
Choose a lab science from this distribution list		5		
Choose any course from this distribution list		5		
<b>Additional Electives from the above distribution lists - select 15 credits:</b>				
Program advisor approved Communication, Quantitative/Symbolic Reasoning, Social & Behavioral Sciences, Humanities or Mathematical & Natural Science				
		5		
		5		
		5		
<b>Subtotal</b>		<b>60</b>		
<b>Total Credits Required</b>		<b>180</b>		

### Note:

- Students must earn a minimum 2.0 grade in all CSIA and CSIT courses.
- Students must earn a minimum 2.5 grade in all CS courses.
- Required minimum cumulative GPA 2.0.
- Minimum 2.0 grade in MATH 050, 070, 072, 094, 095 or 098 is a prerequisite for all programming classes.



# Degree & Certificate Requirements

## Database Administrator Associate in Applied Science (AAS)

### PROFESSIONAL TECHNICAL

### 2020-2021 Degree Requirements

#### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 101	Intro to Computers & Information Technology	5		
CS 102	Programming Fundamentals [M/S]	5		
or				
CS& 131	Computer Science I C++ [M/S]	5		
CS 106	Database Systems	5		
CS 117	Computer Ethics	2		
CS 118	Customer Service	3		
CS 150	Computer Security	5		
CS 228	Windows Server	5		

**Subtotal 30**

#### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 206	Database Design	5		
CS 221	SQL Server Administration	5		
CS 223	UNIX/Linux	5		
CS 225	SQL Server Programming	5		
CS 232	Network Security	5		

**Select 15 credits from the following:**

CS 123	PC Hardware	5		
or				
CS 127	Windows Configuration	5		
CS 140	SharePoint	5		
CS 162	C++2 [M/S]	5		
or				
CS 202	Programming Fundamentals 2 [M/S]	5		
CS 250	HTML5-JavaScript/JQuery	5		

**Subtotal 40**

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
Any PSYC course higher than 100		5		
SOC& 101	Intro to Sociology [S/B]	5		
SOC& 201	Social Problems [S/B]	5		
<b>Communication Studies - select 5-6 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      **20-21**  
**Total Credits Required**      **90-91**

### Note:

MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 or MATH 072 with a minimum grade of 2.0 is a prerequisite for all programming classes. Students must receive a minimum grade of 2.5 in all Computer Science courses.

# Degree & Certificate Requirements

## Dental Hygiene (Completion Degree) Bachelor of Applied Science (BAS)

2020-2021 Degree Requirements

BAS degrees require a minimum of 60 credits of 300- and 400-level courses

**For students with CBC's AAS in Dental Hygiene degree only**

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
DHYG 409	Community Oral Health Research II	2		
DHYG 415	Community Oral Health Practicum	2		
DHYG 416	Educational Theory and Methodology	2		
NRS 315	Healthcare Informatics/Information Technology	5		

**Subtotal 11**

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>*Select 5-6 credits from the following:</b>				
CHEM&121	Intro to Chemistry w/ Lab [M/S]	5		
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		

**\*\*Select 5 credits from the following:**

CHEM&122	Intro to Organic Chemistry w/ Lab [M/S]	5		
CHEM&131	Intro to Organic/Biochemistry w/ Lab [M/S]	5		

**Subtotal 10-11**

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL 315	Writing for Health Professionals [C]	5		
PSYC 201	Social Psychology [S/B]	5		
ICS 310	American Diversity [H]	5		
PHIL 315	Professional Ethics in Healthcare [H]	5		

**\*\*\*Communication Studies - select 5 credits from the following:**

CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal 25**

### AAS in Dental Hygiene Curriculum

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
Previously completed AAS in Dental Hygiene degree coursework		140		

**Subtotal 140**

**Total Credits Required 186-187**

### Note:

\*Students who started the AAS program after the 2007-08 academic year previously completed CHEM& 121 as a prerequisite and do not need to select 5 credits from this section of Major Support course options.

\*\*Students who started the AAS program in the 2017-18 academic year previously completed both CHEM&121 and CHEM&122 as prerequisites and do not need to select 10 credits from the Major Support course options.

\*\*\*Students who completed the AAS program with 3-5 credits of Communication Studies need 5 additional credits for a total of 8-10 Communication Studies credits.

# Degree & Certificate Requirements

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# Degree & Certificate Requirements

## Dental Hygiene Bachelor of Applied Science (BAS)

2020-2021 Degree Requirements

BAS degrees require a minimum of 60 credits of 300- and 400-level courses

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
DHYG 301	Dental Anatomy	1		
DHYG 302	Histology/Embryology	2		
DHYG 303	Oral Radiology I	1		
DHYG 304	Oral Radiology I Lab	1		
DHYG 305	Clinical Dental Hygiene Techniques I	2		
DHYG 306	Clinical Dental Hygiene Techniques I Lab	3		
DHYG 307	Dental Health Education	1		
DHYG 308	Dental Materials	1		
DHYG 309	Dental Materials Lab	1		
DHYG 310	Head and Neck Anatomy	2		
DHYG 311	Medical Emergencies in Dentistry	2		
DHYG 312	General Pathology	2		
DHYG 313	Oral Radiology II	1		
DHYG 314	Oral Radiology II Lab	1		
DHYG 315	Clinical Dental Hygiene Techniques II	2		
DHYG 316	Clinical Dental Hygiene Techniques II Lab	4		
DHYG 318	Restorative Dentistry I	1		
DHYG 319	Restorative Dentistry I Lab	1		
DHYG 320	Pain Control in Dentistry	2		
DHYG 321	Pain Control in Dentistry Lab	2		
DHYG 322	Pharmacology	2		
DHYG 323	Oral Pathology	2		
DHYG 324	Periodontics I	2		
DHYG 325	Clinical Dental Hygiene Techniques III	2		
DHYG 326	Clinical Dental Hygiene Techniques III Lab	4		
DHYG 327	Restorative Dentistry II	1		
DHYG 328	Restorative Dentistry II Lab	2		
DHYG 329	Patient Management	2		
DHYG 330	Clinical Dental Hygiene Techniques IV	1		
DHYG 331	Clinical Dental Hygiene Techniques IV Lab	5		
DHYG 401	Restorative Dentistry III	1		
DHYG 402	Restorative Dentistry III Lab	2		
DHYG 403	Community Oral Health Research I	2		
DHYG 404	Nutrition in Dentistry	1		
DHYG 405	Advanced Clinical Topics	1		
DHYG 406	Clinical Dental Hygiene Techniques V	1		
DHYG 407	Clinical Dental Hygiene Techniques V Lab	6		
DHYG 408	Ethics and Jurisprudence, Practice Management	2		
DHYG 409	Community Oral Health Research II	2		
DHYG 410	Periodontics II	2		
DHYG 411	Clinical Dental Hygiene Techniques VI	1		

# Degree & Certificate Requirements

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
DHYG 412	Clinical Dental Hygiene Techniques VI Lab	7		
DHYG 413	Clinical Dental Hygiene Techniques VII	1		
DHYG 414	Clinical Dental Hygiene Techniques VII Lab	9		
DHYG 415	Community Oral Health Practicum	2		
DHYG 416	Educational Theory and Methodology	2		
NRS 315	Healthcare Informatics/Information Technology	5		

**Subtotal 103**

## Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BIOL&241	Human A&P 1 w/ Lab [M/S]	5-6		
BIOL&242	Human A&P 2 w/ Lab [M/S]	5-6		
NUTR&101	Nutrition [M/S]	5		
BIOL&260	Microbiology w/ Lab [M/S]	5-6		

**Select 5-6 credits from the following:**

CHEM&121	Intro to Chemistry w/ Lab [M/S]	5		
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		

**Select 5 credits from the following:**

CHEM&122	Intro to Organic Chemistry w/ Lab [M/S]	5		
CHEM&131	Intro to Organic/Biochemistry w/ Lab [M/S]	5		

**Subtotal 30-34**

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
ENGL 315	Writing for Health Professionals [C]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
PSYC&100	General Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
ICS 310	American Diversity [H]	5		
PHIL 315	Professional Ethics in Healthcare [H]	5		

**Communication Studies - select 10 credits from the following:**

CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal 50**

**Total Credits Required 183-187**

# Degree & Certificate Requirements

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## EMT-Basic Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
EMT 101	Emergency Medical Technician-Basic	10		

**Total Credits Required**      **10**



# Degree & Certificate Requirements

## Early Childhood Education Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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		
EDUC&130	Guiding Behavior	3		
ECED&132	Infants & Toddlers--Nurturing 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 for Young Children	3		
ECED&180	Language & Literacy Development	3		
ECED&190	Observation/Assessment	3		
EDUC&203	Exceptional Child	3		

**Subtotal 56-58**

# Degree & Certificate Requirements

## 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 (with prior approval).

Course Number	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 127	Music & Movement	3		
ECED&134	Family Child Care Management	3		
EDUC&136	School Age Care	3		
ECED&138	Home Visitor/Family Engagement	3		
ECED&139	Administration of ECE	3		
ECED 141	Child Development Associate	10		
or				
ECED 143-149, 153	Child Development Associate	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 Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Communication Studies - select a minimum of 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Social Sciences - select 10 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
<b>Mathematics - 5 credits:</b>				
MATH 100+	MATH 100 or above	5		
Note: MATH& 171 recommended for BAS path				

**Subtotal**      **25**  
**Total Credits Required**      **96-98**

### Note:

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.

\*The AAS in ECE requires 16-20 General Education credits. If intention is to continue and apply for BASTE, students will need 45 General Education credits.

# Degree & Certificate Requirements

## Engineering Technology Associate in Applied Science (AAS)

### PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

#### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENT 111	Introduction to Engineering	5		
ENT 121	Engineering Fundamentals w/ Lab	4		
ENT 122	Materials	3		
ENT 124	Intermediate Drafting	4		
ENT 128	Architecture & Engineering Blueprint Reading	2		
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		
<b>Introduction to Drafting - select 4-5 credits from the following:</b>				
ENT 114	Introduction to Drafting	4		
or				
ENT 118	Spatial Visualization	2		
and				
ENT 267	AutoCAD I w/ Lab	3		

**Subtotal 70-71**

#### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PHYS&114	General Physics I w/ Lab [M/S]	5		
PHYS&115	General Physics II w/ Lab [M/S]	5		
<b>Physics or English - select 5 credits from the following:</b>				
PHYS&116	General Physics III w/ Lab [M/S]	5		
ENGL&235	Technical Writing [C]	5		

**Subtotal 15**

#### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH 113	Geometry/Trigonometry [M/S]	5		
or				
MATH&142	Precalculus II [M/S] [Q/SR]	5		

**Subtotal 15**

# Degree & Certificate Requirements

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

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Human Relations - select 3-5 credits from the following:</b>				
PSYC 103	Applied Psychology	3		
PSYC&100	General Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
BUS 271	Human Relations Business	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      **6-10**  
**Total Credits Required**      **106-111**

# Degree & Certificate Requirements

## Entrepreneurship and Innovation Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ACCT&201	Principles of Accounting I	5		
ACCT&202	Principles of Accounting II	5		
BUS 103	Principles of Sales	5		
BUS 179	Introduction to Entrepreneurship	5		
BUS 262	Management Principles	5		
BUS 263	Principles of Finance	5		
BUS 279	Intermediate Entrepreneurship	5		
BUS 280	Innovation & Design Thinking 1	5		
BUS 281	Innovation & Design Thinking 2	5		
BUS& 201	Business Law	5		
ECON&201	Micro Economics [S/B]	5		
ECON&202	Macro Economics [S/B]	5		

**Total Credits Required      60**

### Major Support

**Select 10 credits from the following:**

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS 111	Computerized Accounting	5		
BUS 265	Marketing Principles	5		
BUS 267	Marketing Special Projects	5		

**Subtotal      10**

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS 271	Human Relations Business	5		
ENGL&101	English Composition I [C]	5		
MATH 106+	MATH 106 or above	5		

**Communication Studies - select 5 credits from the following:**

CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal      20**

**Total Credits Required      90**

# Degree & Certificate Requirements

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## Entrepreneurship and Innovation Certificate

### PROFESSIONAL TECHNICAL

#### 2020-2021 Certificate Requirements

##### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS 179	Introduction to Entrepreneurship	5		
BUS 262	Management Principles	5		
BUS 263	Principles of Finance	5		
BUS 279	Intermediate Entrepreneurship	5		
BUS 280	Innovation & Design Thinking 1	5		
BUS 281	Innovation & Design Thinking 2	5		

**Total Credits Required      30**

# Degree & Certificate Requirements

## Fire Science Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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		

**Total Credits Required      31**

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&235	Technical Writing [C]	5		
<b>Political Science - select 5 credits from the following:</b>				
POLS&202	American Government [S/B]	5		
POLS 104	State and Local Government [S/B]	5		
<b>Business Administration - select 5 credits from the following:</b>				
BUS 262	Management Principles	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 Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
		5		
		5		
		3		

**Subtotal      28**



# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
MATH 106+	MATH 106 or above	5		
PSYC 100+	PSYC 100 or above	3-5		
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      **18-20**  
**Total Credits Required**      **92-94**

# Degree & Certificate Requirements

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## Food Truck Academy Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CUL 116	Food Truck Academy I	10		
CUL 117	Food Truck Academy II	8		
Subtotal		18		

# Degree & Certificate Requirements

## Forensic Science Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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	5		
CJ& 240	Intro to Forensic Science	5		
<b>Subtotal</b>		<b>23</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
or				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
and				
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
CHEM&162	General Chemistry II w/ Lab [M/S]	6		
CHEM&163	General Chemistry III w/ Lab [M/S]	6		
CHEM 254	Quantitative Analysis [M/S]	2		
CHEM 255	Instrumental Analysis [M/S]	2		
CHEM 265	Instrumental Analysis Lab [M/S]	3		
<b>Subtotal</b>		<b>53-58</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
ENGL&235	Technical Writing [C]	5		
CS& 131	Computer Science I C++ [M/S]	5		
<b>Humanities, Social Science, Natural Science - select 15 credits, no more than 10 credits from any one department:</b>				
		5		
		5		
		5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>33-35</b>		
<b>Total Credits Required</b>		<b>109-116</b>		

# Degree & Certificate Requirements

## Health Physics Bachelor of Applied Science (BAS)

2020-2021 Degree Requirements

BAS degrees require a minimum of 60 credits of 300- and 400-level courses

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ELT 124	Direct Current Circuits	5		
NT 111	Basic Nuclear Math & Physics	5		
NT 121	Reactor Plant Operations	4		
or				
NT 122	Basic Nuclear Facilities	4		
NT 131	Nuclear Facility Components	4		
NT 141	Basic Reactor Safety, Theory, & Operations	5		
or				
NT 142	Basic Nuclear Safety & Environmental Compliance	5		
NT 150	Internship Seminar	1		
NT 152	Internship	5		
or				
NT 154	Industry Project	5		
NT 160	Nuclear Chemistry	3		
NT 170	Mechanical & Fluid Power Transmission	4		
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		
HPHYS300	Radiation Physics I	5		
HPHYS305	Radiation Physics II	5		
HPHYS310	Nuclear Forensics	5		
HPHYS315	Radiological and Nuclear Emergency Response	5		
HPHYS320	Environmental Radioactivity	5		
HPHYS350	Health Physics Seminar I	1		
HPHYS400	External Dosimetry	5		
HPHYS405	Internal Dosimetry	5		
HPHYS410	Radiation Biology	5		
HPHYS415	Radiation Detection and Measurement & Lab	5		
HPHYS420	Medical Health Physics	5		
HPHYS425	Nuclear and Radiological Regulatory Framework	5		
HPHYS450	Health Physics Seminar II	1		

**Subtotal 123**

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Communication - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Quantitative/Symbolic Reasoning - 20 credits:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
<b>Humanities* -10 credits:</b>				
PHIL 305	Professional Ethics [H]	5		
Choose any course from this distribution		5		
<b>Social &amp; Behavioral Sciences* - select 10 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
Choose any course from this distribution		5		
<b>Mathematical &amp; Natural Science* - select 20-21 credits from the following:</b>				
BIOL&175	Human Biology w/ Lab [M/S]	5		
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
or				
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
ENVS 310	Environmental Issues [M/S]	5		
PHYS&110	Physics for Non-Science Majors w/ Lab [M/S]	5		
or				
Any PHYS& course higher than 110		5		

**Subtotal**      **70-71**  
**Total Credits Required**      **193-194**

## Note:

\*Course selections must meet the distribution requirements for the BAS degree.

- Students must earn a minimum 2.5 grade in all Health Physics (HPHYS) 300- and 400-level courses.
- Required minimum 180 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade 2.0 for MATH&141 and MATH&142.
- Minimum grade per distribution course 1.0.

# Degree & Certificate Requirements

## Healthcare Central Service Technology Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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 Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
HSCI 147	Medical Terminology	5		
Subtotal		5		
Total Credits Required		23		

# Degree & Certificate Requirements

## Hospitality Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Select 13-19 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
HSP 101	Front Desk Representative	2		
HSP 102	Guestroom Attendant	2		
HSP 103	Restaurant Server	2		
HSP 104	Maintenance Employee	2		
HSP 105	Kitchen Cook	2		
HSP 106	Breakfast Attendant	2		
HSP 107	Guest Service Professional	2		
HSP 108	Hospitality Internship	1-6		
CA 100	Introduction to Microcomputers	4		
IHT 100	OSHA-10	1		

Total Credits Required 13-19

# Degree & Certificate Requirements

## Hydroponics and Greenhouse Management Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
HORT 202	Cultivated Plants w/ Lab	5		
HORT 203	Crop Growth & Development w/ Lab	5		
HORT 242	Hydroponic Technology w/ Lab	4		
HORT 235	Greenhouse Production and Management w/ Lab	3		
AG 289	Agriculture Business Concepts	5		

**Total Credits Required**      **22**



# Degree & Certificate Requirements

## IT Support Technician Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 101	Intro to Computers & Information Technology	5		
CS 102	Programming Fundamentals [M/S]	5		
or				
CS& 131	Computer Science I C++ [M/S]	5		
CS 106	Database Systems	5		
CS 117	Computer Ethics	2		
CS 118	Customer Service	3		
CS 150	Computer Security	5		
CS 228	Windows Server	5		
<b>Subtotal</b>		<b>30</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 123	PC Hardware	5		
CS 127	Windows Configuration	5		
CS 223	UNIX/Linux	5		
CS 231	Network Infrastructure	5		
CS 232	Network Security	5		
CS 250	HTML5-JavaScript/JQuery	5		
<b>Select 10 additional credits from any CS courses:</b>				
CS		5		
CS		5		
<b>Subtotal</b>		<b>40</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
Any PSYC course higher than 100		5		
SOC& 101	Intro to Sociology [S/B]	5		
SOC& 201	Social Problems [S/B]	5		
<b>Communication Studies - select 5-6 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      **20-21**  
**Total Credits Required**      **90-91**

### Note:

MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 or MATH 072 with a minimum grade of 2.0 is a prerequisite for all programming classes. Students must receive a minimum grade of 2.5 in all Computer Science courses.

# Degree & Certificate Requirements

## Industrial Technology Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Select 10-19 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
IHT 100	OSHA-10	1		
INT 101	Forklift Operations	1		
INT 103	Basic HVAC	3		
ELT 101	Basic Electricity	5		
ELT 201	Basic Electronics	5		
BPR 110	Basic Blueprints and Drawings	3		
WT 100	Basic Welding	3		
MNT 110	Fundamentals of Maintenance	7		
MNT 111	Intro to Machine Operations	7		
MNT 210	Hydraulic and Pneumatic Systems	7		

Total Credits Required 10-19

# Degree & Certificate Requirements

## Information Technology Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 101	Intro to Computers & Information Technology	5		
CS 102	Programming Fundamentals [M/S]	5		
or				
CS& 131	Computer Science I C++ [M/S]	5		
CS 106	Database Systems	5		
CS 117	Computer Ethics	2		
CS 118	Customer Service	3		
CS 150	Computer Security	5		
CS 228	Windows Server	5		
<b>Subtotal</b>		<b>30</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS& 141	Computer Science I Java [M/S]	5		
CS 162	C++2 [M/S]	5		
or				
CS 202	Programming Fundamentals 2 [M/S]	5		
CS 206	Database Design	5		
CS 221	SQL Server Administration	5		
CS 225	SQL Server Programming	5		
CS 232	Network Security	5		
CS 236	Advanced Object Oriented Programming [M/S]	5		
CS 250	HTML5-JavaScript/JQuery	5		
<b>Subtotal</b>		<b>40</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
Any PSYC course higher than 100		5		
SOC& 101	Intro to Sociology [S/B]	5		
SOC& 201	Social Problems [S/B]	5		
<b>Communication Studies - select 5-6 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      **20-21**  
**Total Credits Required**      **90-91**

### Note:

MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 or MATH 072 with a minimum grade of 2.0 is a prerequisite for all programming classes. Students must receive a minimum grade of 2.5 in all Computer Science courses.

# Degree & Certificate Requirements

## Information Technology Bachelor of Applied Science (BAS)

2020-2021 Degree Requirements

BAS degrees require a minimum of 60 credits of 300- and 400-level courses

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 101	Intro to Computers & Information Technology	5		
CS 102	Programming Fundamentals [M/S]	5		
or				
CS& 131	Computer Science I C++ [M/S]	5		
CS 106	Database Systems	5		
CS 117	Computer Ethics	2		
CS 118	Customer Service	3		
CS& 141	Computer Science I Java [M/S]	5		
CS 150	Computer Security	5		
CS 162	C++2 [M/S]	5		
or				
CS 202	Programming Fundamentals 2 [M/S]	5		
CS 206	Database Design	5		
CS 221	SQL Server Administration	5		
CS 225	SQL Server Programming	5		
CS 228	Windows Server	5		
CS 232	Network Security	5		
CS 236	Advanced Object Oriented Programming [M/S]	5		
CS 250	HTML5-JavaScript/JQuery	5		
CSIT 301	Information Systems	5		
CSIT 306	Intro to Big Data and Analysis	5		
CSIT 311	Python for Data Processing	5		
CSIT 316	Cloud Computing HTML5 and PHP	5		
CSIT 401	Information Systems Analysis and Design	5		
CSIT 411	Agile Methodology & ePortfolio Planning	5		
CSIT 416	Data Visualization	5		
CSIT 421	IT Capstone	5		
CSIA 310	E-Commerce Security	5		
or				
any CSIA course 300-level or above		5		
<b>Subtotal</b>		<b>115</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PROJ 100	Introduction to Project Management	5		
<b>Subtotal</b>		<b>5</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>English - 5 credits:</b>				
ENGL&101	English Composition I [C]	5		
<b>English - select 5 additional credits from the following:</b>				
ENGL&102	Composition II [C]	5		
ENGL&235	Technical Writing [C]	5		
ENGL 410	Professional & Organizational Communication [C]	5		
<b>Quantitative/Symbolic Reasoning - select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Humanities - 10 credits:</b>				
ICS 310	American Diversity [H]	5		
PHIL 305	Professional Ethics [H]	5		
<b>Social &amp; Behavioral Sciences - 5 credits:</b>				
SOC 305	Cybercrime: A Sociological Perspective [S/B]	5		
<b>Social &amp; Behavioral Sciences* - select 5 additional credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
Choose any course from this distribution		5		
<b>Mathematical &amp; Natural Science* - select 10 credits from the following:</b>				
Choose any course from this distribution		5		
Choose a lab science from this distribution		5		
<b>Additional Electives from the above distribution lists* - select 15 credits:</b>				
Program advisor approved Communication, Quantitative/Symbolic Reasoning, Social & Behavioral Sciences, Humanities or Mathematical & Natural Science				
		5		
		5		
		5		
<b>Subtotal</b>		<b>60</b>		
<b>Total Credits Required</b>		<b>180</b>		

## Note:

\*Course selections must meet the distribution requirements for the BAS degree.

- Students must earn a minimum 2.0 grade in all CSIA and CSIT courses.
- Students must earn a minimum 2.5 grade in all CS courses.
- Required minimum 180 credits.
- Required minimum cumulative GPA 2.0.
- MATH 094 or MATH 095 or MATH 096 or MATH 098 or MATH 050 or MATH 070 or MATH 072 with minimum grade 2.0 is a prerequisite for all programming classes.

# Degree & Certificate Requirements

## Innovation & Design Thinking Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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&201	Micro Economics [S/B]	5		
ECON&202	Macro Economics [S/B]	5		
Any Computer Science or Computer Applications course 100-level or higher		4-5		
<b>Subtotal</b>		<b>34-35</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PROJ 100	Introduction to Project Management	5		
BUS 280	Innovation & Design Thinking 1	5		
BUS 281	Innovation & Design Thinking 2	5		
BUS 282	Innovation Capstone	5		
BUS 265	Marketing Principles	5		
BUS 267	Marketing Special Projects	3		
<b>Additional approved electives - select 7 credits:</b>				
		5		
		2		
<b>Subtotal</b>		<b>35</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>English - select 5 additional credits from the following:</b>				
ENGL&102	Composition II [C]	5		
ENGL&235	Technical Writing [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH 106	Business Mathematics	5		
Any MATH course higher than 106		5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>28-30</b>		
<b>Total Credits Required</b>		<b>97-100</b>		



# Degree & Certificate Requirements

## Innovation & Design Thinking One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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 [S/B]	5		
<b>Subtotal</b>		<b>20</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PROJ 100	Introduction to Project Management	5		
BUS 280	Innovation & Design Thinking 1	5		
BUS 281	Innovation & Design Thinking 2	5		
BUS 282	Innovation Capstone	5		
BUS 265	Marketing Principles	5		
BUS 267	Marketing Special Projects	3		
<b>Subtotal</b>		<b>28</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
MATH 106+	MATH 106 or above	5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>18-20</b>		
<b>Total Credits Required</b>		<b>66-68</b>		

# Degree & Certificate Requirements

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## Innovation & Design Thinking Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS 280	Innovation & Design Thinking 1	5		
BUS 281	Innovation & Design Thinking 2	5		
BUS 282	Innovation Capstone	5		
BUS 267	Marketing Special Projects	4		

**Total Credits Required      19**

# Degree & Certificate Requirements

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## Introduction to CNC Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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		

# Degree & Certificate Requirements

## Light Body Repair Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AMT 107	Parts, Systems, and Components	4		
AMT 115	Basic Damage Repair	3		
AMT 116	Corrosion Protection	3		
AMT 117	Introduction to Paint Application	3		
AMT 118	Glass and Plastic Adhesive Repair	3		

Subtotal 16

### Major Support

Select 0-2 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
INT 101	Forklift Operations	1		
IHT 100	OSHA-10	1		

Subtotal 0-2

Total Credits Required 16-18

# Degree & Certificate Requirements

## Logistics Technician Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
INT 130	Logistics Technician	6		
Subtotal		6		

### Major Support

Select 0-6 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CA 100	Introduction to Microcomputers	4		
IHT 100	OSHA-10	1		
INT 101	Forklift Operations	1		

Subtotal 0-6  
Total Credits Required 6-12

# Degree & Certificate Requirements

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## Magnetic Resonance Imaging (MRI) Technology Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
IMAGE250	Cross Sectional Anatomy	3		
IMAGE271	MRI Clinical Practicum	12		
IMAGE281	MRI Instrumentation and Procedures	3		
Total Credits Required		18		

# Degree & Certificate Requirements

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## Mammography Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
IMAGE225	Mammography	4		
IMAGE229	Mammography Clinical	4		
Total Credits Required		8		

# Degree & Certificate Requirements

## Manual Precision Machining Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
IHT 100	OSHA-10	1		
INT 105	Precision Measurement	1		
BPR 105	Blueprint Reading	3		
MT 111	Basic Machine Technology I	5		
MT 112	Basic Machine Technology I Lab	8		
MT 121	Basic Machine Technology II	5		
MT 122	Basic Machine Technology II Lab	8		
MT 131	Basic Machine Technology III	5		
MT 132	Basic Machine Technology III Lab	8		
Total Credits Required		44		



# Degree & Certificate Requirements

## Math Education Associate in Arts & Sciences (AA/DTA/MRP)

### TRANSFER

### 2020-2021 Degree Requirements

#### Communication\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
ENGL&102	Composition II [C]	5		
Communication - select 5 credits from the following:				
CMST 104	Speech Essentials [C]	3		
CMST&220	Public Speaking [C]	5		

Subtotal 13-15

#### Quantitative/Symbolic Reasoning\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&151	Calculus I [M/S] [Q/SR]	5		

Subtotal 5

#### Humanities\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		

Subtotal 15

#### Social & Behavioral Sciences\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PSYC&100	General Psychology [S/B]	5		
		5		
		5		

Subtotal 15

#### Mathematical & Natural Science\*

One course must be a laboratory science

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&152	Calculus II [M/S] [Q/SR]	5		
		5		
		5		

Subtotal 15

#### Health & Physical Education\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		3		

Subtotal 3

# Degree & Certificate Requirements

## Emphasis Courses

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

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&153	Calculus III [M/S] [Q/SR]	5		
MATH&254	Calculus IV [M/S] [Q/SR]	5		
MATH 243	Linear Algebra [M/S] [Q/SR]	5		
Additional electives with departmental approval:				
		5		
		4		

**Subtotal            24**  
**Total Credits Required    90-92**

## Note:

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

- 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, completion coach or faculty advisor.
- Maximum three credits of PE may be applied.

# Degree & Certificate Requirements

## Mathematics (Emphasis) Associate in Arts & Sciences (AA/DTA)

TRANSFER

Option C

2020-2021 Degree Requirements

### Communication\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
ENGL&		5		
CMST		3		
<b>Subtotal</b>		<b>13</b>		

### Quantitative/Symbolic Reasoning\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&151	Calculus I [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>5</b>		

### Humanities\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
<b>Subtotal</b>		<b>15</b>		

### Social & Behavioral Sciences\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		
<b>Subtotal</b>		<b>15</b>		

### Mathematical & Natural Science\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
PHYS&221	Engineering Physics I w/ Lab [M/S]	5		
<b>Subtotal</b>		<b>15</b>		

### Health & Physical Education\*

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		3		
<b>Subtotal</b>		<b>3</b>		

# Degree & Certificate Requirements

## Electives\*

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

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&254	Calculus IV [M/S] [Q/SR]	5		
PHYS&222	Engineering Physics II w/ Lab [M/S]	5		
MATH 243	Linear Algebra [M/S] [Q/SR]	5		
MATH 255	Differential Equations [M/S] [Q/SR]	5		
Additional elective with departmental approval		5		

**Subtotal**      **25**  
**Total Credits Required**      **91**

## Note:

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

- 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, completion coach or faculty advisor.
- Maximum three credits of PE may be applied.

# Degree & Certificate Requirements

## Medical Assistant Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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	2		
MA 242	Externship	6		
<b>Subtotal</b>		<b>55</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
HSCI 147	Medical Terminology	5		
<b>Electives - select 15 credits of courses level 100 or above from the Humanities, Social Science, Behavioral Science or Natural Science distribution list:</b>				
		5		
		5		
		5		
<b>Subtotal</b>		<b>20</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
MATH 106+	MATH 106 or above (except MATH 109)	5		
PSYC&100	General Psychology [S/B]	5		
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>20</b>		
<b>Total Credits Required</b>		<b>95</b>		

# Degree & Certificate Requirements

## Medical Assistant One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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	2		
MA 242	Externship	6		
<b>Subtotal</b>		<b>55</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
HSCI 147	Medical Terminology	5		
<b>Subtotal</b>		<b>5</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
PSYC&100	General Psychology [S/B]	5		
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>15</b>		
<b>Total Credits Required</b>		<b>75</b>		

# Degree & Certificate Requirements

## Medical Records & Healthcare Information Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MRHI 101	Introduction to Health Information Practices	5		
MRHI 103	Legal Aspects of Healthcare	5		
MRHI 114	Human Body Structure, Function, and Disease I	4		
MRHI 150	Pharmacology in Allied Health	3		
MRHI 195	Practicum I	2		
MRHI 201	Coding I	5		
MRHI 205	Health Information Administration	5		
MRHI 206	Data Integrity	5		
MRHI 207	Intro to Revenue Cycle	5		
MRHI 211	Coding II	5		
MRHI 214	Human Body Structure, Function, and Disease II	4		
MRHI 221	Coding III	5		
MRHI 295	Practicum II	3		
<b>Subtotal</b>		<b>56</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
HSCI 147	Medical Terminology	5		
CS 101	Intro to Computers & Information Technology	5		
Elective		5		
Elective		5		
<b>Subtotal</b>		<b>20</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
PSYC&100	General Psychology [S/B]	5		
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>20</b>		
<b>Total Credits Required</b>		<b>96</b>		

# Degree & Certificate Requirements

## Medical Records & Healthcare Information One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MRHI 101	Introduction to Health Information Practices	5		
MRHI 103	Legal Aspects of Healthcare	5		
MRHI 114	Human Body Structure, Function, and Disease I	4		
MRHI 195	Practicum I	2		
MRHI 207	Intro to Revenue Cycle	5		
MRHI 214	Human Body Structure, Function, and Disease II	4		
<b>Subtotal</b>		<b>25</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
HSCI 147	Medical Terminology	5		
CS 101	Intro to Computers & Information Technology	5		
<b>Subtotal</b>		<b>10</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
PSYC&100	General Psychology [S/B]	5		
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>20</b>		
<b>Total Credits Required</b>		<b>55</b>		



# Degree & Certificate Requirements

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## Medical Secretary Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MA 140	Admin. Medical Assistant Office Procedures I	5		
MRHI 101	Introduction to Health Information Practices	5		
MRHI 195	Practicum I	2		
HSCI 147	Medical Terminology	5		

**Total Credits Required**      **17**

# Degree & Certificate Requirements

## Medical Simulation Technology Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
SIM 110	Fundamentals of Simulaton Programming	2		
SIM 120	Medical Equipment Research	2		
SIM 130	Introducation to Medical Simulation	5		
SIM 140	Basic Simulation Maintenance	5		
SIM 161	Pharmacology Lab	1		
SIM 212	Advanced Life Support Scenarios	5		
SIM 220	Simulation Systems Administration	5		
SIM 221	Pediatric Simulations	5		
SIM 222	Clinical Focused Simulations	3		
SIM 230	LMS for Simulation	2		
SIM 233	Simulation By Design	3		
SIM 295	Practicum in Community Simulation	2		
SIM 297	Simulation Seminar	1		
<b>Subtotal</b>		<b>41</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 104	Intro to Computer Hardware	3		
CS& 141	Computer Science I Java [M/S]	5		
or				
CS& 131	Computer Science I C++ [M/S]	5		
HED 119	Medical Terminology	5		
HED 160	Pharmacology	3		
BIOL&170	Human Biology	5		
FAD 150	Industrial First Aid	2		
<b>Subtotal</b>		<b>23</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
ENGL&235	Technical Writing [C]	5		
MATH&141	Precalculus I [M/S] [Q/SR]	5		
PSYC&100	General Psychology [S/B]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
<b>Subtotal</b>		<b>30</b>		

**Total Credits Required** **94**

### Note:

For more information about this program, visit Big Bend Community College at [bigbend.edu/academics/programs/medical-simulation](http://bigbend.edu/academics/programs/medical-simulation).

Students apply to and enroll at Big Bend Community College for core courses. For specific questions, contact Andrea Elliott at [andreae@bigbend.edu](mailto:andreae@bigbend.edu) or 509-793-2125.

# Degree & Certificate Requirements

## Multi-Occupational Trades Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
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.				
<b>Subtotal</b>		<b>5650</b>		
		<b>hours/129</b>		
		<b>credits</b>		

### Major Support

Select one of the following with approval from JATC:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS& 101	Introduction to Business	5		
BUS 262	Management Principles	5		
CA 100	Introduction to Microcomputers	4		
SPAN&121+	Spanish I [H] or above	5		
<b>Subtotal</b>		<b>4-5</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH 106+	MATH 106 or above	5		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Human Relations - select 3-5 credits from the following:</b>				
PSYC 103	Applied Psychology	3		
PSYC&100	General Psychology [S/B]	5		
BUS 271	Human Relations Business	5		
CMST 260	Multicultural Communication [C]	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 103	Workplace Communication	3		
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
<b>Subtotal</b>		<b>16-20</b>		
<b>Total Credits Required</b>		<b>149-154</b>		

# Degree & Certificate Requirements

## Network Administrator Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 101	Intro to Computers & Information Technology	5		
CS 102	Programming Fundamentals [M/S]	5		
or				
CS& 131	Computer Science I C++ [M/S]	5		
CS 106	Database Systems	5		
CS 117	Computer Ethics	2		
CS 118	Customer Service	3		
CS 150	Computer Security	5		
CS 228	Windows Server	5		
<b>Subtotal</b>		<b>30</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 223	UNIX/Linux	5		
CS 230	Active Directory	5		
CS 231	Network Infrastructure	5		
CS 232	Network Security	5		
CS 250	HTML5-JavaScript/JQuery	5		
<b>Select 15 additional credits from the following:</b>				
CS 123	PC Hardware	5		
CS 127	Windows Configuration	5		
CS 140	SharePoint	5		
CS 162	C++2 [M/S]	5		
or				
CS 202	Programming Fundamentals 2 [M/S]	5		
CS 221	SQL Server Administration	5		
CSIA 200	Computer Forensics Fundamentals	5		
<b>Subtotal</b>		<b>40</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
Any PSYC course higher than 100		5		
SOC& 101	Intro to Sociology [S/B]	5		
SOC& 201	Social Problems [S/B]	5		
<b>Communication Studies - select 5-6 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      **20-21**  
**Total Credits Required**      **90-91**

### Note:

MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 or MATH 072 with a minimum grade of 2.0 is a prerequisite for all programming classes. Students must receive a minimum grade of 2.5 in all Computer Science courses.

# Degree & Certificate Requirements

## Nuclear Technology Instrumentation & Control Technician Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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		
ELT 171	Digital Fundamentals	5		
ELT 211	Applied Electronics	5		
IC 201	Instrumentation I	5		
IC 202	Instrumentation II	5		
IC 203	Instrumentation III	5		
IC 230	PLC Programming & Computer Interfacing	5		
NT 111	Basic Nuclear Math & Physics	5		
NT 114	Introduction to Radiation Safety	5		
NT 121	Reactor Plant Operations	4		
or				
NT 122	Basic Nuclear Facilities	4		
NT 131	Nuclear Facility Components	4		
NT 141	Basic Reactor Safety, Theory, & Operations	5		
or				
NT 142	Basic Nuclear Safety & Environmental Compliance	5		
NT 150	Internship Seminar	1		
NT 152	Internship	1-5		
or				
NT 154	Industry Project	1-5		
NT 160	Nuclear Chemistry	3		
NT 170	Mechanical & Fluid Power Transmission	4		
<b>Subtotal</b>		<b>81</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Chemistry - select 5-6 credits from the following:</b>				
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
<b>Physics - select 5 credits from the following:</b>				
PHYS&110	Physics for Non-Science Majors w/ Lab [M/S]	5		
Any PHYS& course higher than 110		5		
<b>Subtotal</b>		<b>10-11</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Mathematics - 5 credits:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
<b>Social &amp; Behavioral Sciences - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		

**Subtotal**      **20**  
**Total Credits Required**    **111-112**

# Degree & Certificate Requirements

## Nuclear Technology Instrumentation & Control Technician One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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		
NT 111	Basic Nuclear Math & Physics	5		
NT 114	Introduction to Radiation Safety	5		
NT 121	Reactor Plant Operations	4		
or				
NT 122	Basic Nuclear Facilities	4		
NT 131	Nuclear Facility Components	4		
NT 141	Basic Reactor Safety, Theory, & Operations	5		
or				
NT 142	Basic Nuclear Safety & Environmental Compliance	5		
<b>Subtotal</b>		<b>38</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Chemistry - select 5-6 credits from the following:</b>				
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
<b>Physics - select 5 credits from the following:</b>				
PHYS&110	Physics for Non-Science Majors w/ Lab [M/S]	5		
Any PHYS& course higher than 110		5		
<b>Subtotal</b>		<b>10-11</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Mathematics - 5 credits:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>15</b>		
<b>Total Credits Required</b>		<b>63-64</b>		



# Degree & Certificate Requirements

## Nuclear Technology Non-Licensed Nuclear Operator Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ELT 124	Direct Current Circuits	5		
IC 250	Instrumentation & Control for Operators	5		
IC 260	Process Instrumentation	5		
NT 111	Basic Nuclear Math & Physics	5		
NT 114	Introduction to Radiation Safety	5		
NT 121	Reactor Plant Operations	4		
or				
NT 122	Basic Nuclear Facilities	4		
NT 131	Nuclear Facility Components	4		
NT 141	Basic Reactor Safety, Theory, & Operations	5		
or				
NT 142	Basic Nuclear Safety & Environmental Compliance	5		
NT 150	Internship Seminar	1		
NT 152	Internship	1-5		
or				
NT 154	Industry Project	1-5		
NT 160	Nuclear Chemistry	3		
NT 170	Mechanical & Fluid Power Transmission	4		
NOP 111	Hydraulic and Fluid Flows	5		
NOP 221	Advanced Operational Systems	5		
NOP 231	Advanced Facility Components	5		
NOP 241	Chemical & Water Treatment Systems	5		
NOP 251	Advanced Thermodynamics and Heat Transfer	4		

**Subtotal 75**

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Chemistry - select 5-6 credits from the following:</b>				
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
<b>Physics - select 5 credits from the following:</b>				
PHYS&110	Physics for Non-Science Majors w/ Lab [M/S]	5		
Any PHYS& course higher than 110		5		

**Subtotal 10-11**

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Mathematics - 5 credits:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
<b>Social &amp; Behavioral Sciences - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		

**Subtotal**      **20**  
**Total Credits Required**    **105-106**

# Degree & Certificate Requirements

## Nuclear Technology Non-Licensed Nuclear Operator One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ELT 124	Direct Current Circuits	5		
NT 111	Basic Nuclear Math & Physics	5		
NT 114	Introduction to Radiation Safety	5		
NT 121	Reactor Plant Operations	4		
or				
NT 122	Basic Nuclear Facilities	4		
NT 131	Nuclear Facility Components	4		
NT 141	Basic Reactor Safety, Theory, & Operations	5		
or				
NT 142	Basic Nuclear Safety & Environmental Compliance	5		
<b>Subtotal</b>		<b>28</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Chemistry - select 5-6 credits from the following:</b>				
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
<b>Physics - select 5 credits from the following:</b>				
PHYS&110	Physics for Non-Science Majors w/ Lab [M/S]	5		
Any PHYS& course higher than 110		5		
<b>Subtotal</b>		<b>10-11</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Mathematics - 5 credits:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>15</b>		
<b>Total Credits Required</b>		<b>53-54</b>		

# Degree & Certificate Requirements

## Nuclear Technology Radiation Protection Technician Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ELT 124	Direct Current Circuits	5		
NT 111	Basic Nuclear Math & Physics	5		
NT 121	Reactor Plant Operations	4		
or				
NT 122	Basic Nuclear Facilities	4		
NT 131	Nuclear Facility Components	4		
NT 141	Basic Reactor Safety, Theory, & Operations	5		
or				
NT 142	Basic Nuclear Safety & Environmental Compliance	5		
NT 150	Internship Seminar	1		
NT 152	Internship	1-5		
or				
NT 154	Industry Project	1-5		
NT 160	Nuclear Chemistry	3		
NT 170	Mechanical & Fluid Power Transmission	4		
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		
<b>Subtotal</b>		<b>66</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Biology - 5 credits:</b>				
BIOL&175	Human Biology w/ Lab [M/S]	5		
<b>Chemistry - select 5-6 credits from the following:</b>				
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
<b>Physics - select 5 credits from the following:</b>				
PHYS&110	Physics for Non-Science Majors w/ Lab [M/S]	5		
Any PHYS& course higher than 110		5		
<b>Subtotal</b>		<b>15-16</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Mathematics - select 5-10 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
<b>Social &amp; Behavioral Sciences - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		

**Subtotal**      **20-25**  
**Total Credits Required**      **101-107**

# Degree & Certificate Requirements

## Nuclear Technology Radiation Protection Technician One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ELT 124	Direct Current Circuits	5		
NT 111	Basic Nuclear Math & Physics	5		
NT 121	Reactor Plant Operations	4		
or				
NT 122	Basic Nuclear Facilities	4		
NT 131	Nuclear Facility Components	4		
NT 141	Basic Reactor Safety, Theory, & Operations	5		
or				
NT 142	Basic Nuclear Safety & Environmental Compliance	5		
RPT 111	Radiation Fundamentals	5		
<b>Subtotal</b>		<b>28</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Biology or Chemistry - select 5-6 credits from the following:</b>				
BIOL&175	Human Biology w/ Lab [M/S]	5		
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
CHEM&161	General Chemistry I w/ Lab [M/S]	6		
<b>Physics - select 5 credits from the following:</b>				
PHYS&110	Physics for Non-Science Majors w/ Lab [M/S]	5		
Any PHYS& course higher than 110		5		
<b>Subtotal</b>		<b>10-16</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Mathematics - 5 credits:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
<b>Subtotal</b>		<b>15</b>		
<b>Total Credits Required</b>		<b>53-59</b>		

# Degree & Certificate Requirements

## Nursing (ADN) Associate in Applied Science - Transfer (AAS-T) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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	2		
NRS 235	Nursing Trends Lab	2		
<b>Total Credits Required</b>		<b>77</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CHEM&121+	Intro to Chemistry w/ Lab or above	5		
PSYC&200	Lifespan Psychology [S/B]	5		
BIOL&241	Human A&P 1 w/ Lab [M/S]	5-6		
BIOL&242	Human A&P 2 w/ Lab [M/S]	5-6		
BIOL&260	Microbiology w/ Lab [M/S]	5-6		
<b>Subtotal</b>		<b>25-28</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL&102	Composition II [C]	5		
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      **15**  
**Total Credits Required**    **117-120**



# Degree & Certificate Requirements

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## Nursing Assistant Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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

## Nursing Bachelor of Science (BSN)

### 2020-2021 Degree Requirements

BAS degrees require a minimum of 60 credits of 300- and 400-level courses

#### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
NRS 301	Nursing Roles, Dimensions, and Perspectives	3		
NRS 315	Healthcare Informatics/Information Technology	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		
<b>Subtotal</b>		<b>30</b>		

Available pathways: Non-DTA/MRP-ADN Graduates, DTA/MRP-ADN Graduates

Choose one pathway from below:

#### Non-Direct Transfer Agreement/Major Related Program-ADN Graduates

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Major Support - 5 credits:</b>				
NUTR&101	Nutrition [M/S]	5		
<b>General Education - 20 credits:</b>				
ENGL 315	Writing for Health Professionals [C]	5		
PHIL 315	Professional Ethics in Healthcare [H]	5		
ICS 310	American Diversity [H]	5		
ECON 315	Economics of Healthcare [S/B]	5		
<b>ADN Curriculum</b>		<b>90</b>		
<b>Credit by Examination (NCLEX-RN)</b>		<b>35</b>		
<b>Subtotal</b>		<b>150</b>		
<b>Total Credits Required</b>		<b>180</b>		

#### Direct Transfer Agreement/Major Related Program-ADN Graduates

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>General Education - 15 credits:</b>				
ENGL 315	Writing for Health Professionals [C]	5		
ICS 310	American Diversity [H]	5		
ECON 315	Economics of Healthcare [S/B]	5		
<b>ADN Curriculum</b>		<b>135</b>		
<b>Subtotal</b>		<b>150</b>		
<b>Total Credits Required</b>		<b>180</b>		

#### Note:

Students who did not graduate from a school of nursing with a Direct-Transfer Agreement/Major Related Program Associate Degree in Nursing (DTA/MRP-ADN) take pathway 1 and students who did graduate from a school of nursing with a Direct-Transfer Agreement/Major Related Program Associate Degree in Nursing (DTA/MRP-ADN) take pathway 2.

# Degree & Certificate Requirements

## Occupational Safety & Health Technology Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
NT 111	Basic Nuclear Math & Physics	5		
OSH 101	Fundamentals of Occupational Safety & Health	5		
OSH 124	Industrial and Construction Safety Regulations	5		
OSH 147	Ethics, Documentation, and Records	4		
OSH 151	Accident Prevention, Inspection & Investigations	5		
OSH 152	Internship	1-7		
OSH 153	Risk Management	5		
OSH 177	Industrial Chemical Safety & Hazards	5		
OSH 231	Biological Hazards	5		
OSH 233	Fire Protection Systems	2		
OSH 235	Physical Hazards	5		
OSH 274	Safety Program Management	5		
OSH 280	Industrial Instrumentation and Equipment	5		
<b>Subtotal</b>		<b>61</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Science - 10 credits:</b>				
BIOL&175	Human Biology w/ Lab [M/S]	5		
CHEM&140	General Chemistry Prep w/ Lab [M/S]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
<b>OSH - select 4-5 credits from the following:</b>				
OSH 230	Industrial Toxicology	5		
OSH 271	Fundamentals of Industrial Hygiene	4		
OSH 272	Ergonomics	4		
OSH 277	Environmental Management	5		
<b>Subtotal</b>		<b>19-20</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>English - 10 credits:</b>				
ENGL&101	English Composition I [C]	5		
ENGL&235	Technical Writing [C]	5		
<b>Social &amp; Behavioral Sciences - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		

Subtotal      20  
Total Credits Required    100-101

# Degree & Certificate Requirements

## Operating Room Aide One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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		
<b>Subtotal</b>		<b>15</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
HSCI 147	Medical Terminology	5		
BIOL&241	Human A&P 1 w/ Lab [M/S]	5-6		
BIOL&242	Human A&P 2 w/ Lab [M/S]	5-6		
BIOL&260	Microbiology w/ Lab [M/S]	5-6		
<b>Subtotal</b>		<b>20-23</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
PSYC&100	General Psychology [S/B]	5		
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>20</b>		
<b>Total Credits Required</b>		<b>55-58</b>		

# Degree & Certificate Requirements

## Paramedic One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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		

**Subtotal 53**

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
EMT 101	Emergency Medical Technician-Basic	10		

**Subtotal 10**

**Total Credits Required 65**

# Degree & Certificate Requirements

## Paramedicine Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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		
<b>Total Credits Required</b>		<b>53</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
HE 240	Stress Management [PE]	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 [M/S]	5-6		
BIOL&242	Human A&P 2 w/ Lab [M/S]	5-6		
<b>Subtotal</b>		<b>28-30</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
ENGL&235	Technical Writing [C]	5		
PSYC&100	General Psychology [S/B]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		

#### Communication Studies - select 5 credits from the following:

CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal** 25  
**Total Credits Required** 106-108

# Degree & Certificate Requirements

## Parts Business Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AMT 107	Parts, Systems, and Components	4		
IHT 100	OSHA-10	1		
AMT 108	Parts Logistics Practicum	1		
INT 130	Logistics Technician	6		
CMST 103	Workplace Communication	3		

Subtotal 15

### Major Support

Select 0-4 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CA 100	Introduction to Microcomputers	4		
INT 101	Forklift Operations	1		

Subtotal 0-4

Total Credits Required 15-19



# Degree & Certificate Requirements

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## Perioperative Nursing Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PON 101	Perioperative Nursing Theory I	6		
PON 111	Perioperative Nursing Lab	3		
PON 201	Perioperative Nursing Theory II	4		
PON 221	Perioperative Nursing Practicum	5		

**Total Credits Required      18**

# Degree & Certificate Requirements

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## Phlebotomy Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PHLEB100	Phlebotomy I	4		
PHLEB101	Phlebotomy I Lab	5		
Total Credits Required		9		

# Degree & Certificate Requirements

## Precision Agriculture Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
AG 101	Crop Production I Field Crops w/ Lab	4		
AG 107	Agriculture Safety	3		
AG 117	Agriculture Mechanics and Machinery w/ Lab	4		
AG 140	Weed Science w/ Lab	4		
AG 181	Irrigation Principles and Management w/ Lab	4		
AG 221	Introduction to Precision Agriculture	3		
BIOL 201	Soils w/ Lab [M/S]	5		
AG 222	Advanced Precision Agriculture w/ Lab	4		
AG 250	GPS and GIS Applications w/ Lab	4		
CS 101	Intro to Computers & Information Technology	5		
AG 232	Crop Production II Fruit & Veg Production w/ Lab	4		

**Total Credits Required      44**

# Degree & Certificate Requirements

## Precision Machining Technology Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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		
INT 105	Precision Measurement	1		
<b>Subtotal</b>		<b>85</b>		

### Major Support

Select 3-13 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BPR 105	Blueprint Reading	3		
MT 102	SolidWorks(R) I	5		
MT 202	SolidWorks(R) II	5		
<b>Subtotal</b>		<b>3-13</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH 112	Machinist Math	5		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
ENGL&235	Technical Writing [C]	5		
<b>Human Relations - select 3-5 credits from the following:</b>				
PSYC 103	Applied Psychology	3		
PSYC&100	General Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
BUS 271	Human Relations Business	5		
<b>Communication Studies - select 3-5 credits from the following:</b>				
CMST 103	Workplace Communication	3		
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>16-20</b>		
<b>Total Credits Required</b>		<b>104-118</b>		

# Degree & Certificate Requirements

## Production Technician Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
INT 120	Production Technician	12		
Subtotal		12		

### Major Support

Select 0-2 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
IHT 100	OSHA-10	1		
INT 101	Forklift Operations	1		
Subtotal		0-2		

Total Credits Required 12-14

# Degree & Certificate Requirements

## Programming and Software Development Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS 101	Intro to Computers & Information Technology	5		
CS 102	Programming Fundamentals [M/S]	5		
or				
CS& 131	Computer Science I C++ [M/S]	5		
CS 106	Database Systems	5		
CS 117	Computer Ethics	2		
CS 118	Customer Service	3		
CS 150	Computer Security	5		
CS 228	Windows Server	5		
<b>Subtotal</b>		<b>30</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CS& 141	Computer Science I Java [M/S]	5		
CS 162	C++2 [M/S]	5		
or				
CS 202	Programming Fundamentals 2 [M/S]	5		
CS 236	Advanced Object Oriented Programming [M/S]	5		
CS 250	HTML5-JavaScript/JQuery	5		
CS 262	Game Programming Design and Development	5		
<b>Select 15 credits from the following:</b>				
CS 123	PC Hardware	5		
or				
CS 127	Windows Configuration	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		
<b>Subtotal</b>		<b>40</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
Any PSYC course higher than 100		5		
SOC& 101	Intro to Sociology [S/B]	5		
SOC& 201	Social Problems [S/B]	5		
<b>Communication Studies - select 5-6 credits from the following:</b>				
CMST 104	Speech Essentials [C]	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      **20-21**  
**Total Credits Required**      **90-91**

### Note:

MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 or MATH 072 with a minimum grade of 2.0 is a prerequisite for all programming classes. Students must receive a minimum grade of 2.5 in all Computer Science courses.

# Degree & Certificate Requirements

## Project Management Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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	5		
or				
PROJ 140	Introduction to Primavera	5		
PROJ 211	Project Procurement	3		
PROJ 222	Project Quality Management	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 Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS& 101	Introduction to Business	5		
BUS& 201	Business Law	5		
CMST 221	Communication Skills for Conflict Resolution [H]	5		
CMST 240	Leadership Development	5		
BUS 271	Human Relations Business	5		
BUS 272	Organization Development	3		
ICS 220	Globalization [S/B]	5		

**Subtotal 35**



# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH&107	Math in Society [M/S] [Q/SR]	5		
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH 147	Finite Math [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>20</b>		
<b>Total Credits Required</b>		<b>91</b>		

## Note:

- 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

## Project Management Bachelor of Applied Science (BAS)

2020-2021 Degree Requirements

BAS degrees require a minimum of 60 credits of 300- and 400-level courses

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>Communication - 10 credits:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 410	Professional & Organizational Communication [C]	5		
<b>Quantitative/Symbolic Reasoning - select 5 credits from the following:</b>				
MATH&107	Math in Society [M/S] [Q/SR]	5		
MATH&141	Precalculus I [M/S] [Q/SR]	5		
MATH&142	Precalculus II [M/S] [Q/SR]	5		
MATH&144	Precalculus I & II [M/S] [Q/SR]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
MATH 147	Finite Math [M/S] [Q/SR]	5		
MATH&148	Business Calculus [M/S] [Q/SR]	5		
MATH&151	Calculus I [M/S] [Q/SR]	5		
MATH&152	Calculus II [M/S] [Q/SR]	5		
MATH&153	Calculus III [M/S] [Q/SR]	5		
<b>Humanities - 10 credits:</b>				
ICS 310	American Diversity [H]	5		
PHIL 305	Professional Ethics [H]	5		
<b>Social &amp; Behavioral Sciences - 5 credits:</b>				
ECON 305	Managerial Economics [S/B]	5		
<b>Social &amp; Behavioral Sciences - select 5 additional credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
<b>Mathematical &amp; Natural Science* - select 10 credits from the following:</b>				
ENVS 310	Environmental Issues [M/S]	5		
Natural Science w/ Lab		5		
<b>Additional Electives from the above distribution lists* - select 15 credits:</b>				
Program advisor approved Communication, Quantitative/Symbolic Reasoning, Social & Behavioral Sciences, Humanities or Mathematical & Natural Science courses				
		5		
		5		
		5		
<b>Subtotal</b>		<b>60</b>		

# Degree & Certificate Requirements

## Major Support\*\*

See program advisor for additional information

Course Number	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	5		
or				
PROJ 140	Introduction to Primavera	5		
PROJ 211	Project Procurement	3		
PROJ 222	Project Quality Management	3		
PROJ 231	Project Risk Management	5		
BUS& 101	Introduction to Business	5		
BUS& 201	Business Law	5		
BUS 271	Human Relations Business	5		
BUS 272	Organization Development	3		
ICS 220	Globalization [S/B]	5		
CMST 221	Communication Skills for Conflict Resolution [H]	5		
CMST 240	Leadership Development	5		
<b>Subtotal</b>		<b>66</b>		

Available concentrations: General or Construction

Choose one concentration from below:

## General

See program advisor for additional information

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
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	5		
or				
PROJ 421	Advanced Primavera	5		
PROJ 480	Advanced Project Management Capstone	5		
AMGT 310	Operations Management	5		

**General Electives - select 25 credits from the following:**

CMST 415	Applied Professional Communication	5		
AMGT 300	Management & Organization Theory	5		
AMGT 320	Leadership & Organization Behavior	5		
AMGT 360	Business Planning and Strategy	5		
AMGT 417	BAS Special Topics	1–5		
AMGT 420	Human Resource Management	5		
AMGT 430	Fundamentals of Financial Management	5		

**Subtotal** 55  
**Total Credits Required** 181

# Degree & Certificate Requirements

## Construction

See program advisor for additional information

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
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	5		
or				
PROJ 421	Advanced Primavera	5		
PROJ 480	Advanced Project Management Capstone	5		
AMGT 310	Operations Management	5		
ENT 111	Introduction to Engineering	5		
ENT 114	Introduction to Drafting	4		
ENT 122	Materials	3		
ENT 128	Architecture & Engineering Blueprint Reading	2		
or				
BPR 110	Basic Blueprints and Drawings	3		
ENT 134	Surveying w/ Lab	6		
ENT 219	Construction Estimating	1		
CMST 415	Applied Professional Communication	5		
or				
AMGT 320	Leadership & Organization Behavior	5		

**Subtotal**      **56-57**  
**Total Credits Required**      **182-183**

## Note:

\*Course selections must meet the distribution requirements for the BAS degree.

\*\*Course credits used for major support should be discussed with your completion coach or academic advisor.

- Students must earn a 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.

# Degree & Certificate Requirements

## Project Management One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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	5		
or				
PROJ 140	Introduction to Primavera	5		
<b>Subtotal</b>		<b>20</b>		

### Major Support

See Project Management advisor for approved courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
<b>Subtotal</b>		<b>5</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH 106	Business Mathematics	5		
MATH&107	Math in Society [M/S] [Q/SR]	5		
<b>Psychology or Sociology - select 5 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Subtotal</b>		<b>20</b>		
<b>Total Credits Required</b>		<b>45</b>		

### Note:

- 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

## Radiologic Technology Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
PHYS&110	Physics for Non-Science Majors w/ Lab [M/S]	5		
RATEC102	Radiographic Physics	5		
RATEC103	Principles of Radiographic Exposure	3		
RATEC104	Advanced Radiographic Procedures	4		
RATEC105	Introduction to Radiographic Technique	2		
RATEC106	Computed Imaging	2		
RATEC107	Positioning and Related Anatomy I	2		
RATEC108	Positioning and Related Anatomy II	3		
RATEC109	Positioning and Related Anatomy III	3		
RATEC111	Clinical Education I	5		
RATEC112	Clinical Education II	5		
RATEC113	Clinical Education III	5		
RATEC120	Nursing Procedures	2		
RATEC121	Patient Care	2		
RATEC127	Introduction to Sectional Anatomy	2		
RATEC207	Concept Integration	2		
RATEC210	Clinical Education IV	13		
RATEC211	Clinical Education V	8		
RATEC212	Clinical Education VI	8		
RATEC213	Clinical Education VII	8		
RATEC220	Pathology I	3		
RATEC221	Pathology II	2		
RATEC240	Radiation Biology and Protection	3		
RATEC296	Special Topics in Radiology	2		
<b>Subtotal</b>		<b>99</b>		

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BIOL&241	Human A&P 1 w/ Lab [M/S]	5-6		
BIOL&242	Human A&P 2 w/ Lab [M/S]	5-6		
HSCI 147	Medical Terminology	5		
<b>Subtotal</b>		<b>15-17</b>		

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
PSYC&100	General Psychology [S/B]	5		
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal**      **20**  
**Total Credits Required**    **134-136**

### 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.

# Degree & Certificate Requirements

## Sales Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Select 12-14 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BUS 103	Principles of Sales	5		
BUS 265	Marketing Principles	5		
BUS 267	Marketing Special Projects	2-4		

Subtotal 12-14

### Communication Studies

Select 3-5 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
CMST 103	Workplace Communication	3		
CMST 110	Communication Behavior [C]	3		
CMST&210	Interpersonal Communication [C]	5		
CMST 260	Multicultural Communication [C]	5		

Subtotal 3-5

Total Credits Required 15-19



# Degree & Certificate Requirements

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## Solid Modeling for Manufacturing Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MT 102	SolidWorks(R) I	5		
MT 202	SolidWorks(R) II	5		
BPR 105	Blueprint Reading	3		
Total Credits Required		13		

# Degree & Certificate Requirements

## Spanish Medical Interpreting Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
HSCI 148	Spanish Medical Interpreting I	5		
HSCI 149	Spanish Medical Interpreting II	5		
HSCI 150	Spanish Medical Interpreting III	5		
Total Credits Required		15		

# Degree & Certificate Requirements

## State Early Childhood Education One-Year Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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	3		
or				
ECED&170	Environments for Young Children	3		
EDUC&150	Child/Family/Community	3		
ECED&160	Curriculum Development	5		
ECED&180	Language & Literacy Development	3		
ECED&190	Observation/Assessment	3		
<b>Subtotal</b>		<b>34</b>		

### Major Support

Select 3 credits from the following:

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
EDUC&130	Guiding Behavior	3		
ECED&132	Infants & Toddlers--Nurturing Care	3		
ECED&134	Family Child Care Management	3		
EDUC&136	School Age Care	3		
ECED&138	Home Visitor/Family Engagement	3		
ECED&139	Administration of ECE	3		
<b>Subtotal</b>		<b>3</b>		

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Mathematics - select 5 credits from the following:</b>				
MATH 100+	MATH 100 or above	5		
MATH&171	Math for Elementary Education I [M/S]	5		
Note: MATH& 171 recommended for BAS path				
<b>Subtotal</b>		<b>10</b>		
<b>Total Credits Required</b>		<b>47</b>		

### Note:

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 Initial Early Childhood Education Short-Term Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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		

# Degree & Certificate Requirements

## State Short Early Childhood Education Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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 specializations: General, Infant/Toddler Care, School-Age Care, Family Child Care, Home Visitor/Family Engagement or Administration  
Choose one specialization from below:

### Specialization - General

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
EDUC&130	Guiding Behavior	3		
Subtotal		3		
Total Credits Required		20		

### Specialization - Infant/Toddler Care

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ECED&132	Infants & Toddlers--Nurturing Care	3		
Subtotal		3		
Total Credits Required		20		

### Specialization - School-Age Care

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
EDUC&136	School Age Care	3		
Subtotal		3		
Total Credits Required		20		

### Specialization - Family Child Care

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ECED&134	Family Child Care Management	3		
Subtotal		3		
Total Credits Required		20		

### Specialization - Home Visitor/Family Engagement

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ECED&138	Home Visitor/Family Engagement	3		
Subtotal		3		
Total Credits Required		20		

### Specialization - Administration

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ECED&139	Administration of ECE	3		
Subtotal		3		
Total Credits Required		20		

# Degree & Certificate Requirements

## Surgical Technology Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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 Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
HSCI 147	Medical Terminology	5		
BIOL&241	Human A&P 1 w/ Lab [M/S]	5-6		
BIOL&242	Human A&P 2 w/ Lab [M/S]	5-6		
BIOL&260	Microbiology w/ Lab [M/S]	5-6		

**Subtotal 20-23**

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
ENGL&101	English Composition I [C]	5		
MATH&146	Introduction to Stats [M/S] [Q/SR]	5		
PSYC&100	General Psychology [S/B]	5		

**Communication Studies - select 5 credits from the following:**

CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		

**Subtotal 20**

**Total Credits Required 104-107**

# Degree & Certificate Requirements

## Teacher Education Bachelor of Applied Science (BAS)

2020-2021 Degree Requirements

BAS degrees require a minimum of 60 credits of 300- and 400-level courses

### Major Courses

Course Number	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		
EDUC&130	Guiding Behavior	3		
ECED&132	Infants & Toddlers--Nurturing 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 for Young Children	3		
ECED&180	Language & Literacy Development	3		
ECED&190	Observation/Assessment	3		
EDUC&203	Exceptional Child	3		
ECED 300	Social Studies for Teachers	5		
ECED 301	Inquiry Based Science for Teachers	3		
ECED 307	Health and Physical Education Learning Standards	2		
ECED 325	Advanced Math Methods	3		
ECED 340	Assessment and Evaluation	5		
ECED 365	Observations, Documentation, and Monitoring	3		
ECED 370	Adaptations, Modifications, and Planning	5		
ECED 385	Advanced Language and Literacy Methods	3		
ECED 395	Equity and Social Justice	3		
ECED 479	Fall Student Teaching	15		
ECED 489	Winter Student Teaching	15		
ECED 499	Spring Student Teaching	15		

Subtotal 132-135

### 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 (with prior approval).

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
		5		
		5		
		5		

Subtotal 15

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
<b>English - 10 credits:</b>				
ENGL&101	English Composition I [C]	5		
ENGL&102	Composition II [C]	5		
<b>Communication Studies - select 5 credits from the following:</b>				
CMST&101	Introduction to Communication Studies [C]	5		
CMST&210	Interpersonal Communication [C]	5		
CMST&220	Public Speaking [C]	5		
CMST 260	Multicultural Communication [C]	5		
<b>Social Sciences - select 10 credits from the following:</b>				
PSYC&100	General Psychology [S/B]	5		
PSYC 201	Social Psychology [S/B]	5		
SOC& 101	Intro to Sociology [S/B]	5		
<b>Social Sciences - 10 additional credits:</b>				
ICS 310	American Diversity [H]	5		
PHIL 305	Professional Ethics [H]	5		
<b>Mathematics - 10 credits:</b>				
MATH&171	Math for Elementary Education I [M/S]	5		
MATH&172	Math for Elementary Education II [M/S] [Q/SR]	5		

**Subtotal**      **45**  
**Total Credits Required**    **192-195**



# Degree & Certificate Requirements

## Welding Technology Associate in Applied Science (AAS) PROFESSIONAL TECHNICAL 2020-2021 Degree Requirements

### Major Courses

Course Number	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 140	Shield Metal Arc Certification Preparation	1-5		
WT 141	Shield Metal Arc Welding Certification	1-5		
WT 107	Fabrication Principles Review	4		
WT 108	Fabrication Technique I	1		
WT 181	Fabrication Techniques 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		
INT 105	Precision Measurement	1		
BPR 106	Blueprint Reading I (WT)	3		
BPR 206	Blueprint Reading II (WT)	3		
DRW 106	Mechanical Drawing for Vocational Application	3		

**Subtotal 88-101**

### Major Support

**Select 0-3 credits from the following:**

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
WT 195	Supervised Employment	1-3		

**Subtotal 0-3**

# Degree & Certificate Requirements

## General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH 100	Algebraic Tools for Vocational Application	3		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Human Relations - select 3-5 credits from the following:</b>				
PSYC 103	Applied Psychology	3		
PSYC&100	General Psychology [S/B]	5		
BUS 271	Human Relations Business	5		
<b>Communication Studies - select 3 credits from the following:</b>				
CMST 103	Workplace Communication	3		
CMST 110	Communication Behavior [C]	3		

**Subtotal**      **14-16**  
**Total Credits Required**      **102-120**

### Note:

WT 103, 112, 113, 141, 201, 202, 211, 222 and 231 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 Certificate PROFESSIONAL TECHNICAL 2020-2021 Certificate Requirements

### Major Courses

Course Number	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 Techniques I Lab	3		

**Subtotal 31-33**

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BPR 106	Blueprint Reading I (WT)	3		
DRW 106	Mechanical Drawing for Vocational Application	3		
INT 105	Precision Measurement	1		

**Subtotal 7**

**Total Credits Required 38-40**

### Note:

WT 112 and 113 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 2020-2021 Certificate Requirements

### Major Courses

Course Number	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 140	Shield Metal Arc Certification Preparation	1-5		
WT 141	Shield Metal Arc Welding Certification	1-5		
WT 108	Fabrication Technique I	1		
WT 181	Fabrication Techniques I Lab	3		

**Subtotal 33-43**

### Major Support

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
BPR 106	Blueprint Reading I (WT)	3		
DRW 106	Mechanical Drawing for Vocational Application	3		
INT 105	Precision Measurement	1		

**Subtotal 7**

### General Education

Course Number	Course Title	Credits	Qtr. Completed	Comments / Substitution
MATH 100	Algebraic Tools for Vocational Application	3		
<b>English - select 5 credits from the following:</b>				
ENGL&101	English Composition I [C]	5		
ENGL 103	Writing in the Workplace	5		
<b>Human Relations - select 3-5 credits from the following:</b>				
PSYC 103	Applied Psychology	3		
PSYC&100	General Psychology [S/B]	5		
BUS 271	Human Relations Business	5		
<b>Communication Studies - select 3 credits from the following:</b>				
CMST 103	Workplace Communication	3		
CMST 110	Communication Behavior [C]	3		

**Subtotal 14-16**

**Total Credits Required 54-66**

### Note:

WT 103, 112, 113 and 141 are variable credit courses. Variable credit courses taken of the same class in the evening must be done within four consecutive quarters.

# Department Overviews

## ACCT& Accounting

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.

### Knowledge of Accounting

Upon completion of the Program, students will be able to:

- Understand the fundamental principles of accounting
- Understand the regulatory environment of business

### Accounting Skills

Upon completion of the Program, 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 structures including corporations, partnerships, and small businesses
- Apply information tools and resources within business organizations.

### Communications Skills

Upon completion of the Program, students will be able to:

- Demonstrate proficiency in communications skills necessary in a business environment.
- Apply information tools and resources within business organizations.
- Develop an understanding of the regulatory environment of business.

## AOT Administrative Office Technology

Administrative Office Technology (AOT) provides students with coursework to support positions in various and often specialized types of office environments.

## ABE Adult Basic Education

Adult Basic Education (ABE) consists of three main areas of focus: GED® test preparation, High School+ coursework, and ABE classes. These classes serve the adult community and are available at the Transition Center on the Pasco campus and online.

We offer classes in reading, writing, math, and content areas. Each student is assessed for reading, writing, and math levels and placed into an appropriately leveled class environment.

Our courses serve the needs of adult students seeking a high school equivalency degree and preparing for college coursework. 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.

## AFS Agricultural Food Systems

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.

## AG Agriculture

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, an Associate in Applied Science in Agriculture Production and an Associate in Applied Science in Agribusiness. Certificates in Crop and Soil, Hydroponics and Greenhouse Management, and Precision Agriculture are also options. Finally, 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 will broaden career opportunities and help 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.

## ANTH Anthropology

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. Students interested in pursuing the study of Anthropology can follow an academic map of recommended courses to prepare for a major in Anthropology.

## AMGT Applied Management

Applied Management (AMGT) is a course prefix designated for upper level (300-400) courses.

# Department Overviews

The core purpose of the Bachelor of Applied Science in Applied Management (BAS-AM) is to increase the academic credentials of its student population in the field of management and related studies in order to benefit the community served by the institution. The BAS-AM degree seeks to accomplish this mission by imparting curricula that is relevant, up-to-date, focused, and applicable. Additionally, it offers flexible concentrations in general management, healthcare administration (HCAD) and Agribusiness (AG).

Student success is supported by ensuring effective content, materials, activities/assignments, and learning outcomes are routinely assessed and align with the demands of the careers of the present and future. It is the hope that students who successfully complete the BAS-AM program will possess greater opportunities for career and academic advancement after graduation.

The BAS-AM program supports the college mission of successful credential completion by providing an avenue for students of varying academic backgrounds (i.e., through the prior completion of a two-year degree in any field) to complete a Bachelor's degree in a generalizable field of study (i.e., Management). As a Bachelor's degree is often the cost of entry to certain positions in a variety of fields, this particular program provides a valuable opportunity for students to expand their career arcs through promotion and/or new job placements.

As the discipline of management significantly involves collaboration, understanding and utilizing diverse skill sets, and a broad level of engagement between people, the program supports the college outcomes of diversity, equity, and inclusion. Furthermore, as the program is constantly focused on addressing modern local, regional, national, and global needs, the concepts of sustainability, emotional wellbeing, and ethics are embedded in every aspect of the curriculum.

The Program Learning Outcomes for the AMGT program are as follows:

1. Analyze and apply managerial functions, roles, styles, and effective strategies for stability and change, to be used in various managerial and leadership situations
2. Analyze workplace scenarios to show how careful attention to members of a diverse population can result in significant competitive advantages
3. Develop and demonstrate an understanding of the four primary resources of management (human, capital, informational, and material)
4. Apply the four primary functions of management (planning, organizing, leading, and controlling) through a variety of situations
5. Demonstrate critical operations, tactical, and strategic managerial thoughts in a variety of scenarios

## APPRE Apprenticeships

Apprenticeships provide ways to acquire the experience and training needed to get established in a career in the trades. 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, through the labor union, the worker receives a completion certificate which can be applied towards an AAS in Multi-Occupational Trades.

## ARAB Arabic

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

## ART Art, Visual

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 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 and cultural 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 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.

## ASTR Astronomy

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.

## AMT Automotive Technology

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

# Department Overviews

- 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

## BIOL Biology

Whatever your interest, from plants, soils and insects, to the structure and function of the human body, Biology courses at CBC can assist in your educational pursuits.

The Biology department offers courses to:

- Fulfill graduation requirements for the non-science major to obtain an Associate in Arts and Sciences degree (BIOL& 100, BIOL& 175, BIOL 140, BIOL 148)
- 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 148, BIOL 201, BIOL 252, BIOL 253)

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

## BPR Blueprint Reading

Columbia Basin College offers several Blueprint reading courses. Some are tailored specifically for the Machine Technology and Welding programs.

## BUS Business

The variety of business courses offered are designed to meet many different needs. Students can complete the AA in Business and 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 Business Administration or Entrepreneurship and Innovation.

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

## CHEM Chemistry

The chemistry program at CBC engages students in hands-on courses that support each student's personal, academic and professional goals by guiding students to develop a fundamental understanding and appreciation of the central science and its consistent and diverse impact on our lives. Our chemistry courses:

- Fulfill graduation requirements for the non-science major to obtain an Associate in Arts and Sciences degree (CHEM& 110).
- Meet the entrance requirements for the Health Sciences (Nursing, Dental Hygiene, Physical Therapy, Paramedic/EMT, etc.) Agriculture and Nuclear Technology programs (CHEM& 121, CHEM& 122, CHEM& 123, CHEM& 140).
- Prepare the science major and pre-professional (pre-med, pre-vet, pre-chiropractic, pre-optometry, pre-pharmacy, etc.) transfer student for upper-level courses (CHEM&161, CHEM&162, CHEM&163, CHEM&241/251, CHEM&242/252, CHEM& 243/253).
- Provide undergraduate research experience (CHEM281-296) or exposure to analytical techniques for students considering a career in forensics and analytical sciences (CHEM254/264, CHEM255/265).

## CHIN& Chinese

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.

## CDL Commercial Driver's License

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.

## CMST Communication Studies

Communication Studies is a discipline that focuses on the ability of individuals to communicate effectively in a variety of environments. Students will explore both the theory and practice of fundamental communication skills and strategies. They will examine the human, social, political, institutional and mediated dimensions of human communications.

This department offers instruction in a wide range of communication areas including Public Speaking, Mass Media, Interpersonal Communication, Multicultural Communication, Oral Interpretation and Small Group Discussion.

Students on the Communication Studies Pathway prepare themselves for a multitude of career opportunities. Those may include advertising, business, education, journalism, electronic media production, marketing, law and public relations.

## CSRE Community Education

The Community Education department offers a variety of opportunities for the lifelong learner to take courses for professional development or personal enrichment.

## CA Computer Applications

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.

## CS Computer Science

The Computer Science (CS) department is committed to providing 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. The CS curriculum aligns with specific focus areas defined by the National Security Agency/ Department of Homeland Security as part of their Center of Academic Excellence (CAE) program.

Students may earn the following:

Certificate:

- Computer and Information Technology

Two-year Associate in Applied Science (AAS) degrees:



# Department Overviews

- Cyber Security
- Database Administrator
- Information Technology
- IT Support Technology
- Network Administrator
- Programming and Software Development

Four-year Bachelor of Applied Science (BAS) degrees:

- Cybersecurity
- Information Technology

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.

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.

## CSIT Computer Science Information Technology

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 the 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.

## CJ Criminal Justice and Forensics

Are you interested in exploring a career in Corrections, Law Enforcement or taking on a role in our judicial system? By studying Criminal Justice, you'll explore the theories behind crime and punishment, juvenile delinquency, drug and alcohol addiction and other criminal justice areas.

## CUL Culinary

The culinary program courses help prepare students for entry-level culinary positions in the food industry and food truck business and provide preparation for advanced education in the fields of food science or hospitality. The program provides basic skills in food preparation and production, service and management and provides internship opportunities with local businesses to gain hands-on training.

## CSIA Cyber Security

Computer Science Information Assurance (CSIA) is a course prefix designated for upper-level (300-400) courses. Currently, the CSIA courses are required for the Bachelor of Applied Science in Cyber Security.

Cybercrime is increasing at a rapid pace thus creating the need for trained cyber security professionals. The BAS Cyber Security degree focuses on the techniques, policies, and procedures that prepare students to secure and defend critical assets. Courses include e-commerce, ethics, cryptography, computer forensics, cybercrime and terrorism, network fundamentals, and wireless security. This degree provides the technical skills and knowledge for students who plan to enter the field of information security and helps students quickly prepare for roles as information security analysts and network administrators. The BAS Cyber Security degree also provides a foundation for many industry certifications such as Network+, Security+, CCNA, SSCP, and CEH. The cybersecurity program is certified as a national center of academic excellence (CAE2Y). CBC also has a cooperative agreement with the University of Washington which allows limited cross-enrollment in UW Cyber Security courses.

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

- Protect an organization's critical information and assets by ethically integrating cybersecurity risk management and business continuity best practices throughout an enterprise.
- Implement continuous network monitoring and provide real-time security solutions.
- Analyze advanced persistent threats and deploy countermeasures and conduct risk and vulnerability assessments of planned and installed information systems.
- Formulate, update and communicate short- and long-term organizational cybersecurity strategies and policies.

## DHYG Dental Hygiene

The Dental Hygiene degree is a four-year baccalaureate degree that consists of two years of prerequisite coursework and two years of Dental Hygiene professional training. Following completion of all prerequisites, students may apply for admission to the Dental Hygiene program. Applications and due dates are posted on the website. The program has limited enrollment. The educational objective of the program is to prepare students who, upon graduation and successful completion of the NBDHE (National Board Dental Hygiene Examination) and regional clinical board exams (Local Anesthetic, Restorative and Clinical dental hygiene procedures), will be licensed to practice as dental hygienists.



# Department Overviews

Prerequisites must be completed with a 2.0 GPA in each class with an overall cumulative GPA of 2.6 for the science courses (A&P I and II, Microbiology and Chemistry) prior to admission to the program.

## Prerequisites:

- 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
- Intro to Chemistry w/ Lab: CHEM& 121
- Intro to Organic Chemistry w/ Lab: CHEM& 122
- English Composition I: ENGL& 101
- Introduction to Stats: MATH& 146
- General Psychology: PSYC& 100
- Social Psychology: PSYC 201
- Communication Studies Courses: (two of the following) CMST& 101 or CMST& 210 or CMST& 220 or CMST 260

## Course Substitutions:

- CHEM& 140 or CHEM& 161 may be substituted for CHEM& 121
- CHEM& 131 may be substituted for CHEM& 122

**Once admitted into the program, each student will be responsible for providing documentation of the following additional requirements:**

- Required immunization records
- Current basic life support (BLS) for healthcare provider
- Satisfactory criminal history background check using a college approved vendor

Questions regarding the criminal background policy should be directed to the Dean for Health Sciences at 509-544-8310.

## DUTEC Diagnostic Ultrasound Technology

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](http://columbiabasin.edu/ultrasound) for updates and announcements regarding future openings in this program.

## ECED Early Childhood Education

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. Some courses will be offered in Spanish to support the development of dual language educators. Additional class options are listed in the Education section. Credentials are recognized by Washington State Department of Children, Youth, and Families (DCYF).

## Degrees and Certificates Offered

- Bachelor of Applied Science (BAS) in Teacher Education degree (with WA state licensure in PreK-3)
- Associate in Applied Science (AAS) in Early Childhood Education degree
- State Early Childhood Education One-Year Certificate
- State Short Early Childhood Education Certificate
- State Initial Early Childhood Education Short-Term Certificate
- Child Development Associate (CDA) Short-Term Certificate

## 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

## ECON Economics

Economics is the science that studies how societies, businesses, and individuals use limited resources to meet unlimited wants. Economics is a broad 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 studies how individuals and businesses make decisions under different market structures.

## EDUC Education

Education courses provide introductory coursework in teacher education for applied degrees like CBC's AAS in Early Childhood Education, CBC's BAS in Teacher Education, or transfer majors at other four-year colleges and universities. Most courses are offered in the evenings or on Saturdays to accommodate the varied schedules of working students.

## ELT Electronics

Electronics courses are offered in support of short-term certificate and degree programs such as Nuclear Technology. Courses are designed to offer a basic understanding of electricity and electrical components.

## EMT Emergency Medical Technician

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 lifesaving 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 15 weeks long.

# Department Overviews

Entrance into the EMT-B class is contingent upon the successful completion of a competitive entrance process. Applications are posted on the CBC website along with detailed instructions for completion of the application. EMT classes are held in the evenings two days per week with several Saturdays as well.

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 Washington 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.

## ENT Engineering Technology

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.

## ENGL English

The English department offers writing courses that fulfill requirements for students in transfer, workforce, and bachelor degree programs. Along with preparation for college-level writing, courses include expository, research, and workplace writing; creative writing; as well as writing in medical professions, business, and project management. Literature courses, ranging from English, American, to world and specialized literature, teach students to read closely, think critically, and communicate effectively. The skills learned in these classes are essential to careers in law, digital design, business, science, engineering to education, politics, marketing, and health care.

## EFL English As A Foreign Language

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.

## ELA English Language Acquisition

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 skills in reading, writing, mathematics, speaking and comprehension of the English language. Instruction focuses on developing language and communication skills through an integration of academic, interpersonal and occupational problem-solving activities.

## ENVS Environmental Science

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.

## EXSC Exercise Science

Students studying Exercise Science build a foundation for various careers, such as becoming a personal trainer, athletic trainer, physical therapist and more! As a field of study, Exercise Science is unique because of its application of scientific knowledge and skills to human function. Our program also serves the broader student body by providing educational opportunities designed to foster lifelong physical activity.

## FS Fire Science

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 are designed to assist students in just beginning their journey or propelling those already employed. 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 field.

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 preparing for multiple career options, including Paramedic.

CBC Fire Science program provides a pathway to higher education with transferability to several other universities offering BS degrees in fields such as fire service administration, EMS administration or in conjunction with the Paramedic program, a BS in Paramedicine.

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.

## FCA Firefighter I

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.

# Department Overviews

## FYI First Year Introduction

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.

## FRCH French

Our French courses 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.

## ENGR General Engineering

General Engineering courses are required for various engineering degrees and fulfill the requirements for transfer to four-year institutions.

## GEO Geography

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.

## GEOL Geology

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.

## HE Health Education

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.

## HPHYS Health Physics

The BAS in Health Physics (BASHP) prepares a highly skilled workforce that applies a scientific understanding of physical interaction of radiation with the body and environment to maintain protection from the potential hazards of radiation. The BASHP curriculum is aligned with Accreditation Board of Engineering and Technology, Inc. (ABET) standards. The ABET requires baccalaureate-level health physics programs to demonstrate that graduates possess the necessary knowledge, skills, and attitudes to competently and ethically implement and practice applicable scientific, technical, and regulatory aspects of Health Physics.

Based on the ABET's recommendations, the Program Learning Outcomes of the BASHP program emphasize a strong foundation of technical knowledge, practical skills application, and team-oriented performance proficiency. Aligning with the ABET's requirement, the BASHP curriculum framework. The BASHP program graduates will be able to:

1. Apply knowledge of mathematics, science, and engineering;
2. Design and conduct experiments, as well as to analyze and interpret data;
3. Design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;
4. Function on multi-disciplinary teams;
5. Identify, formulate, and solve engineering problems;
6. Use the techniques, skills, and modern engineering tools necessary for engineering practice;
7. Apply knowledge of atomic and nuclear physics to nuclear and radiological systems and processes;
8. Apply knowledge of transport and interaction of radiation with matter to nuclear and radiation processes;
9. Measure nuclear and radiation processes;
10. Identify professional and ethical responsibility;
11. Explain the impact of engineering solutions in a global, economic, environmental and societal context; and
12. Discuss contemporary issues.

## HSCI Health Sciences

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.

# Department Overviews

## HCAD Healthcare Administration

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.

## HCST Healthcare Central Service Technology

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 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. Graduates of the HCST Program are eligible for certification through the International Association of Healthcare Central Service Materiel Management (IAHCSMM).

## HEB Hebrew

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.

## HIST History

The History program offers a variety of general and more specialized courses in U.S. and World History. The program'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. History courses develop skills that are in high demand across a range of careers, from business to government to the law. CBC offers an academic map of suggested courses for students interested in preparing for a major in History.

## HORT Horticulture

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.

## HSP Hospitality

A career in hospitality offers an exciting professional future that allows someone to put their goals, interests and abilities to good use in a field of limitless potential. Whether it's conference or convention centers, resorts, cruise ships, restaurants, wineries, hotels, or vacation destinations, the hospitality industry needs employees with specialized skills. This program prepares students for entry into the industry by providing those specialized skills with industry certifications. The hospitality industry offers good, high-paying jobs with opportunities for advancing to top-level positions.

## HDEV Human Development

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.

## DRW Industrial Drawing

Columbia Basin College offers an Industrial Drawing course tailored specifically for the Welding program.

## IHT Industrial Hygiene Technology

Industrial Hygiene Technology courses focus on implementing and enforcing safety standards. Currently, IHT courses support safety practices in existing programs.

## INT Industrial Technology

### Certified Logistic Technician (CLT)

A Logistics Technician works with the world of supply chain and logistics. Logistics is the activity of transporting goods to customers. Students learn the activities involved in handling materials through the supply chain including product receiving and storage, order processing, packaging and shipping, inventory control, handling hazmat, transportation modes and dispatch and tracking. The Tri-Cities area has many companies that require people with these skills and are waiting to interview students with these skills for current job openings. The CLT program is 11 weeks long (one quarter) and students that successfully complete the course receive nationally portable, industry-recognized certification.



# Department Overviews

## Certified Production Technician (CPT)

The Certified Production Technician program prepares workers for high-performance, technologically-advanced production jobs in all sectors of manufacturing. Students learn critical work functions in the following areas: safety (including intro to manufacturing and work-readiness skills), quality practices and measurement, manufacturing processes and production and maintenance awareness. The Tri-Cities area has many companies that require people with these skills and are waiting to interview students with these skills for current job openings. The CPT program is 11 weeks long (one quarter) and students that successfully complete the course receive nationally portable, industry-recognized certification.

## Troubleshooting for Technicians

This course is designed to boost the efficiency and effectiveness of troubleshooting by teaching today's technicians a proven 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. This class provides approximately 22 hours of classroom training and is offered several times during the year to accommodate industry needs. Please call 509-542-4804 for a schedule of training.

## IC Instrumentation and Control

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.

## ICS Intercultural Studies

Courses in Intercultural Studies examine race, ethnicity, class, gender, disability, sexuality, and other diversities, with an aim towards understanding how diversity is changing the contours of American society. The goals of the ICS program are scholarly but also practical: we focus on understanding diversity with an aim towards applying that knowledge to workplace and social relationships in our pluralistic society. ICS students will gain a greater understanding of the diverse context of American society and become aware of their own cultural assumptions, perspectives, and habits, even as they recognize the assumptions that inform cultural perspectives other than their own. If you are interested in pursuing further study in Gender Studies; Latinx Studies; International Relations; Race, Ethnicity and Immigration; or Women's Studies, please ask your advisor for academic maps of recommended courses for your intended major.

## JAPN Japanese

Our Japanese courses 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.

## MNT Maintenance

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.

## MT Manufacturing Technology

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

# Department Overviews

## MATH Mathematics

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.

## MA Medical Assistant

The Columbia Basin College Medical Assistant (MA) program prepares graduates for a wide range of duties in medical offices and other healthcare settings. Students learn the knowledge, technical skills and work ethic that are required for an entry-level position in medical assisting. The curriculum includes competencies in front office administrative processes as well as back office clinical procedures. The program provides a two-year Associate in Applied Science degree as well as a One-Year Certificate in Medical Assisting.

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). Commission on Accreditation of Allied Health Education Programs, 25400 U.S. Highway 10 North, Suite 158, Clearwater, FL 33763. Only graduates of a Commission on Accreditation of Allied Health Education Programs 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.

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 the 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: PSYC& 100, ENGL& 101, CMST& 101, CMST& 210, CMST& 220, CMST 260, and HSCI 147. All prerequisite and Medical Assistant courses must be passed at a 2.0 GPA or higher. Students are expected to possess the ability to use basic computer systems and produce documents.

A Medical Assistant program application is required for consideration. Medical Assistant program application should include a copy of the following healthcare documents:

- Certificate of Completion for seven hours of HIV/AIDS Bloodborne Pathogen Training
- A current American Heart Association Basic Life Support (BLS) 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.

## IMAGE Medical Imaging Technology

The IMAGE courses are designed to prepare students for advanced level ARRT certification examinations in the following 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, Radiation Therapy, or Ultrasound.

### 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.

# Department Overviews

## MRHI Medical Records & Healthcare Information

The Medical Records and Healthcare Information program provides a solid foundation in important medical science concepts, computer applications, healthcare coding classifications and information management, all of which creates a skilled professional who can process, code, classify, condense, analyze and manage healthcare information through physical and computer technology methods. Pathway options include a One-Year Certificate, a two-year Associate in Applied Science (AAS) degree and a Bachelor of Applied Science in Applied Management with a concentration in Healthcare Administration.

The program prepares students for professional positions in a variety of areas, including hospitals, clinics, long-term care facilities, insurance agencies, home-health, government and other agencies. The AAS degree enhances the graduate's ability to join a high-growth component of the medical industry as a Healthcare Information Management professional.

## SIM Medical Simulation

The Medical Simulation Associate in Applied Science – Transfer degree prepares students for entry-level employment in simulation laboratories. These simulation laboratories are currently being used in nursing instruction, hospital and medical provider training and emergency response teams. To meet the growing need for training simulation professionals, the Medical Simulation program will develop students who can implement simulation scenarios, conduct manikin programming, establish maintenance standards, develop interpersonal relationships and promote community engagement. Upon completion of the Medical Simulation Associate in Applied Science –Transfer degree, students are prepared to take industry certification exams validating their skills.

Big Bend Community College, in collaboration with CBC, offers the opportunity to obtain an Associate in Applied Science-Transfer degree in Medical Simulation. The Medical Simulation program is designed to allow for students who do not live near Big Bend Community College. For example, most of the content in the Medical Simulation courses are taught online with a preceptor lab option. This means that distance learners have an opportunity to complete their labs with an expert in the field in an approved location closer to their homes. In order to create an effective distance learning plan, students will need to contact the Medical Simulation coordinator or advisor as soon as possible. More information can be found on Big Bend Community College's website at <http://www.bigbend.edu/academics/programs/medical-simulation>.

## MUSC Music

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.

## NOP Non-Licensed Operator

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.

## NMTEC Nuclear Medicine Technology

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 great majority of 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 \$1,000, most of which are purchased at the beginning of the program.

# Department Overviews

## NT Nuclear Technology

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 and other associated industries.

### 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

## NRS Nursing

Columbia Basin College offers an Accreditation Commission for Education in Nursing (ACEN) Nursing program. The Nursing program prepares students for professional nursing practice through an educational process that combines a rigorous academic curriculum with clinical practice hours. Instruction takes place on the Richland campus as well as in partnering healthcare facilities. A state-of-art practice lab is available for students to learn and practice clinical skills. For more information, call 509.544.8309.

### Associate in Nursing-Transfer Degree

Students must first submit a general Application for Admission 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 will be admitted to a cohort that begins each fall. 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 coursework before receiving the AAS-T degree from CBC. Students should meet 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](http://columbiabasin.edu/nursing). Please refer to the Entrance Requirements.

All nursing support courses must be passed with a 2.0 or better. 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: Introduction to Stats, MATH& 146
- Communication Studies: CMST 260 or CMST& 101 or 210 or 220

**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 BLS CPR card
- 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.

### Registered Nurse to Bachelor of Science (RN-BSN) Entrance Requirements:

Associate Degree Registered nurses with an unencumbered license in the State of Washington have the option to complete the Bachelor of Science in Nursing (BSN). This program can be completed in as little as four quarters and much of the course work is completed online. To be considered for the RN-BSN program, the applicant must have completed 40 general education credits in an Associate degree in Nursing program, including:

- MATH& 146 Introduction to Stats (or equivalent)
- CHEM& 121 Intro to Chemistry w/ Lab (or equivalent)
- ENGL& 101 English Composition I (or equivalent), ENGL&102 Composition II (or equivalent), or ENGL&235 Technical Writing (or equivalent)
- NUTR& 101 Nutrition (or equivalent) Note: this course may be taken concurrently during the RN-BSN program

Please note: transcripts will be reviewed by the CBC transcript evaluator to ensure course equivalency. Prerequisite courses do not have an expiration date; however, prerequisite courses must be completed prior to being accepted into the RN-BSN program.

## NA Nursing Assistant

Nursing assistants (NAs) provide care to patients in a variety of healthcare settings for individuals that have difficulty performing their own basic care. Because of the personal nature of the job, nursing assistants should be compassionate and enjoy helping others. The Nursing Assistant program is designed to prepare students for entry-level practice as a Nursing Assistant-Certified (NAC) in Washington state. Students who successfully pass all components of the CBC NA coursework will receive a DSHS Certificate of Completion, notation posted on the CBC transcript and will be eligible to take the Nurse Aide Assessment Program (NNAAP) exam and apply for licensure as an NAC. The exam has two parts: a written or oral portion and a skills demonstration. Candidates must successfully pass both parts in order to be eligible to apply for licensure in the state of Washington and be placed on the nurse aide registry.



# Department Overviews

## Lecture/Clinical Requirements

Students are required to meet three to four days per week to complete the NA 100 lecture hours. 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 to complete these hours during shifts that may start as early as 6 am. These hours are arranged by the instructor with the facility. Students need to make arrangements to attend these required shifts as attendance is mandatory.

Applicants are required to provide the following documentation:

- A current American Heart Association Healthcare Basic Life Support (BLS) card
- A current First Aid card
- A professional letter of reference

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.

## NUTR& Nutrition & Food Science

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 life cycle, as well as current issues in nutrition are considered.

## OSH Occupational Safety & Health

This program prepares individuals to apply basic safety and health principles including physics, engineering principles and technical skills, in support of industry professionals engaged in identifying and mitigating hazardous materials and maintaining safety and health standards. This program includes instruction in industrial and construction safety principles; inspection, monitoring, testing and sampling procedures; biohazard identification, laboratory techniques, instrument calibration and equipment maintenance, safety and protection equipment; applications to specific work environments and report preparation.

Students graduating with an Associate in Applied Science degree in Occupational Safety & Health will be prepared to:

- Perform basic occupational safety and health functions.
- Apply a working knowledge of mathematics, sciences and other related disciplines to conduct experiments and to analyze and interpret data to solve occupational safety and health-related issues.
- Identify, formulate and solve applied science problems, using the techniques, skills and modern tools necessary for professional practice.
- Apply the principles of industrial hygiene and toxicology, and use fundamental exposure measurement techniques.
- Evaluate the relevance of contemporary issues in occupational safety and health.
- Identify principles of professional and ethical responsibility for occupational safety and health professionals.
- Apply principles of occupational safety and health through mentored supervised learning experiences.

## PMD Paramedic

The Paramedic is the highest trained of all Emergency Medical Technicians. It is crucial to have a good foundation as an EMT or an Advanced EMT in order to be successful as a Paramedic. The Paramedic requires significantly more training than the EMT or the Advanced EMT, and represents the Advanced Life Support role in the pre-hospital setting.

Two options are provided for the Paramedic pathway: a Paramedic Certificate and an Associate in Applied Science (AAS) Degree in Paramedicine.

An application and entrance exam are required as part of the acceptance process into the Paramedic Certificate or AAS degree program. A student does not need to be accepted and enrolled in the Paramedic program to take major support or general education prerequisite classes. New for 2021, The Paramedic program will start a new class every January and June, providing more frequent opportunities to start your EMS education. Individuals working towards the AAS and Certificate will require successful completion of the specified prerequisites before the program start date.

### Minimum application requirements are as follows:

1. The applicant must be a current student at CBC or apply for admission. If you are not currently a student at CBC you may apply on the CBC website by going to [columbiabasin.edu/apply](http://columbiabasin.edu/apply).
2. The applicant must be at least 18 years old by the beginning of the course.
3. Provide evidence of a high school diploma or equivalency.
4. The Columbia Basin College Paramedic program is limited to only emergency medical personnel who can verify certification of one year EMT or equivalent as per WAC 246-976-0471.
5. Proof of completion of one of the following options for an anatomy and physiology course(s), prior to the start of the program. You may be enrolled in a course during the application period as long as the course is completed prior to the start of the program. If a course is not complete before the application deadline, a written explanation of when you expect to be complete must be provided, as well as a current course grade at the time of application.

**Option #1:** Completion of the corexcel A&P online course with a grade of 2.0 or better. This course meets the minimum requirements for A&P entry into the Paramedic certificate program only. It will not provide college-level credit towards the AAS degree and should only be taken if you are applying for the Paramedic certificate program.

# Department Overviews

**Option #2:** Completion of BIOL& 241 with lab and BIOL& 242 with lab at Columbia Basin College or an equivalent from another accredited institution. If seeking equivalent, a minimum of 10 credits of Anatomy & Physiology must be transferrable to CBC with a 2.0 GPA or greater. A copy of your unofficial transcript must be submitted with this application. The actual transfer of the credits does not have to be completed until full acceptance has been granted.

6. English: There is not a prerequisite for English 101 to gain entry into the certificate or the AAS Paramedicine program, however, completion of ENGL& 101 is strongly encouraged.

7. Math: At minimum, completion of MATH 050 (previously known as MATH 094, MATH 095 or MATH 098) with a 2.0 or greater. If you have completed a higher level of math, that would be acceptable. Or, if you have completed an AAS or bachelor's degree that included a math course, that would be acceptable.

8. Attendance of a mandatory paramedic information session.

## PON Perioperative Nursing

Perioperative nurses are Registered Nurses (RNs) with special training, knowledge and skills in surgical patient care. Perioperative nurses work in hospital operating rooms and surgical services departments, ambulatory surgery centers, physician offices and other specialty facilities providing care to patients during the course of a surgical procedure. They work closely with surgeons, anesthesia providers, surgical technologists and other operating room professionals. Traditionally, the perioperative nurse may serve as either a scrub nurse or a circulating nurse. In the scrub role, the perioperative nurse establishes and maintains the sterile field, anticipates the needs of the surgical team and passes instruments and supplies to the surgeon and surgical first assistant. In the circulating role, the perioperative nurse manages the overall care of the patient and ensures patient safety by ensuring a proper environment. The circulator also transfers and positions the patient, performs urinary catheterization, positions the patient, performs counts of all instruments and supplies with the surgical technologist or scrub nurse and maintains intraoperative documentation. To be successful, perioperative nurses must develop a strong sense of physical and environmental awareness and the ability to anticipate the patient and surgical team's needs. This requires in-depth knowledge of surgical anatomy, operative procedures, surgical instrumentation and supplies, sterilization and infection control procedures and technical specialty equipment. CBC's Perioperative Nursing program incorporates AORN's PeriOp 101 program into didactic, laboratory and clinical study. Didactic coursework is presented using a hybrid online and classroom-based learning environment, culminating in a 165-hour clinical experience designed to prepare students for a career in the operating room. Program applicants must be licensed RNs meeting specific entrance criteria.

## PHIL Philosophy

Philosophy analyzes virtually every aspect of human existence. It attempts to understand the issues of our lives, such as the nature of truth and knowledge, the mind and body, freedom and determinism, right and wrong, and the existence of God. The philosophy department offers a wide range of classes that encourage the critical thinking skills essential for any career.

## PHLEB Phlebotomy

Phlebotomists work in many areas of the health care industry including hospitals, clinics and medical offices and are valuable members of the health care team. Phlebotomists must demonstrate patience, compassion, excellent communication skills and have the ability to keep up with a fast-paced environment. The phlebotomy curriculum is a two-course sequence, which prepares individuals with the knowledge, skills and abilities necessary to function as an entry-level phlebotomist. 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/licenses/permitsandcertificates/professions/newreneworupdate/medicalassistant/applicationsandforms.aspx](http://www.doh.wa.gov/licenses/permitsandcertificates/professions/newreneworupdate/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.

# Department Overviews

More information can be obtained from the Health Sciences Center office at 509.544.8300.

## PE Physical Education

The Physical Education department offers a variety of classes that can expose the student to leisure activity skills and fitness activities.

## PEC Physical Education Professional

These courses are designed for the PE major or students interested in a coaching career.

## PHYS Physics

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 (general physics) and calculus-based physics (engineering physics). The courses fulfill the requirement for the transfer to four-year institutions and various technical programs.

## POLS Political Science

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 descriptive and normative 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. Students interested in pursuing the study of Political Science can follow an academic map of suggested courses to prepare for a major in Political Science.

## PROJ Project Management

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 certificate, two-year Associate in Applied Science degree and a four-year Bachelor of Applied Science degree where each added step in the education builds on and reinforces the earlier knowledge, skills and experiences. The Bachelor of Applied Science in Project Management also offers a concentration option in Construction. 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 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

Students may begin a Project Management certificate or degree program during any quarter.

The Bachelor of Applied Science in Project Management is accredited by the Project Management Institute (PMI) Global Accreditation Center for Project Management Education Programs (GAC). GAC accredited programs must demonstrate and meet rigorous global standards of accreditation, which include an assessment of each program's objectives and outcomes, faculty and student evaluations, onsite and online resources, annual self-evaluation and proof of continuous improvements in the area of project management education. GAC accreditation ensures the quality of academic degree programs and their graduates, to meet the standards of the rapidly growing field of project management.

- Students eligible to sit for a PMI credential exam may immediately apply the classroom hours from a completed Project Management (PROJ) course toward the contact hour requirement, rather than waiting until they graduate from the program. The student can be confident that these hours are pre-approved and will automatically be accepted toward fulfilling the contact hour requirement.
- As a GAC accredited program, CBC is able to issue Professional Development Units (PDUs) to students who complete any individual registered Project Management course within their accredited degree program. The PMI credential holder can be confident that these PDUs are pre-approved and will automatically be accepted toward fulfilling the PMI continuing certification requirement.

## PSYC Psychology

Psychology is the scientific study of the mind and its functions. From critically examining behavior and investigating the brain's mysteries, to creative insights on well-being and furthering the discussion on mental health, our courses in psychology can help you develop knowledge and skills that will be useful in nearly any career.

# Department Overviews

## RPT Radiation Protection Technician

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.

## RATEC Radiologic Technology

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 radiologic 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](http://columbiabasin.edu/radtech) or contact the Health Sciences Division at 509.544.8306 or 509.544.8300.

## RDG Reading

The Reading department offers classes for students who need to build and/or improve college reading skills or who wish to acquire college vocabulary.

## RUSS& Russian

Our Russian courses 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.

## SNR Senior Citizen

The Senior Citizen department offers a variety of opportunities for the lifelong learner to take courses for professional development or personal enrichment.

## SSCI Social Science

The program offers courses in undergraduate social science research.

## SOWK Social Work

Social work is a profession dedicated to enhancing the social functioning of all people. Generally speaking, social work promotes human growth and development through education, public health, human welfare and social justice to help people achieve their maximum potential. Social Workers are typically social activists, connecting individuals and families with resources to meet basic needs and improve the quality of life. Specifically, social work may take many forms; psychological services, child protection, government planning and policymaking, and much, much more.

Students who major in Social Work develop strong communication skills, learn to be critical thinkers, understand resource management and how to employ advocacy skills. They often work as social workers, counselors, case managers, probation officers, community outreach workers, consultants and/or mediators.

## SOC Sociology

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.

## SPAN Spanish

Our Spanish courses 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. Heritage learners of Spanish are strongly encouraged to enroll in SPAN 205, SPAN 206, or SPAN 207.

The placement process is available on the World Languages webpage. Information on how to earn Prior Learning Credits is also available on the webpage.

## SURG Surgical Technology

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 5-6 credits
- BIOL& 242 Human A&P 2 w/ Lab 5-6 credits
- BIOL& 260 Microbiology w/ Lab 5-6 credits
- CMST& 210 Interpersonal Communication **or** CMST& 220 Public Speaking **or** CMST 260 Multicultural Communication 5 credits
- HSCI 147 Medical Terminology 5 credits
- MATH& 146 Introduction to Stats 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.



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The program provides a One-Year Operating Room Aide Certificate to students completing the first quarter of the program. Graduates of the Surgical Technology program earn an Associate in Applied Science degree in Surgical Technology and are eligible for national board certification through the National Board of Surgical Technology and Surgical Assisting (NBSTSA). The NBSTSA Certified Surgical Technologist (CST) examination first-time pass rate for graduates of the CBC Surgical Technology program is 86%\*.

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

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](http://columbiabasin.edu/surgtech) or contact the Health Sciences Division at 509.544.8354 or 509.544.8300.

\*Source: 2018 ARC/STSA Annual Report.

## EDUT Technical Education

Technical Education courses are designed to support career and technical education instructors' knowledge and application of instructional strategies to provide the best learning opportunities for their students.

## DRMA Theatre

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 enrich students learning experiences by having them work with state of the art technologies, performance methodologies and learning industry techniques.
- To provide extracurricular activity through performances for the college and community.
- To enrich the theatre going public in areas of Equity and Diversity.

Career opportunities include teaching theatre, professional acting, directing, designing, stage management and technical theatre. 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.

## WT Welding Technology

Welding Technology offers certificates and an AAS degree 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

## WS Women's Studies

CBC offers students courses in Women's Studies that focus specifically on the issues, inequalities and possibilities that occur at the intersection of gender, sexuality, race, ethnicity, nationality and class. Students learn various theories and methods to help critically analyze and explore these issues both historically and in contemporary times. Topics of focus include social movements, culture, art, and literature.

## WKSP Workshop

Workshops are offered by a variety of academic departments throughout the year; many are exploratory or one time options.

# Courses & Programs

## Accounting

### ACCT&201

#### Principles of Accounting I • 5.0 Credits

Formerly BA 251

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

#### Principles of Accounting II • 5.0 Credits

Formerly BA 252

The theory and practice of accounting, including financial statements. Emphasis on partnership and corporate accounting. **Prerequisite:** ACCT& 201 or instructor permission.

### ACCT&203

#### Principles of Accounting III • 5.0 Credits

Formerly BA 253

A continuation of ACCT& 202. Introduction of manufacturing and cost accounting. Analysis of financial statements, budgeting, and cost volume analysis. **Prerequisite:** ACCT& 202.

## Administrative Office Technology

### AOT 117

#### Office Orientation • 4.0 Credits

Formerly AOT 1170

This class encompasses business ethics, personal values, human relations, and effective communication in an office environment. This course focuses on attaining and retaining entry-level employment.

### AOT 142

#### General Office Procedures • 5.0 Credits

Formerly AOT 1420

This class bridges the gap between the classroom and the office by prioritizing work and managing time, preparing realistic office assignments, filing office documents; managing personal information (PIM software); and conducting online research. **Prerequisite:** concurrent enrollment in AOT 117 or instructor permission.

### AOT 156

#### Supervised Employment • 2.0 Credits

Formerly AOT 1952

This is a supervised work experience involving the application and practice of skills and principles learned in the classroom. The student will be placed with an employer where the environment will build on the student's area of career interest and prepare them to be productive employees.

**Prerequisite:** AOT 117 and 142, or instructor permission.

### AOT 172

#### Word Processing I • 4.0 Credits

This class 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.

## Adult Basic Education

### ABE 009

#### LOC Ed Interviewing • 1.0–3.0 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 • 1.0–15.0 Credits

Math instruction in adding and subtracting of simple whole numbers. Reading instruction in phonics, language patterns, and using context to understand written material. Writing instruction for basic survival needs and for personal communication.

### ABE 020

#### ABE Level 2 • 1.0–15.0 Credits

Math instruction in place value, whole number operations, and problem-solving. Reading instruction in phonics, language patterns, and using context to understand written material. Writing instruction for basic survival needs and for personal communication.

### ABE 030

#### ABE Level 3 • 1.0–15.0 Credits

Math instruction in decimals, fractions, and problem-solving. Reading instruction in word meanings, structure in word meanings, structure of paragraphs, identification of main idea, distinguishing between fact and opinion and comprehension strategies for a variety of reading materials. Writing instruction in sentence composition and paragraph construction.

### ABE 040

#### ABE Level 4 • 1.0–15.0 Credits

Math instruction in percent, ratio, proportion, measurement, tables, and graphs. Reading instruction in organization and main idea, as well as in evaluation, comprehension, and making inferences using a variety of intermediate level reading materials. Writing instruction in writing connected paragraphs with correct punctuation, capitalization usage, spelling, and more complex sentence structure.

### ABE 050

#### Basic GED(R) Prep • 1.0–15.0 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(R) Prep • 1.0–15.0 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(R) Math • 1.0–5.0 Credits

Individualized instruction to prepare students to pass the official Mathematics Reasoning GED® tests.

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## ABE 090

### I-Best Studies • 1.0–10.0 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.

## Agricultural Food Systems

### AFS 101

#### Introduction to Agricultural Systems • 5.0 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 • 1.0–15.0 Credits

A class used to explore new coursework.

### AFS 201

#### Agricultural & Food Systems w/ Lab • 5.0 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

### AG 101

#### Crop Production I Field Crops w/ Lab • 4.0 Credits

This course covers introduction to principles of crop production, including crop growth, development, yield and quality. Emphasis is placed on applying technology advances in agronomy to active crop-production situations, including basic soils, climate, crop physiology, and breeding. Major field and forage crops grown in the Columbia Basin and Washington state will be covered. Production practices such as planting, maintenance, storage techniques and harvesting will also be covered.

### AG 102

#### Introduction to Animal Science w/ Lab • 5.0 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 • 0.0 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 107

#### Agriculture Safety • 3.0 Credits

This course is an overview of various hazards associated with agriculture. Hazards examined include machinery, controlled spaces, pesticides, and other items in the agricultural workplace. The course also covers identifying safety hazards, applying procedures, analyzing safety rules and regulations. Emphasis will be placed on safety and worker protection in the agricultural workplace, agricultural pesticide uses and applications, chemical safety, and waste hazards associated with pesticides and fertilizer use. Safety standards for agriculture identified by the Washington State Administration codes (WAC 296-307) will be covered.

### AG 117

#### Agriculture Mechanics and Machinery w/ Lab • 4.0 Credits

This course emphasizes agriculture equipment including tractors, planters, harvesters and balers used in modern agriculture. The course also covers economic factors, operation principles, adjustments and maintenance of commonly used machines. Maneuvering, attaching, detaching, and using implements will be covered.

### AG 140

#### Weed Science w/ Lab • 4.0 Credits

The course provides a background on weed identification, biology, distribution of weeds, interference in crops, and weed ecology. Weed control by preventive, cultural, biological, mechanical, and chemical means. The course also covers herbicide terminology, equipment calibration, and dosage calculations.

### AG 181

#### Irrigation Principles and Management w/ Lab • 4.0 Credits

This course focuses on elements of irrigation including methods, management and the irrigation industry in the Columbia Basin. The course covers irrigation methods, systems, efficiencies, equipment, and their relationship to soils and plants. The course will also cover water scheduling, flow measurement, and irrigation management. Water supply, quality, and issues will also be discussed.

### AG 199

#### Special Studies • 1.0–20.0 Credits

A class used to explore new coursework.

### AG 201

#### Soils w/ Lab • 5.0 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, 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 205

#### Crop Pests and Diseases w/ Lab • 4.0 Credits

This course provides an overview of pests, diseases, and nematodes common in the crops of Washington. The course will focus on identification of pests and diseases, study of life cycles, control and management strategies of pests, diseases, and nematodes. The course will cover basic principles of plant pathology, entomology, and nematology.

### AG 210

#### Applied Agriculture Research • 2.0 Credits

In the lab, students are directly involved in conducting agricultural research as a member of a research team led by a faculty member.

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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 221

### Introduction to Precision Agriculture • 3.0 Credits

This course will provide an introduction to Precision Agriculture technologies, covering both the applications and the different technologies (e.g. geographic information systems (GIS), global positioning systems (GPS), remote sensing systems, variable rate application, drones etc.) that make precision farming possible. This course covers the introductory use of each of these tools in the processes of a precision farming system. Economic and environmental benefits will also be discussed.

## AG 222

### Advanced Precision Agriculture w/ Lab • 4.0 Credits

This course covers unmanned aerial systems (UAS) usage in precision agriculture, including platforms, history and commercial applications. Processes of precision agriculture such as data collection, data analysis, and analysis application will be emphasized. This course also covers Federal Aviation Administration (FAA) regulatory framework, privacy issues, and navigation. **Prerequisite: grade of 2.0 or better in AG 221.**

## AG 232

### Crop Production II Fruit & Veg Production w/ Lab • 4.0 Credits

This course is designed to provide students with an in-depth understanding of the principles and practices of sustainable fruit and vegetable crop production. Students will learn about soil fertility management, stand establishment, environmental modification, and pest management.

## AG 250

### GPS and GIS Applications w/ Lab • 4.0 Credits

This course applies Global Positioning Systems (GPS) and Geographic Information Systems (GIS) applications such as agriculture, surveying, aviation etc. The course will focus on basics of cartography, geography, map projections, and coordinate systems. Emphasis is on data collection using GPS, transfer data, process field data, analysis, storage/retrieval of data, generating reports and or maps using imaging software. Students will utilize hands-on computer exercises with real farm data to provide a practical experience. **Prerequisite: grade of 2.0 or better in AG 221.**

## AG 252

### Insects of Economic Importance w/ Lab • 5.0 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 • 5.0 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 297

### Agriculture Internship • 3.0 Credits

This course is designed to provide students with major-related, supervised, evaluated practical training work experiences in a community agency, business, or industrial firm. The course involves the application and practice of skills and principles learned in the classroom and in real-world situations. Students will also evaluate agricultural careers and an overview of the types of agricultural employment. Students are graded on the basis of documented learning acquired through hands-on experiences in an actual work setting. **Prerequisite: instructor permission required.**

## AG 299

### Special Studies • 1.0–20.0 Credits

A class used to explore new coursework.

## AG 310

### Ag Operations and Supply Chain Management • 5.0 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 • 5.0 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 • 5.0 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 • 1.0–10.0 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.



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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 • 5.0 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

### ANTH&100

#### Survey of Anthropology [S/B] • 5.0 Credits

Formerly ANT 101

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 197

#### Field Experience • 1.0–3.0 Credits

Formerly ANTH 1972

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 • 1.0–15.0 Credits

A class used to explore new coursework.

### ANTH&204

#### Archaeology [S/B] • 5.0 Credits

Formerly ANT 130

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

#### Biological Anthropology [M/S] • 5.0 Credits

Formerly ANT 111

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

#### Cultural Anthropology [S/B] • 5.0 Credits

Formerly ANT 120

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 214

#### Biological Anthropology Lab [M/S] • 1.0 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&234

#### Religion & Culture [S/B] • 5.0 Credits

Formerly ANT 128

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.

### ANTH 299

#### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Applied Management

### AMGT 300

#### Management & Organization Theory • 5.0 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). Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **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 • 5.0 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

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operations management to a real business problem. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **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 • 1.0–5.0 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, and instructor approval.**

## AMGT 320

### Leadership & Organization Behavior • 5.0 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **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 • 5.0 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

## AMGT 340

### Information Technology and Applications • 5.0 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **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 • 5.0 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **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 • 5.0 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **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 • 1.0–5.0 Credits

A class designed to explore a specific topic of special interest. Students are required to work 55 hours to earn one credit hour. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, and instructor approval.**

## AMGT 400

### Financial and Managerial Accounting • 5.0 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **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 • 1.0–5.0 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, and instructor approval.**

## AMGT 420

### Human Resource Management • 5.0 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 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

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## AMGT 430

### Fundamentals of Financial Management • 5.0 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: AMGT 400 with a minimum grade of 2.0 or ACCT& 203 with a minimum grade of 2.0 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 • 1.0–5.0 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, and instructor approval.**

## AMGT 480

### Business Strategy Capstone • 5.0 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: AMGT 300, 310, 320, 330, and 400. Additionally, you must have taken or be concurrently taking AMGT 340, 360, and 430. All prerequisites must be passed with a 2.0 or better.**

## AMGT 489

### BAS Independent Study • 1.0–5.0 Credits

A class designed to explore a specific topic of special interest. Students are required to work 55 hours to earn one credit hour. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: meets the criteria for acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, and instructor approval.**

## AMGT 490

### Small Business Start-up Capstone • 5.0 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. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: AMGT 300, 310, 320, 330, and 400. Additionally, you must have taken or be concurrently taking AMGT 340, 360, and 430. All prerequisites must be passed with a 2.0 or better.**

## Arabic

### ARAB 121

#### Arabic I [H] • 5.0 Credits

Introduction to the modern, standard Arabic language including conversational skills, reading, writing and grammar, and the culture of Arab countries of the Middle East and Northern Africa including geography, customs, daily life, and heritage. Designed for the novice learner of Arabic, with little or no proficiency in the Arabic language. **Recommended prerequisite: successful completion of at least ENGL 099.**

### ARAB 122

#### Arabic II [H] • 5.0 Credits

Introduction to the modern, standard Arabic language including conversational skills, reading, writing and grammar, and the culture of Arab countries of the Middle East and Northern Africa including geography, customs, daily life, and heritage. **Prerequisite: ARAB 121 or instructor permission.**

### ARAB 123

#### Arabic III [H] • 5.0 Credits

Introduction to the modern, standard Arabic language including conversational skills, reading, writing and grammar, and the culture of Arab countries of the Middle East and Northern Africa including geography, customs, daily life, and heritage. **Prerequisite: ARAB 122 or instructor permission.**

## Art, Visual

### ART& 100

#### Art Appreciation [H] • 5.0 Credits

Formerly ART 110

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.

### ART 111

#### 2D Design • 5.0 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

#### 3D Design • 5.0 Credits

Formerly ART 1121

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.

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## ART 113

### Drawing I • 3.0 Credits

Formerly ART 1131

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

### Drawing II • 3.0 Credits

Formerly ART 1141

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

### Life Drawing • 3.0 Credits

Formerly ART 1151

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] • 5.0 Credits

A comparative study of architecture, sculpture, and pictorial arts from the ancient cultures of the world. A chronological survey of prehistoric, Mesopotamian, Egyptian, Greek, Roman, Byzantine, and Islamic arts.

## ART 117

### Art History Medieval-Baroque [H] • 5.0 Credits

A study of architecture, painting, and sculpture from the Middle Ages through the Gothic, Renaissance, and Baroque. Comparative studies of cross cultural traditions.

## ART 118

### Art History Modern Times [H] • 5.0 Credits

A chronological study of architecture, sculpture, painting, printmaking, photography, and the design arts from Romanticism to the present.

## ART 119

### Art History of Asia [H] • 5.0 Credits

A survey of painting, sculpture, ceramics, and architecture of India, China, Southeast Asia, and Japan with emphasis on the political, philosophical, and religious courses that shape Far Eastern art.

## ART 120

### Art History of the Americas [H] • 5.0 Credits

Survey of pre-Colombian art in North and South America; North American and Latin American colonial arts; modern and contemporary Latin American and Native American art and their contributions to contemporary culture.

## ART 198

### Special Studies • 1.0–15.0 Credits

Formerly ART 1991

An experimental class to be used to explore new approaches and applications to studio art.

## ART 199

### Special Studies • 1.0–15.0 Credits

An experimental class to be used to explore new approaches and applications to art theory.

## ART 201

### Photography I • 1.0–3.0 Credits

Formerly ART 2011

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

### Photography II • 1.0–3.0 Credits

Formerly ART 2021

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 • 5.0 Credits

An introduction to the use of digital media in art. This course acquaints students with the 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 • 5.0 Credits

An introductory class in the theory and application of layout, typography, color, and image as it is used in today's advertising and industrial graphics. The course covers the fundamentals of graphic design with an emphasis on creative problem solving through traditional and digital techniques using industry-accepted software. <Recommended prerequisite: ART 111, 113, and 209.>

## ART 212

### Graphic Design II • 5.0 Credits

An intermediate class that expands on the use of theory and refined application of layout, typography, color, and image as it is used in today's advertising and industrial graphics. The course objective is to develop greater proficiency in graphic design processes and skills to achieve creative solutions through traditional and digital techniques using industry-accepted software. **Prerequisite:** ART 211.

## ART 213

### Printmaking I • 1.0–3.0 Credits

Formerly ART 2131

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.

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## ART 214

### Printmaking II • 1.0–3.0 Credits

Formerly ART 2141

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

### Painting I • 1.0–3.0 Credits

Formerly ART 2151

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

### Painting II • 1.0–3.0 Credits

Formerly ART 2161

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

### Watercolor I • 1.0–3.0 Credits

Formerly ART 2171

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

### Watercolor II • 1.0–3.0 Credits

Formerly ART 2181

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

### Sculpture I • 1.0–3.0 Credits

Formerly ART 2201

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

### Sculpture II • 1.0–3.0 Credits

Formerly ART 2211

A continuation of ART 220 with emphasis on the techniques of casting, construction, and carving. **Prerequisite:** ART 220.

## ART 222

### Ceramics I • 1.0–3.0 Credits

Formerly ART 2221

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

### Ceramics II • 1.0–3.0 Credits

Formerly ART 2231

A continuation of ART 222 with special emphasis on wheel technique, glaze formulation, and design of clay forms. **Prerequisite:** ART 222.

## ART 224

### Ceramic Sculpture • 1.0–3.0 Credits

Formerly ART 2241

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

### Metals I • 1.0–3.0 Credits

Formerly ART 2251

An introduction to the broad range of materials, techniques, and formats characteristic of metal art and jewelry. **Recommended prerequisite:** ART 111.

## ART 226

### Metals II • 1.0–3.0 Credits

Formerly ART 2261

A continuation of ART 225 with emphasis on advanced fabrication techniques, casting, and contemporary metal art and jewelry design. This course explores form as a means of expression for both functional and nonfunctional work. It is designed to develop skill, craftsmanship, and sensitivity to design in working with metal. **Prerequisite:** ART 225.

## ART 230

### Professional Practices • 1.0–2.0 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

### Illustration I • 1.0–3.0 Credits

Formerly ART 2411

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

### Illustration II • 1.0–3.0 Credits

Formerly ART 2421

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

### Illustration III • 1.0–3.0 Credits

Formerly ART 2431

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

### Studio Problems • 1.0–3.0 Credits

Formerly ART 2501

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.



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## ART 251

### Studio Problems - Design • 1.0–3.0 Credits

Formerly ART 2511

Individual, contracted, advanced study in design. Studio and seminar.

## ART 252

### Studio Problems - Graphic • 1.0–3.0 Credits

Formerly ART 2521

Individual, contracted, advanced study in computer graphics. Studio and seminar. **Recommended prerequisite: ART 209, 211, and 212.**

## ART 253

### Studio Problems - Drawing • 1.0–3.0 Credits

Formerly ART 2531

Individual, contracted, advanced study in drawing. Studio and seminar.

## ART 254

### Studio Problems - Painting • 1.0–3.0 Credits

Formerly ART 2541

Individual, contracted, advanced study in painting. Studio and seminar.

## ART 255

### Studio Problems - Sculpture • 1.0–3.0 Credits

Formerly ART 2551

Individual, contracted, advanced study in sculpture. Studio and seminar.

## ART 256

### Studio Problems - Metals • 1.0–3.0 Credits

Formerly ART 2561

Individual, contracted, advanced study in metal arts. Studio and seminar.

## ART 257

### Studio Problems - Ceramics • 1.0–3.0 Credits

Formerly ART 2571

Individual, contracted, advanced study in ceramic arts. Studio and seminar.

## ART 258

### Studio Problems - Watercolor • 1.0–3.0 Credits

Formerly ART 2581

Individual contracted advanced study in water color. Studio and seminar.

## ART 259

### Studio Problems - Photography • 1.0–3.0 Credits

Formerly ART 2591

Individual, contracted, advanced study in photography, studio and seminar.

## ART 298

### Special Studies Lab • 1.0–15.0 Credits

Formerly ART 2991

An advanced experimental class to be used to explore new approaches and applications to studio art.

## ART 299

### Special Studies • 1.0–15.0 Credits

An advanced experimental class to be used to explore new approaches and applications to art theory.

## Astronomy

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### ASTR&101

#### Intro to Astronomy w/ Lab [M/S] • 5.0 Credits

Formerly AST 101

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: grade of 2.0 or better in MATH 050, 060, 062, or 096.**

### ASTR 102

#### Intro to Astronomy - Part II w/ Lab [M/S] • 5.0 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 050, 060, 062, 096 or instructor permission. ASTR& 101 recommended.**

### ASTR 199

#### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

### ASTR 299

#### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Automotive Technology

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### AMT 100

#### Basic Automotive Maintenance • 2.0 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 104

#### Diesel Engine Theory • 2.0 Credits

This course provides basic knowledge and theory of operation of automotive diesel engines including ignition and fuel systems.

**Prerequisite: AMT 107, 109, 113, and 114 or instructor permission.**

### AMT 105

#### Basic Automotive Maintenance Lab • 1.0–3.0 Credits

Formerly AMT 1001

Lab to be taken concurrently with AMT 100.

### AMT 107

#### Parts, Systems, and Components • 4.0 Credits

This course prepares students to apply technical knowledge and skills to perform tasks and services that facilitate the movement and sale of parts and materials. Students will learn the identification of individual parts in vehicle systems and demonstrate an understanding of parts' relationships

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to various systems. **Prerequisite:** enrollment in the Automotive Technology program, or CASAS 221+ or equivalent, or instructor permission.

## AMT 108

### Parts Logistics Practicum • 1.0 Credit

This class provides field experiences that allow a student to observe and document how working professionals perform their job duties. Students will also participate in performing tasks to a limited extent allowed by on-site staff in an environment that will build on the students' area of career interests and prepare them to be productive employees. **Prerequisite:** AMT 107 and INT 130, or instructor permission.

## AMT 109

### Tools and Hardware • 3.0 Credits

This is an entry-level course that provides basic tool and hardware safety, use, and storage. It will cover the tools, hardware, fasteners, and basic equipment commonly used in maintenance shop environments.

## AMT 112

### Electrical Systems • 2.0 Credits

A class covering electrical basics, electronics, test equipment, wiring circuitry, and basic diagnosis of starting and charging systems. Students in the lab diagnose and repair light circuits, wiring systems, and basic starting and charging systems. This course is designed for automotive students.

## AMT 113

### Maintenance Publications and Records • 2.0 Credits

This course provides students with knowledge to utilize maintenance publications, service bulletins, and maintenance directives for service and maintenance of vehicles. It also includes the correct procedures and information for completing work orders and creating maintenance log entries.

## AMT 114

### Preventive Maintenance • 5.0 Credits

This course provides students with basic knowledge and understanding of automotive procedures for maintaining vehicles by following recommendations for preventive care. This course provides the background science and physics for understanding the unique needs and attributes of automotive materials and systems including lubrication, hydraulic, pneumatic, metallurgical, gaseous, power, and fuels.

## AMT 115

### Basic Damage Repair • 3.0 Credits

This course is an introduction to basic metal repair and metal straightening techniques. It includes shop safety and the proper use of power and hand tools.

## AMT 116

### Corrosion Protection • 3.0 Credits

This course provides an introduction to identifying damage and non-damage corrosion. Various methods of corrosion protection are presented as well as metal treatments and primers. **Prerequisite:** AMT 107 or instructor permission.

## AMT 117

### Introduction to Paint Application • 3.0 Credits

This course provides basic knowledge and practice in correcting defects in vehicle finishes. Students will learn to distinguish among the various types of paint equipment, use various paint codes and specifications, identify various paint systems, and explore paint defects. **Prerequisite:** AMT 107 or instructor permission.

## AMT 118

### Glass and Plastic Adhesive Repair • 3.0 Credits

This course provides an introduction to the basics of glass and plastic adhesive repair. Topics include glass repair, fiberglass and composite repair, and applying body plastic filler.

## AMT 119

### Suspension and Steering Systems Theory • 2.0 Credits

This class is designed to give students an understanding of the theory of automotive steering and suspension systems. The emphasis will be on the mechanical portion of those systems. **Prerequisite:** AMT 107, 109, 113, and 114 or instructor permission.

## AMT 120

### Basic Electrical Systems • 4.0 Credits

This course provides students with a basic understanding of the theory, diagnosis, and service of automotive electrical systems. Subjects covered will include basic electrical principles and how malfunctions affect the proper functioning of vehicles. **Prerequisite:** MATH 111 or instructor permission.

## AMT 121

### Suspension and Steering Systems Servicing • 5.0 Credits

This lab is designed to familiarize students with the operation, diagnosis, repair, and service of automotive steering and suspension systems, with the emphasis on the mechanical portion of these systems. **Prerequisite:** AMT 107, 109, 113, and 114 or instructor permission.

## AMT 123

### Brake Systems I • 5.0 Credits

This class provides a basic understanding of the theory, diagnosis, and service of automotive brake systems. Emphasis will be placed on the mechanical portion of the brakes systems and the principles behind their operation. **Prerequisite:** AMT 120 with a minimum 2.0 GPA or instructor permission.

## AMT 129

### Engine Theory • 3.0 Credits

This course introduces students to the theory of internal combustion engines. Students will explore the fundamentals of fuel system theory, ignition theory, and identify engine mechanical integrity and operation. **Prerequisite:** AMT 107, 109, 113, and 114 or instructor permission. Minimum grade of 2.0 is required to advance in the program.

## AMT 130

### Engine Servicing • 4.0 Credits

This class provides students a basic understanding of the diagnosis, service, and operation of internal combustion engines with an emphasis on servicing, failure analysis, and correct parts replacement. **Prerequisite:** AMT 107, 109, 113, and 114 or instructor permission. Minimum grade of 2.0 is required to advance in the program.

## AMT 133

### Engine Repair • 4.0 Credits

Students will learn to inspect and repair engine lubrication systems, cooling systems, cylinder heads, and valve trains, as well as how to perform advanced level engine diagnosis. Emphasis will be placed on failure analysis and demonstrating proper parts replacement. **Prerequisite:** AMT 129 and 130 or instructor permission. Minimum grade of 2.0 is required to advance in the program.

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## AMT 134

### Engine Rebuild • 3.0 Credits

Students will learn how to remove and install an automotive engine; inspect and troubleshoot internal combustion engines; demonstrate the ability to reassemble engine components into a working condition, including engine conformity inspections; and perform advanced level engine diagnosis. **Prerequisite:** AMT 129, 130, and concurrently enrolled in AMT 133 or instructor permission. Minimum grade of 2.0 is required to advance in the program.

## AMT 135

### Vehicle Maintenance & Lab • 7.0 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 • 7.0 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 • 1.0–15.0 Credits

A class used to explore new coursework or for a specific topic of special interest.

## AMT 199

### Special Studies • 1.0–10.0 Credits

A class used to explore new coursework.

## AMT 210

### Automotive Electronics • 4.0 Credits

This course covers the concepts of electrical fundamentals and electronics including series, parallel, and compound circuits; motors, relays, switches, inverters, converters; power distribution, wiring and routing; and logic diagrams and circuits. **Prerequisite:** AMT 120 or instructor permission.

## AMT 220

### Advanced Electrical & Electronics & Lab • 7.0 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 • 5.0 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 Transmission • 5.0 Credits

Students will gain a basic understanding of the theory, diagnosis, rebuilding, and servicing of automatic automotive transmissions, including an understanding of their internal hydraulic, electrical, and mechanical operations.

## AMT 233

### Manual Transmissions & Lab • 7.0 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 • 7.0 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 • 7.0 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.

## AMT 250

### Automotive Technology Systems Review • 3.0 Credits

This combination class/lab is designed to give students a review of basic knowledge and understanding of vehicle systems including: electrical, engines, brakes, heating and air conditioning, automatic transmissions, and engine performance.

## AMT 251

### Hybrid Operations and Safety • 3.0 Credits

This combination class/lab is designed to give students an overview of hybrid/high voltage vehicles. The class covers safety, driving characteristics, environmental concerns, and hybrid/high voltage energy principles.



# Courses & Programs

## AMT 252

### High Voltage Basic Operations • 3.0 Credits

This combination class/lab is designed to give students an overview of high voltage batteries, transformers, high voltage wiring, dc-dc converters, safety circuitry, three-phase motors, and high voltage control systems.

## AMT 253

### Basic Maintenance and Servicing of Hybrids • 3.0 Credits

This combination class/lab is designed to give students the theory and hands-on experience to perform basic preventive maintenance of hybrid vehicles.

## AMT 254

### High Voltage Diagnostics • 3.0 Credits

This combination class/lab is designed to give students theories and strategies for diagnosing high voltage and hybrid specific systems.

## AMT 255

### Component Replacement • 3.0 Credits

This combination class/lab is designed to give students theory and hands-on experience of proper removal and replacement of hybrid components.

## Biology

### BIOL&100

#### Survey of Biology w/ Lab [M/S] • 5.0 Credits

Formerly BIO 100

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 140

#### Fundamentals of Botany w/ Lab [M/S] • 5.0 Credits

Formerly BIO 140

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

#### Plant Identification w/ Lab [M/S] • 5.0 Credits

Formerly BIO 148

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&160

#### General Biology w/ Lab [M/S] • 5.0 Credits

Formerly BIO 105

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

#### Human Biology w/ Lab [M/S] • 5.0 Credits

Formerly BIO 110

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 199

#### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

### BIOL 201

#### Soils w/ Lab [M/S] • 5.0 Credits

Formerly BIO 201

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&211

#### Majors Cellular w/ Lab [M/S] • 5.0 Credits

Formerly BIO 111

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

#### Majors Plant w/ Lab [M/S] • 5.0 Credits

Formerly BIO 112

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

#### Majors Animal w/ Lab [M/S] • 5.0 Credits

Formerly BIO 113

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

#### Human A&P 1 w/ Lab [M/S] • 6.0 Credits

Formerly BIO 221

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

#### Human A&P 2 w/ Lab [M/S] • 6.0 Credits

Formerly BIO 222

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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 252

### Insects of Economic Importance w/ Lab [M/S] • 5.0 Credits

Formerly BIO 252

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

### Plant Pathology w/ Lab [M/S] • 5.0 Credits

Formerly BIO 253

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&260

### Microbiology w/ Lab [M/S] • 6.0 Credits

Formerly BIO 260

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).**

## BIOL 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Blueprint Reading

### BPR 105

#### Blueprint Reading • 3.0 Credits

The Blueprint Reading course is a comprehensive guide to interpreting drawings commonly found in manufacturing. This course is intended as an introduction to understanding blueprints and being able to visualize and understand the intent of the designer or draftsman as presented in a blueprint. The first step in making quality parts or assemblies is interpreting the drawing correctly and applying the given information to the final product. This is the short course of need to know information for blueprint reading in machine trades.

### BPR 106

#### Blueprint Reading I (WT) • 3.0 Credits

This course is designed to introduce the welding student to the world of blueprint symbols, facts, and figures. BPR 106 is the first of a two-part series in which 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 110

#### Basic Blueprints and Drawings • 3.0 Credits

This course is intended to provide students with information about how to read and interpret information from blueprints, drawings, exploded views, illustrated parts catalogs, assembly drawings, flow diagrams, and schematics.

### BPR 204

#### Blueprint Reading II (MT) • 3.0 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) • 3.0 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

### BUS& 101

#### Introduction to Business • 5.0 Credits

Formerly BA 101

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 103

#### Principles of Sales • 5.0 Credits

Formerly BA 103

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

#### Business & Payroll Tax Accounting • 5.0 Credits

Formerly BA 105

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

#### Federal Income Taxes • 5.0 Credits

Formerly BA 107

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

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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**

### **Computerized Accounting • 5.0 Credits**

Formerly BA 111

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**

### **Personal Finance • 5.0 Credits**

Formerly BA 120

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**

### **Public Relations • 5.0 Credits**

Formerly BA 134

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**

### **Advertising Principles • 5.0 Credits**

Formerly BA 150

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**

### **Investments • 5.0 Credits**

Formerly BA 165

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 • 5.0 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 • 1.0–6.0 Credits**

To obtain experience in event planning by assisting or being the lead in the completion of an event planning project(s).

## **BUS 179**

### **Introduction to Entrepreneurship • 5.0 Credits**

This is a survey course in entrepreneurship and business development. This course focuses on starting and developing a new business. Topics include evaluating opportunities and testing the feasibility of creative ideas, selecting and dealing with partners; examining alternative methods of financing, developing the initial competitive strategy, structuring and managing the business through the early survival months, and locating sources of outside help.

## **BUS 195**

### **Supervised Employment • 1.0–5.0 Credits**

Formerly BUS 1952

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 • 1.0–5.0 Credits**

Designed to provide students with insight into the many aspects of the world of work through discussions of their personal work environments, encompassing actual on-the-job training and observations. May be repeated to a maximum of six credits. **Prerequisite: concurrent enrollment in BUS 195.**

## **BUS 199**

### **Special Studies • 1.0–5.0 Credits**

Formerly BA 199

A class used to explore new coursework.

## **BUS& 201**

### **Business Law • 5.0 Credits**

Formerly BA 254

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.

## **BUS 210**

### **Managing Personal Finance • 5.0 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**

### **Personal Finance • 5.0 Credits**

Formerly BA 220

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

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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**

### **Management Information Systems • 5.0 Credits**

Formerly BA 250

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**

### **Legal Institutions & Processes in Am. Business • 5.0 Credits**

Formerly BA 255, POLS&200

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**

### **Governmental Accounting • 5.0 Credits**

Formerly BA 257

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**

### **Human Resources Management • 1.0–5.0 Credits**

Formerly BA 261

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**

### **Management Principles • 5.0 Credits**

Formerly BA 262

A study of the essentials of management in merchandising, manufacturing, agriculture, agrichemical business, and service businesses.

## **BUS 263**

### **Principles of Finance • 5.0 Credits**

Formerly BA 263

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**

### **Fraud & Accounting Information Systems • 5.0 Credits**

Formerly BA 264

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**

### **Marketing Principles • 5.0 Credits**

Formerly BA 265

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**

### **Marketing Special Projects • 1.0–5.0 Credits**

Formerly BA 267

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.

## **BUS 268**

### **Marketing Special Projects II • 1.0–5.0 Credits**

Formerly BA 268

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.

## **BUS 269**

### **Marketing Special Projects III • 1.0–5.0 Credits**

Formerly BA 269

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.

## **BUS 271**

### **Human Relations Business • 5.0 Credits**

Formerly BA 271

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.

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## BUS 272

### Organization Development • 3.0 Credits

Formerly BA 272

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 279

### Intermediate Entrepreneurship • 5.0 Credits

Students will learn the principles and skills needed for implementation of a business plan to own and operate a successful venture. The principles and skills of the entrepreneur are utilized in the decision making process. Topics covered in this course include: The appropriate business structure and organization, developing plans and strategies for the entrepreneurial venture, financing strategies, exploration of growth opportunities, and successful managing of scarce resources. **Prerequisite:** BUS 179.

## BUS 280

### Innovation & Design Thinking 1 • 5.0 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 • 5.0 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 • 5.0 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

### Supervised Employment • 1.0–5.0 Credits

Formerly BUS 2952

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 • 1.0–2.0 Credits

Designed to provide students with insight into the many aspects of the world of work through discussions of their personal work environment, encompassing actual on-the-job training, and observations. May be repeated to a maximum of six credits. **Prerequisite:** concurrent enrollment in BUS 295.

## BUS 299

### Special Studies • 1.0–5.0 Credits

Formerly BA 299

A class used to explore new coursework.

## Chemistry

### CHEM&110

#### Chemical Concepts w/ Lab [M/S] • 5.0 Credits

Formerly CHM 100

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 050, 060, 062, 096 or higher.

### CHEM&121

#### Intro to Chemistry w/ Lab [M/S] • 5.0 Credits

Formerly CHM 110

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 050, 060, 062, 094, 097 or higher.

### CHEM&122

#### Intro to Organic Chemistry w/ Lab [M/S] • 5.0 Credits

Formerly CHM 120

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, 140, or 161.

### CHEM&123

#### Intro to Biochemistry w/ Lab [M/S] • 5.0 Credits

Formerly CHM 130

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 or 242.



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## CHEM&131

### Intro to Organic/Biochemistry w/ Lab [M/S] • 5.0 Credits

Formerly CHM 135

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

### General Chemistry Prep w/ Lab [M/S] • 5.0 Credits

Formerly CHM 101

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: grade of 2.0 or better in MATH 070, 072, 095 or 098.**

## CHEM&161

### General Chemistry I w/ Lab [M/S] • 6.0 Credits

Formerly CHM 111

Fundamental concepts in chemistry including matter, measurement, and dimensional analysis, atomic theory, atomic structure, chemical bonding, chemical formulas and nomenclature, mole concept, chemical reactions and stoichiometry, thermochemistry, electronic structure, periodic trends, molecular geometry, valence bond theory, molecular orbital theory, chemical instrumentation, data acquisition, and data analysis. Problem-solving techniques and critical thinking are fundamental in both the lecture and laboratory. **Prerequisite: CHEM& 140 with a grade of 2.0 or better or a satisfactory score on the CHEM& 161 Fitness Exam.**

## CHEM&162

### General Chemistry II w/ Lab [M/S] • 6.0 Credits

Formerly CHM 112

Principles of the gas, liquid, and solid states of matter, intermolecular forces, solutions, chemical kinetics, chemical equilibria, chemical instrumentation, data acquisition, and data analysis. Problem-solving techniques and critical thinking are fundamental in both the lecture and laboratory. **Prerequisite: grade of 2.0 or better in CHEM& 161.**

## CHEM&163

### General Chemistry III w/ Lab [M/S] • 6.0 Credits

Formerly CHM 113

Spontaneity, entropy, free energy, electrochemistry, nuclear chemistry, introduction to organic chemistry, chemical instrumentation, data acquisition, data analysis, and other special topics in chemistry. Problem-solving techniques and critical thinking are fundamental in both the lecture and laboratory. **Prerequisite: grade of 2.0 or better in CHEM& 162.**

## CHEM 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## CHEM&241

### Organic Chemistry I [M/S] • 4.0 Credits

Formerly CHM 221

Stresses nomenclature, structure, stereochemistry, and introduces conceptual material needed to understand reaction mechanisms and synthesis. **Prerequisite: CHEM& 163, and concurrent enrollment in CHEM& 251.**

## CHEM&242

### Organic Chemistry II [M/S] • 4.0 Credits

Formerly CHM 222

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, and concurrent enrollment in CHEM& 252.**

## CHEM&243

### Organic Chemistry III [M/S] • 4.0 Credits

Formerly CHM 223

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, and concurrent enrollment in CHEM& 253.**

## CHEM&251

### Organic Chemistry I Lab [M/S] • 2.0 Credits

Formerly CHM 2211

Lab to be taken concurrently with CHEM& 241.

## CHEM&252

### Organic Chemistry II Lab [M/S] • 2.0 Credits

Formerly CHM 2221

Lab to be taken concurrently with CHEM& 242.

## CHEM&253

### Organic Chemistry III Lab [M/S] • 2.0 Credits

Formerly CHM 2231

Lab to be taken concurrently with CHEM& 243.

## CHEM 254

### Quantitative Analysis [M/S] • 2.0 Credits

Formerly CHM 251

Introduction to analytical chemistry. Sampling, statistics, and spreadsheets. Acid-base, precipitation, complexation, 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

### Instrumental Analysis [M/S] • 2.0 Credits

Formerly CHM 252

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

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included in the lab. **Prerequisite:** grade of 2.0 or better in CHEM 254/264.

## CHEM 264

### Quantitative Analysis Lab [M/S] • 3.0 Credits

Formerly CHM 2511

Lab to be taken concurrently with CHEM 254.

## CHEM 265

### Instrumental Analysis Lab [M/S] • 3.0 Credits

Formerly CHM 2521

Lab to be taken concurrently with CHEM 255.

## CHEM 281

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2861

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

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2862

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

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2863

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

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2864

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

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2865

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

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2866

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

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2901

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

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2902

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

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2903

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

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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

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2904

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

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2905

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

### Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Formerly CHEM 2906

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 • 1.0–15.0 Credits

A class used to explore new coursework.

## Chinese

### CHIN&121

#### Chinese I [H] • 5.0 Credits

Formerly CHIN 101

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

#### Chinese II [H] • 5.0 Credits

Formerly CHIN 102

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

#### Chinese III [H] • 5.0 Credits

Formerly CHIN 103

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 Driver's License

### CDL 101

#### Commercial Driver's License • 5.0 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 18 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 • 1.0 Credit

Classroom instruction on such topics as safety, vehicle control, starting, shifting, proper cornering, straight backing, docking, and braking.

**Prerequisite: CDL 101 or concurrent enrollment.**

### CDL 111

#### Range Operations and Maneuvers Lab • 3.0 Credits

Students practice backing and maneuvering skills. **Prerequisite: CDL 101 or concurrent enrollment.**

### CDL 115

#### Backing Maneuvers • 1.0 Credit

This course provides theory and practice of backing skills. **Prerequisite: CDL 101 or concurrent enrollment.**

### CDL 120

#### On Street Driving • 1.0 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 • 1.0 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.**



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## CDL 140

### Transportation Customer Service Skills • 2.0 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. **Prerequisite:** CDL 101 or concurrent enrollment.

## CDL 145

### Preventive Maintenance • 1.0 Credit

This course is intended to provide truck driving students with information on how to confirm proper operating levels, evaluate wear, identify symptoms, troubleshoot problems, and effectively communicate with maintenance operations. **Prerequisite:** CLD 101 or concurrent enrollment.

## CDL 150

### Cooperative Work Experience • 1.0 Credit

This course is intended to provide the student with on-the-job driving and navigating experience. Gain experience with cargo loading, securing loads and documentation, map reading, DOT logbooks, and trip planning. **Prerequisite:** CDL 101, 110, 111, 115, 120, 130, and 140 with a 2.0 or better.

## CDL 199

### WA Construction Teamsters Apprenticeship • 0.0 Credits

## Communication Studies

### CMST&101

#### Introduction to Communication Studies [C] • 5.0 Credits

Students in this survey course will explore the theory and practice of fundamental communication skills and strategies. This course emphasizes investigation and understanding in three core settings: public speaking communication, small group communication and interpersonal communication. Ancillary fields of multicultural communication and mass media will be examined. Students will also learn to prepare, deliver and critique effective presentations.

### CMST&102

#### Intro to Mass Media [S/B] • 5.0 Credits

Formerly JOR 100

This course offers an overview of historical, cultural, economic, and social issues affected by the development and continued evolution of mass media. Media products analyzed will be both traditional (print, audio, film, etc.) and evolving (digital). Upon completing this course, students will be conscious of how viewpoints are shaped by the media and be more critical consumers of media products.

### CMST 103

#### Workplace Communication • 3.0 Credits

Formerly SPE 103

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 104

#### Speech Essentials [C] • 3.0 Credits

Formerly CMST 101

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 104 and CMST& 220.

### CMST 108

#### Voice and Articulation • 3.0 Credits

Formerly SPE 108

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

#### Communication Behavior [C] • 3.0 Credits

Formerly SPE 110

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

#### Debate I • 2.0 Credits

Formerly SPE 141

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

#### Debate II • 2.0 Credits

Formerly SPE 142

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

#### Debate III • 2.0 Credits

Formerly SPE 143

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

#### Special Studies • 1.0–15.0 Credits

Formerly CMST 199

A class used to explore new coursework.

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## CMST 201

### Studies in Media & Culture: Rotating Genre Study • 5.0 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&210

### Interpersonal Communication [C] • 5.0 Credits

Formerly SPE 111

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

### Public Speaking [C] • 5.0 Credits

Formerly SPE 102

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.

## CMST 221

### Communication Skills for Conflict Resolution [H] • 5.0 Credits

Formerly SPE 220

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

### Leadership Development • 5.0 Credits

Formerly SPE 240

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

### Applied Leadership I • 2.0 Credits

Formerly SPE 241

This course explores leadership skills, concepts, and theories as it relates to student involvement on campus. **Prerequisite: instructor permission.**

## CMST 242

### Applied Leadership II • 2.0 Credits

Formerly SPE 242

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

### Applied Leadership III • 2.0 Credits

Formerly SPE 243

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

### Oral Interpretation [H] • 5.0 Credits

Formerly SPE 246

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

### PARL Procedures • 1.0–2.0 Credits

Formerly SPE 253

The theory and study of parliamentary procedures.

## CMST 260

### Multicultural Communication [C] • 5.0 Credits

Formerly SPE 260

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

### Special Studies • 1.0–15.0 Credits

Formerly CMST 299

A class used to explore new coursework.

## CMST 415

### Applied Professional Communication • 5.0 Credits

Students will study and apply effective professional workplace communication principles. Concepts include awareness and application of interpersonal and multicultural communication skills, leadership styles and application, small group dynamics, problem-solving, decision making and conflict management. **Acceptance into a BAS/BSN program or instructor permission.**

## Community Education

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## CSRE 002

### Traffic Control • 0.0 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

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is held at the Pasco campus from 8:30 am to 4 pm. 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 • 0.0 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 095

### Orientation to Correctional Careers • 1.0 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 • 1.0 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 • 1.0 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

### CA 100

#### Introduction to Microcomputers • 4.0 Credits

Introduces hardware and software concepts, operating systems and/or interface systems, Internet access, basic word processing, and spreadsheet software through hands-on experience. **Recommended prerequisite:** keyboarding experience.

### CA 101

#### Keyboarding I • 2.0 Credits

Introduces the fundamentals of touch typing of letters, numbers, symbols, and operational keys using a computer.

### CA 102

#### Keyboarding II • 2.0 Credits

Reinforces keyboarding skills. Introduces appropriate formatting of business letters, personal letters, memos, reports, and tables using word processing software. **Prerequisite:** CA 101 (formerly AOT 101) with a 2.0 or better or instructor permission.

### CA 103

#### Presentations Graphics Applications • 2.0 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

#### Intro to Computer & Info Tech - Concepts • 2.0 Credits

Formerly CA 1002

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 130

#### Windows Operating System • 1.0 Credit

Formerly CA 1003

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

#### Intro to Computer & Info Tech - MS Word • 1.0 Credit

Formerly CA 1004

Introductory class to Microsoft Word, a word processing software application that enables you to easily create both simple and complex documents.

### CA 150

#### Intro to Computer & Info Tech - MS Excel • 1.0 Credit

Formerly CA 1005

Introductory class to Microsoft Excel, a spreadsheet application typically used to display and manipulate numerical data.

### CA 160

#### Intro to Computer & Info Tech - MS PowerPoint • 1.0 Credit

Formerly CA 1006

Introductory class to Microsoft PowerPoint, a presentation software application that allows you to combine text and graphics for on-screen presentations.

### CA 170

#### Microsoft Outlook • 1.0 Credit

Formerly CA 1007

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

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contacts, schedule appointments, events, and tasks, and use of reminder options.

## CA 180

### Microsoft Access • 1.0 Credit

Formerly CA 1008

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 • 1.0–5.0 Credits

A class used to explore new approaches to software applications.

## CA 299

### Special Studies • 1.0–5.0 Credits

A class used to explore new approaches to software applications.

## Computer Science

### CS 101

#### Intro to Computers & Information Technology • 5.0 Credits

CS 101 is a five-credit introductory class designed to meet the needs of all students as defined in CBC's "Using Information Technology & Tools Student Learning Outcome." The class emphasizes the cognitive aspects of dealing with Information Technology (IT): evaluating information, learning practical IT skills, solving problems, and dealing with information-related issues such as privacy, security, ethics, etc. Students 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 MATH 040 or MATH 050 with a grade of 2.0 or better or concurrent enrollment.**

### CS 102

#### Programming Fundamentals [M/S] • 5.0 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 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.**

### CS 106

#### Database Systems • 5.0 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 MATH 040 or MATH 050 with a grade of 2.0 or better or test placement.**

### CS 107

#### Intermediate Word Processing • 2.0 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 • 2.0 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 117

#### Computer Ethics • 2.0 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 or concurrent enrollment and ENGL 099 or appropriate placement. All CS prerequisites must be passed with a 2.5 or better.**

### CS 118

#### Customer Service • 3.0 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 MATH 040 or MATH 050 with a grade of 2.0 or better or appropriate placement.**

### CS 123

#### PC Hardware • 5.0 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. **Prerequisite: CS 101 or concurrent enrollment. All CS prerequisites must be passed with a 2.5 or better.**

### CS 127

#### Windows Configuration • 5.0 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 or concurrent enrollment. All CS prerequisites must be passed with a 2.5 or better.**

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## CS& 131

### Computer Science I C++ [M/S] • 5.0 Credits

Formerly CS 161

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 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.

## CS 140

### SharePoint • 5.0 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& 141

### Computer Science I Java [M/S] • 5.0 Credits

Formerly CS 215

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 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.

## CS 150

### Computer Security • 5.0 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 MATH 050 or MATH 060 with a 2.0 or better or appropriate placement.

## CS 162

### C++2 [M/S] • 5.0 Credits

This is an intermediate C++ course that provides students an understanding of key object-oriented programming (OOP) theories and concepts, and how to create and manipulate objects in a GUI environment. Students 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 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. **Prerequisite:** as needed.

## CS 202

### Programming Fundamentals 2 [M/S] • 5.0 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 206

### Database Design • 5.0 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 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.

## CS 221

### SQL Server Administration • 5.0 Credits

This course provides students with the knowledge and skills to install, configure, administer, and troubleshoot Microsoft SQL Server client/server database management systems. It 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 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.

## CS 223

### UNIX/Linux • 5.0 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. **Prerequisite:** CS 101 with a 2.5 or better and MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.

## CS 225

### SQL Server Programming • 5.0 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 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.

## CS 228

### Windows Server • 5.0 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 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.

## CS 230

### Active Directory • 5.0 Credits

This course is designed to provide students with the knowledge and skills necessary to install, configure, and administer Microsoft Windows Active Directory. The course also focuses on implementing Group Policy and performing the Group Policy-related tasks that are required to centrally manage users and computers. **Prerequisite:** CS 228 with a 2.5 or better



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and MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.

## CS 231

### Network Infrastructure • 5.0 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 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.

## CS 232

### Network Security • 5.0 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 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.

## CS 236

### Advanced Object Oriented Programming [M/S] • 5.0 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 250

### HTML5-JavaScript/JQuery • 5.0 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 with a 2.5 or better.

## CS 260

### Data Structures in C++ • 5.0 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 • 5.0 Credits

Helps students understand important fundamentals of how to develop game applications using object-oriented development techniques. Course projects involve developing, debugging, and optimizing games for multiple hardware platforms. **Prerequisite:** CS 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 • 1.0–5.0 Credits

A class used to explore new coursework.

## Computer Science Information Technology

## CSIT 301

### Information Systems • 5.0 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:** CS 206 and CS 250 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

## CSIT 306

### Intro to Big Data and Analysis • 5.0 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:** CSIT 311 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

## CSIT 311

### Python for Data Processing • 5.0 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 (CS 236 or CS 260) and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

## CSIT 316

### Cloud Computing HTML5 and PHP • 5.0 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 CS 250 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

## CSIT 401

### Information Systems Analysis and Design • 5.0 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 with a 2.0 or better and meets

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the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

## CSIT 411

### Agile Methodology & ePortfolio Planning • 5.0 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: PROJ 100 and CSIT 401 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

## CSIT 416

### Data Visualization • 5.0 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 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

## CSIT 421

### IT Capstone • 5.0 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 or concurrent enrollment and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

## Criminal Justice and Forensics

## CJ& 101

### Introduction to Criminal Justice [S/B] • 5.0 Credits

Formerly CJ 131

This course provides an overview of the criminal justice system discussing law enforcement, the courts, corrections, juvenile justice, and current issues. This course examines the Constitutional requirements, historical development of the system, the agencies, processes, and theories within the criminal justice system. Emphasis is placed on how the various systems interrelate and interact with each other to attain the goal of an equitable delivery of crime-related public service.

## CJ 104

### Introduction to Policing • 5.0 Credits

This course examines the role of policing in American society. Theories and practices of policing from contemporary and historical perspectives are covered. This course also identifies political, social, organizational, and legal environments where the police perform their roles.

## CJ& 105

### Introduction to Corrections • 5.0 Credits

This course will examine the historical context, philosophical concepts, and major theories that have shaped corrections in the United States. Various sentencing options, correctional approaches and programs, the role of corrections in the larger criminal justice system, and contemporary correctional issues are discussed. Emphasis is placed on the effects of the corrections system on the individuals, families, and society.

## CJ& 106

### Juvenile Justice • 5.0 Credits

Formerly CJ 136

This course will cover the history and philosophy of juvenile justice in America and the impact of present societal reforms on the juvenile justice system. This course will discuss the theories which support the creation, development, and continuance of juvenile justice systems, practices, and procedures in the United States.

## CJ& 110

### Criminal Law • 5.0 Credits

Formerly CJ 132

This course is designed as an introduction into the study of criminal law and will review the difference between crimes against property, crimes against the public, and crimes against a person. This course will study the various mental states required for criminal responsibility and those defenses used in a criminal trial, along with definitions, classifications, elements, and penalties of crime and criminal responsibility.

## CJ 134

### Organization/Administration • 5.0 Credits

The principles of organization and administration of the modern law enforcement agency. Principles of management and operation of a law enforcement agency.

## CJ 135

### Traffic Control • 5.0 Credits

A study of the history of traffic control, routine and emergency traffic procedures. Fundamentals of traffic accident investigation are covered.

## CJ 137

### Constitutional Law • 5.0 Credits

A study of the provisions of the U.S. Constitution with primary emphasis on the Bill of Rights and the 14th Amendment and the application to law enforcement and the criminal justice system.

## CJ 197

### Internship • 1.0–5.0 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 • 1.0–3.0 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.**

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## CJ 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## CJ 222

### Alcohol/Drug Pharmacology/Physiology • 3.0 Credits

Physical responses of the human body to alcohol and other drugs, current research findings, basic information, and terminology essential for working in the criminal justice field.

## CJ 232

### Criminal Investigation • 5.0 Credits

The fundamentals of criminal investigation, criminalistics, and investigative techniques. An overview of investigations of crimes against people and property, and the role of science in crime detection. **Prerequisite: CJ& 101 or instructor permission.**

## CJ 234

### Criminal Evidence • 5.0 Credits

This course relates to the rules of evidence affecting the admissibility of evidence into court in criminal or civil cases as they pertain to the law enforcement officer or other members of the criminal justice system. This course will focus on court proceedings as they pertain to evidence, witnesses, report writing, exclusionary rule, and search and seizure under the Fourth Amendment. **Prerequisite: CJ& 101 or instructor permission.**

## CJ& 240

### Intro to Forensic Science • 5.0 Credits

Formerly CJ 242

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.

## CJ 290

### Basic Reserve Officer Law Enforcement Academy • 1.0–9.0 Credits

An overview of the fundamental subjects associated with the position of Reserve Law Enforcement Officer. Washington Criminal Justice Training Commission approved. A law enforcement agency sponsorship required.

## CJ 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Culinary

## CUL 116

### Food Truck Academy I • 10.0 Credits

Formerly BUS 116

This course is designed to offer students and entrepreneurs an introduction to the components necessary to start and operate mobile vending/food trucks in the Mid-Columbia region. Students will learn how to evaluate menu planning; create menu options; determine staffing and inventory needs; apply proven event planning methods; equipment needs; safe food handling and serving; and the general basics of operating a food truck.

## CUL 117

### Food Truck Academy II • 8.0 Credits

Formerly BUS 117

This course is designed to offer students and entrepreneurs additional tools and skills needed to establish a mobile vending/food truck business. Students will learn how to develop a brand identity, identify their brand logo, and develop promotional tools; and create a marketing and promotional plan. Additional topics include finances, insurance and laws, codes, and permits and licensing requirements. **Prerequisite: CUL 116 or instructor permission.**

## Cyber Security

## CSIA 200

### Computer Forensics Fundamentals • 5.0 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 or MATH 050 or MATH 070 or MATH 072 with a 2.0 or better or appropriate placement.**

## CSIA 250

### Networking Fundamentals • 5.0 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 • 5.0 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: CS 150, CS 231, CSIA 250 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

## CSIA 310

### E-Commerce Security • 5.0 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: CS 150, CS 206, CS 232 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

## CSIA 320

### Ethical Hacking • 5.0 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: CS 232, CSIA 300 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**



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## CSIA 330

### Wireless Security • 5.0 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:** CS 150, CSIA 250, CSIA 300 or concurrent enrollment, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

## CSIA 410

### Cryptology • 5.0 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:** CS 150, CS 231, CSIA 250 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

## CSIA 420

### Cyber Crime and Terrorism • 5.0 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:** CSIA 250, CS 232, CSIA 300, CSIA 320 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

## CSIA 430

### UNIX Administration and Security • 5.0 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:** CS 232, CSIA 250, CSIA 300, CSIA 320 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

## CSIA 440

### Cyber Testing and Penetration • 5.0 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, CSIA 320, CSIA 330 and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

## CSIA 450

### Cyber Security Capstone • 5.0 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:** Must be taken Senior year or after 25 credits of CSIA classes are taken and meet the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

## Dental Hygiene

### DHYG 101

#### Oral Radiology I Lab • 1.0 Credit

Formerly DHYG 1121

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

#### Clinical Dental Hygiene Techniques I Lab • 3.0 Credits

Formerly DHYG 1131

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

#### Dental Materials Lab • 1.0 Credit

Formerly DHYG 1151

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

#### Oral Radiology II Lab • 1.0 Credit

Formerly DHYG 1221

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

#### Clinical Dental Hygiene Techniques II Lab • 4.0 Credits

Formerly DHYG 1231

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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

### Restorative Dentistry I Lab • 1.0 Credit

Formerly DHYG 1251

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

### Pain Control in Dentistry Lab • 2.0 Credits

Formerly DHYG 1261

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

### Clinical Dental Hygiene Techniques III Lab • 4.0 Credits

Formerly DHYG 1341

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

### Restorative Dentistry II Lab • 2.0 Credits

Formerly DHYG 1351

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 • 1.0 Credit

This course is an introduction to the anatomy of crown and root structures of the teeth. Builds on basic sciences, prepares for the study of additional dental sciences, and how these structures relate to the clinical practice of dental hygiene. **Prerequisite: enrollment in the CBC Dental Hygiene program.**

## DHYG 111

### Histology/Embryology • 2.0 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 • 1.0 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 • 2.0 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 • 1.0 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 • 1.0 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 operator. **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 • 2.0 Credits

Study of the head and neck regions, and oral anatomy. Identification of nerves, bones, and muscles associated with the head, neck, and oral regions. **Prerequisite: acceptance and enrollment in the CBC Dental Hygiene program.**

## DHYG 120

### Medical Emergencies in Dentistry • 2.0 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

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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 • 2.0 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 • 1.0 Credit

Second in a series of oral radiology. Focuses on radiographic quality, techniques, film processing, mounting, and interpretation of errors.

**Prerequisite:** concurrent enrollment in DHYG 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 • 2.0 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 • 1.0 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 • 2.0 Credits

Covers the pharmacology and physiology of both local anesthetic agents and nitrous oxide sedation. Application of knowledge of the anatomy of nerves, physiology of nerve conduction, and the transmission of pain impulse and the use of local anesthetics and Nitrous Oxide for pain control in the delivery of dental procedures. Discussion and application of knowledge, prevention, and management of associated possible emergencies is included. Practice of local anesthetics and administration of Nitrous Oxide sedation is practiced on student partners. **Prerequisite:** concurrent enrollment in DHYG 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 • 2.0 Credits

Focuses on pharmacology as it affects the clinical practice of dentistry. Emphasizes drugs commonly used in medicine that affect dental treatment. Also emphasizes drugs of choice for treatment of common systemic and oral diseases, and for emergency treatment; effects, administration, 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 • 2.0 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 • 2.0 Credits

First in a series on periodontology. Focuses on the study of the healthy periodontal tissues, and the factors, recognition, and classes of periodontal disease 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 • 2.0 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 • 1.0 Credit

Third in a series of courses dealing with restorative dentistry skills. Includes application of dental materials, amalgam restoration, and composite restoration materials. **Prerequisite:** concurrent enrollment in DHYG 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 • 2.0 Credits

This course focuses on the characteristics of individual patients, motivation, and interpersonal communication. Students are exposed to diverse cultures and their attitudes and approaches to medical and dental care. Additionally, treatment modifications for the young, geriatric, medically or mentally compromised patient, and those with transitional special needs are presented. **Prerequisite:** 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

# Courses & Programs

in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

## DHYG 144

### Clinical Dental Hygiene Techniques IV • 1.0 Credit

Fourth in a series of clinical dental hygiene technique courses. Provides an expanded learning experience with application of knowledge of oral findings and associated clinical application. **Prerequisite: concurrent enrollment in DHYG 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

### Clinical Dental Hygiene Techniques IV Lab • 5.0 Credits

Formerly DHYG 1441

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 • 1.0–12.0 Credits

A class used to explore new coursework.

## DHYG 211

### Nutrition in Dentistry • 1.0 Credit

The information in this class recalls and reviews the basic principles of nutrition and develops an understanding of their relationship to oral health. Emphasis is placed on the assessment of patient nutritional status and chairside nutritional counseling for optimal oral health. The class builds on basic sciences and dental sciences and prepares for the clinical practice of dental hygiene. **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 • 1.0 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 • 1.0 Credit

Fifth in a series of clinical dental hygiene technique courses. Provides an expanded learning experience through discussion case presentation, and study of clinical cases. **Prerequisite: concurrent enrollment in DHYG 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 • 2.0 Credits

Explores the fundamental factors necessary to practice within the ethical and legal framework of the American Dental Hygiene Association Code of Ethics and the Washington State Dental 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

### Clinical Dental Hygiene Techniques V Lab • 6.0 Credits

Formerly DHYG 2141

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

### Community Oral Health I Lab • 2.0 Credits

Formerly DHYG 2211

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

### Clinical Dental Hygiene Techniques VI Lab • 7.0 Credits

Formerly DHYG 2241

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

### Clinical Dental Hygiene Techniques VII Lab • 9.0 Credits

Formerly DHYG 2341

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

### Restorative Dentistry III Lab • 2.0 Credits

Formerly DHYG 2461

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.



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## DHYG 221

### Community Oral Health I • 2.0 Credits

Examines the principles of community health, including: assessment indices planning, implementation, and evaluation of healthcare with an emphasis on oral health. Builds on knowledge of ethics, basic and dental sciences, and clinical dental hygiene practice. Provides the knowledge to function in a community oral health setting. Due to the nature of the program curriculum, each quarter builds on the knowledge and skills gained in previous quarters. Continuing enrollment is contingent upon successful completion of quarterly Dental Hygiene program courses.

## DHYG 222

### Periodontics II • 2.0 Credits

Second in a series 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 • 1.0 Credit

Sixth in a series of clinical dental hygiene technique courses. Provides a learning experience for periodontally involved patients and the dental hygiene diagnosis and process of care. Case studies and advanced instrumentation techniques 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 • 1.0 Credit

Seventh in a series of clinical dental hygiene courses. Provides an expanded learning experience through discussion and exploration of clinical technique practices. **Prerequisite:** concurrent enrollment in DHYG 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 • 1.0 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 • 1.0–12.0 Credits

A class used to explore new coursework.

## DHYG 301

### Dental Anatomy • 1.0 Credit

Formerly DHYG 110

An introduction to the anatomy of crown and root structures of the teeth. Builds on basic sciences and prepares for the study of additional dental sciences of Restorative I, II, and III, as well as tooth identification

of dentition in patients. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

## DHYG 302

### Histology/Embryology • 2.0 Credits

Formerly DHYG 111

An introduction to the embryology and histology of the head and neck region. Builds on basic sciences and prepares for the additional study of dental sciences as they relate to the clinical practice of dental hygiene.

**Prerequisite:** enrollment in the CBC Dental Hygiene program.

## DHYG 303

### Oral Radiology I • 1.0 Credit

Formerly DHYG 112

First in a two-quarter series course of oral radiology. Focuses on radiation physics, biology, and protection of the patient when radiographs are taken, recognition of anatomical landmark, evidence of pathology, and abnormalities. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 304.

## DHYG 304

### Oral Radiology I Lab • 1.0 Credit

Formerly DHYG 101

First in a two-quarter series course of oral radiology labs. Application of patient protection, radiographic film placement, and proper exposure and developing techniques. Identification of oral structures identifiable in exposed radiographs. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 303.

## DHYG 305

### Clinical Dental Hygiene Techniques I • 2.0 Credits

Formerly DHYG 113

Introduction of the basic principles used in the practice of dental hygiene. Includes infection control standards (OSHA), universal precautions, patient assessment, and treatment standards. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 306.

## DHYG 306

### Clinical Dental Hygiene Techniques I Lab • 3.0 Credits

Formerly DHYG 102

The clinical practice of basic skills of infection control, patient assessment, and treatment in the clinical setting, and pre-clinical setting on dental typodont models progressing to student partners. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 305.

## DHYG 307

### Dental Health Education • 1.0 Credit

Formerly DHYG 114

The principles and practices of prevention and control of dental disease is covered with emphasis on biofilm control, cardiology, motivation of the patient, and personal and patient oral hygiene education and techniques. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

## DHYG 308

### Dental Materials • 1.0 Credit

Formerly DHYG 115

First course in the restorative series; presents history, composition, chemical and physical properties, and use of materials commonly used in the dental laboratory and dental operator. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 309.

# Courses & Programs

## DHYG 309

### Dental Materials Lab • 1.0 Credit

Formerly DHYG 103

First in the restorative lab series; provides experiences in common dental procedures and prepares students for the practice of expanded functions as allowed by the state of Washington. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 308.

## DHYG 310

### Head and Neck Anatomy • 2.0 Credits

Formerly DHYG 116

The study of the head and neck regions, identification of nerves, bones of the skull, and muscles associated with the head and neck region; oral anatomy and oral regions structure and function; dysfunction in swallowing and nasal pathways; and origins of sleep apnea and its resulting impact on systemic health. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

## DHYG 311

### Medical Emergencies in Dentistry • 2.0 Credits

Formerly DHYG 120

Commonly encountered medical emergencies that may occur in the dental setting; presenting signs and symptoms of systemic reactions; recommended treatment protocols and emergency procedures are covered. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

## DHYG 312

### General Pathology • 2.0 Credits

Formerly DHYG 121

The study of systemic diseases and their etiology; presentation of signs and symptoms of disease manifestation; inflammatory process, immune response and healing; current recommended treatments; morbidity, mortality, and the impact of oral inflammation and disease on systemic health. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

## DHYG 313

### Oral Radiology II • 1.0 Credit

Formerly DHYG 122

The second in a series of the study of oral radiology; focuses on radiographic quality, techniques, film processing, mounting, and interpretation of errors, including pathology and cariogenic lesions. Includes both traditional and digital techniques of exposure and processing. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 314.

## DHYG 314

### Oral Radiology II Lab • 1.0 Credit

Formerly DHYG 104

The second in a series of oral radiology lab which includes practice of oral radiographic skill and technique on a dental manikin and student partner in a clinical setting. Application of knowledge from DHYG 304 radiographic technique and evaluation of films diagnostic quality and effectiveness. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 313.

## DHYG 315

### Clinical Dental Hygiene Techniques II • 2.0 Credits

Formerly DHYG 123

Second in a series of clinical dental hygiene techniques; focus is on dental hygiene treatment planning, effective communication with patients, preventive dental patient education, and skill development in clinical skills.

**Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 316.

## DHYG 316

### Clinical Dental Hygiene Techniques II Lab • 4.0 Credits

Formerly DHYG 105

Second in a series of clinical practice of dental hygiene; skill development in patient assessment, instrumentation and treatment are introduced and practiced on a dental typodont, student partners, and patients in a clinical setting. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 315.

## DHYG 318

### Restorative Dentistry I • 1.0 Credit

Formerly DHYG 125

Second in a series of courses in restorative dentistry; focus on composition and physical properties of amalgam and its use as a dental restorative material; amalgam safety and handling is taught to protect student clinicians. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 319.

## DHYG 319

### Restorative Dentistry I Lab • 1.0 Credit

Formerly DHYG 106

Second in a series of laboratory courses in restorative dentistry. Laboratory experience in the safe placement and handling and manipulation of amalgam restorative materials to complete Class I restorations. Materials are used in typodonts to restore prepared typodont teeth to simulate original anatomy of the tooth. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 318.

## DHYG 320

### Pain Control in Dentistry • 2.0 Credits

Formerly DHYG 126

This course includes the pharmacology and physiology of both local anesthetic agents and nitrous oxide sedation. Application of the knowledge of the nerves of the head, the physiology of nerve conduction, and the transmission of pain impulse are studied as well as the transient blockage of nerve transmission with local anesthetics. Knowledge of prevention and management of dental emergencies is included as well as the decision making of the selection of the appropriate injection to be given and the type of local anesthetic to be used. The use of Nitrous Oxide delivery and its application as an analgesic is also included. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 321.

## DHYG 321

### Pain Control in Dentistry Lab • 2.0 Credits

Formerly DHYG 107

Effective techniques in the delivery of nerve block and infiltration injections in the oral cavity is covered as well as the safe and effective delivery of Nitrous Oxide sedation - all injections and the delivery of Nitrous Oxide are completed on student partners. These skills are part of the expanded duties allowed for dental hygienists in the state of Washington and are practiced in accordance with the Washington Regional Examining Board standards. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 320.

## DHYG 322

### Pharmacology • 2.0 Credits

Formerly DHYG 127

# Courses & Programs

The study of pharmacology as it affects the clinical practice of dentistry; emphasis is on drugs commonly used to treat medical conditions and their impact on dental treatment; systemic and oral diseases are covered as well as the drugs of choice for these conditions; effects, administration, biotransformation, and toxicology as potential for emergency reactions, idiopathic reactions, and emergency treatment protocols. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

## DHYG 323

### Oral Pathology • 2.0 Credits

Formerly DHYG 131

The study of commonly encountered oral diseases including their etiology, presentation, recognition, treatment chosen, their impact on dental treatment, and the need for referral for further evaluation. Extensive and correct documentation is stressed as well as collaboration with a dentist for definitive diagnosis. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

## DHYG 324

### Periodontics I • 2.0 Credits

Formerly DHYG 132

The first of a two-quarter series on the health and disease states of the dental periodontal tissues; components of the gingival and periodontal structures and the contributing factors that cause gingivitis and periodontitis; the oral-systemic link and systemic disease states such as cardiovascular disease, diabetes, pregnancy, etc. that are linked to the presence of periodontal pathogens. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

## DHYG 325

### Clinical Dental Hygiene Techniques III • 2.0 Credits

Formerly DHYG 134

Third in a series of courses designed to teach dental hygiene techniques and the expanded development of clinical dental hygiene skills.

**Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 326.

## DHYG 326

### Clinical Dental Hygiene Techniques III Lab • 4.0 Credits

Formerly DHYG 108

Third in a series on clinical practice of dental hygiene; basic skills of dental hygiene practice including patient assessment, instrumentation and treatment expanding on procedures and techniques introduced in previous clinical courses. First introduction to work on patients and continued development of procedures and techniques introduced in previous clinical courses. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 325.

## DHYG 327

### Restorative Dentistry II • 1.0 Credit

Formerly DHYG 135

Third in a series of restorative dentistry lecture on skill development including dental preparation design; isolation technique; application of dental materials, amalgam restorations, and composite materials to replace Class I, II, and III prepared restorations in typodont teeth. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 328.

## DHYG 328

### Restorative Dentistry II Lab • 2.0 Credits

Formerly DHYG 109

Third in a series of laboratory courses teaching preclinical principles of the placement and finishing of Class I, II, and III prepared typodont teeth using

amalgam and composite materials to duplicate the missing anatomy in prepared teeth; includes application of dental anatomy, dental materials, and clinical skill development. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 327.

## DHYG 329

### Patient Management • 2.0 Credits

Formerly DHYG 136

Lecture and student participation in study of characteristics of individual patients, motivation, and interpersonal communication; exposure to diverse cultures and their attitudes and approaches to medical and dental care; modification of treatment planning for the young, geriatric, medically, or mentally compromised patient and patients who exhibit special needs. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

## DHYG 330

### Clinical Dental Hygiene Techniques IV • 1.0 Credit

Formerly DHYG 144

Fourth in a series of lectures providing expanded learning and application of knowledge of oral findings and associated clinical application; progressive dental hygiene techniques for the periodontally involved patient including use of ultrasonic scaler, advanced instrumentation techniques for root surfaces, and treatment of the pregnant patient through menopause, the elderly patient, patients with dental prostheses, and edentulous patients. Enrollment in the CBC DHYG program is required. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 331.

## DHYG 331

### Clinical Dental Hygiene Techniques IV Lab • 5.0 Credits

Formerly DHYG 147

Fourth in a series of dental hygiene technique lab courses; provides expanded learning experience of dental hygiene techniques through performing clinical dental hygiene care for a variety of patients, and the clinical application of learned skills; critical evaluation of dental hygiene treatment needs and the delivery of care on patients. **Prerequisite:** enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 330.

## DHYG 401

### Restorative Dentistry III • 1.0 Credit

Formerly DHYG 246

Fourth in a series of restorative dentistry skills as allowed to be practiced by dental hygienists in WA state; Class II and Class III Amalgam and Composite restorations and cusp build-up restorations and restoring anterior teeth. **Prerequisite:** enrollment in the CBC Dental Hygiene program and completion of DHYG 327.

## DHYG 402

### Restorative Dentistry III Lab • 2.0 Credits

Formerly DHYG 220

Fourth in a series of restorative labs with focus on the placement and finishing of Class II and III Amalgam and Composite restorations and cusp build-ups and restoring anterior teeth; practice is continued on typodont teeth, restorations on patients in a clinical setting. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

## DHYG 403

### Community Oral Health Research I • 2.0 Credits

Study and evaluation of strategies to improve oral health for varying age groups; functioning as an oral health advocate in a community setting. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

# Courses & Programs

## DHYG 404

### Nutrition in Dentistry • 1.0 Credit

Formerly DHYG 211

An initial recall and review of principles of nutrition with enhanced information on nutrition's relationship to oral health; emphasis is placed on assessment of a patient's nutritional knowledge and eating habits and the impact that these have on their oral health/disease. **Prerequisite: enrollment in the CBC Dental Hygiene program.**

## DHYG 405

### Advanced Clinical Topics • 1.0 Credit

Formerly DHYG 212

Topics presented include use of lasers, advanced instrumentation techniques, endoscopy use in dentistry, use of ultraviolet light for the detection of oral lesions, etc. Alternative practice settings and additional educational pursuits and career tracking; expanded work venues, work in public health settings and the military are explored. **Prerequisite: enrollment in the CBC Dental Hygiene program.**

## DHYG 406

### Clinical Dental Hygiene Techniques V • 1.0 Credit

Formerly DHYG 214

Fifth in a series of clinical dental hygiene technique courses; providing expanded learning experience of case presentations and study of clinical cases, advanced clinical techniques of Local Anesthesia (AMSA, Gow-Gates, The Wand, Interseptal anesthesia), etc. **Prerequisite: enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 407.**

## DHYG 407

### Clinical Dental Hygiene Techniques V Lab • 6.0 Credits

Formerly DHYG 216

Fifth in the series of dental hygiene practice lab; progressive clinical experience in patient assessment, dental hygiene treatment planning, and clinical work on patients; continued development of clinical skills and knowledge, including restorative care on patients. **Prerequisite: enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 406.**

## DHYG 408

### Ethics and Jurisprudence, Practice Management • 2.0 Credits

Formerly DHYG 215

Study of the ethical framework of the ADHA Code of Ethics, the Washington Dental Hygiene Practice Act; ethical problem solving and ethical decision making; history of the profession, jurisprudence, and working within the legal boundaries of the law for the profession of dental hygiene; practice management styles, insurance coding, team participation, and leadership. **Prerequisite: enrollment in the CBC Dental Hygiene program.**

## DHYG 409

### Community Oral Health Research II • 2.0 Credits

Use of public health concepts and their impact on community health research; design elements included in research; selection of research topic, and exploration of community partners to include in the pursuit of a research project; development of a research project to be field tested, evaluated, and presented to stake holders during spring quarter. **Prerequisite: enrollment in the CBC Dental Hygiene program and DHYG 403 with a 2.0 or better.**

## DHYG 410

### Periodontics II • 2.0 Credits

Formerly DHYG 222

Second in a series of courses in the study of periodontology; background knowledge of advanced treatment of periodontal disease including assessment, diagnosis, treatment planning, evaluation of outcomes and further maintenance or retreatment needs included; use of intra oral digital photography on a selected periodontal patient for development of a case presentation; determination of referral for out of scope treatment needs; oral home care evaluation and patient compliance; exacerbating medical or systemic factors for disease progression. **Prerequisite: enrollment in the CBC Dental Hygiene program.**

## DHYG 411

### Clinical Dental Hygiene Techniques VI • 1.0 Credit

Formerly DHYG 224

Sixth in a series of clinical dental hygiene technique courses; clinical experiences involving periodontally involved patients and assessment and evaluation of continued care needs and intervals for maintenance; discussion and determination of restorative needs and care. **Prerequisite: enrollment in the CBC Dental Hygiene program and completion of DHYG 406 and 407.**

## DHYG 412

### Clinical Dental Hygiene Techniques VI Lab • 7.0 Credits

Formerly DHYG 218

Sixth in a series of clinical practice in dental hygiene providing comprehensive clinical experience in all phases of dental hygiene process of care for patient care; clinical work expands on the procedures and techniques introduced in prior clinical courses including placement of restorations on patients. **Prerequisite: enrollment in the CBC Dental Hygiene program.**

## DHYG 413

### Clinical Dental Hygiene Techniques VII • 1.0 Credit

Formerly DHYG 234

Seventh in a series of clinical dental hygiene technique courses; expanded learning through discussion and exploration of clinical practice in a variety of settings; discussion and practice of accelerated scheduling of patients (Private Practice Days); work expectations in community based clinics, public health clinics, private dental practices, specialty practices, etc. **Prerequisite: enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 414.**

## DHYG 414

### Clinical Dental Hygiene Techniques VII Lab • 9.0 Credits

Formerly DHYG 219

Seventh in a series of clinical practice in dental hygiene providing comprehensive dental hygiene services in a clinical setting; completing dental hygiene process of care and the implementation of patient care for a variety of patients; practice of implementing accelerated hygiene with the use of an assistant as well as working independently; placement of restorations on patients. **Prerequisite: enrollment in the CBC Dental Hygiene program and concurrent enrollment in DHYG 413.**

## DHYG 415

### Community Oral Health Practicum • 2.0 Credits

This course is the final segment (capstone) in the series that implements and evaluates an oral health program/project designed to improve the well-being of citizens and provide access to care to underserved populations. Students will present oral health program outcomes to stakeholders and the community in an effort to develop evidence-based research. This course takes place outside of the classroom in an experiential learning format. **Prerequisite: enrollment in the CBC Dental Hygiene program and DHYG 409 with a 2.0 or better.**



# Courses & Programs

## DHYG 416

### Educational Theory and Methodology • 2.0 Credits

Understanding and implementing pre-assessment strategies to determine participants knowledge levels; the creation of an overview and objectives to provide learners with a context for learning; giving targeted feedback and performance evaluation to enhance continual learning goals; and selecting among direct instruction, inquiry-based learning and cooperative learning depending on the chosen outcomes. **Prerequisite:** enrollment in the CBC Dental Hygiene program.

## Diagnostic Ultrasound Technology

### DUTEC101

#### Concepts of Patient Care • 3.0 Credits

Develops patient care and communication skills required in sonography. Students discuss legal, ethical, and psychological aspects of patient care, as well as professional issues and concerns. **Prerequisite:** acceptance into program.

### DUTEC105

#### Pathophysiology I • 3.0 Credits

Introduces pathogenesis: the sequence of events in the development of a disease. Students focus on pathological conditions affecting the abdomen and identifiable with diagnostic imaging techniques. An extensive review of normal physiology is also presented. **Prerequisite:** acceptance into program or permission of program chair.

### DUTEC106

#### Pathophysiology II • 3.0 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.

### DUTEC107

#### Human Cross-Sectional Anatomy • 2.0 Credits

Covers the human anatomy from the cross-sectional perspective in longitudinal, transverse, coronal, and oblique planes. Students analyze correlations with clinical diagnostic imaging techniques. **Prerequisite:** acceptance into program or permission of program chair.

### DUTEC110

#### General Ultrasound I: Abdominal • 5.0 Credits

Presents basic concepts and terminology, as well as scanning protocols for the ultrasound examination of the abdomen. Topics include both normal and pathological states. **Prerequisite:** acceptance into program or permission of program chair.

### DUTEC111

#### Echocardiography I • 5.0 Credits

Covers basic ultrasound protocols and scanning techniques of the heart. Students focus on anatomy, physiology, pathology, and echocardiographic pattern recognition. **Prerequisite:** acceptance into program or permission of program chair.

### DUTEC112

#### Pathophysiology III • 3.0 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.

### DUTEC113

#### Pathophysiology IV • 3.0 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.

### DUTEC120

#### General Ultrasound II: Obstetrics & Gynecology • 5.0 Credits

Presents current theory and scanning techniques for medical sonographers, focusing on obstetrics and gynecology procedures and pathologies. **Prerequisite:** acceptance into program or permission of program chair.

### DUTEC121

#### Echocardiography II • 5.0 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.

### DUTEC130

#### General Ultrasound III: Small Parts • 5.0 Credits

Presents the anatomy and pathophysiology of small human body parts. Intraoperative scanning focuses on surgical procedures. **Prerequisite:** acceptance into program or permission of program chair.

### DUTEC131

#### Echocardiography III • 5.0 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.

### DUTEC140

#### General Ultrasound IV • 5.0 Credits

Examines issues relating to the clinical practicum in abdominal and obstetrics/gynecology. **Prerequisite:** acceptance into program or permission of program chair.

### DUTEC141

#### Echocardiography IV • 5.0 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.

### DUTEC160

#### Vascular Scanning & Techniques I • 3.0 Credits

Presents current theory and scanning techniques for medical sonographers. Students learn Doppler techniques used to diagnose peripheral vascular and cerebral vascular disease. **Prerequisite:** acceptance into program or permission of program chair.

### DUTEC161

#### Vascular Scanning & Techniques II • 3.0 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.

# Courses & Programs

## DUTEC162

### Vascular Scanning & Techniques III • 3.0 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.

## DUTEC165

### Ultrasound Equipment III • 3.0 Credits

Provides hands-on ultrasound scanning experience in the student's clinical specialty area. Competency is required before beginning the clinical practicum. **Prerequisite:** acceptance into program or permission of program chair.

## DUTEC170

### Ultrasound Physics & Instrumentation I • 3.0 Credits

Covers acoustical physics, including heat energy, light and sound, wave theory, reflection, refraction, resonance, tissue interaction, transducers, bioeffects, and computers in ultrasonics. **Prerequisite:** acceptance into program or permission of program chair.

## DUTEC171

### Ultrasound Physics & Instrumentation II • 3.0 Credits

Continues DUTEC 170. Topics include Doppler effect, Doppler techniques, acoustic power, fluid dynamics, and quality assurance procedures.

**Prerequisite:** acceptance into program or permission of program chair.

## DUTEC180

### Advanced Studies: General Ultrasound • 3.0 Credits

Examines issues relating to the clinical practicum in abdominal and obstetrics/gynecology. **Prerequisite:** acceptance into program or permission of program chair.

## DUTEC181

### Advanced Studies: Echo-Vascular • 3.0 Credits

Examines issues relating to the clinical practicum in echocardiography and vascular technology. **Prerequisite:** acceptance into program or permission of program chair.

## DUTEC185

### Electrocardiography (EKG) • 2.0 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.

## DUTEC190

### Survey of Echocardiography I • 2.0 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.

## DUTEC191

### Survey of General Ultrasound I • 2.0 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.

## DUTEC192

### Survey of Echocardiography II • 2.0 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.

## DUTEC193

### Survey of General Ultrasound II • 2.0 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.

## DUTEC194

### Survey of Echocardiography III • 2.0 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.

## DUTEC195

### Survey of General Ultrasound III • 2.0 Credits

Examines issues relating to the clinical practicum in abdominal and obstetrics/gynecology. **Prerequisite:** acceptance into program or permission of program chair.

## DUTEC199

### Special Studies • 1.0–5.0 Credits

A class used to explore new coursework.

## DUTEC210

### Clinical Practicum I • 12.0 Credits

Provides clinical experience in an ultrasound department under the supervision of a sonographer. **Prerequisite:** acceptance into program or permission of program chair.

## DUTEC220

### Clinical Practicum II • 12.0 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.

## DUTEC230

### Clinical Practicum III • 12.0 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.

## DUTEC240

### Clinical Practicum IV • 12.0 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.

## DUTEC250

### Ultrasound Physics for Mammographers • 3.0 Credits

Covers acoustical physics, including the concepts and principles of sound transmission, and the utilization of high frequency sound to produce

# Courses & Programs

images for diagnostic purposes. **Prerequisite: acceptance into program or permission of program chair.**

## DUTEC251

### Breast Ultrasound for Mammographers • 3.0 Credits

Reviews anatomy and physiology of the breast. Includes orientation to cross-sectional imaging of the breast, correlation with mammographic images, and characterization of normal and abnormal findings from a sonographic viewpoint. **Prerequisite: DUTEC 250 or permission of program chair.**

## DUTEC252

### Ultrasound Equipment/Knobology for Mammographers • 2.0 Credits

Introduces the ultrasound system. Includes detailed descriptions of essential parts of the ultrasound system using a variety of ultrasound machines, classroom demonstrations of system operations and technique, and some practice on the systems. **Prerequisite: DUTEC 251 and acceptance into program or permission of program chair.**

## DUTEC269

### Physics Review • 2.0 Credits

Prepares student for certification exams by reviewing physics and ultrasound instrumentation. Students focus on mathematical analysis and physics theories. **Prerequisite: acceptance into program or permission of program chair.**

## Early Childhood Education

### ECED&100

#### Child Care Basics • 3.0 Credits

This course is designed to meet licensing requirements for early learning lead teachers and family home child care providers and the STARS 30 hour basics course recognized in the MERIT system. Topics: child growth/development, cultural responsiveness, community resources, guidance, health/safety/nutrition and professional practices.

### ECED 102

#### Introduction to Curriculum • 3.0 Credits

Formerly ECE 102

Provides students with both a theoretical and practical understanding of the curriculum content in a developmentally appropriate setting for young children.

### ECED 103

#### Art • 3.0 Credits

Formerly ECE 103

Provides the student with a basic understanding of the methods used for teaching visual art to young children in a developmentally appropriate manner.

### ECED&105

#### Intro to Early Childhood Education • 5.0 Credits

Students will explore the foundations of early childhood education. Examine theories defining the field, issues, trends, best practices, and program models. Observe children, professionals and programs in action.

### ECED&107

#### Health/Safety/Nutrition • 5.0 Credits

Formerly ECE 230

Introduction to implementation of equitable health, safety and nutrition standards for the growing child in group care. Focus on federal Child Care Block Grant funding (CCDF) requirements, Washington state licensing

and Head Start Performance standards. Develop skills necessary to keep children healthy and safe, report abuse and neglect, and connect families to community resources.

### ECED 110

#### Preschool Seminar • 1.0–3.0 Credits

Formerly ECE 1172

Provides an opportunity to participate in a short-term seminar relating to early childhood education.

### ECED 112

#### Introduction to ELL Teaching Strategies • 3.0 Credits

Formerly ECE 112

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

#### ECED Special Topics Symposium • 1.0–3.0 Credits

Formerly ECE 116

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

#### ECED Seminar • 1.0–3.0 Credits

Formerly ECE 117

Provides an opportunity to participate in an intensive, short-term learning experience relating to early childhood education.

### ECED 118

#### Skills Training • 1.0–3.0 Credits

Formerly ECE 118

Provides an opportunity to participate in a short-term skills training relating to early childhood education.

### ECED 119

#### ECED Workshop • 1.0–3.0 Credits

Formerly ECE 119

An opportunity to participate in a workshop class relating to early childhood education.

### ECED&120

#### Practicum-Nurturing Relationships • 2.0 Credits

In an early learning setting students will engage in establishing nurturing, supportive relationships with all children and professional peers. Focus on children's health and safety, promoting growth and development, and creating a culturally responsive environment.

### ECED 122

#### Math & Science • 1.0–5.0 Credits

Formerly ECE 122

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

#### Children's Literature • 3.0 Credits

Formerly ECE 120

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.

# Courses & Programs

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## **ECED 127**

### **Music & Movement • 3.0 Credits**

Formerly ECE 127

In this interactive class, students learn the importance of providing high quality music and movement activities in an early learning setting.

## **ECED&132**

### **Infants & Toddlers--Nurturing Care • 3.0 Credits**

Formerly ECE 205

Students will 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 retentive care.

## **ECED&134**

### **Family Child Care Management • 3.0 Credits**

Students will learn how to manage a family childcare program. Topics include licensing requirements, record-keeping, relationship building, communication strategies, guiding behavior, and promoting growth and development.

## **ECED&138**

### **Home Visitor/Family Engagement • 3.0 Credits**

Plan and provide home visits and group activities. Promote secure parent-child relationships. Support families to provide high-quality early learning opportunities embedded in everyday routines and experiences.

## **ECED&139**

### **Administration of ECE • 3.0 Credits**

Formerly ECE 215

Students will develop administrative skills required to develop, operate, manage and improve early childhood education and care programs. Acquire basic business management skills. Explore resources and supports for meeting Washington State licensing and professional National Association for the Education of Young Children (NAEYC) standards.

## **ECED 141**

### **Child Development Associate • 10.0 Credits**

Formerly ECE 141

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**

### **Child Development Associate • 1.0–10.0 Credits**

Formerly ECE 1411

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**

### **Child Development Associate • 1.0–11.0 Credits**

Formerly ECE 1412

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**

### **Child Development Associate • 1.0–11.0 Credits**

Formerly ECE 1413

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**

### **Child Development Associate • 1.0–11.0 Credits**

Formerly ECE 1414

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**

### **Child Development Associate • 1.0–11.0 Credits**

Formerly ECE 1415

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**

### **Child Development Associate • 1.0–11.0 Credits**

Formerly ECE 1416

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**

### **Child Development Associate • 1.0–11.0 Credits**

Formerly ECE 1417

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**

### **Child Development Associate • 1.0–11.0 Credits**

Formerly ECE 1418

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**

### **Supervised Practicum • 3.0 Credits**

Formerly ECE 151

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.

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## **ECED 152**

### **Supervised Practicum Lab • 1.0–6.0 Credits**

Formerly ECE 1511

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**

### **Child Development Associate • 1.0–11.0 Credits**

Formerly ECE 1419

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&160**

### **Curriculum Development • 5.0 Credits**

Formerly ECE 202

Students will investigate learning theory, program planning, tools and methods for curriculum development promoting language, fine/gross motor, social-emotional, cognitive and creative skills and growth in children birth through age 8 utilizing developmentally appropriate and culturally responsive practice.

## **ECED&170**

### **Environments for Young Children • 3.0 Credits**

This class focuses on the adult's role in designing, evaluating, and improving indoor and outdoor environments that ensure quality learning, nurturing experiences, and optimize the development of young children.

## **ECED&180**

### **Language & Literacy Development • 3.0 Credits**

This course examines teaching strategies for language acquisition and literacy skill development examined at each developmental stage (birth-age 8) through the four interrelated areas of speaking, listening, writing, and reading.

## **ECED&190**

### **Observation/Assessment • 3.0 Credits**

Formerly ECE 121

Students will collect and record observation and assessment data in order to plan for and support the child, the family, the group, and the community. Practice reflection techniques, summarizing conclusions, and communicating findings.

## **ECED 201**

### **Multicultural Education • 3.0 Credits**

Formerly ECE 201

Explores the theory and practice of implementing a culturally responsible early childhood program.

## **ECED 216**

### **Advanced Special Topics • 1.0–3.0 Credits**

Formerly ECE 216

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**

### **Advanced Seminar • 1.0–3.0 Credits**

Formerly ECE 217

Provides an opportunity to participate in an advanced short-term learning experience relating to early childhood education.

## **ECED 218**

### **Advanced Skills Training • 1.0–3.0 Credits**

Formerly ECE 218

Provides an opportunity to participate in an advanced short-term skills training relating to early childhood education.

## **ECED 219**

### **Advanced Workshop • 1.0–3.0 Credits**

Formerly ECE 219

An opportunity to participate in an advanced workshop class relating to early childhood education.

## **ECED 221**

### **Strategies for Teaching Special Needs • 3.0 Credits**

Formerly ECE 221

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**

### **Sign Language Level 1 • 3.0 Credits**

Formerly ECE 222

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**

### **Sign Language Level 2 • 3.0 Credits**

Formerly ECE 223

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**

### **Sign Language Level 3 • 3.0 Credits**

Formerly ECE 224

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**

### **Advanced Supervised Practicum • 1.0–3.0 Credits**

Formerly ECE 251

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 with professionals in an early learning setting.

## **ECED 252**

### **Advanced Supervised Practicum Lab • 1.0 Credit**

Formerly ECE 2511

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



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personal teaching skills while gaining on-the-job experience working with professionals in an early learning setting.

## **ECED 280**

### **Special Studies Lab • 1.0–3.0 Credits**

Formerly ECE 2891

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

## **ECED 281**

### **Special Studies Lab • 1.0–15.0 Credits**

Formerly ECE 2892

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

## **ECED 282**

### **Special Studies Lab • 1.0–15.0 Credits**

Formerly ECE 2893

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

## **ECED 283**

### **Special Studies Lab • 1.0–15.0 Credits**

Formerly ECE 2894

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

## **ECED 284**

### **Special Studies Lab • 1.0–15.0 Credits**

Formerly ECE 2895

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

## **ECED 285**

### **Special Studies Lab • 1.0–15.0 Credits**

Formerly ECE 2896

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

## **ECED 286**

### **Special Studies Lab • 1.0–15.0 Credits**

Formerly ECE 2897

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

## **ECED 287**

### **Special Studies Lab • 1.0–15.0 Credits**

Formerly ECE 2898

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

## **ECED 288**

### **Special Studies Lab • 1.0–15.0 Credits**

Formerly ECE 2899

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

## **ECED 289**

### **Special Studies • 1.0–15.0 Credits**

Formerly ECE 289

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

## **ECED 300**

### **Social Studies for Teachers • 5.0 Credits**

An overview of the main concepts in social studies for early childhood teachers including topics in history, civics, geography, economics, and global issues. **Prerequisite:** Admission into the BASTE program at CBC.

## **ECED 301**

### **Inquiry Based Science for Teachers • 3.0 Credits**

An overview of the main concepts in natural science for early childhood teachers including topics in earth/space science, life science, physical science, and engineering design. Lab included. **Prerequisite:** Admission into the BASTE program at CBC.

## **ECED 307**

### **Health and Physical Education Learning Standards • 2.0 Credits**

This course will prepare students to plan for comprehensive health and fitness education in early learning programs serving children birth to grade three who are culturally, linguistically, and ability diverse and their families, including the dimension of wellness such as physical, emotional, and social well-being. **Prerequisite:** Admission into the BASTE program at CBC.

## **ECED 325**

### **Advanced Math Methods • 3.0 Credits**

Student will develop a deep understanding of the development of spatial and mathematical learning across all strands: number & operations, algebra, geometry, measurement, and data analysis & probability. There will be an emphasis on the content included in the state early learning guidelines and standards for children birth through grade three and their families who are culturally, linguistically, and ability diverse. **Prerequisite:** Admission into the BASTE program at CBC.

## **ECED 340**

### **Assessment and Evaluation • 5.0 Credits**

This course will prepare student to select, administer, score, and interpret formal assessment tools. Evaluate students for placement into special education programs. Develop Individual Education Plans (IEPs), Individual Family Service Plans (IFSPs), and 504 plans for children birth to third grade who are culturally, linguistically, and ability diverse and their families. **Prerequisite:** Admission into the BASTE program at CBC.

## **ECED 365**

### **Observations, Documentation, and Monitoring • 3.0 Credits**

Students will develop skills and strategies for observing, documenting and monitoring children birth to grade three who are culturally, linguistically and ability diverse and their families. Strategies for tracking progress toward meeting Individual Education Plan (IEP) and Individual Family Service Plan (IFSP) goals will also be addressed. **Prerequisite:** Admission into the BASTE program at CBC.

## **ECED 370**

### **Adaptations, Modifications, and Planning • 5.0 Credits**

Students will use evidence based strategies to adapt and modify curriculum and environments for individual children birth to grade three who are culturally, linguistically, and ability diverse and their families. Create lesson plans for children based on Individual Education Plans (IEP), Individual Family Services Plans (IFSP) goals, and 504 plans. **Prerequisite:** Admission into the BASTE program at CBC.

## **ECED 385**

### **Advanced Language and Literacy Methods • 3.0 Credits**

Students will be able to refine teaching strategies for language acquisition and literacy skill development for children who are culturally, linguistically,

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and ability diverse at each developmental stage birth through grade three, through the four interrelated areas of speaking, listening, writing, and reading. There will be an emphasis on strategies for teaching reading and how to support each stage of literacy development across genres and purposes. Strategies for supporting families as they assist their children in learning language and literacy will also be addressed. **Prerequisite: Admission into the BASTE program at CBC.**

## ECED 395

### Equity and Social Justice • 3.0 Credits

Students will develop skills needed to effectively collaborate with others including school personnel, community agency personnel, and families to support children birth to third grade who are culturally, linguistically, and ability diverse and their families. Supervision of assistants and paraprofessionals will also be addressed. **Prerequisite: Admission into the BASTE program at CBC.**

## ECED 479

### Fall Student Teaching • 15.0 Credits

Students will gain experience working in an education setting with children birth through grade three who are culturally, linguistically, and ability diverse and their families under the supervision of a certificated teacher with an emphasis on building relationships and guiding behavior.

**Prerequisite: Admission into the BASTE program at CBC, ECED& 105, department permission, criminal background check required.**

## ECED 489

### Winter Student Teaching • 15.0 Credits

Students will demonstrate effective teaching practice and experience working in an education setting with children birth through grade three who are culturally, linguistically, (including English language learners), and ability diverse and their families under the supervision of a certified teacher, with an emphasis on pedagogy in accordance with instructional frameworks in Washington state. Apply the use of technology for technology for assessment, instruction, and family engagement.

**Prerequisite: Admission into the BASTE program at CBC, ECED& 105, department permission, criminal background check required.**

## ECED 499

### Spring Student Teaching • 15.0 Credits

Students will gain experience working in an education setting, with children birth through grade three who are culturally, linguistically (including English language learners), and ability diverse and their families under the supervision of a certificated teacher, with an emphasis on using data to improve practices. Apply the use of technology for technology for assessment, instruction, and family engagement. **Prerequisite:**

**Admission into the BASTE program at CBC, ECED& 105, department permission, criminal background check required.**

## Economics

### ECON 110

#### Economic Trends, Issues and Policy [S/B] • 5.0 Credits

Formerly EC 110

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

#### Economic Development of the United States • 5.0 Credits

Formerly EC 116

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 • 1.0–5.0 Credits

A class used to explore new coursework.

### ECON&201

#### Micro Economics [S/B] • 5.0 Credits

Formerly EC 202

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

#### Macro Economics [S/B] • 5.0 Credits

Formerly EC 201

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.

### ECON 291

#### History of American Economic Development [S/B] • 1.0–5.0 Credits

Formerly EC 291

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 • 1.0–5.0 Credits

A class used to explore new coursework.

### ECON 305

#### Managerial Economics [S/B] • 5.0 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.**

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## ECON 310

### Comparative Economic System • 5.0 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] • 5.0 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.**

## Education

## EDUC 101

### Introduction to Education • 4.0 Credits

Formerly ED 101

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

### Paraeducator in Schools • 3.0 Credits

Formerly ED 108

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

### Introduction to Instructional Strategies • 5.0 Credits

Formerly ED 111

An overview of instructional strategies including theory and practical application within the K-12 classroom.

## EDUC 112

### Introduction to ELA Teaching Strategies • 3.0 Credits

Formerly ED 112

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&114

### Child Development • 3.0 Credits

Formerly ECE 106

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

### Child Development • 5.0 Credits

Formerly EDUC 106

Build a foundation for explaining how children develop in all domains, conception through early adolescence. Explore various developmental theories, methods for documenting growth, and impact of brain development. Topics addressed: stress, trauma, culture, race, gender identity, socioeconomic status, family status, language, and health issues.

## EDUC 117

### Seminar • 1.0–3.0 Credits

Formerly ED 117

Provides an opportunity to participate in an intensive, short-term learning experience relating to the field of early childhood education.

## EDUC 128

### Introduction to Math Instruction • 5.0 Credits

Formerly ED 128

An introduction to math instruction including math reform philosophy, theory, and practical application within the K-12 system.

## EDUC&130

### Guiding Behavior • 3.0 Credits

Formerly ECE 104

Students will examine the principles and theories promoting social competence in young children and creating safe learning environments. Develop skills promoting effective interactions, providing positive individual guidance, and enhancing group experiences.

## EDUC&136

### School Age Care • 3.0 Credits

Students will develop skills to provide developmentally appropriate and culturally relevant activities/care for children ages 5-12 in a variety of settings. Topics include: implementation of curriculum, preparation of environments, building relationships, guiding cognitive and social emotional development, and community outreach.

## EDUC&150

### Child/Family/Community • 3.0 Credits

Formerly ECE 209

Students will integrate the family and community contexts in which a child develops. Explore cultures and demographics of families in society, community resources, strategies for involving families in the education of their child, and tools for effective communication.

## EDUC 153

### Paraeducation Supervised Practicum • 4.0 Credits

Formerly EDUC 1532

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

### Field Experience • 1.0–2.0 Credits

Formerly EDUC 1972



# Courses & Programs

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 • 1.0–15.0 Credits

A class used to explore new coursework.

## EDUC&203

### Exceptional Child • 3.0 Credits

Formerly ECE 107

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.

## EDUC 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Electronics

### ELT 101

#### Basic Electricity • 5.0 Credits

This course provides an introduction to the basic concepts of electricity including series and parallel circuits, AC and DC currents, transformers, resistance, capacitors, multimeter use, and troubleshooting.

### ELT 111

#### Introduction to Electricity • 5.0 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:** grade of 2.0 or better in MATH 095 or MATH 050 or MATH 070 or satisfactory placement test score.

### ELT 124

#### Direct Current Circuits • 5.0 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 • 5.0 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 • 5.0 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 • 5.0 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 154.

## ELT 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## ELT 201

### Basic Electronics • 5.0 Credits

This course covers the concepts of electrical fundamentals and electronics including Ohm's and Kirchoff's Laws; series, parallel, and compound circuits; motors, relays, switches, inverters, converters; power distribution, wiring and routing; soldering, terminals, splicing; and troubleshooting.

## ELT 211

### Applied Electronics • 5.0 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 Technician

### EMT 101

#### Emergency Medical Technician-Basic • 1.0–10.0 Credits

This is the entry-level course to the Emergency Medical Service (EMS) profession and is designed for those who aspire to become an Emergency Medical Technician-Basic. 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 • 9.0 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, 040, or better.

### EMT 104

#### Advanced Emergency Medical Technician (AEMT) II • 9.0 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

# Courses & Programs

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.

## Engineering Technology

### ENT 111

#### Introduction to Engineering • 5.0 Credits

This course introduces students to the role of the engineer, engineering dimensions and standards, and the basic methodology of engineering problem-solving. **Prerequisite:** MATH 095 or MATH 098 or MATH 070 or MATH 072 or concurrent enrollment or instructor permission.

### ENT 114

#### Introduction to Drafting • 4.0 Credits

Formerly ENT 116

Basic principles of drafting and introduction to CAD to include spatial visualization, line types, sketching, scale, orthographic projection, isometric drawings, sectional views, oblique lines and surfaces, auxiliary views and basic applications.

### ENT 118

#### Spatial Visualization • 2.0 Credits

An overview of the techniques used to mentally manipulate 2-dimensional and 3-dimensional figures. Includes the basics of drafting such as line types, orthographic projection, isometric drawings, and basic applications.

### ENT 121

#### Engineering Fundamentals w/ Lab • 4.0 Credits

Fundamental concepts relevant to many engineering disciplines, including: energy, vectors, force systems, free body diagrams, strength of materials, associated problem-solving, and basic design procedures. **Prerequisite:** ENT 111.

### ENT 122

#### Materials • 3.0 Credits

An introduction to the materials which are used in the fabrication of construction projects including: foundations, wood, heavy timber frame construction, wood light frame construction, exterior finishes, interior finishes, masonry, roofing, and glass.

### ENT 124

#### Intermediate Drafting • 4.0 Credits

Formerly ENT 125

Intermediate principles of drafting and CAD to include spatial visualization, line types, sketching, scale, orthographic projection, isometric drawings, sectional views, oblique lines and surfaces, auxiliary views and intermediate applications. **Prerequisite:** ENT 114 with a grade of 2.0 or higher, or ENT 118 and ENT 267 with a grade of 2.0 or higher, or instructor permission.

### ENT 128

#### Architecture & Engineering Blueprint Reading • 2.0 Credits

An overview of the techniques used in reading construction drawings for architecture and engineering projects.

### ENT 134

#### Surveying w/ Lab • 6.0 Credits

A course in plane surveying which includes: horizontal, vertical, and angular measurements, traversing, mapping, construction survey, land survey, and calculations. **Prerequisite:** MATH 113, MATH& 142, or instructor permission.

### ENT 135

#### Statics • 5.0 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

#### Advanced Drafting • 4.0 Credits

Formerly ENT 1361

Advanced principles of drafting and CAD to include 3D projects, plan and profile drawings, advanced views, advanced sections, and dimensioning. **Prerequisite:** ENT 124 or instructor permission.

### ENT 171

#### Technical Drafting • 3.0 Credits

Formerly ENT 1711

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 • 1.0–15.0 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 • 5.0 Credits

A study of stress and deformation of materials. Topics include: axial and torsional loading, stress-strain relationships, shearing stresses, temperature stresses, and engineering applications. **Prerequisite:** ENT 135 or instructor permission.

### ENT 216

#### Mechanical Drafting & Design • 5.0 Credits

Formerly ENT 2161

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

#### Construction Estimating • 1.0 Credit

Formerly ENT 2191

An overview of the techniques used in estimating material quantities in construction projects. **Prerequisite:** ENT 122 or instructor permission.

### ENT 224

#### Structures • 5.0 Credits

Load analysis and design of basic structural members using timber and steel. **Prerequisite:** ENT 214.

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## ENT 226

### Architectural/Structural Drafting • 5.0 Credits

Formerly ENT 2261

A drafting and design course covering construction techniques, architectural drawings, organization of drawing sets, and design projects.

**Prerequisite:** ENT 136.

## ENT 229

### Construction Specifications • 2.0 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

### Design • 5.0 Credits

Formerly ENT 2361

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 • 5.0 Credits

An introductory course in electricity which includes: basic electrical theory and mathematical relationships, series and parallel circuits, DC and AC circuit components, power generation and distribution. **Prerequisite:** MATH& 141 and enrollment in the ENT program or instructor permission.

## ENT 267

### AutoCAD I w/ Lab • 3.0 Credits

This course utilizes AutoCAD for computer-aided drafting (CAD). The course shows how to use AutoCAD to set up drawings, additional draw and edit commands, dimensioning, and text. Students utilize drafting and editing techniques to efficiently produce their drawings. **Prerequisite:** ENT 116 or equivalent.

## ENT 268

### AutoCAD II w/ Lab • 3.0 Credits

This course goes beyond the basic fundamentals of AutoCAD and examines ways to use it in today's workplace. Emphasis is placed on advanced commands including: blocks, dimensions, attributes and extracting them, paper space/model space, xrefs, and file management. The class then customizes a menu creating: custom pulldown menus, toolbars, and macros. **Prerequisite:** ENT 267.

## ENT 270

### 3-D w/ Lab • 3.0 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 • 3.0 Credits

This course simulates actual drawing projects in a variety of disciplines such as: civil, structural, architectural, mechanical, and electrical. Students are expected to develop and manage large sets of drawings. **Prerequisite:** ENT 268 or instructor permission.

## ENT 272

### Advanced 3-D w/ Lab • 3.0 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 • 3.0 Credits

This course covers advanced AutoCAD features, such as how AutoCAD interacts with the web, from transmitting files, reviewing, to collaborating. The class also examines AutoCAD interactions with 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 • 3.0 Credits

A drafting and design course covering architecture, residential drawings, and the organization of drawing sets incorporating design projects. **Prerequisite:** ENT 267.

## ENT 280

### Extended CAD Lab • 1.0–3.0 Credits

Formerly ENT 2801

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 • 1.0–15.0 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

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## ENGL 090

### Writing Express • 1.0–3.0 Credits

Formerly ENGL 090

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

### Grammar Skills • 5.0 Credits

Formerly ENG 091

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

### English Review • 5.0 Credits

Formerly ENG 095

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 097

### Special Studies • 5.0 Credits

A class used to explore new coursework.

# Courses & Programs

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## ENGL 098

### Writing Prep I • 5.0 Credits

Formerly ENG 098

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

### Writing Prep II • 5.0 Credits

Formerly ENG 099

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&101

### English Composition I [C] • 5.0 Credits

Formerly ENG 101

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

### Composition II [C] • 5.0 Credits

Formerly ENG 201

An advanced expository writing course focusing on research essays and other aspects of college writing. **Prerequisite:** ENGL& 101 with a 1.0 or better.

## ENGL 103

### Writing in the Workplace • 5.0 Credits

Formerly ENG 103

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&111

### Intro to Literature [H] • 5.0 Credits

Formerly LIT 150

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 140

### The Cinema [H] • 5.0 Credits

Formerly LIT 140

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

### Women's Literature [H] • 5.0 Credits

Formerly LIT 160

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

### Multicultural Literature [H] • 5.0 Credits

Formerly LIT 180

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

### Bible as Literature [H] • 5.0 Credits

Formerly LIT 195

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 • 1.0–15.0 Credits

A class used to explore new coursework.

## ENGL 203

### Mythology [H] • 5.0 Credits

Formerly LIT 203

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

### Intro to Linguistics [H] • 5.0 Credits

Formerly ENG 210

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&220

### Intro to Shakespeare [H] • 5.0 Credits

Formerly LIT 270

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

### Technical Writing [C] • 5.0 Credits

Formerly ENG 205

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 1.0 or better.

## ENGL&236

### Creative Writing I [H] • 5.0 Credits

Formerly ENG 240

A study of creative writing, emphasizing diverse styles and techniques. **Strongly recommended:** ENGL& 101.

## ENGL&237

### Creative Writing II [H] • 5.0 Credits

Formerly ENG 241

A continuation of ENGL& 236. **Prerequisite:** ENGL& 236.

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## ENGL&244

### American Literature I [H] • 5.0 Credits

Formerly LIT 225

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

### American Literature II [H] • 5.0 Credits

Formerly LIT 226

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

### American Literature III [H] • 5.0 Credits

Formerly LIT 227

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

### World Literature I [H] • 5.0 Credits

Formerly LIT 205

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

### World Literature II [H] • 5.0 Credits

Formerly LIT 206

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

### World Literature III [H] • 5.0 Credits

Formerly LIT 207

A survey of world literature emphasizing Romanticism, Realism, and Modernism. **Prerequisite:** eligible for ENGL& 101 or currently enrolled in ENGL 099.

## ENGL 257

### English Grammar [H] • 5.0 Credits

Formerly ENG 255

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

### English Literature [H] • 5.0 Credits

Formerly LIT 264

A survey of English literature from Beowulf to 1640. **Prerequisite:** eligible for ENGL& 101 or currently enrolled in ENGL 099.

## ENGL 265

### English Literature [H] • 5.0 Credits

Formerly LIT 265

A survey of English literature from 1640 to 1800. **Prerequisite:** eligible for ENGL& 101 or currently enrolled in ENGL 099.

## ENGL 266

### English Literature [H] • 5.0 Credits

Formerly LIT 266

A survey of English literature from 1800 to the present. **Prerequisite:** eligible for ENGL& 101 or currently enrolled in ENGL 099.

## ENGL 275

### The Lord of the Rings [H] • 5.0 Credits

Formerly LIT 275

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

### Lesbian, Gay, Bisexual, Trans, Queer Studies [H] • 5.0 Credits

Formerly LIT 280

An introduction to the interdisciplinary field of lesbian/gay/bisexual/transgender/gueer studies from a historical and multicultural perspective. Works of fiction, poetry, drama, nonfiction, and film/television are used to understand connections between sexual orientation, gender identity, and the humanities. **Prerequisite:** eligible for ENGL& 101 or currently enrolled in ENGL 099.

## ENGL 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## ENGL 315

### Writing for Health Professionals [C] • 5.0 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] • 5.0 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.

## English As A Foreign Language

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## EFL 090

### Spelling & Pronunciation • 3.0 Credits

This course is designed for non-native speakers of English to develop an understanding of the patterns in English spelling and pronunciation.

## EFL 091

### Vocabulary • 5.0 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.



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## EFL 092

### Grammar I • 5.0 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 • 5.0 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 • 5.0 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 • 5.0 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 Basic Education or instructor permission.**

## EFL 096

### Reading & Writing II • 5.0 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 • 5.0 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] • 5.0 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 • 5.0 Credits

This course addresses the challenges of spoken English in an academic setting. Activities are evenly divided between note-taking while listening to academic lectures, 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] • 5.0 Credits

This course is the continuation of EFL 101. This second course covers more rhetorical styles for use in academic papers written in conjunction with the reading of literature. Journal writing 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 • 1.0–15.0 Credits

A class used to explore new coursework.

## English Language Acquisition

## ELA 009

### ELA ED Interviewing • 1.0–3.0 Credits

Formerly ESL 009

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 • 1.0–18.0 Credits

Formerly ESL 010

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 • 1.0–18.0 Credits

Formerly ESL 020

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 • 1.0–18.0 Credits

Formerly ESL 030

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 • 1.0–18.0 Credits

Formerly ESL 040

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 • 1.0–18.0 Credits

Formerly ESL 050

# Courses & Programs

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 • 4.0 Credits

Formerly ESL 053

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 • 2.0 Credits

Formerly ESL 054

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 • 1.0–6.0 Credits

Formerly ESL 056

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 • 4.0 Credits

Formerly ESL 057

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

Formerly ESL 059

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 • 1.0–18.0 Credits

Formerly ESL 060

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 • 1.0–10.0 Credits

Formerly ESL 090

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 • 1.0–7.0 Credits

Formerly ESL 199

A class used to explore new coursework.

## Environmental Science

### ENVS&101

#### Intro to Environmental Science w/Lab [M/S] • 5.0 Credits

Formerly ENVS 100

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.

### ENVS 174

#### Intro to Meteorology and the Atmosphere [M/S] • 5.0 Credits

An introduction to meteorology, weather, climate, and the atmospheric processes related to air pollution and climate change. Topics include: atmospheric structure, solar radiation, clouds, precipitation, pressure, fronts, hurricanes, air pollution, climate, and global climate change.

**Prerequisite:** MATH 095 or MATH 098 or MATH 070 or MATH 072 or satisfactory placement test score.

### ENVS 310

#### Environmental Issues [M/S] • 5.0 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.

## Exercise Science

### EXSC 101

#### Introduction to Exercise Science • 3.0 Credits

Introduces the student to chronic disease as seen through the lens of the Exercise Science discipline. Students will examine possible employment opportunities addressing chronic disease using Exercise Science principles.

### EXSC 201

#### Anatomical Kinesiology • 5.0 Credits

This course will introduce students to anatomical concepts and physical laws as applied to human movement emphasizing the effects of individual and environmental variables. Includes analyses of normal and pathological gait. **Prerequisite:** BIOL& 241.

### EXSC 202

#### Personal Training • 5.0 Credits

Personal Training is a comprehensive course designed to prepare students to become certified Personal Trainers. Students learn to properly screen clients for safe participation in an exercise program, utilize different tools for assessing a clients' fitness level, and identify appropriate assessment techniques for a wide variety of clientele. Students learn components of program design for resistance training, cardiovascular training, and flexibility. **Prerequisite:** BIOL& 241. Additionally, you must have taken or be concurrently taking NUTR& 101 or have instructor permission.

# Courses & Programs

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## EXSC 203

### Exercise Science Practicum • 2.0 Credits

Students work in conjunction with Exercise Science instructors to provide individual planning and programming for a variety of populations. Students will also observe professionals in Exercise Science related fields in a variety of settings. **Prerequisite:** EXSC 202 or instructor permission.

## Fire Science

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### FS 100

#### Introduction to Fire Service • 1.0 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 • 1.0–3.0 Credits

Management in the fire service explores the skills and techniques used by competent management in business, government, and voluntary organizations, with particular emphasis on their application to the fire service.

### FS 121

#### Fire Tactics • 1.0–3.0 Credits

Discussion of basic firefighting tactics of company response, including size-up rescue, exposure, ventilation and fire problems, and tactics used.

### FS 131

#### Introduction to Fire Inspections • 1.0–3.0 Credits

A course designed to give the new inspector a basic concept of inspections that deal with fire hazards, authority to inspect, and how to conduct a pre-fire plan.

### FS 141

#### Chemistry of Hazardous Materials • 3.0 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 • 3.0 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 • 1.0–15.0 Credits

A class used to explore new coursework or for a specific topic of special interest.

### FS 199

#### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

### FS 211

#### Building Construction • 1.0–3.0 Credits

A course covering basic building construction, outlining the specific weaknesses of various constructions.

### FS 222

#### Fire Tactics II • 3.0 Credits

This course includes planning, implementing, and evaluating basic and advanced fire tactics at the command officer level. **Prerequisite:** FS 121.

### FS 231

#### Fire Protection Equipment • 1.0–3.0 Credits

Designed to give students a clear understanding of the principles and limitations of fire suppression and detection systems.

### FS 241

#### Fire Investigation • 1.0–3.0 Credits

Includes methods of determining the area of fire origin, fire causes, fire spread, and the aspects of fire behavior; recognizing accidental and incendiary fires and securing and preserving evidence. Witness interrogation methods, arson laws, court procedures, and review of case histories are discussed.

### FS 251

#### Fire Service Hydraulics • 3.0 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 • 1.0–10.0 Credits

A class used to explore new coursework or for a specific topic of special interest.

### FS 299

#### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Firefighter I

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### FCA 105

#### Hydraulics • 3.0 Credits

A course that is designed to give the new firefighter a basic understanding of municipal water systems, principles of fluids, fire flow requirements, and basic fire stream calculations.

### FCA 120

#### Fire Investigation • 3.0 Credits

Includes methods of determining the area of fire origin, fire causes, fire spread, and the aspects of fire behavior; recognition of accidental and incendiary fires and securing and preserving evidence.

### FCA 137

#### Fire Protection Systems • 3.0 Credits

Designed to give a clear understanding of the principles and limitations of fire suppression and detection systems.



# Courses & Programs

## FCA 152

### Building Construction • 3.0 Credits

A course covering basic building construction, outlining the specific weaknesses of various types of construction.

## FCA 160

### Fire Ground Tactics • 3.0 Credits

Discussion of basic firefighting tactics of company response, including size-up, rescue, exposure, ventilation and fire problems, and tactics used.

## FCA 177

### Wildland/Urban Interface • 3.0 Credits

Discussion of basic firefighting tactics of wildland fires that threaten homes within urban areas. In addition to general firefighting tactics, discussions on determining if a home or a group of homes can be safely protected are presented.

## FCA 190

### Introduction to Fire Inspection and Codes • 3.0 Credits

A course designed to give the new firefighter a basic concept of inspections involving the International Fire Code and the International Building Code.

## FCA 251

### Firefighter Level I Academy • 1.0–23.0 Credits

This academy offers extensive classroom and hands-on training to those seeking a career in Fire Science. The Academy meets or exceeds all the required subject areas for Firefighter Level I Certification as outlined by the Washington State Patrol Fire Protection Bureau.

## FCA 261

### Firefighter Level II Academy • 8.0 Credits

This academy is a continuation of Firefighter Academy I. Firefighter II provides extensive classroom and hands-on training to those seeking a career in Fire Science. The Academy meets or exceeds all the required subject areas for Firefighter Level II. **Prerequisite: Firefighter I certification. Certification as outlined by the Washington State Patrol Fire Protection Bureau.**

## First Year Introduction

### FYI 101

#### First Year Introduction • 1.0 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 • 1.0–2.0 Credits

A class used to explore new coursework.

## French

### FRCH&121

#### French I [H] • 5.0 Credits

Formerly FR 101

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

#### French II [H] • 5.0 Credits

Formerly FR 102

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

#### French III [H] • 5.0 Credits

Formerly FR 103

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 150

#### Beginning Conversational French • 1.0–5.0 Credits

Formerly FR 150

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

#### Beginning Conversational French • 1.0–5.0 Credits

Formerly FR 151

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

#### Beginning Conversational French • 1.0–5.0 Credits

Formerly FR 152

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 • 1.0–15.0 Credits

A class used to explore new coursework.

### FRCH&221

#### French IV [H] • 5.0 Credits

Formerly FR 201

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

#### French V [H] • 5.0 Credits

Formerly FR 202

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.**

# Courses & Programs

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## FRCH&223

### French VI [H] • 5.0 Credits

Formerly FR 203

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.

## FRCH 250

### Intermediate Conversational French • 1.0–5.0 Credits

Formerly FR 250

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

### Intermediate Conversational French • 1.0–5.0 Credits

Formerly FR 251

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

### Intermediate Conversational French • 1.0–5.0 Credits

Formerly FR 252

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

### French Literature Reading [H] • 1.0–3.0 Credits

Formerly FR 260

Selected readings of French literature. **Prerequisite:** FRCH& 223 or instructor permission.

## FRCH 261

### French Literature Reading [H] • 1.0–3.0 Credits

Formerly FR 261

Selected readings of French literature. **Prerequisite:** FRCH& 223 or instructor permission.

## FRCH 262

### French Literature Reading [H] • 1.0–3.0 Credits

Formerly FR 262

Selected readings of French literature. **Prerequisite:** FRCH& 223 or instructor permission.

## FRCH 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## General Engineering

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## ENGR&111

### Engineering Graphics 1 • 3.0 Credits

Formerly GE 101

Principles of mechanical drawing: geometric construction, orthographic projection, sectional views, auxiliary views, isometric and oblique drawings, dimensions, threads, fasteners, and lettering.

## ENGR 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## ENGR&214

### Statics • 5.0 Credits

Formerly GE 281

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.

**Prerequisite:** MATH& 151 and either PHYS& 241/231 or PHYS& 221.

## ENGR&215

### Dynamics • 5.0 Credits

Formerly GE 291

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.

## ENGR 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Geography

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## GEO 101

### Physical Geography [M/S] • 5.0 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] • 5.0 Credits

An introduction to the use of human geography as a framework with which to critically analyze and understand the world, both on a micro and macro level. CBC's course in Cultural Geography provides an introduction to the ways in which human groups think about, arrange, and modify their physical habitats. This geographic knowledge is a basic means to understanding one's own world and the worlds of others.

## GEO 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## GEO 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Geology

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## GEOL&101

### Intro to Physical Geology w/ Lab [M/S] • 5.0 Credits

Formerly GEL 101

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

# Courses & Programs

geologic development of the Pacific Northwest, including field studies. Lecture and lab must be taken concurrently. **Prerequisite: grade of 2.0 or better in MATH 040 or 084.**

## GEOL&103

### Historical Geology w/ Lab [M/S] • 5.0 Credits

Formerly GEL 203

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

### Environmental Geology w/ Lab [M/S] • 5.0 Credits

Formerly GEL 211

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.**

## GEOL 115

### Geology of the National Parks • 5.0 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 • 1.0–15.0 Credits

A class used to explore new coursework.

## GEOL 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Health Education

## HE 110

### Concepts of Fitness [PE] • 2.0 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] • 2.0 Credits

Class is designed to promote and achieve knowledge in the areas of diet, exercise, and weight management for today's lifestyles as it relates to the students' total well-being.

## HE 161

### HIV/AIDS Issues and Strategies [PE] • 2.0 Credits

A comprehensive overview of the virus HIV and AIDS, including: biological, epidemiological, historical, universal precautions, economic, legal, ethical, social, and behavioral aspects.

## HE 162

### HIV/AIDS Education [PE] • 1.0 Credit

Formerly HE 1611

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] • 3.0 Credits

Study of current health and wellness issues and problems of the college-age student. Emphasis is on lifestyles, risk factors, and preventing disease and illness with a wellness lifestyle.

## HE 171

### Exercise Prescription [PE] • 2.0 Credits

This course is the study of the history, current trends, and research regarding proper protocols for designing individual workout programs based on needs and experience of individuals.

## HE 172

### Exercise Prescription Lab [PE] • 1.0 Credit

Formerly HE 1711

Lab to be taken concurrently with HE 171.

## HE 199

### Special Studies • 1.0–15.0 Credits

An experimental class to be used to explore new approaches and applications to Health Education.

## HE 210

### Sports Nutrition [PE] • 3.0 Credits

This course is an introduction to terms, concepts, and research regarding proper nutrition for athletes and active individuals. In addition, supplementation and aids to enhance performance are studied.

## HE 215

### Health and Fitness for Life [PE] • 3.0 Credits

This course is designed to provide students with the necessary knowledge and skills to maintain a healthy fitness level throughout the lifespan. Students will develop, implement, and modify an exercise program geared to their specific fitness and wellness goals. This class requires students to exercise in the fitness center.

## HE 216

### Health and Fitness for Life Lab [PE] • 1.0 Credit

Formerly HE 2151

Lab to be taken concurrently with HE 215.

## HE 220

### Drugs and Health [PE] • 3.0 Credits

This course is designed to achieve physiological knowledge and awareness of chemical use and abuse as it relates to the student's total well-being.

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## HE 230

### First-Aid Safety • 3.0 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] • 3.0 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] • 3.0 Credits

A study of the causes of human stress and how to manage or minimize this stress. Theories, implications, and practical applications are emphasized.

## HE 250

### Sports Management [PE] • 3.0 Credits

This course is an introduction to the history, current global perspectives, trends, and research regarding the field of sports management. Students gain an understanding of marketing, organization, and financial aspects of sports management.

## Health Physics

### HPHYS300

#### Radiation Physics I • 5.0 Credits

This course is intended to teach students the basic fundamentals of health physics beginning with a review of physical principles, atomic and nuclear structure, radiation sources, radioactive decay series and differential equations, and the physical theory of interaction of radiation with matter. Students will develop skills by learning how to use available resources such as Brookhaven National Laboratory National Nuclear Data Center, Oak Ridge National Laboratory Radiological Toolbox and national Health Physics Society membership resources. **Prerequisite: acceptance into the Health Physics BAS program.**

### HPHYS305

#### Radiation Physics II • 5.0 Credits

This course is intended to teach students advanced fundamentals of health physics beginning with radiation exposure, dosimetric quantities, radiation biology, standards and guidance relating to radiation safety, radiation detector theory and measurement counting statistics. Students will develop skills by learning how to use available resources, such as Brookhaven National Laboratory's National Nuclear Data Center, Oak Ridge National Laboratory's Radiological Toolbox and national Health Physics Society membership resources. **Prerequisite: grade of 2.5 or better in HPHYS 300 or instructor permission.**

### HPHYS310

#### Nuclear Forensics • 5.0 Credits

This course explores the chemical, physical and nuclear aspects associated with nuclear material production and identification. Topics will include nuclear fuel cycle, analysis of recovered material, nuclear policy and nuclear forensic case histories. **Prerequisite: acceptance into the Health Physics BAS program.**

### HPHYS315

#### Radiological and Nuclear Emergency Response • 5.0 Credits

This course is intended to teach students the national framework for responding to incidents involving radiological and nuclear materials and

the role of historical impacts on shaping policy and accident analysis. A description of the National Contingency Plan and how it envelopes the EPA, investigative units, medical management of patients, response and recovery, societal issues, and factors affecting decision making. **Prerequisite: grade of 2.5 or better in HPHYS 305 or instructor permission.**

### HPHYS320

#### Environmental Radioactivity • 5.0 Credits

This course is intended to teach students the sources of natural and technologically enhanced radioactivity in the environment. Basic environmental transport methods and software will be explored and applied to determine dose to a worker and a member of the public based on a composite of real-world situations, in a hypothetical setting, that have historically occurred in the health physics industry. **Prerequisite: grade of 2.5 or better in HPHYS 305 or instructor permission.**

### HPHYS350

#### Health Physics Seminar I • 1.0 Credit

This course is intended to cover a broad spectrum of topics in contemporary health physics (e.g., state and federal regulations, waste disposal, emergency response, dosimetry, IAEA activities, nuclear nonproliferation, radiation oncology, etc.) delivered by field experts. Additionally, the students will increase their knowledge of employment opportunities and learn basic skills, such as resume writing and interview techniques. **Prerequisite: acceptance into the Health Physics BAS program.**

### HPHYS400

#### External Dosimetry • 5.0 Credits

This course is intended to teach students external radiation protection, point kernel techniques, shielding calculations including National Council on Radiation Protection and Measures (NCRP) 147, and external dosimetry measurement techniques. Students will develop skills by learning how to use industry shielding software and available resources, such as Oak Ridge National Laboratory's Radiological Toolbox. **Prerequisite: grade of 2.5 or better in HPHYS 305 or instructor permission.**

### HPHYS405

#### Internal Dosimetry • 5.0 Credits

This course is intended to teach students internal radiation protection based on international recommendations that include International Commission on Radiological Protection (ICRP), National Council on Radiation Protection and Measurements (NCRP) and journal publications. Furthermore, the course will include discussion and applications of Medical Internal Radiation Dose (MIRD) methods for calculating internal dose. Students will develop skills by learning how to use industry dosimetry software, such as Integrated Modules for Bioassay Analysis (IMBA) and Oak Ridge National Laboratory's Radiological Toolbox. **Prerequisite: grade of 2.5 or better in HPHYS 305 or instructor permission.**

### HPHYS410

#### Radiation Biology • 5.0 Credits

This course is intended to teach students molecular mechanisms of radiation interaction, cell survival curves, cellular radiosensitivity, dose fractionation, acute radiation syndrome, medical countermeasures, radiation carcinogenesis, teratogenesis, and radiation protection. Students will develop skills by learning how to use applicable sections of the Oak Ridge National Laboratory's Radiological Toolbox. **Prerequisite: grade of 2.5 or better in HPHYS 305 or instructor permission.**

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## HPHYS415

### Radiation Detection and Measurement & Lab • 5.0 Credits

This course is intended to teach students the basic physics principles and applications of radiation detecting instruments, with laboratory exercises.

The course emphasizes techniques and instrumentation for nuclear radiation detection and measurements as they relate to health physics (radiation safety) and nuclear physics. Laboratory exercises implement classroom knowledge through experience with various counting systems.

**Prerequisite:** grade of 2.5 or better in HPHYS 305 or instructor permission.

## HPHYS420

### Medical Health Physics • 5.0 Credits

This course is intended to provide students an introduction to the field of Medical Health Physics. Topics in this course will include the diagnostic and therapeutic use of x-rays and nuclear medicine, radiation protection and regulation, radiation accidents, waste management and disposal.

**Prerequisite:** acceptance into the Health Physics BAS program.

## HPHYS425

### Nuclear and Radiological Regulatory Framework • 5.0 Credits

This course is intended to teach students the formation of the nuclear and regulatory environment in the United States and the role of Independent Domestic and International Consensus Standards. **Prerequisite:**

acceptance into the Health Physics BAS program.

## HPHYS450

### Health Physics Seminar II • 1.0 Credit

This second seminar in the series is intended to expand knowledge spectrum of topics in contemporary health physics, delivered by field experts, and explore local employment opportunities. **Prerequisite:**

acceptance into the Health Physics BAS program.

## Health Sciences

## HSCI 147

### Medical Terminology • 5.0 Credits

Formerly HIT 147, AOT 147

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 • 5.0 Credits

The Spanish Medical Interpreting program is a sequential, three-quarter vocational certificate program, consisting of Spanish Medical Interpreting I, II, and III. The program prepares students for state or national medical interpreter certification and to enter the workforce as professional, ethical, and competent healthcare interpreters. Students are introduced to healthcare interpreting as a profession, concepts and relevant terminology in biomedicine, and given opportunities to develop foundational skills in healthcare interpreting. Topics include: International code of ethics and its application, language access laws, HIPAA, interpreting modalities and protocols, basic note-taking skills, self-evaluation, glossary building and intervention techniques. **Prerequisite:** 1. Native-like proficiency

in English and Spanish. 2. Applicants must pass an entrance test to be admitted. Recommended courses: HSCI 147, SPAN 205, 206, 207. Cross-listed as SPAN 281 (credit cannot be received for both courses).

## HSCI 149

### Spanish Medical Interpreting II • 5.0 Credits

The Spanish Medical Interpreting program is a sequential, three-quarter vocational certificate program, consisting of Spanish Medical Interpreting I, II, and III. The program prepares students for state or national medical interpreter certification and to enter the workforce as professional, ethical, and competent healthcare interpreters. Students are introduced to healthcare interpreting as a profession, concepts and relevant terminology in biomedicine, and given opportunities to develop foundational skills in healthcare interpreting. This course builds on the knowledge and skills acquired in SPAN 281/HSCI 149. Topics include: National code of ethics and standards of practice, ethical decision-making, basic medical prefixes, roots and suffixes, note-taking and sight translation skills, interpreter positioning, language and communication dynamics, and the role of the interpreter in health equity. **Prerequisites:** HSCI 148 or SPAN 281 with a 1.0 or higher. Cross-listed as SPAN 282 (credit cannot be received for both courses).

## HSCI 150

### Spanish Medical Interpreting III • 5.0 Credits

The Spanish Medical Interpreting program is a sequential, three-quarter vocational certificate program, consisting of Spanish Medical Interpreting I, II, and III. The program prepares students for state or national medical interpreter certification and to enter the workforce as professional, ethical, and competent healthcare interpreters. Students are introduced to healthcare interpreting as a profession, concepts and relevant terminology in biomedicine, and given opportunities to develop foundational skills in healthcare interpreting. This course builds on the knowledge and skills acquired in Spanish Medical Interpreting II. This course provides students with guided interpreting practice. Topics include: State code of ethics, abbreviations in healthcare, the concepts of patient advocacy, communicative autonomy, cultural brokering and responsiveness, and business practices in the industry. **Prerequisites:** HSCI 149 or SPAN 282 with a 1.0 or higher. Cross-listed as HSCI 150 (credit cannot be received for both courses).

## HSCI 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## HSCI 220

### ACLS Initial • 2.0 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.



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## HSCI 222

### ACLS Experienced Provider • 1.0 Credit

The ACLS Experienced Provider course is for seasoned ACLS providers who wish to renew their ACLS provider status. This course provides a stimulus for expert healthcare providers to identify areas in resuscitation that deal with special circumstances. **Prerequisite: current Healthcare Provider BLS card and current ACLS Provider Card.**

## HSCI 223

### ACLS Instructor Course • 1.0 Credit

One credit class to prepare individuals to become instructors in advanced cardiovascular life support. **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 • 2.0 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 • 1.0 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

# Courses & Programs

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.**

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## 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 266

### General Cardiology • 0.3 Credits

This course provides general cardiology theories, principles, ECG interpretation, diagnosis, management or treatment of cardiac emergencies in both the chronic and acute setting for paramedics enrolled in the Benton Franklin Counties Ongoing Training and Education Programs (OTEP) and follows treatment algorithms as outlined in the local Benton Franklin protocol.

## HSCI 293

### Current Topics • 1.0–15.0 Credits

This course is an elective credit for on-the-job firefighting training and experience.

## HSCI 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Healthcare Administration

## HCAD 300

### Healthcare Systems, Strategic Thinking, & Strategy • 5.0 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 • 5.0 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 • 5.0 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 • 5.0 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 • 5.0 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 • 5.0 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 • 5.0 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



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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, 350, 400, 430, and HCAD 315, 330, and 420.

## Healthcare Central Service Technology

### HCST 100

#### Foundations of Central Service • 6.0 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:** Acceptance into the Healthcare Central Service Technology program.

### HCST 150

#### Central Service Clinical • 12.0 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 and HSCI 147, both with a 2.0 or better.

## Hebrew

### HEB 121

#### Hebrew I [H] • 5.0 Credits

Introduction to the modern Hebrew language including conversational skills, reading, writing and grammar, and Israeli and Jewish culture including geography, customs, daily life, and heritage. Designed for the novice learner of Hebrew, with little or no proficiency in the Hebrew language. **Recommended prerequisite:** successful completion of at least ENGL 099.

### HEB 122

#### Hebrew II [H] • 5.0 Credits

Introduction to the Hebrew language including conversational skills, reading, writing and grammar, and Israeli and Jewish culture including geography, customs, daily life, and heritage. **Prerequisite:** HEB 121 or instructor permission.

### HEB 123

#### Hebrew III [H] • 5.0 Credits

Introduction to the Hebrew language including conversational skills, reading, writing and grammar, and Israeli and Jewish culture including geography, customs, daily life, and heritage. **Prerequisite:** HEB 122 or instructor permission.

## History

### HIST 107

#### Chicano History [S/B] • 5.0 Credits

Formerly HIS 107

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

#### History of Immigration in the U.S. [S/B] • 5.0 Credits

Formerly HIS 108

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

#### History of Modern East Asia [S/B] • 5.0 Credits

Formerly HIS 110

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

#### Colonial Latin America [S/B] • 5.0 Credits

Formerly HIS 111

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

#### Modern Latin America [S/B] • 5.0 Credits

Formerly HIS 112

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

#### Mexico Since Independence [S/B] • 5.0 Credits

Formerly HIS 113

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

#### Intro to Middle East History & Society [S/B] • 5.0 Credits

Formerly HIS 115

This course will introduce students to the sociology and history of the Middle East as one of the most diverse regions in the world. Specifically, it examines the historical development as well as the current transformation of social, cultural, economic, and political systems of Middle Eastern societies. Topics will be examined using a macro-sociological approach which analyzes both their internal dynamics and their role and place in

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the world. **This course is cross-listed with SOC 115. Credit cannot be received for both courses.**

## HIST&126

### World Civilizations I [H] • 5.0 Credits

Formerly HIS 101

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

### World Civilizations II [H] • 5.0 Credits

Formerly HIS 102

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

### World Civilizations III [H] • 5.0 Credits

Formerly HIS 103

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

### U.S. History I [S/B] • 5.0 Credits

Formerly HIS 104, HIST&136

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

### U.S. History II [S/B] • 5.0 Credits

Formerly HIST&137, HIS 105

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] • 5.0 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 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## HIST&214

### Pacific Northwest History • 5.0 Credits

Formerly HIS 251

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.

## HIST 233

### War in History [S/B] • 5.0 Credits

Formerly HIS 233

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 • 1.0–15.0 Credits

A class used to explore new coursework.

## Horticulture

### HORT 202

#### Cultivated Plants w/ Lab • 5.0 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 • 5.0 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 235

#### Greenhouse Production and Management w/ Lab • 3.0 Credits

This course covers the operation and management of greenhouses and other controlled environments used in crop/horticultural production with emphasis on system design and construction, lighting methods and intensity, heating and cooling systems, growing media, plant nutrition, water quality and irrigation systems. This course also offers basic understanding of greenhouse production of plants, cultural control and practices specific to greenhouse production.

### HORT 242

#### Hydroponic Technology w/ Lab • 4.0 Credits

This hands-on intensive course will introduce students to soilless hydroponic crop production. The course will provide information on key components of hydroponic crop production including plant growth and nutrition, growing systems, and cultural practices. Students will apply concepts to the growth of hydroponic crops in a commercial greenhouse setting.

### HORT 251

#### Plant Propagation w/ Lab • 5.0 Credits

An introduction to the methods of plant propagation including methods of propagating by true seed, bulbs, divisions, layering, cuttings, budding, grafting, and micro-propagation. Emphasis is placed on the basic principles necessary to furnish an adequate understanding for commercial and industrial application.

## Hospitality

### HSP 101

#### Front Desk Representative • 2.0 Credits

This course is an introduction to the purpose and tasks of a front desk representative. It includes the identification of the various equipment and systems that front desk representatives use in the course of performing

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their duties. Successful completion of this course results in a certified front desk representative credential.

## HSP 102

### Guestroom Attendant • 2.0 Credits

This course is an introduction to the purpose and tasks of a guest room attendant. It includes the standards that are required and the role of keeping property secure. Successful completion of this course results in a certified guestroom attendant credential.

## HSP 103

### Restaurant Server • 2.0 Credits

This course is an introduction to the purpose and tasks of a restaurant server and how they work together with others to meet superior performance standards. Successful completion of this course results in a certified restaurant server credential.

## HSP 104

### Maintenance Employee • 2.0 Credits

This course is an introduction to the duties and primary functions of a maintenance employee and how they work together with others to meet superior performance standards. Successful completion of this course results in a certified maintenance employee credential.

## HSP 105

### Kitchen Cook • 2.0 Credits

This course is an introduction that describes the duties and primary functions of a kitchen cook and how they work together with others to meet superior performance standards. Successful completion of this course results in a certified kitchen cook credential.

## HSP 106

### Breakfast Attendant • 2.0 Credits

This is an introduction to the duties and primary functions of a breakfast attendant and how they work together with others to meet superior performance standards. Successful completion of this course results in a certified breakfast attendant credential.

## HSP 107

### Guest Service Professional • 2.0 Credits

This course is an introduction to the duties and primary functions of a guest service professional to maintain the highest level of service excellence. Successful completion of this course results in a certified guest service professional credential.

## HSP 108

### Hospitality Internship • 6.0 Credits

Students serve an internship with a company that offers the application of classroom learning with on-the-job experiences in the hospitality industry. The student will be placed with an employer where the environment will build on the student's area of career interest and prepare them to be productive employees.

## Human Development

## HDEV 100

### College Success • 3.0 Credits

Formerly EDUC 100, ED 100

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 • 4.0 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 • 3.0 Credits

Formerly HDEV 1994

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 • 1.0 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 • 2.0 Credits

Formerly HDEV 1991

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 • 1.0 Credit

Formerly HDEV 1992

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 • 1.0 Credit

Formerly HDEV 1993

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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

### College Major/Career Planning • 3.0 Credits

Formerly EDUC 135, ED 135

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 • 1.0–15.0 Credits

A class used to explore new coursework.

## Industrial Drawing

## DRW 106

### Mechanical Drawing for Vocational Application • 3.0 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

## IHT 100

### OSHA-10 • 1.0 Credit

Provides the Occupational Safety and Health Administration (OSHA) 10-hour safety awareness training certification.

## Industrial Technology

## INT 101

### Forklift Operations • 1.0 Credit

This course provides training and preparation for powered forklift and pallet jack equipment operation in warehouse and industrial settings.

## INT 103

### Basic HVAC • 3.0 Credits

This course provides a basic understanding of the installation, operation, service, maintenance, and troubleshooting of various types of heating, ventilation, air conditioning, and refrigeration systems. **Prerequisite:** CASAS 221+ or equivalent or by instructor permission.

## INT 105

### Precision Measurement • 1.0 Credit

This course provides knowledge and skills for using tapes, rules, and calipers including various features, sizes, variations, and the technology behind the tool.

## INT 120

### Production Technician • 12.0 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 • 6.0 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 • 4.0 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 • 2.0 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

## IC 201

### Instrumentation I • 5.0 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 154; NT 170 recommended.

## IC 202

### Instrumentation II • 5.0 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 • 5.0 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.

# Courses & Programs

## IC 230

### PLC Programming & Computer Interfacing • 5.0 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:** ELT 171.

## IC 250

### Instrumentation & Control for Operators • 5.0 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 • 5.0 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

## ICS 100

### Cultural and Historical Linked to Travel • 1.0–3.0 Credits

An introduction to the history, culture, geography, art, and language of a country or countries, to be followed by a required trip to the area studied for an immersion experience.

## ICS 120

### Survey of Hispanic Culture [H] • 5.0 Credits

An introduction to the culture and civilization of the Spanish-speaking world; taught in English.

## ICS 125

### Native American Culture [H] • 5.0 Credits

Formerly HIST&219

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] • 5.0 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

### Survey of African American Cultures [H] • 5.0 Credits

Formerly HIST&220, HIS 106

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 • 1.0–5.0 Credits

A class used to explore new coursework.

## ICS 220

### Globalization [S/B] • 5.0 Credits

Sociological analysis of the global interconnectedness of things, people, and ideas. Topics include economic development and trade, immigration

and citizenship, human rights, transmission of culture and knowledge, and new technologies including the internet. Emphasis on understanding the significance of social forces and inequalities in shaping globalization processes. Cross-listed as SOC 220 (credit cannot be received for both courses).

## ICS 222

### Columbia Basin Cultures [H] • 5.0 Credits

A study of the history and contemporary situation of the Columbia Basin with special attention paid to Native Americans, Hispanic Americans, Asian Americans, and African Americans. Important topics include early settlement, labor relations, race relations, and historic and modern patterns of migration.

## ICS 255

### Race and Ethnic Relations [S/B] • 5.0 Credits

Relationships among various ethnic and racial groups in America, patterns of immigration, assimilation and mobility, and inter-ethnic conflicts and coalitions 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 299

### Special Studies • 1.0–5.0 Credits

A class used to explore new coursework.

## ICS 310

### American Diversity [H] • 5.0 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.

## ICS 320

### Culture and Health [H] • 5.0 Credits

This course examines race, ethnicity, class, gender, disability, sexuality, and other forms of diversity, with the goal of understanding how these factors can affect health and the delivery of health care to members of a pluralistic society. Students will explore this diversity with an aim towards applying the knowledge to the health care workplace and other social interactions. By the end of the course, students will have a greater understanding of the diverse context of American society and will be able to apply these concepts when interacting with their diverse patients and clients. 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.



# Courses & Programs

## Japanese

### JAPN&121

#### Japanese I [H] • 5.0 Credits

Formerly JPSE 101

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

#### Japanese II [H] • 5.0 Credits

Formerly JPSE 102

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

#### Japanese III [H] • 5.0 Credits

Formerly JPSE 103

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

#### Japanese IV [H] • 5.0 Credits

Formerly JPSE 201

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

#### Japanese V [H] • 5.0 Credits

Formerly JPSE 202

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

#### Japanese VI [H] • 5.0 Credits

Formerly JPSE 203

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.**

### JAPN 299

#### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Maintenance

### MNT 110

#### Fundamentals of Maintenance • 7.0 Credits

Formerly AGET 110

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 either MATH 050 or 084 with a grade of 2.0 or better, or MATH 084 with a grade of P if taken before spring 2016, or satisfactory placement test score.**

### MNT 111

#### Intro to Machine Operations • 7.0 Credits

Formerly MOP 111

This course is designed to give students skills using measuring instruments and the concepts of machining with a metal lathe.

### MNT 210

#### Hydraulic and Pneumatic Systems • 7.0 Credits

Formerly AGET 210

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

### MT 102

#### SolidWorks(R) I • 5.0 Credits

This course is 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: BPR 105 or 110 or equivalent, and CA 100 or CS 101, or instructor permission.**

### MT 111

#### Basic Machine Technology I • 5.0 Credits

This course is designed to give students skills in using measuring instruments and concepts of machining with a metal lathe. Upon completion of this course, students should know how to turn and measure diameters within .001", cut threads, knurl, and cut tapers.

### MT 112

#### Basic Machine Technology I Lab • 1.0–9.0 Credits

Formerly MT 1111

# Courses & Programs

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Work on projects using the lathe to practice the concepts taught in the class.

## MT 121

### Basic Machine Technology II • 5.0 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

### Basic Machine Technology II Lab • 1.0–9.0 Credits

Formerly MT 1211

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 • 5.0 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

### Basic Machine Technology III Lab • 1.0–9.0 Credits

Formerly MT 1311

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 • 1.0–15.0 Credits

A class used to explore new coursework or for a specific topic of special interest.

## MT 201

### Introduction to Engineering Material Science • 5.0 Credits

As an introductory course, the goal is to learn the fundamental nature of engineered materials, as applied to a Machine Technology Certificate or as a qualifying transfer class to 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(R) II • 5.0 Credits

This course prepares students to take the Certified SolidWorks® Associate Exam. **Prerequisite:** MT 102 or instructor permission.

## MT 211

### Advanced Machine Technology I • 5.0 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

### Advanced Machine Technology I Lab • 1.0–9.0 Credits

Formerly MT 2111

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 • 5.0 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

### Advanced Machine Technology II Lab • 9.0 Credits

Formerly MT 2211

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 • 5.0 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

### Advanced Machine Technology III Lab • 1.0–9.0 Credits

Formerly MT 2311

Work on projects using SolidWorks(R), CAM system, and CNC milling machine to practice the concepts taught in class. **Prerequisite:** MT 222 or instructor permission.

## Mathematics

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## MATH 040

### Pre-Algebra • 5.0 Credits

This introductory course includes computations with integers, fractions, and decimals, prime factorization, algebraic symbols and operations including integer exponents, square roots and inequalities, order of operations, percent, ratios and proportions, translating sentences into mathematical expressions, problem solving strategies, properties of standard geometric objects, and linear equations. **Prerequisite:** MATH 080 or higher or satisfactory placement test score.

## MATH 048

### Math for Technical Applications Support • 2.0 Credits

Designed as a corequisite course for any student taking MATH 100 that does not meet the prerequisite requirements. This course will run concurrently with MATH 100 and provide the tools and concepts necessary for students to participate in MATH 100. Topics include whole numbers, decimals, fractions, basic proportions and percentages, real numbers, and basic algebra concepts. **Prerequisite:** concurrent enrollment in MATH 100.

## MATH 050

### Quantitative Literacy • 5.0 Credits

This course is designed to engage students in complex and realistic situations involving the mathematics of quantity, change and relationships, spatial reasoning, geometric investigations, probability and statistics. Intermediate algebra topics include linear and nonlinear

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models, ratios, proportions, percents and dimensional analysis. Note that this course will not satisfy the intermediate algebra requirement of the University of Washington. **Prerequisite: grade of 2.0 or better in MATH 040, 084, 096 or 097 or STAT 091 or satisfactory placement test score.**

## MATH 060

### Algebra I • 5.0 Credits

This course includes linear equations and applications, linear inequalities, compound linear inequalities, absolute value equations and inequalities, graphing linear equations in two variables, slope and intercepts, finding the equation of a line, functions and relations, graphs of basic functions, systems of linear equations in two variables, systems of inequalities in two variables, adding and subtracting polynomials, polynomial multiplication and division. **Prerequisite: grade of 2.5 or better in MATH 040 or grade of 2.0 or better in MATH 084 or satisfactory placement test score.**

## MATH 062

### Algebra I Supported • 7.0 Credits

This course includes linear equations and applications, linear inequalities, compound linear inequalities, absolute value equations and inequalities, graphing linear equations in two variables, slope and intercepts, finding the equation of a line, functions and relations, graphs of basic functions, systems of linear equations in two variables, systems of inequalities in two variables, adding and subtracting polynomials, polynomial multiplication and division. Additional two hours per week of the course will provide review for essential prerequisite material. **Prerequisite: grade of 2.0 or better in MATH 040 or MATH 084 or satisfactory placement test score.**

## MATH 070

### Algebra II • 5.0 Credits

This course includes factoring polynomials and solving polynomial equations, rational expressions, complex fractions, rational equations and inequalities, radical expressions, simplifying expressions with radicals and rational exponents, radical equations and functions, complex numbers, methods for solving quadratic equations and applications, exponential and logarithmic properties and equations. **Prerequisite: grade of 2.5 or better in MATH 060 or MATH 062 or grade of 2.0 or better in MATH 097 or satisfactory placement test score.**

## MATH 072

### Algebra II Supported • 7.0 Credits

This course includes factoring polynomials and solving polynomial equations, rational expressions, complex fractions, rational equations and inequalities, radical expressions, simplifying expressions with radicals and rational exponents, radical equations and functions, complex numbers, methods for solving quadratic equations and applications, exponential and logarithmic properties and equations. Additional two hours per week of the course will provide review for essential prerequisite material. **Prerequisite: grade of 2.0 or better in MATH 060 or MATH 062 or MATH 096 or MATH 097 or satisfactory placement test score.**

## MATH 092

### Special Topics in Mathematics • 1.0–10.0 Credits

This course is designed to give special mathematical topics to those students whose needs are not met with the existing curriculum.

## MATH 100

### Algebraic Tools for Vocational Application • 5.0 Credits

Formerly MTH 100

Designed to introduce the student to the tools and concepts necessary to solve mathematical problems applicable to the student's trade.

Topics include ratios and proportions, percentages, measurement, applying formulas, basic algebra concepts, geometry, and basic triangle trigonometry. **Prerequisite: appropriate placement or concurrent enrollment in MATH 048.**

## MATH 106

### Business Mathematics • 5.0 Credits

Formerly MTH 106

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 MATH 050 with a grade of 2.0 or better or satisfactory placement test score.**

## MATH&107

### Math in Society [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 110, MTH 130

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: MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 (or MATH 072) with a grade of 2.0 or better or satisfactory placement test score.**

## MATH 108

### Math for Early Childhood Education • 5.0 Credits

Formerly MTH 108

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 MATH 040 with a grade of 2.0 or better or satisfactory placement test score.**

## MATH 109

### Trigonometric Tools for Vocational Application • 3.0 Credits

Formerly MTH 109

The second course of a two-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 100 or appropriate placement.**

## MATH 111

### Automotive Math • 5.0 Credits

Formerly MTH 111

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 MATH 040 with a grade of 2.0 or better or satisfactory placement test score.**

## MATH 112

### Machinist Math • 5.0 Credits

Formerly MTH 112

A mathematics 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



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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: MATH 095 or MATH 098 or MATH 070 (or MATH 072) with a grade of 2.0 or better or satisfactory placement test score.**

## MATH 113

### Geometry/Trigonometry [M/S] • 5.0 Credits

Formerly MTH 113, MTH 103

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& 114.

**Prerequisite: MATH 095 or MATH 098 or MATH 070 (or MATH 072) with a grade of 2.0 or better or satisfactory test placement.**

## MATH&141

### Precalculus I [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 154, MTH 104

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 070 or MATH 072 or MATH 095 or MATH 098 or satisfactory placement test score.**

## MATH&142

### Precalculus II [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 105, MTH 155

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

### Precalculus I & II [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 157, MTH 107

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

### Introduction to Stats [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 143

A course especially suited for the non-physical science major such as business, medical professionals, behavioral sciences, computer science, etc. A study of both descriptive and inferential statistics, including: measures of central tendency, random variables, probability, probability

distributions, sampling methods, confidence intervals, hypothesis testing, estimation, linear regression, and correlation. **Prerequisite: STAT 092 or MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 (or MATH 072) with a grade of 2.0 or better or satisfactory placement test score.**

## MATH 147

### Finite Math [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 147, MTH 200

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: MATH 095 or MATH 098 or MATH 070 (or MATH 072) with a grade of 2.0 or better or satisfactory placement test score.**

## MATH&148

### Business Calculus [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 210

Designed for non-physical science majors such as business, management, behavioral science, and social science. Topics include: relations, functions, exponential and logarithmic functions, derivatives and their applications, integrals and their applications, and functions of several variables.

**Prerequisite: grade of 2.0 or better in MATH 070 or MATH 072 or MATH 147 or satisfactory placement test score. Suggested prerequisite: MATH& 141.**

## MATH&151

### Calculus I [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 231, MTH 201

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

### Calculus II [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 202, MTH 232

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

### Calculus III [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 233, MTH 203

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

### Math for Elementary Education I [M/S] • 5.0 Credits

Formerly MATH 121

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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 grade of 2.0 or better in MATH 070 or MATH 072 or MATH 095 or MATH 098 or satisfactory placement test score.**

## MATH&172

### Math for Elementary Education II [M/S] [Q/SR] • 5.0 Credits

Formerly MATH 122

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

### Math for Elementary Education III [M/S] [Q/SR] • 5.0 Credits

Formerly MATH 123

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 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## MATH 243

### Linear Algebra [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 213, MTH 243

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

### Discrete Structures [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 246, MTH 216

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&254

### Calculus IV [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 204, MTH 234

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.**

## MATH 255

### Differential Equations [M/S] [Q/SR] • 5.0 Credits

Formerly MTH 254

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 • 1.0–15.0 Credits

A class used to explore new coursework.

## Medical Assistant

### MA 111

#### Pharmacology I • 5.0 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 • 4.0 Credits

This is the first of two structure and function classes introducing cellular function, organ systems of the body, the anatomy and physiology of the integumentary, skeletal, muscular, nervous, endocrine systems, 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 • 4.0 Credits

This class provides a theoretical foundation in medical asepsis, infection control, vital signs, phlebotomy, cardiopulmonary procedures, colon procedures, introduction to the clinical laboratory, urinalysis, and a theoretical foundation for the gynecological exam, prenatal care, pediatric exams, and office emergencies. **Prerequisite: MA 111, 114, and 140. This course to be taken concurrently with MA 116 (lab course).**

### MA 116

#### Clinical Procedures Lab I • 4.0 Credits

Formerly MA 1151

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 • 5.0 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.**

# Courses & Programs

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## MA 141

### Career Development for Medical Assistants • 2.0 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 • 5.0 Credits

This is the second of two pharmacology classes. This class includes the administration of medication including: safety and quality assurance, enteral, percutaneous, and parenteral routes of medication; 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 • 4.0 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, genetics, 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 • 4.0 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, and medical microbiology. **Prerequisite:** MA 115, 116, 211, and 214. **This course to be taken concurrently with MA 216 (lab course).**

## MA 216

### Clinical Procedures Lab II • 4.0 Credits

Formerly MA 2151

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 • 6.0 Credits

This course expands on front office roles and responsibilities of an Administrative Medical Assistant. Major topics covered include: patient account management, 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 safety and emergency practices. **Prerequisite:** MA 115, 116, 211, and 214.

## MA 241

### Externship Seminar • 2.0 Credits

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

### Externship • 6.0 Credits

Formerly MA 2413

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

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### IMAGE100

#### Bone Densitometry • 4.0 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 • 4.0 Credits

Students are assigned to a bone densitometry department for 132 hours to satisfy clinical competency requirements of the ARRT for eligibility to sit for the ARRT advanced-level exam in bone densitometry. **Prerequisite:** currently enrolled in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.

### IMAGE225

#### Mammography • 4.0 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 • 4.0 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 • 3.0 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

# Courses & Programs

Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

## IMAGE251

### Advanced Sectional Anatomy • 2.0 Credits

Designed for students having completed a cross-sectional anatomy course. Neuro and vascular anatomy and sectional images of joint and extremity body areas 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 • 3.0 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 • 3.0 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 • 1.0–12.0 Credits

Provides hands-on experience in the clinical setting. Students perform designated tasks associated with CT scanning and procedures under direct and indirect supervision. Completion of this course prepares the student for entry-level work in a CT department. **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 • 1.0–12.0 Credits

Provides hands-on experience in the clinical setting. Students perform designated tasks associated with MRI scanning and procedures under direct and indirect supervision. **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 • 3.0 Credits

Designed to provide didactic preparation for advanced-level certification exam in CT scanning. Includes information pertaining to the equipment used, clinical application, specific technique applications, patient care, and quality control. **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 • 3.0 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.

## Medical Records & Healthcare Information

## MRHI 101

### Introduction to Health Information Practices • 5.0 Credits

This introductory course surveys the fundamental theories and practices of the Medical Records and Health Information Management profession. Areas of study include the responsibilities and duties of a professional in the field, the basics of health services organization and delivery, elements of health data and record structure, the essentials of the electronic health record, and an overview of information privacy and security as applied to the field. **Prerequisite:** HSCI 147 with a minimum 2.0 or instructor permission.

## MRHI 103

### Legal Aspects of Healthcare • 5.0 Credits

An introduction to legal issues as it relates to healthcare practitioners and the health record. Topics include confidentiality and release of information standards with specific attention paid to HIPAA requirements. This course emphasizes the health record as a legal document and introduces privacy and security principles of protected health information. **Prerequisite:** HSCI 147 with a minimum 2.0 or instructor permission.

## MRHI 114

### Human Body Structure, Function, and Disease I • 4.0 Credits

This is the first of two structure, function, and disease classes. It introduces the chemistry of life, cells and tissues, and organ systems of the body. The structure and function of the following systems are covered: the integumentary, skeletal, muscular, nervous, endocrine, senses, and blood. The common diseases, pathology of the diseases, and treatment modality of each of these diseases is also covered. This course is cross listed with MA 114. Students completing MRHI 114 may not receive graduation credit for MA 114. **Prerequisite:** HSCI 147 with a 2.0 or better or instructor permission.

## MRHI 150

### Pharmacology in Allied Health • 3.0 Credits

This class provides a basic knowledge of pharmacology. The main topics covered within the context of pharmacology include an introduction to legal and ethical issues, terms and abbreviations, governmental agencies, and providers and professionals. Additional topics include reading and interpreting medication orders, understanding drug classifications, and identifying commonly prescribed drugs used with each body system. **Prerequisite:** HSCI 147 with a 2.0 or better or instructor permission.

## MRHI 195

### Practicum I • 2.0 Credits

This course focuses on medical records office training. Theory is applied in practice through an individualized learning plan. Students demonstrate abilities by creating, processing, and analyzing health records and medical billing procedures. **Prerequisite:** MRHI 101 with a 2.0 or better or instructor permission.



# Courses & Programs

## MRHI 201

### Coding I • 5.0 Credits

This course introduces the basic principles and conventions of the International Classification of Diseases, tenth-edition (ICD-10). Areas of study include ICD-10-CM understanding and application, ICD-10-PCS fundamentals, ICD-10 Manual navigation, ICD-10 Coding Guidelines, and body-system diagnostic code assignment. **Prerequisite:** MRHI 214 with a 2.0 or better or instructor permission.

## MRHI 205

### Health Information Administration • 5.0 Credits

This course contains an overview of management theories, organizational structure, and legal regulations that apply to Health Information Management (HIM). The course focuses on the topics of change management, human resources management, ethics, performance management, training, and organizational structure as it relates to HIM. Students develop the skills necessary to become a successful HIM management professional. **Prerequisite:** MRHI 101 with a 2.0 or better or instructor permission.

## MRHI 206

### Data Integrity • 5.0 Credits

This course introduces healthcare data and information system concepts necessary to successfully manage healthcare data in the digital era. A variety of data governance functions are examined including data architecture management, metadata management, master data management, content and record management, data security management, business intelligence and big data, data quality management, and terminology and classification systems. Students discover how to develop a sound data governance program that solves the significant data management challenges faced by a Healthcare Information Management professional.

## MRHI 207

### Intro to Revenue Cycle • 5.0 Credits

This course provides an overview of reimbursement methodologies, health insurance plans and claims, terminology, coding and compliance, payment systems, and value-based purchasing. The course examines the interrelationship between billing and coding and compliance, and discusses how each affects healthcare providers, patients, and insurance payers. **Prerequisite:** MRHI 101 with a 2.0 or better or instructor permission.

## MRHI 211

### Coding II • 5.0 Credits

This is the second course in the coding series. It is a beginning level course in Current Procedural Terminology (CPT), a clinical coding system used to code professional procedures and services. This course also covers intermediate level International Classification of Diseases, 10th edition (ICD-10-CM) coding. Sub-areas of study include CPT format and usage, Healthcare Common Procedure Coding System (HCPCS) II coding, modifier assignment, facility vs. non-facility coding, Ambulatory Payment Classifications (APC), and ICD-10-CM diagnosis coding. **Prerequisite:** MRHI 201 with a 2.0 or better or instructor permission.

## MRHI 214

### Human Body Structure, Function, and Disease II • 4.0 Credits

This is the second-in-series body structure, function, and disease course. Topics include the circulatory, lymphatic, respiratory, digestive, urinary, and reproductive systems. Further instruction covers immunity, nutrition and metabolism, fluid and electrolyte balance, acid-base balance, 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. This course is cross listed with MA 214. Students completing MRHI 214 may not receive graduation credit for MA 214. **Prerequisite:** MRHI 114 with a 2.0 or better or instructor permission.

## MRHI 221

### Coding III • 5.0 Credits

This final course in the coding series covers inpatient hospital coding with advanced coding principles. Areas of study include inpatient procedure and diagnosis code assignment, Diagnosis Related Group (DRG) classification, and advanced ICD-10-CM coding. This course also discusses the relationship between coding and billing, and provides an analysis of documentation discrepancies. **Prerequisite:** MRHI 211 with a 2.0 or better or instructor permission.

## MRHI 295

### Practicum II • 3.0 Credits

This course is a directed coding practicum. Students are assigned to a healthcare facility where they are supervised in a clinical coding experience. The course's project requirements involve coding case scenarios and creating a quality assurance audit plan. There is continued emphasis on quality assurance, data abstraction, ICD-10 coding, and CPT assignment. **Prerequisite:** MRHI 201 and 211 with a 2.0 or better and concurrent enrollment in MRHI 221.

## Music

## MUSC 100

### Music Fundamentals • 3.0 Credits

Formerly MUS 100

Non-major course covering basic concepts of rhythm, melody, keyboards, scales, and harmony.

## MUSC&105

### Music Appreciation [H] • 5.0 Credits

Formerly MUS 115

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 116

### History of Jazz [H] • 5.0 Credits

Formerly MUS 116

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

### Band • 1.0–2.0 Credits

Formerly MUS 118

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

### Applied Music • 1.0 Credit

Formerly MUS 122

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.

# Courses & Programs

These courses are intended for students who are pursuing a degree in music.

## MUSC 123

### Applied Music • 1.0 Credit

Formerly MUS 123

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

### Applied Music • 1.0 Credit

Formerly MUS 124

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

### Orchestra • 1.0 Credit

Formerly MUS 125

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

### Piano Class • 2.0 Credits

Formerly MUS 134

Group piano instruction for all students interested in beginning piano. Students may take more than one quarter.

## MUSC 135

### Piano Class • 2.0 Credits

Formerly MUS 135

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

### Piano Class • 2.0 Credits

Formerly MUS 136

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

### Jazz Band • 1.0–3.0 Credits

Formerly MUS 137

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

### Voice Class • 2.0 Credits

Formerly MUS 141

An introduction to the principles of voice production, vocal literature, and vocal techniques.

## MUSC 139

### Voice Ensemble • 1.0–3.0 Credits

Formerly MUS 142

Emphasis on vocal ensemble literature. May include different types of ensembles/styles according to available voicing. **Prerequisite: instructor permission.**

## MUSC 140

### Vocal Jazz • 1.0–3.0 Credits

Formerly MUS 140

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&141

### Music Theory I • 5.0 Credits

Formerly MUS 101

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

### Music Theory II • 5.0 Credits

Formerly MUS 102

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

### Music Theory III • 5.0 Credits

Formerly MUS 103

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 147

### Instrument Ensemble • 1.0 Credit

Formerly MUS 147

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

### Brass Techniques • 1.0–3.0 Credits

Formerly MUS 151

Class instruction in fundamentals and materials for beginning students on brass instruments. Cornet, trumpet, French horn, baritone horn, trombone, sousaphone, and tuba.

## MUSC 152

### Percussion Techniques • 2.0 Credits

Formerly MUS 152

Class instruction in fundamentals and materials for beginning students on percussion instruments.

# Courses & Programs

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## MUSC 153

### Woodwind Techniques • 2.0 Credits

Formerly MUS 153

Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon.

## MUSC 154

### Woodwind & Flute • 2.0 Credits

Formerly MUS 154

Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon.

## MUSC 155

### Wood/Oboe/Bassoon • 2.0 Credits

Formerly MUS 155

Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon.

## MUSC 156

### Wood/Oboe/Bassoon • 2.0 Credits

Formerly MUS 156

Class instruction in the fundamentals and materials for beginning students on woodwind instruments. Clarinet, saxophone, flute, oboe, and bassoon.

## MUSC 161

### Beginning Folk Guitar • 2.0 Credits

Formerly MUS 161

Group guitar instruction in the fundamentals of folk guitar playing for the beginner, including basic strums, chords, and note reading.

## MUSC 162

### Intermediate Folk Guitar • 2.0 Credits

Formerly MUS 162

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

### Ear Training Fundamentals • 1.0 Credit

Formerly MUS 171

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

### Ear Training Fundamentals • 1.0 Credit

Formerly MUS 172

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

### Ear Training Fundamentals • 1.0 Credit

Formerly MUS 173

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

### Chorus • 1.0–3.0 Credits

Formerly MUS 181

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 • 1.0–15.0 Credits

A class used to explore new coursework.

## MUSC 216

### Studio Problems - Conducting • 3.0 Credits

Formerly MUSC 2152

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

### Studio Problems - Composition • 3.0 Credits

Formerly MUSC 2153

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

### Studio Problems - Performance • 3.0 Credits

Formerly MUSC 2154

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

### Applied Music • 2.0 Credits

Formerly MUS 225

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

### Applied Music • 2.0 Credits

Formerly MUS 227

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

### Piano Class/Music Majors • 2.0 Credits

Formerly MUS 236

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.

# Courses & Programs

## MUSC 240

### Jazz Theory and Improvisation • 1.0–2.0 Credits

Formerly MUS 240

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&241

### Music Theory IV • 5.0 Credits

Formerly MUS 204

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

### Music Theory V • 5.0 Credits

Formerly MUS 205

Melody harmonization, harmonic dictation, chromatic harmony, advanced modulation, 20th century techniques, and oral composition. Offered winter quarter only. **Prerequisite:** MUSC& 241.

## MUSC&243

### Music Theory VI • 5.0 Credits

Formerly MUS 206

Melody harmonization, harmonic dictation, chromatic harmony, advanced modulation, 20th century techniques, and oral composition. Offered spring quarter only. **Prerequisite:** MUSC& 242.

## MUSC 244

### Advanced Vocal Jazz • 1.0–3.0 Credits

Formerly MUS 242

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

### Advanced Ear Training • 1.0 Credit

Formerly MUS 274

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

### Advanced Ear Training • 1.0 Credit

Formerly MUS 275

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

### Advanced Ear Training • 1.0 Credit

Formerly MUS 276

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

### Advanced Chorus • 1.0–3.0 Credits

Formerly MUS 281

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 • 1.0–15.0 Credits

A class used to explore new coursework.

## Non-Licensed Operator

### NOP 111

#### Hydraulic and Fluid Flows • 5.0 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

#### Advanced Operational Systems • 5.0 Credits

This course provides an introduction to electrical generation and distribution systems with a focus on transformers, motor and control circuits, generators, and the impact of environmental conditions. **Prerequisite:** ELT 111 or ELT 124, and NT 121 or NT 122.

### NOP 231

#### Advanced Facility Components • 5.0 Credits

This course provides an introduction to steam systems with a focus on steam traps, steam turbines, heat exchangers, and related facility components. **Prerequisite:** NT 111 or instructor permission.

### NOP 241

#### Chemical & Water Treatment Systems • 5.0 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

#### Advanced Thermodynamics and Heat Transfer • 4.0 Credits

This course provides an introduction to industrial processes and cycles including steam plants, diesel generators, air compressors, and refrigeration cycles. It also covers advanced heat transfer topics including thermal hydraulics. **Prerequisite:** NT 170 or instructor permission.

## Nuclear Medicine Technology

### NMTEC199

#### Introduction to Nuclear Medicine Technology • 2.0 Credits

This course introduces the student to the Bellevue College Nuclear Medicine Technology program. It includes three days of clinical orientation in a nuclear medicine department. We'll create a shared understanding of the basics of nuclear medicine practice, examine active learning techniques, and develop cohesiveness as a group. **Prerequisite:** acceptance into program or instructor permission.



# Courses & Programs

## NMTEC200

### Applied Anatomy & Physiology • 1.0 Credit

Studies human anatomy and physiology as they apply to nuclear medicine imaging. Specific organ systems covered include skeletal, circulatory, cardiac, pulmonary, gastrointestinal, immune, excretory, endocrine, and central nervous systems. **Prerequisite:** acceptance into program.

## NMTEC201

### Basic Nuclear Medicine Science • 3.0 Credits

Presents basic science required for nuclear medicine. Topics include types of radiation, half-life and radioactive decay, interactions of radiation, detection instruments, statistics of radiation counting, basic radiation protection, and introduction to imaging process. **Prerequisite:** acceptance into program.

## NMTEC202

### Instrumentation • 2.0 Credits

Examines the function and use of the nuclear medicine gamma camera. Topics include basic electronics, collimators, digital cameras, online correction systems, and modifications required for tomographic studies. Students learn quality control and troubleshooting. **Prerequisite:** acceptance into program.

## NMTEC203

### Computers in Nuclear Medicine • 3.0 Credits

Introduces the use of computers in nuclear medicine, emphasizing analysis of static, dynamic, and tomographic images. **Prerequisite:** acceptance into program.

## NMTEC210

### Radiopharmacy • 1.0 Credit

Studies all commonly used nuclear medicine pharmaceuticals, their preparation, indications for use, dosages, and contraindications. **Prerequisite:** acceptance into program.

## NMTEC211

### Nursing Procedures • 1.0 Credit

Presents nursing procedures relating to nuclear medicine. Topics include patient assessment, oxygen administration, infection control, intravenous drug administration, vasovagal and anaphylactic reactions, basic pharmacology, sedation, medical and legal issues, cardiac physiology, and electrocardiography. **Prerequisite:** acceptance into program.

## NMTEC212

### Position Emission Tomography • 2.0 Credits

Covers all aspects of positron emission tomography (PET), including basic principles, instrumentation, PET/CT imaging and quality control, quantitation of radiopharmaceutical uptake, clinical indications for PET imaging, biochemistry of fluorodeoxyglucose (FDG), clinical aspects of FDG imaging, new PET radiopharmaceuticals, and issues relating to reimbursement for PET scans. **Prerequisite:** acceptance into program.

## NMTEC229

### Introduction to Clinical Education • 3.0 Credits

Provides an introduction to the practice of nuclear medicine with an emphasis on the operation of a gamma camera, basic radiopharmacy and radiation safety principles, and patient care procedures. **Prerequisite:** acceptance into program.

## NMTEC230

### Clinical Education I • 10.0 Credits

First in a five-course sequence of supervised clinical instruction in nuclear medicine technology. Topics including imaging, patient care, radiopharmacy, camera quality control, and computer analysis. Students are expected to gain proficiency according to defined objectives. **Prerequisite:** acceptance into program.

## NMTEC231

### Clinical Education II • 10.0 Credits

Second in a five-course sequence of supervised clinical instruction in nuclear medicine technology. Topics include imaging, patient care, radiopharmacy, camera quality control, and computer analysis. Students are expected to gain proficiency according to defined objectives. **Prerequisite:** acceptance into program.

## NMTEC232

### Clinical Education III • 10.0 Credits

Third in a five-course sequence of supervised clinical instruction in nuclear medicine technology. Topics include imaging, patient care, radiopharmacy, camera quality control, and computer analysis. Students are expected to gain proficiency according to defined objectives. **Prerequisite:** acceptance into program.

## NMTEC233

### Clinical Education IV • 13.0 Credits

Fourth in a five-course sequence of supervised clinical instruction in nuclear medicine technology. Topics include imaging, patient care, radiopharmacy, camera quality control, and computer analysis. Students are expected to gain proficiency according to defined objectives. **Prerequisite:** acceptance into program.

## NMTEC234

### Clinical Education V • 13.0 Credits

Fifth in a five-course sequence of supervised clinical instruction in nuclear medicine technology. Topics include radiopharmacy, positron emission tomography, nuclear cardiology, and pediatrics. **Prerequisite:** acceptance into program.

## NMTEC240

### Radiation Safety • 1.0 Credit

Covers principles and practices for radiation safety. Topics include calculation of doses absorbed from procedures, personnel monitoring, handling and disposal of radioactive materials, and licensing of a nuclear medicine department. **Prerequisite:** acceptance into program.

## NMTEC241

### Radiation Biology • 1.0 Credit

Discusses the potentially harmful effects of radiation on humans. Topics include the basic chemistry of radiation interactions in living cells, the effects of extensive radiation exposure, and the potential long-term effects of accumulated radiation damage. **Prerequisite:** acceptance into program.

## NMTEC250

### Sectional Anatomy for Nuclear Medicine • 3.0 Credits

Presents sectional anatomy of the body, including a brief introduction to the following imaging modalities: CT, MRI, angiography, and ultrasound. Main emphasis is on identifying organs of the head, neck, chest, abdomen, and pelvis on CT and MR images. **Prerequisite:** acceptance into program.

# Courses & Programs

## NMTEC260

### Clinical Nuclear Medicine I • 1.0 Credit

Presents nuclear medicine from the technologist's standpoint, emphasizing the technical aspects and pitfalls of nuclear medicine procedures. NMTEC 260 lectures are coordinated with NMTEC 200.

**Prerequisite:** acceptance into program.

## NMTEC261

### Clinical Nuclear Medicine II • 1.0 Credit

Presents nuclear medicine from the physician's standpoint, emphasizing the diagnosis of disease and ways in which the technologist can assist the physician making a correct diagnosis. **Prerequisite:** acceptance into program.

## NMTEC262

### Clinical Nuclear Medicine III • 1.0 Credit

Discusses advanced topics related to imaging and non-imaging procedures. Topics include hematology and immunology, laboratory techniques in nuclear medicine, Schilling test, H. pylori breath testing, blood volume determination, bone densitometry, radioimmunotherapy, and advanced nuclear neurology. **Prerequisite:** acceptance into program.

## NMTEC275

### Board Preparation • 1.0 Credit

Prepares students for the NMTCB exam by reviewing all aspects of nuclear medicine technology and giving practice tests. Students focus on practical application of the basic science knowledge gained throughout the program. Students also complete a capstone project. **Prerequisite:** acceptance into program.

## NMTEC280

### CT for the Nuclear Medicine Technologist • 3.0 Credits

Provides didactic instruction in CT scanning, as is pertinent to its application to nuclear medicine procedures. Includes information pertaining to production and detection of X-rays in CT, instrumentation and image reconstruction, specific technique applications, patient care, and quality control. **Prerequisite:** acceptance into program.

## Nuclear Technology

### NT 111

#### Basic Nuclear Math & Physics • 5.0 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:** grade of 2.0 or better in MATH 095 or MATH 050 or MATH 070 or satisfactory placement test score.

### NT 114

#### Introduction to Radiation Safety • 5.0 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 • 4.0 Credits

Introduction to the basics of reactor plant operations. Topics include basic computer operations and knowledge of basic systems associated

with a nuclear power plant. **Prerequisite:** admission to the Nuclear Technology program.

### NT 122

#### Basic Nuclear Facilities • 4.0 Credits

Introduction to tank farms, vitrification, and decommissioning nuclear facilities. **Prerequisite:** admission to the Nuclear Technology program.

### NT 131

#### Nuclear Facility Components • 4.0 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 • 5.0 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 • 5.0 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 • 1.0 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. **Prerequisite:** currently enrolled in the NT program or instructor permission.

### NT 152

#### Internship • 1.0–5.0 Credits

Students serve an internship of up to 165 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:** NT 150 or instructor/departments chair approval.

### NT 154

#### Industry Project • 1.0–5.0 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. Thirty-three field-based experience hours equals one credit. **Prerequisite:** instructor/departments chair approval.

### NT 160

#### Nuclear Chemistry • 3.0 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.

# Courses & Programs

## NT 170

### Mechanical & Fluid Power Transmission • 4.0 Credits

Formerly MEC 111

Introduction to the concepts of mechanical and fluid power transmission including principles of heat, steam, heat transfer, and fluid flow.

**Prerequisite:** NT 111.

## NT 200

### Nuclear Industry Exam Preparation • 3.0 Credits

This course prepares nuclear technology students for taking multiple industry exams, which may include DOE Core Exam, POSS, or other exams as may be required by industry employers. **Prerequisite: must be enrolled as a Nuclear Technology student.**

## NT 261

### Nuclear Facilities Management • 5.0 Credits

This course provides students with background in managing work functions in nuclear facilities, including compliance with federal and state regulations, quality assurances, and maintenance forms and records. This class should be taken during or after the second year of study in the Nuclear Technology program. **Prerequisite: instructor permission.**

## Nursing

## NRS 101

### Basic Pharmacology Math • 1.0–3.0 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 • 1.0 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 • 1.0 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 • 1.0–7.0 Credits

This is the first theoretical course in the associate degree nursing curriculum. Theoretical concepts include the fundamentals of nursing care and the introduction of the nursing process. Concepts of health needs across the lifespan; diversity, equity and inclusion; nutrition; ethics and policy; basic pharmacological principles; and beginning professional

communication techniques are presented. Emphasis is on quality, safety, health maintenance, professional responsibility, and the organizations that affect the practice of nursing. **Prerequisite: admission to the Nursing program.**

## NRS 113

### Nursing I Lab • 1.0–4.0 Credits

Formerly NRS 1111

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 • 1.0–5.0 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

### Nursing II Lab • 1.0–5.0 Credits

Formerly NRS 1211

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 • 1.0–5.0 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. Concepts of patient education strategies are introduced through the formation of a patient teaching plan. **Prerequisite: NRS 102 and 121/123 with a 2.0 or better.**

## NRS 133

### Nursing III Lab • 1.0–5.0 Credits

Formerly NRS 1311

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.**

# Courses & Programs

## NRS 135

### Nursing Trends Lab • 1.0–2.0 Credits

Formerly NRS 1351

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 quarters 1-3. **Prerequisite:** enrollment in the Nursing program.

## NRS 141

### Practical Nursing • 1.0–5.0 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

### Practical Nursing Lab • 1.0–6.0 Credits

Formerly NRS 1411

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 145

### First Year Clinical Elective • 6.0 Credits

This optional clinical lab course is offered to students desiring to obtain extra clinical experience before starting the second year of the Associate Degree Nursing Program. This course provides for application of theoretical concepts to the nursing care of adults and children in acute care setting. **Prerequisite:** a grade of 2.0 or better in NRS 103, 131, and 133.

## NRS 151

### Advanced Placement • 1.0–11.0 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 • 1.0 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 • 1.0–5.0 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 evaluation of nursing research will be introduced.

**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

### Nursing IV Lab • 1.0–5.0 Credits

Formerly NRS 2111

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 is 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 • 1.0–5.0 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, oncological, and reproductive 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 • 1.0 Credit

One-credit class providing an overview of nursing management and leadership, legal issues in nursing, job search, nursing delivery systems, and role transition issues related to moving from a nursing student to professional nursing practice. **Prerequisite:** concurrent enrollment in NRS 221/223.

## NRS 223

### Nursing V Lab • 1.0–5.0 Credits

Formerly NRS 2211

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 is 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. **Prerequisite:** NRS 201 and 211/213 with a 2.0 or better.

# Courses & Programs

## NRS 231

### Nursing VI • 1.0–5.0 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, high risk maternal/newborn endocrine, and renal disorders and those requiring emergent care. Concepts of leadership and delegation are reinforced. **Prerequisite:** NRS 222 and 221/223 with a 2.0 or better.

## NRS 232

### Professional Issues II • 2.0 Credits

Two-credit class providing an overview of nursing management and leadership, legal, ethical and professional issues related to nursing practice, and the nurse's role in the changing healthcare environment. Students will explore multiple specialty roles within the nursing profession. **Prerequisite:** NRS 222 and 221/213 with a 2.0 or better and concurrent enrollment in NRS 231/233.

## NRS 233

### Nursing VI Lab • 1.0–8.0 Credits

Formerly NRS 2311

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

### Nursing Trends Lab • 1.0 Credit

Formerly NRS 2351

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 quarters 4 and 5. **Prerequisite:** enrollment in the Nursing program.

## NRS 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## NRS 301

### Nursing Roles, Dimensions, and Perspectives • 3.0 Credits

Facilitates the transition of Registered Nurses with an Associate degree in Nursing to the role of a BSN graduate. Introduces students to the philosophy, theory, and roles of the professional nurse in the context of contemporary and future professional nursing practice. Analysis of social, economic, and policy issues affecting the practice of professional nursing with emphasis on strategies for advancing the profession. **Prerequisite:** acceptance into the RN-BSN program.

## NRS 315

### Healthcare Informatics/Information Technology • 5.0 Credits

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 of study 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:** acceptance into the RN-BSN program. This course is cross linked to HCAD 315. Students completing NRS 315 may not receive graduation credit for HCAD 315.

## NRS 320

### Nursing Research and Evidence-Based Practice • 5.0 Credits

Examines the nature of inquiry, basic research concepts, language, and processes. Content in process focuses on how research contributes to the development of nursing knowledge, improves nursing practice, and enhances professional development and professional accountability. Qualitative and quantitative research methods are compared and are analyzed to enhance understanding of the research process. Legal and ethical issues are explored. Students utilize evidence based practice to guide decision-making in nursing practice. **Prerequisite:** acceptance into the RN-BSN program.

## NRS 350

### Pathophysiology, Pharmacology, and Assessment • 5.0 Credits

This course builds upon the RN's knowledge of the pathophysiology of disease, pharmacologic intervention, and health assessment of an individual by examining issues that affect families and communities on a local and global scale. Emphasis is on the role of the Bachelor's-prepared RN in assessing families, communities, and populations, identifying barriers to treatment, and developing interdisciplinary solutions. Major topics include family, community, and population assessment, determinants of health, health disparities, vulnerable populations, genetics, genomics, and pharmacogenetics. **Prerequisite:** acceptance into the RN-BSN program.

## NRS 399

### NCLEX Exam • 35.0 Credits

## NRS 410

### Nursing Leadership and Management • 5.0 Credits

Enables students to practice within complex healthcare systems and to assume the roles of provider of care; designer/manager/coordinator of care; and member of a diverse and global health care environment. Major topic areas include: provision of complex systems, change theory, conflict management, conflict resolution strategies, negotiation, relationship building, group roles/group dynamics, and concepts of teamwork. Management and organizational theories and concepts are studied, evaluated, and applied. **Prerequisite:** acceptance into the RN-BSN program.

## NRS 420

### Populations and Global Health Nursing • 3.0 Credits

This course examines nursing as part of the larger healthcare delivery system. Emphasis is on identification of cultural, social, political, and epidemiological factors related to health, illness, health promotion, and disease prevention that impact local, national, and global healthcare. **Prerequisite:** acceptance into the RN-BSN program.

## NRS 421

### Populations and Global Health Nursing Practicum • 2.0 Credits

This course presents clinical concepts of community health nursing and the multiple determinants of health in local healthcare settings. Students



# Courses & Programs

participate in selected clinical based activities in various community agencies as interdisciplinary provider, designer, and manager in the process to provide competent care, promote health protection, and provide assistance with health maintenance and restoration to a diverse population within the community. **Prerequisite:** acceptance into the RN-BSN program.

## NRS 460

### Leadership Capstone • 2.0 Credits

In collaboration with a nursing faculty and clinical preceptor, students plan and implement an evidence-based project consistent with the professional leadership role. Students use critical thinking skills and evidence-based practice to promote patient-centered nursing in a complex healthcare environment. This course culminates with an evidence-based project that is presented to peers and the community.

**Prerequisite:** acceptance into the RN-BSN program.

## Nursing Assistant

### NA 100

#### Nursing Assistant • 4.0 Credits

This course leads to the ability of those completing the course to become eligible for testing as a Nursing Assistant Certified. The course covers communication and interpersonal skills, infection control, safety and emergency procedures, promoting resident independence, respecting resident rights, basic nursing skills, personal care skills, mental health and social services needs, care of the cognitively impaired resident, basic restorative care, resident rights, HIPAA, First Aid and CPR for the healthcare provider, 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

#### Nursing Assistant Lab • 4.0 Credits

Formerly NA 1001

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

### NUTR&101

#### Nutrition [M/S] • 5.0 Credits

Formerly NFS 111

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.

## Occupational Safety & Health

### OSH 101

#### Fundamentals of Occupational Safety & Health • 5.0 Credits

Formerly IHST 101

This course covers the fundamental aspects of occupational safety and health practices and how they are related to applicable standards, risk management, performance metrics, hazard recognition/controls,

industrial hygiene, environmental management, fire safety, systems safety, ergonomics, hazardous materials, fleet safety, emergency management, and accident investigation. **Prerequisite:** grade of 2.0 or better in STAT 092 or MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 (or MATH 072) or satisfactory placement test score and/or acceptance into the program.

### OSH 124

#### Industrial and Construction Safety Regulations • 5.0 Credits

Formerly IHST 124

This course is a study of OSHA regulations for construction and general industry, and WISHA standards and regulations. Students will develop an understanding of safety management, project incorporation of safety, and subcontractor management. Topics covered include: excavation, fall protection, scaffolding, equipment operation, steel erection, cranes, and electrical.

### OSH 147

#### Ethics, Documentation, and Records • 4.0 Credits

Formerly IHST 147

Safety and health professionals face potential legal and ethical issues on an almost daily basis. In a landscape of changing responsibilities and new laws, they often make difficult decisions that can result in the creation of legal issues and liabilities for themselves and their companies. This course will explore issues in criminal liability for individuals and corporations under the OSHA Act and state criminal codes.

### OSH 151

#### Accident Prevention, Inspection & Investigations • 5.0 Credits

Formerly IHST 151

This course provides a review of accident investigation methodologies that include accident response, evidence collection, analysis techniques, and developing and communicating recommendations to prevent recurrence. It includes drug/alcohol testing, claims management, return to work/rehabilitation programs, and preparation for lawsuits and deposition.

### OSH 152

#### Internship • 1.0–7.0 Credits

Formerly IHST 152

Under the supervision of the college instructor and employer, a student will serve an internship of up to 231 hours in an industry, enforcement agency, or consultation services setting. **Prerequisite:** CTE department permission.

### OSH 153

#### Risk Management • 5.0 Credits

Formerly IHST 153

This course is an examination of risk management principles in the context of safety and health management. Strategies and tactics for reducing workplace hazards are presented through a review of best practices and principles balanced by an organization's use of opportunistic and speculative risks.

### OSH 177

#### Industrial Chemical Safety & Hazards • 5.0 Credits

Formerly IHST 177

A systematic analysis of how hazardous materials escalate an incident or emergency event. This course includes examination of the basic fundamental concepts common to hazardous chemicals with an emphasis on how some key elements, compounds, and mixtures are inherently dangerous.

# Courses & Programs

## OSH 230

### Industrial Toxicology • 5.0 Credits

Formerly IHST 230

This course is an exploration of the basic principles associated with the toxic effects of chemicals on the living organism while examining the regulatory aspects and applications of toxicology in the workplace. Among the topics covered are the potential adverse effects of drugs, pesticides, food additives, and industrial chemicals.

## OSH 231

### Biological Hazards • 5.0 Credits

Formerly IHST 231

This course is intended to familiarize students with a range of biological hazards that may be encountered in community and work environments, including commercial, non-industrial, industrial and healthcare settings, with emphasis on the methods occupational hygienists use to recognize, evaluate, and control microbiological hazards.

## OSH 233

### Fire Protection Systems • 2.0 Credits

Formerly IHST 233

This course is an in-depth study of flammables, combustibles, and their relation to fire prevention. It includes hazard analysis and assessment of establishments relating to the prevention and control of fires, understanding the types of extinguishing systems and the hazards associated with each, and emergency response and evacuation plans.

## OSH 235

### Physical Hazards • 5.0 Credits

Formerly IHST 235

This course is a study of the physical hazards in industry and the methods of workplace design and redesign to control these hazards. Emphasis is on the regulation codes and standards associated with the control of physical hazards.

## OSH 271

### Fundamentals of Industrial Hygiene • 4.0 Credits

Formerly IHST 271

This course is an introduction to the basics of industrial hygiene that includes the anticipation, recognition, evaluation, and control of workplace environmental stressors (chemical, physical, and biological) that can impact the health, comfort, or productivity of the worker.

## OSH 272

### Ergonomics • 4.0 Credits

Formerly IHST 272

This course covers the principles and practices of ergonomics as it applies to the industrial and construction environment. It demonstrates how to collect data on users and operators and how to convert the data to good workplace design.

## OSH 274

### Safety Program Management • 5.0 Credits

Formerly IHST 274

This course includes a study of accident cost analysis, recordkeeping standards, reporting, job safety analysis, fundamentals of safety training, and safety management system requirements, training, and implementation.

## OSH 277

### Environmental Management • 5.0 Credits

Formerly IHST 277

This course is an overview of the theories, processes, and applications of natural and technological hazards from a geographic perspective. Topics involve investigation beyond the basic physical processes to include mitigation strategies and emergency management considerations. Some of the subjects include earthquakes, volcanoes, wildfires, floods, tornadoes, hurricanes, winter storms, oil spills, chemical releases, and environmental terrorism.

## OSH 280

### Industrial Instrumentation and Equipment • 5.0 Credits

Formerly IHST 280

This course is an overview of the basic instrumentation used for industrial hygiene readings to include theory of operation, interferences, limitations, proper usage for Direct Reading Instruments (DRIs), Volatile Organic Compound (VOC) Meters, noise measuring, light measuring, heat stress instruments, and miscellaneous monitoring equipment as well as the use of sample pumps and media for source, area, and personal data gathering.

## Paramedic

### PMD 201

#### Paramedic I • 6.0 Credits

This course is intended to prepare the paramedic student in the areas of medical, legal, ethics, roles and responsibilities, principles of pathophysiology, pharmacology, intravenous access, and medication administration. 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](http://columbiabasin.edu/paramedic).**

### PMD 202

#### Paramedic II • 6.0 Credits

This course is 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 the previous PMD course sequence with a grade of 2.0 or better.**

### PMD 203

#### Paramedic III • 6.0 Credits

This course in the Paramedic sequence 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 previous PMD sequence courses with a grade of 2.0 or better.**

### PMD 204

#### Paramedic IV • 6.0 Credits

This course in the Paramedic sequence provides skills and knowledge necessary to assess and manage trauma emergencies, specifically:

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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 previous PMD sequence courses with a grade of 2.0 or better.**

## **PMD 205**

### **Paramedic V • 6.0 Credits**

This course in the Paramedic sequence 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 previous PMD sequences with a grade of 2.0 or better.**

## **PMD 206**

### **Paramedic VI • 6.0 Credits**

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: completion of the previous PMD sequences with a grade of 2.0 or better.**

## **PMD 210**

### **Paramedic I Lab • 2.0 Credits**

Formerly PMD 2013

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**

### **Paramedic II Lab • 3.0 Credits**

Formerly PMD 2023

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 minimum competencies in same-day surgery, operating room, emergency department, as well as beginning their field/ambulance experience.

## **PMD 230**

### **Paramedic III Lab • 3.0 Credits**

Formerly PMD 2033

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 240**

### **Paramedic IV Lab • 3.0 Credits**

Formerly PMD 2043

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**

### **Paramedic V Lab • 3.0 Credits**

Formerly PMD 2053

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**

### **Paramedic VI Lab • 3.0 Credits**

Formerly PMD 2063

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**

### **Extended Paramedic Internship • 1.0–3.0 Credits**

Formerly PMD 2103

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.**

## Perioperative Nursing

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## **PON 101**

### **Perioperative Nursing Theory I • 6.0 Credits**

This course is designed to prepare students for entry into perioperative nursing practice. Surgical nursing concepts are presented using a combination of lectures and online modules published by the Association of periOperative registered Nurses (AORN). Topics include an introduction to perioperative nursing practice, related core nursing skills, teamwork in the perioperative setting, the operating room environment, and standards for aseptic technique and surgical patient safety. **Prerequisite: graduate of an accredited registered nursing program with current Washington state RN licensure and acceptance into the Perioperative Nursing program.**



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## PON 111

### Perioperative Nursing Lab • 3.0 Credits

This course provides students the opportunity to apply core perioperative nursing concepts and practice skills within a structured laboratory environment. Students will perform technical skills within the scope of the perioperative nurse. Skills include sterile and aseptic technique, preoperative patient preparation, surgical patient positioning, operative counts, and other functions performed in the scrub and circulating nurse roles. **Prerequisite: graduate of an accredited registered nursing program with current Washington state RN licensure and acceptance into the Perioperative Nursing program.**

## PON 201

### Perioperative Nursing Theory II • 4.0 Credits

This course explores the role of the perioperative nurse within the context of the primary surgical specialties and will review basic surgical anatomy, pathophysiology, surgical wound classification and healing, operative instrumentation, and general considerations for patients undergoing general, obstetric and gynecologic, otorhinolaryngologic, genitourinary, orthopedic, plastic and reconstructive, peripheral vascular, cardiothoracic, oral and maxillofacial, ophthalmic, and neurosurgical procedures. **Prerequisite: PON 101 and 111, both with a minimum grade of 2.0.**

## PON 221

### Perioperative Nursing Practicum • 5.0 Credits

Students in this course will gain technical experience within the perioperative nursing role by participating in a structured clinical internship program. Students prepare for and perform assigned surgical tasks under the supervision of facility personnel, clinical preceptors, and clinical college faculty in accordance with patient safety standards and industry best practices. **Prerequisite: PON 101 and 111, both with a minimum grade of 2.0.**

## Philosophy

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## PHIL&101

### Intro to Philosophy [H] • 5.0 Credits

Formerly PHI 101

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 106

### Introduction to Logic [H] • 5.0 Credits

Formerly PHIL&106

A study of the principles of formal and informal thinking: induction, deduction, and language.

## PHIL&120

### Symbolic Logic [Q/SR] • 5.0 Credits

A study of the principles of formal thinking, which includes an analysis of symbolic theory within a context that encourages the development of logical skills. **Prerequisite: grade of 2.0 or higher in MATH 094 or MATH 095 or MATH 098 or MATH 050 or MATH 070 or MATH 072 or appropriate placement.**

## PHIL 131

### World Religions [H] • 5.0 Credits

Formerly PHI 131

A survey of the major religious systems of the world, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.

## PHIL 150

### Introduction to Ethics [H] • 5.0 Credits

Formerly PHI 150

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 • 1.0–15.0 Credits

A class used to explore new coursework.

## PHIL 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## PHIL 305

### Professional Ethics [H] • 5.0 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] • 5.0 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.**

## Phlebotomy

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## PHLEB100

### Phlebotomy I • 4.0 Credits

This lecture 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.**

## PHLEB101

### Phlebotomy I Lab • 5.0 Credits

Formerly PHLEB1001

This clinical course is the second class of the two-course sequence. This class requires 120 hours of supervised clinical experience in various

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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 am and end as late as 6 pm, 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

### PE 103

#### Physical Fitness I [PE] • 1.0 Credit

Formerly PE 1031

Instruction and practice in exercises that condition the body. Designed to develop a level of strength, flexibility, and endurance.

### PE 104

#### Physical Fitness II [PE] • 1.0 Credit

Formerly PE 1041

This course offers advanced conditioning through the use of strenuous exercises and incorporates techniques recently developed through research. **Prerequisite: PE 103.**

### PE 110

#### Aerobics Step Training I [PE] • 1.0 Credit

Formerly PE 1101

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

#### Aerobics Step Training II [PE] • 1.0 Credit

Formerly PE 1111

Continued study and involvement offering a greater level of conditioning through the use of more intense training techniques involved with step training.

### PE 112

#### Aerobic Dance I [PE] • 1.0 Credit

Formerly PE 1121

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

#### Aerobic Dance II [PE] • 1.0 Credit

Formerly PE 1131

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

#### Aerobic Dance III [PE] • 1.0 Credit

Formerly PE 1141

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

#### Body Mechanics [PE] • 1.0 Credit

Formerly PE 1151

This course involves special exercise and calisthenics which enhance total fitness, figure improvement, body toning, weight control, and posture.

### PE 116

#### Pilates [PE] • 1.0 Credit

Formerly PE 1161

An introductory course to Pilates emphasizing physical exercises, breathing, core strength and stability, and muscle awareness.

### PE 117

#### Yoga I [PE] • 1.0 Credit

Formerly PE 1171

An introductory course to Hatha Yoga emphasizing physical exercises, breathing exercises, and meditation practice.

### PE 118

#### Step Aerobic Interval Training [PE] • 1.0 Credit

Formerly PE 1181

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

#### Yoga II [PE] • 1.0 Credit

Formerly PE 1191

A continuation course to a Hatha Yoga practice including intermediate physical poses, yoga breathing exercises, and selected meditations.

### PE 120

#### Weight Training I [PE] • 1.0 Credit

Formerly PE 1201

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

#### Weight Training II [PE] • 1.0–2.0 Credits

Formerly PE 1211

An intermediate program with students designing their individual workout program.

### PE 122

#### Weight Training III [PE] • 1.0–2.0 Credits

Formerly PE 1221

An advanced program with the student designing her/his individual workout program.

### PE 127

#### Fitness Center [PE] • 1.0–6.0 Credits

Formerly PE 1271

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.

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## PE 132

### Golf I [PE] • 1.0 Credit

Formerly PE 1321

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

### Golf II [PE] • 1.0 Credit

Formerly PE 1331

Techniques on special shots such as sand shots, sidehill, and downhill lies are emphasized. **Prerequisite: PE 132.**

## PE 134

### Golf III • 1.0 Credit

Formerly PE 1341

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

### Golf Swing Analysis Strategies [PE] • 2.0 Credits

Formerly PE 1351

A comprehensive study of the individual parts of the modern golf swing with intensive training directed toward precise control and more power.

## PE 140

### Softball I [PE] • 1.0 Credit

Formerly PE 1401

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

### Softball II [PE] • 1.0 Credit

Formerly PE 1411

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

### Softball III [PE] • 1.0 Credit

Formerly PE 1421

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

### Soccer I [PE] • 1.0 Credit

Formerly PE 1451

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

### Soccer II [PE] • 1.0 Credit

Formerly PE 1461

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

### Soccer III [PE] • 1.0 Credit

Formerly PE 1471

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

### Jogging I [PE] • 1.0–2.0 Credits

Formerly PE 1481

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

### Jogging II [PE] • 1.0–2.0 Credits

Formerly PE 1491

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

### Jogging III [PE] • 1.0–2.0 Credits

Formerly PE 1501

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

### Basketball I [PE] • 1.0 Credit

Formerly PE 1601

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

### Basketball II [PE] • 1.0 Credit

Formerly PE 1611

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

### Basketball III [PE] • 1.0 Credit

Formerly PE 1621

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

### Volleyball I [PE] • 1.0 Credit

Formerly PE 1631

Covers basic skills, court positions, and strategies for beginning sets along with 4-2 and 5-1 offenses.

## PE 164

### Volleyball II [PE] • 1.0 Credit

Formerly PE 1641

A continuation of Volleyball I. Intermediate skills, defensive strategies, play sets, and how to play doubles and triples volleyball. **Prerequisite: PE 163.**

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## PE 165

### Volleyball III [PE] • 1.0 Credit

Formerly PE 1651

Emphasis is on team plan and interaction using and applying all volleyball skills. **Prerequisite:** PE 164.

## PE 172

### Bowling I • 1.0 Credit

Formerly PE 1721

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

### Bowling II • 1.0 Credit

Formerly PE 1731

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] • 2.0 Credits

This course is a study of the history, current global perspective, current trends, and laws regarding the opportunity for people with challenges and limitations to participate in physical activity and sports.

## PE 181

### Swimming I [PE] • 1.0 Credit

Formerly PE 1811

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

### Adaptive PE Lab [PE] • 1.0 Credit

Formerly PE 1801

Lab to be taken concurrently with PE 180.

## PE 187

### Baseball I [PE] • 1.0–2.0 Credits

Formerly PE 1871

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

### Baseball II [PE] • 1.0 Credit

Formerly PE 1881

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

### Baseball III [PE] • 1.0 Credit

Formerly PE 1891

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

### Cardio Kickboxing I [PE] • 1.0 Credit

Formerly PE 1901

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

### Special Studies • 1.0–15.0 Credits

Formerly PE 1991

An experimental class to be used to explore new approaches and applications to Physical Education.

## PE 199

### Special Studies • 1.0–15.0 Credits

An experimental lab class to be used to explore new approaches and applications to Physical Education.

## PE 201

### Exercise and Weights [PE] • 1.0 Credit

Formerly PE 2011

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

### Special Studies • 1.0–15.0 Credits

Formerly PE 2991

A class used to explore new coursework.

## PE 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Physical Education Professional

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## PEC 135

### Swing Analysis and Strategies • 2.0 Credits

Formerly PEC 1351

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 • 3.0 Credits

This course includes information on preventative procedures such as taping and bracing. Care of initial injury including American Red Cross Certification for Adult CPR and First Aid. Rehabilitation and return to activity protocol. This is good information for coaches, athletes, or active people in general.

## PEC 184

### Care & Prevention of Athletic Injuries II • 2.0 Credits

Formerly PEC 182

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.

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## PEC 185

### Care & Prevention of Athletic Injuries II Lab • 1.0 Credit

Formerly PEC 1821

Lab to be taken concurrently with PEC 184.

## PEC 188

### Athletic Training Internship • 2.0 Credits

Formerly PEC 183

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

### Athletic Training Internship Lab • 1.0 Credit

Formerly PEC 1831

Lab to be taken concurrently with PEC 188.

## PEC 230

### Introduction to PE • 3.0 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 • 2.0 Credits

History, fundamentals, practice organization, method of instruction, game preparation, and player evaluation are the main topics for instruction.

## PEC 236

### Fundamentals of Volleyball • 2.0 Credits

An introductory course in the history and development of power volleyball. It is also a study of the basic skills and organization of offensive and defensive strategies.

## PEC 239

### Fundamentals of Golf • 2.0 Credits

All elements of basic knowledge of golf fundamentals are reviewed with emphasis on methods and techniques of golf instruction for individuals or groups.

## PEC 242

### Theory of Basketball • 2.0 Credits

Advanced concepts and theory in basketball coaching and continuation of fundamentals of basketball supply students with up-to-date information concerning fundamentals, practice organization, game preparation, and player evaluation. **Prerequisite:** PEC 235.

## PEC 243

### Theory of Volleyball • 2.0 Credits

Theory of volleyball for prospective coaches and advanced players with the aspects of philosophy, psychology, methods, and organization.

## PEC 244

### Sports Officiating • 3.0 Credits

This course provides students with the knowledge and expertise necessary to officiate in physical education classes, intramurals, and interscholastically.

## PEC 246

### Sports Officiating • 3.0 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 • 3.0 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 • 2.0 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 • 2.0 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 • 3.0 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

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### PHYS 102

#### Physics of Everyday Experience [M/S] • 5.0 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: grade of 2.0 or better in MATH 040 or 084.**

### PHYS&110

#### Physics for Non-Science Majors w/ Lab [M/S] • 5.0 Credits

Formerly PHYS&100, PHYS&101

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: grade of 2.0 or better in MATH 050, 060, 062, 096 or higher.**

### PHYS&114

#### General Physics I w/ Lab [M/S] • 5.0 Credits

Formerly PHYS&124, PHYS&134

This course is designed for those students that are not majoring in a four-year engineering or physical science degree. Topics include measurement

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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: grade of 2.0 or better in MATH 113 or equivalent (Geometry/Trigonometry, MATH&142, MATH&152, or MATH&153).**

## PHYS&115

### General Physics II w/ Lab [M/S] • 5.0 Credits

Formerly PHYS&135, PHYS&125

Solids and fluids, thermal physics, laws of thermodynamics, electric forces and fields, electrical energy, DC circuits, magnetic forces and fields, electromagnetic induction, and AC circuits. **Prerequisite: grade of 2.0 or better in PHYS& 114.**

## PHYS&116

### General Physics III w/ Lab [M/S] • 5.0 Credits

Formerly PHYS&126, PHYS&136

Oscillations and waves, electromagnetic waves, geometric optics, physical optics, optical instrument, quantum physics, atomic physics, and nuclear physics. **Prerequisite: grade of 2.0 or better in PHYS& 115.**

## PHYS 199

### Special Studies • 1.0–5.0 Credits

A class used to explore new coursework.

## PHYS&221

### Engineering Physics I w/ Lab [M/S] • 5.0 Credits

Formerly PHYS&231, PHYS&241

The first quarter of a three-quarter sequence in calculus-based physics for science and engineering students. The course covers topics in mechanics, including kinematics of motion, force, work, energy, momentum, and kinematics and kinetics of rotation. **Prerequisite: grade of 2.0 or better in MATH& 151 or equivalent.**

## PHYS&222

### Engineering Physics II w/ Lab [M/S] • 5.0 Credits

Formerly PHYS&242, PHYS&232

The second quarter of a three-quarter sequence in calculus-based physics for science and engineering students dealing with the topics of Gravity, Fluids, and Electromagnetism. **Prerequisite: grade of 2.0 or better in MATH& 152 and PHYS& 221.**

## PHYS&223

### Engineering Physics III w/ Lab [M/S] • 5.0 Credits

Formerly PHYS&233, PHYS&243

The third quarter of a three-quarter sequence in calculus-based physics for science and engineering students dealing with the topics of Oscillations and Waves, Thermodynamics, Electromagnetic Waves, Light, and Optics. **Prerequisite: grade of 2.0 or better in PHYS& 222.**

## PHYS 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Political Science

## POLS 104

### State and Local Government [S/B] • 5.0 Credits

Formerly PS 104

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 • 1.0–15.0 Credits

A class used to explore new coursework.

## POLS&201

### Intro Political Theory [S/B] • 5.0 Credits

Formerly PS 150

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

### American Government [S/B] • 5.0 Credits

Formerly PS 100

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

### International Relations [S/B] • 5.0 Credits

Formerly PS 103

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

### Comparative Government [S/B] • 5.0 Credits

Formerly PS 101

A comparative study of the development and transformation of western democratic, communist, and third world political systems and processes.

## POLS 205

### American Political Thought [S/B] • 5.0 Credits

Formerly PS 151

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 • 1.0–15.0 Credits

A class used to explore new coursework.

## Project Management

## PROJ 100

### Introduction to Project Management • 5.0 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 • 5.0 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



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elements of a project. Introduces schedule concepts and is typically taken concurrently with scheduling software course PROJ 130 or 140.

**Prerequisite:** PROJ 100 with a 2.0 or better or concurrent enrollment.

## PROJ 120

### Project Execution & Control • 5.0 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 with a 2.0 or better or instructor permission.

## PROJ 130

### Introduction to Microsoft Project • 5.0 Credits

MS Project is used to develop the project schedule including such things as creating a work breakdown structure; identifying activities, estimates, durations, and relationships; and assignment of resources. Provides hands-on skills for a basic understanding of such things as capturing performance data; preparing outputs and reports; and using baselines. **Prerequisite:** PROJ 110 with a 2.0 or better.

## PROJ 140

### Introduction to Primavera • 5.0 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 110 with a 2.0 or better.

## PROJ 170

### Project Management Internship • 1.0–5.0 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 • 3.0 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 with a 2.0 or better; PROJ 120 with a 2.0 or better or concurrent enrollment.

## PROJ 222

### Project Quality Management • 3.0 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 with a 2.0 or better; PROJ 120 with a 2.0 or better or concurrent enrollment.

## PROJ 231

### Project Risk Management • 5.0 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 with a 2.0 or better.

## PROJ 241

### Project Management Capstone • 5.0 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 with a 2.0 or better; PROJ 130 with a 2.0 or better or PROJ 140 with a 2.0 or better; PROJ 211 with a 2.0 or better; PROJ 221 with a 2.0 or better or PROJ 222 with a 2.0 or better; and PROJ 231 with a 2.0 or better.

## PROJ 270

### Project Management Internship • 1.0–5.0 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 • 1.0–5.0 Credits

A class used to explore new coursework.

## PROJ 310

### Project Contracts & Legal Issues • 5.0 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 with a 2.0 or better and PROJ 211 with a 2.0 or better.

## PROJ 320

### Project Monitoring, Control, & Earned Value • 5.0 Credits

Develops monitoring and control issues beyond PROJ 120 including earned value management concepts and skills. **Prerequisite:** PROJ 120 with a 2.0 or better; PROJ 130 with a 2.0 or better or PROJ 140 with a 2.0 or better; or instructor permission.

## PROJ 330

### Project HR Management & Communication Skills • 5.0 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 with a 2.0 or better.

## PROJ 370

### Project Management Internship • 1.0–5.0 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 • 5.0 Credits

Develops advanced schedule concepts and practices using Microsoft Project software, beyond those learned in PROJ 130, including topics such as resource leveling, critical path management, baselining, and progress

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reporting. The class utilizes scenarios to be addressed using the software.

**Prerequisite:** PROJ 130 with a 2.0 or better.

## PROJ 421

### Advanced Primavera • 5.0 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 with a 2.0 or better.

## PROJ 470

### Project Management Internship • 1.0–5.0 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 • 5.0 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 231 with a 2.0 or better; PROJ 310 with a 2.0 or better; PROJ 320 with a 2.0 or better; PROJ 330 with a 2.0 or better; and either PROJ 221 with a 2.0 or better or PROJ 222 with a 2.0 or better; and either PROJ 411 with a 2.0 or better or PROJ 421 with a 2.0 or better; or instructor permission.

## Psychology

## PSYC&100

### General Psychology [S/B] • 5.0 Credits

Formerly PSY 101

Introduction to the scientific study of human behavior and mental processes. Topics include major psychological theory, learning, neuropsychology, consciousness, cognition, memory, and research methods.

## PSYC 103

### Applied Psychology • 3.0 Credits

Formerly PSY 100

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

### Child Growth & Development • 3.0 Credits

Formerly PSY 106

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&180

### Human Sexuality • 5.0 Credits

Formerly PSY 230

A survey of human sexuality from biological, psychological, sociocultural, and sociobiological perspectives. Topics include sexual orientation, sexual dysfunction, and sexually transmitted diseases.

## PSYC 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## PSYC&200

### Lifespan Psychology [S/B] • 5.0 Credits

Formerly PSY 240

A comprehensive survey of psychological development of the human from conception to death using the biopsychosocial approach.

**Prerequisite:** PSYC& 100.

## PSYC 201

### Social Psychology [S/B] • 5.0 Credits

Formerly PSY 201

This course will provide students with an introduction to the field of social psychology, a subfield of the science of psychology that focuses on the perceptions, thoughts, feelings, and behaviors of individuals and groups within a social context. As this is a survey course, this class will give you a broad overview of the major theories and findings within social psychology. **Recommended prerequisite:** PSYC& 100.

## PSYC 205

### Psychology of Adjustment • 5.0 Credits

Formerly PSY 205

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] • 5.0 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 • 5.0 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&220

### Abnormal Psychology [S/B] • 5.0 Credits

Formerly PSY 202

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.



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## PSYC 270

### Health Psychology • 5.0 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 • 5.0 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 • 1.0–3.0 Credits

Formerly PSYC 2972

Students work as volunteers in a community agency and complete a journal and report (usually 1 credit). **Prerequisite: PSYC& 100 and instructor permission.**

## PSYC 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Radiation Protection Technician

### RPT 111

#### Radiation Fundamentals • 5.0 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 • 5.0 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 or concurrent enrollment or instructor permission.**

### RPT 131

#### Radiation Effects • 5.0 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 or 121 or instructor permission.**

### RPT 141

#### Radioactive Materials Handling • 5.0 Credits

Radioactive material control and methods to minimize and control external exposure and airborne radioactivity. **Prerequisite: RPT 111.**

### RPT 211

#### Radiological Safety and Response • 5.0 Credits

This course focuses on contamination control and appropriate responses to radiological events. **Prerequisite: RPT 111.**

### RPT 222

#### Radiation Protection • 5.0 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

### RATEC102

#### Radiographic Physics • 5.0 Credits

Examines X-ray circuits, tubes, and X-ray equipment. Topics include design and application, troubleshooting and maintenance, equipment testing, imaging intensification, cineradiography, and advanced imaging procedures. **Prerequisite: acceptance into the Radiologic Technology program.**

### RATEC103

#### Principles of Radiographic Exposure • 3.0 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.**

### RATEC104

#### Advanced Radiographic Procedures • 4.0 Credits

Examines the theory and principles of contrast media used in radiologic examinations and special positioning. **Prerequisite: acceptance into the Radiologic Technology program.**

### RATEC105

#### Introduction to Radiographic Technique • 2.0 Credits

Introduces concepts of electromagnetic radiation necessary to understanding the production and control of X-radiation. Students learn how the radiographic image is created and what factors affect the appearance of that image. **Prerequisite: acceptance into the Radiologic Technology program.**

### RATEC106

#### Computed Imaging • 2.0 Credits

Presents computed imaging in comparison to screen-film technology. Topics include identifying components, understanding how they affect the image, and quality control. **Prerequisite: acceptance into the Radiologic Technology program.**

### RATEC107

#### Positioning and Related Anatomy I • 2.0 Credits

Presents basic positioning principles and terminology. Students get demonstration and film evaluation experience in positioning and related anatomy of the chest, abdomen, and upper extremities. Format includes two hours of lecture and a two-hour lab each week. **Prerequisite: acceptance into the Radiologic Technology program.**

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## RATEC108

### Positioning and Related Anatomy II • 3.0 Credits

Provides demonstration and film evaluation experience in positioning and related anatomy of the spine, pelvis, and lower extremities. Format includes two hours of lecture and a two-hour lab each week.

**Prerequisite:** acceptance into the Radiologic Technology program.

## RATEC109

### Positioning and Related Anatomy III • 3.0 Credits

Provides demonstration and film evaluation experience in positioning and related anatomy of the cervical and thoracic spine, bony 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.

## RATEC111

### Clinical Education I • 5.0 Credits

Formerly RATEC1113

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.

## RATEC112

### Clinical Education II • 5.0 Credits

Formerly RATEC1123

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.

## RATEC113

### Clinical Education III • 5.0 Credits

Formerly RATEC1133

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.

## RATEC114

### Supplemental Clinical Practicum I • 1.0 Credit

Formerly RATEC1143

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.

## RATEC120

### Nursing Procedures • 2.0 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.

## RATEC121

### Patient Care • 2.0 Credits

Examines patient care and assessment in the imaging department, as well as in other special care units. Topics include medications and their administration, acute patient care, bedside radiography, and patient lines and tubes. **Prerequisite:** acceptance into the Radiologic Technology program.

## RATEC127

### Introduction to Sectional Anatomy • 2.0 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.

## RATEC199

### Special Studies • 1.0–10.0 Credits

A class used to explore new coursework.

## RATEC207

### Concept Integration • 2.0 Credits

Prepares students for the American Registry of Radiologic Technologists exam through a comprehensive review. **Prerequisite:** acceptance into the Radiologic Technology program.

## RATEC210

### Clinical Education IV • 13.0 Credits

Formerly RATEC2103

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.

## RATEC211

### Clinical Education V • 8.0 Credits

Formerly RATEC2113

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.

## RATEC212

### Clinical Education VI • 8.0 Credits

Formerly RATEC2123

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.

## RATEC213

### Clinical Education VII • 8.0 Credits

Formerly RATEC2133

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.

## RATEC214

### Supplemental Clinical Practicum II • 1.0 Credit

Formerly RATEC2143

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.

## RATEC220

### Pathology I • 3.0 Credits

Introduces changes that occur in disease and injury, with application to radiologic technology. Topics include respiratory, skeletal, gastrointestinal,

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and urinary systems. **Prerequisite:** acceptance into the Radiologic Technology program.

## RATEC221

### Pathology II • 2.0 Credits

Continues RATEC 220. Students become familiar with the etiology, symptoms, prognosis, and imaging of disease processes of the cardiovascular, nervous, hemopoetic, endocrine, and reproductive systems. **Prerequisite:** acceptance into the Radiologic Technology program.

## RATEC240

### Radiation Biology and Protection • 3.0 Credits

Explores types of radiation, interaction of radiation with matter, and the effects of those interactions in human tissue. Students learn methods and principles of radiation protection for both patient and technologist. **Prerequisite:** acceptance into the Radiologic Technology program.

## RATEC296

### Special Topics in Radiology • 2.0 Credits

Allows study of special topics that may be necessary to update students in the field of radiologic technology. **Prerequisite:** acceptance into the Radiologic Technology program or instructor permission.

## RATEC299

### Special Studies • 1.0–10.0 Credits

A class used to explore new coursework.

## Reading

## RDG 091

### Reading Skills • 5.0 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:** appropriate placement or teacher recommendation.

## RDG 099

### College Reading Skills • 5.0 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 • 1.0–3.0 Credits

This class teaches students to advance their vocabulary for college-level writing using a words-in-context approach.

## RDG 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## RDG 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Russian

## RUSS&121

### Russian I [H] • 5.0 Credits

Formerly RUS 101

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

### Russian II [H] • 5.0 Credits

Formerly RUS 102

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

### Russian III [H] • 5.0 Credits

Formerly RUS 103

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

## SNR 015

### Senior Fitness • 0.0 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

## SSCI 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## SSCI 290

### Social Research Methods [S/B] • 4.0 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

### Social Research Methods Lab [S/B] • 1.0 Credit

Formerly SSCI 2901

Lab to be taken concurrently with SSCI 290.

# Courses & Programs

## Social Work

### SOWK 101

#### Introduction to Social Work • 5.0 Credits

Formerly HS 101

An overview of social work experience including history, purpose and tasks, practice settings, and future trends of social work profession.

### SOWK 103

#### Social Work Ethics • 5.0 Credits

Formerly HS 103

The course is designed to review, discuss, and evaluate ethics as it pertains to the field of Social Work. The course will cover current ethical codes, ethical decision making, and how students' personal beliefs, attitudes, biases, and values impact their role as helping professionals.

### SOWK 201

#### Counseling Theory and Practice • 5.0 Credits

Formerly HS 201

This course is an overview of major theories of counseling and psychotherapy. Students will be exposed to a wide variety of theories and have the opportunity to apply those approaches in classroom exercises and role-playing situations. Students will have the opportunity to develop a unique style of counseling, utilizing effective techniques with an emphasis on multicultural awareness. **Prerequisite: SOWK 101 or concurrent enrollment.**

## Sociology

### SOC& 101

#### Intro to Sociology [S/B] • 5.0 Credits

Formerly SOC 101

An introduction to the scientific study of society. Emphasis on relationship of the individual to society, inequality, social institutions, and deviant behavior.

### SOC 110

#### Gender, Media, & Popular Culture [S/B] • 5.0 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 115

#### Intro to Middle East History & Society [S/B] • 5.0 Credits

This course will introduce students to the sociology and history of the Middle East as one of the most diverse regions in the world. Specifically, it examines the historical development as well as the current transformation of social, cultural, economic, and political systems of Middle Eastern societies. Topics will be examined using a macro-sociological approach which analyzes both their internal dynamics and their role and place in the world. **This course is cross-listed with HIST 115. Credit cannot be received for both courses.**

### SOC 150

#### Marriage, Family, and Relationships [S/B] • 5.0 Credits

The family is discussed in broad sociobiological, historical, and comparative perspectives. Modern family life is analyzed after conceptual frameworks have been developed.

### SOC 160

#### Gender Studies [S/B] • 5.0 Credits

Societies create many roles for their members, depending upon technology, organization, and the distribution of power. Some of those roles are assigned on the basis of sex. This course examines the social creation of those gender roles assigned to sex and sexual behavior, and explores the inner life of acting out those roles.

### SOC 197

#### Field Experience • 1.0–3.0 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 • 1.0–15.0 Credits

A class used to explore new coursework.

### SOC& 201

#### Social Problems [S/B] • 5.0 Credits

Formerly SOC 201

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.

### SOC 220

#### Globalization [S/B] • 5.0 Credits

Sociological analysis of the global interconnectedness of things, people, and ideas. Topics include economic development and trade, immigration and citizenship, human rights, transmission of culture and knowledge, and new technologies including the internet. Emphasis on understanding the significance of social forces and inequalities in shaping globalization processes. Cross-listed as ICS 220 (credit cannot be received for both courses).

### SOC 221

#### Sociology of Deviance and Crime [S/B] • 5.0 Credits

This course introduces students to the sociological study of social behavior that violates society's accepted norms, namely, deviance and crime (hereafter: deviance). Specifically, the course will help students understand types of crime, non-criminal deviant behavior (such as mental illness and addiction) and how society responds at various levels to these behaviors. Students will learn about the theoretical approaches (labeling theory, differential association theory, control theory, for example) that explain the causes, extent and consequences of deviance in society. Student will also learn how deviance relates to aspects of class, ethnicity and race and to various social institutions, such as family, media, and power.

### SOC 230

#### Human Sexuality • 3.0 Credits

A survey of human sexuality from biological, psychological, sociocultural, and sociobiological perspectives. Topics include sexual orientation, sexual dysfunction, and sexually transmitted diseases.

### SOC 269

#### Sociology of World Cinema [S/B] • 5.0 Credits

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

# Courses & Programs

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 • 1.0–3.0 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 • 1.0–15.0 Credits

A class used to explore new coursework.

## SOC 305

### Cybercrime: A Sociological Perspective [S/B] • 5.0 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.

## Spanish

## SPAN 104

### Intensive 1st Year Spanish [H] • 15.0 Credits

Formerly SPA 104

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

### Beginning Spanish for Professionals [H] • 5.0 Credits

Formerly SPA 110

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

### Intermediate Spanish for Professionals [H] • 5.0 Credits

Formerly SPA 111

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

### Advanced Spanish for Professionals [H] • 5.0 Credits

Formerly SPA 112

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&121

### Spanish I [H] • 5.0 Credits

Formerly SPA 101

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

### Spanish II [H] • 5.0 Credits

Formerly SPA 102

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

### Spanish III [H] • 5.0 Credits

Formerly SPA 103

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 150

### Beginning Conversational Spanish • 1.0–5.0 Credits

Formerly SPA 150

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

### Beginning Conversational Spanish • 1.0–5.0 Credits

Formerly SPA 151

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

### Conversational Spanish • 5.0 Credits

Formerly SPA 152

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 • 1.0–15.0 Credits

A class used to explore new coursework.



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## SPAN 205

### Spanish for Spanish Speakers [H] • 5.0 Credits

Formerly SPA 205

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

### Spanish for Spanish Speakers [H] • 5.0 Credits

Formerly SPA 206

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

### Spanish for Spanish Speakers [H] • 5.0 Credits

Formerly SPA 207

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&221

### Spanish IV [H] • 5.0 Credits

Formerly SPA 201

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

### Spanish V [H] • 5.0 Credits

Formerly SPA 202

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

### Spanish VI [H] • 5.0 Credits

Formerly SPA 203

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.**

## SPAN 250

### Intermediate Conversational Spanish • 1.0–5.0 Credits

Formerly SPA 250

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

### Intermediate Conversational Spanish • 1.0–5.0 Credits

Formerly SPA 251

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

### Intermediate Conversational Spanish • 1.0–5.0 Credits

Formerly SPA 252

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

### Spanish Literature Readings [H] • 3.0 Credits

Formerly SPA 260

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

### Spanish Literature Readings [H] • 3.0 Credits

Formerly SPA 261

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

### Spanish Literature Readings [H] • 3.0 Credits

Formerly SPA 262

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 281

### Spanish Medical Interpreting I • 5.0 Credits

The Spanish Medical Interpreting program is a sequential, three-quarter vocational certificate program, consisting of Spanish Medical Interpreting I, II, and III. The program prepares students for state or national medical interpreter certification and to enter the workforce as professional, ethical, and competent healthcare interpreters. Students are introduced to healthcare interpreting as a profession, concepts and relevant terminology in biomedicine, and given opportunities to develop foundational skills in healthcare interpreting. Topics include: International code of ethics and its application, language access laws, HIPAA, interpreting modalities and protocols, basic note-taking skills, self-evaluation, glossary building and intervention techniques. **Prerequisite: 1. Native-like proficiency in English and Spanish. 2. Applicants must pass an entrance test to**

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**be admitted. Recommended courses: HSCI 147, SPAN 205, 206, 207.**  
**Cross-listed as HSCI 148 (credit cannot be received for both courses).**

## SPAN 282

### Spanish Medical Interpreting II • 5.0 Credits

The Spanish Medical Interpreting program is a sequential, three-quarter vocational certificate program, consisting of Spanish Medical Interpreting I, II, and III. The program prepares students for state or national medical interpreter certification and to enter the workforce as professional, ethical, and competent healthcare interpreters. Students are introduced to healthcare interpreting as a profession, concepts and relevant terminology in biomedicine, and given opportunities to develop foundational skills in healthcare interpreting. This course builds on the knowledge and skills acquired in SPAN 281/HSCI 149. Topics include: National code of ethics and standards of practice, ethical decision-making, basic medical prefixes, roots and suffixes, note-taking and sight translation skills, interpreter positioning, language and communication dynamics, and the role of the interpreter in health equity. **Prerequisites: HSCI 148 or SPAN 281 with a 1.0 or higher. Cross-listed as SPAN 282 (credit cannot be received for both courses).**

## SPAN 283

### Spanish Medical Interpreting III • 5.0 Credits

The Spanish Medical Interpreting program is a sequential, three-quarter vocational certificate program, consisting of Spanish Medical Interpreting I, II, and III. The program prepares students for state or national medical interpreter certification and to enter the workforce as professional, ethical, and competent healthcare interpreters. Students are introduced to healthcare interpreting as a profession, concepts and relevant terminology in biomedicine, and given opportunities to develop foundational skills in healthcare interpreting. This course builds on the knowledge and skills acquired in Spanish Medical Interpreting II. This course provides students with guided interpreting practice. Topics include: State code of ethics, abbreviations in healthcare, the concepts of patient advocacy, communicative autonomy, cultural brokering and responsiveness, and business practices in the industry. **Prerequisites: HSCI 149 or SPAN 282 with a 1.0 or higher. Cross-listed as HSCI 150 (credit cannot be received for both courses).**

## SPAN 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

## Surgical Technology

## SURG 101

### Introduction to Surgical Technology • 4.0 Credits

Formerly SRGT 101

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

### Perioperative Science • 3.0 Credits

Formerly SRGT 110

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

### Perioperative Patient Care • 2.0 Credits

Formerly SRGT 160

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, 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 106

### Pharmacology for the Surgical Technologist • 5.0 Credits

Formerly SRGT 104

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

### Surgical Procedures I • 8.0 Credits

Formerly SRGT 150

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

### Introduction to Surgical Technology Lab • 3.0 Credits

Formerly SRGT 1011

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

### Perioperative Science Lab • 2.0 Credits

Formerly SRGT 1101

Skills laboratory designed to accompany SURG 102. This course provides students with an opportunity to demonstrate practical skills designed



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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**

### **Perioperative Patient Care Lab • 1.0 Credit**

Formerly SRT 1601

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**

### **Surgical Procedures I Lab • 3.0 Credits**

Formerly SRT 1501

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**

### **Central Service • 1.0 Credit**

Formerly SRT 120

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**

### **Surgical Procedures II • 8.0 Credits**

Formerly SRT 250

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**

### **Surgical Seminar • 3.0 Credits**

Formerly SRT 240

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**

### **Ethics & Professionalism • 2.0 Credits**

Formerly SRT 103

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**

### **Central Service Clinical • 1.0 Credit**

Formerly SRT 1201

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**

### **Operating Room Practicum I • 8.0 Credits**

Formerly SRT 1411

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**

### **Operating Room Practicum II • 10.0 Credits**

Formerly SRT 2411

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**

### **Independent Study • 1.0–5.0 Credits**

Formerly SRT 293

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

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## **EDUT 204**

### **Instruct Strategies for Career & Tech Instrs • 1.0–4.0 Credits**

This course is designed to support career and technical education instructors' knowledge and application of instructional strategies. Students

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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

### DRMA 100

#### Theatre Study Tour • 1.0–3.0 Credits

Formerly DRMA 1001

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&101

#### Intro to Theatre [H] • 5.0 Credits

Formerly THA 115

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.

### DRMA 105

#### Rehearsal and Performance • 1.0–3.0 Credits

Formerly DRMA 1051

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

#### Rehearsal and Performance • 1.0–3.0 Credits

Formerly DRMA 1061

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

#### Rehearsal and Performance • 1.0–3.0 Credits

Formerly DRMA 1071

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

#### Creative Dramatics • 3.0 Credits

Formerly THA 110

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

#### Acting-Beginning • 5.0 Credits

Formerly THA 120

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

#### Acting-Intermediate • 5.0 Credits

Formerly THA 121

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

#### Acting-Advanced • 3.0 Credits

Formerly THA 122

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

#### Stagecraft • 1.0–3.0 Credits

Formerly DRMA 1261

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

#### Stagecraft • 1.0–3.0 Credits

Formerly DRMA 1271

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

#### Stagecraft • 1.0–3.0 Credits

Formerly DRMA 1281

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

#### Stage Movement • 1.0–3.0 Credits

Formerly THA 130

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

#### Special Studies • 1.0–3.0 Credits

Formerly THA 149

Topics vary from among dramatic literature, acting styles, directing, theory, criticism, aesthetics, history, and design. May be repeated for credit.

**Prerequisite: varies.**

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## DRMA 198

### Special Studies • 1.0–3.0 Credits

Formerly DRMA 1991

A class used to explore new coursework.

## DRMA 199

### Special Studies • 1.0–3.0 Credits

A class used to explore new coursework.

## DRMA 200

### Theatre Study Tour • 1.0–3.0 Credits

Formerly DRMA 2001

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

### Survey of Theatre History [H] • 5.0 Credits

Formerly THA 215

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

### Acting for the Camera • 3.0 Credits

Formerly THA 216

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

### Classical Acting • 1.0–3.0 Credits

Formerly THA 217

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

### Acting Studio • 1.0–3.0 Credits

Formerly DRMA 2201

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

### Acting Studio • 1.0–3.0 Credits

Formerly DRMA 2211

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

### Acting Studio • 1.0–3.0 Credits

Formerly DRMA 2221

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

### Touring Children's Theatre • 1.0–3.0 Credits

Formerly DRMA 2251

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 228

### Touring Rep Part II • 1.0–3.0 Credits

## DRMA 230

### Stage Combat • 2.0 Credits

Formerly DRMA 2301

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

### Design Essential • 3.0 Credits

Formerly THA 242

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

### Stage Costuming • 1.0–3.0 Credits

Formerly DRMA 2431

An introductory course in the theory and practice of stage costume design and construction.

## DRMA 244

### Stage Makeup • 1.0–2.0 Credits

Formerly THA 244

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

### Sound Design • 1.0–3.0 Credits

Formerly DRMA 2451

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

### Stage Lighting • 1.0–3.0 Credits

Formerly DRMA 2461

A beginning course in the theory and practice of stage lighting. This course is a "hands-on" approach to design and technical drawing. Lab

# Courses & Programs

time involves, "hang and focus" crew techniques and protocol, and special projects.

## DRMA 248

### Stage Management • 2.0 Credits

Formerly THA 248

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

### Special Studies • 1.0–3.0 Credits

Formerly THA 249

Topics vary from among dramatic literature, acting styles, directing, theory criticism, aesthetics, history, and design. May be repeated for credit.

**Prerequisite: varies.**

## DRMA 250

### Directing for the Stage • 3.0 Credits

Formerly THA 250

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

### Special Studies • 1.0–3.0 Credits

Formerly DRMA 2991

A class used to explore new coursework.

## DRMA 299

### Special Studies - Scene Painting • 1.0–3.0 Credits

A class used to explore new coursework.

## Welding Technology

### WT 048

#### Welding Certification • 0.0 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.

### WT 050

#### Welding Booth Time • 0.0 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.

### WT 100

#### Basic Welding • 3.0 Credits

This course provides a beginning level of theory and welding processes and applications being used today. This course includes safety, set-up and tear-down, present concepts, applications and methods, and operation of oxy-acetylene, electric arc, and MIG welding. **Prerequisite: instructor permission.**

### WT 101

#### Oxy-Acetylene Process • 1.0 Credit

A theoretical approach to give students an understanding in the areas of oxy-acetylene cutting, welding, and brazing of various metals. This class is for 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 • 1.0–5.0 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 • 4.0 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 metal 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 MATH 050 with a grade of 2.0 or better, or satisfactory placement test score.**

### WT 108

#### Fabrication Technique I • 1.0 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

#### Oxy-Acetylene Process Lab • 1.0–3.0 Credits

Formerly WT 1011

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

#### Introduction to Shield Metal Arc Welding • 1.0–10.0 Credits

Formerly WT 1021

An introduction to mild steel arc welding consisting of manipulative skills using the shield metal arc process with E6010 type mild steel electrode. **Prerequisite: grade of 2.0 or better in MATH 050 or 096 or satisfactory placement test score, appropriate reading skills, or instructor permission.**

### WT 113

#### Advanced Shield Metal Arc Welding • 1.0–10.0 Credits

Formerly WT 1031

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

#### Metallic Arc Refresher • 1.0–10.0 Credits

Formerly WT 1301

# Courses & Programs

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 140

### Shield Metal Arc Certification Preparation • 1.0–5.0 Credits

This course develops students' shielded metal arc welding skills in preparation for meeting American Welding Society (AWS), Washington Association of Building Officials (WABO), and American Society of Mechanical Engineers (ASME) certification standards. **Prerequisite: WT 113 and concurrent enrollment in WT 141 or instructor permission.**

## WT 141

### Shield Metal Arc Welding Certification • 1.0–5.0 Credits

Formerly WT 1041

This course provides advanced development of arc welding skills to meet American Welding Society (AWS), Washington Association of Building Officials (WABO), and American Society of Mechanical Engineers (ASME) certification standards. **Prerequisite: WT 113 and concurrent enrollment in WT 140 or instructor permission.**

## WT 144

### Welding Upgrade • 1.0–1.0 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

### Gas Metal Arc Welding (MIG) Certificate • 1.0–10.0 Credits

Formerly WT 1051

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 • 1.0–2.0 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

### Fabrication Techniques I Lab • 3.0 Credits

Formerly WT 1081

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 195

### Supervised Employment • 1.0–3.0 Credits

This is a supervised work experience involving the application and practice of skills and principles learned in the classroom and lab. The student will be placed with an employer where the environment will build on the student's area of career interest and prepare them to be productive employees. **Prerequisite: WT 181 or instructor permission.**

## WT 201

### Weldability of Metals • 1.0–5.0 Credits

This course introduces the concepts that explain the metallurgical behavior and determine the weldability of ferrous and non-ferrous metals. **Prerequisite: WT 141, 108, and 181.**

## WT 202

### Welding Inspection • 1.0–5.0 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 • 1.0 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

### Introduction to Pipe Welding • 1.0–10.0 Credits

Formerly WT 2011

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

### Gas Tungsten Arc Welding (TIG) • 1.0–10.0 Credits

Formerly WT 2021

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

### Pipe Welding Certification • 1.0–10.0 Credits

Formerly WT 2031

This course emphasizes qualification tests for piping and tubing. **Prerequisite: WT 222 or instructor permission.**

## WT 233

### Pipe Welding Refresher • 1.0–10.0 Credits

Formerly WT 2301

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

### Fabrication Technique II Lab • 3.0 Credits

Formerly WT 2081

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.**

# Courses & Programs

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## Women's Studies

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**WS 155**

**Women's Cultural Heritage [H] • 5.0 Credits**

An introductory course which presents an overview of the contributions women have made socially, politically, and culturally.

## Workshop

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**WKSP 000**

**Workshop • 0.0 Credits**

A class used to explore new coursework.

**WKSP 089**

**Bachelor of Applied Science Program Entry • 0.0 Credits**

A class used for registration into BAS classes.

**WKSP 090**

**First Year Introduction for Running Start • 0.0 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 • 0.0 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.



# Board of Trustees, Faculty & Administrative Exempt

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**Lane D. Schumacher** - Associate Dean for Student Retention and Completion  
**Roderick Taylor** - Dean for Math and Science

## Administrative Exempt Employees

**Cinthia D. Alvarez**  
Start Year: 2015  
B.A., Washington State University  
A.A., Columbia Basin College  
High School Equivalency Program Outreach Specialist, HEP  
**Brian E. R. Anderson**  
Start Year: 2020  
M.B.A., University of Central Florida  
B.S., University of Central Florida  
Director for Budget and Purchasing Services, Administration  
**Donald O. Anderson Jr.**  
Start Year: 2020  
M.S.Ed., Concordia University  
Math Center Developer, Title V Student Transitions and Achievement Grant

**Omar Anderson**  
Start Year: 2020  
B.A.S., A.A., Peninsula College  
Completion Coach/Head Women's Soccer Coach, Athletics/Counseling and Advising  
**Alisia Anguiano-Torrez**  
Start Year: 2017  
Outreach and Retention Specialist, CAMP  
**Leida P. Arciniega**  
Start Year: 2019  
M.Ed., B.A., Washington State University  
Completion Coach, Counseling and Advising  
**Amanda R. Aunspaugh**  
Start Year: 2015  
B.A., B.C.J., New Mexico State University  
Executive Assistant to the Office for Instruction, Instruction  
**Jacob D. Bang**  
Start Year: 2020  
M.Ed., Northern Arizona University  
Director for BAS in Teacher Education, BAS  
**Benjamin P. Beus**  
Start Year: 2013  
M.B.A., B.A., Washington State University  
Director for Financial Aid, Financial Aid  
**Michael J. Botu**  
Start Year: 2016  
B.A.S., A.A., A.A.S., Columbia Basin College  
Student Activities Specialist, Student Activities  
**Amanda R. Bragg**  
Start Year: 2013  
B.A., Eastern Washington University  
Director for Accounting Services and Controller, Accounting Services  
**Kellee Anne Brewer**  
Start Year: 2015  
M.S., University of Phoenix  
B.S., Washington State University  
WorkFirst Training Specialist, Workforce Education  
**Tyrone W. Brooks**  
Start Year: 2015  
M.S., B.S., University of Nevada, Reno  
Vice President for Administrative Services, Administration  
**Debbie Bruce**  
Start Year: 1974  
Bookstore Operations Director, Bookstore  
**Montessa Califano**  
Start Year: 2018  
B.A., Pacific Lutheran University  
Completion Coach/Head Softball Coach, Athletics/Counseling and Advising  
**Carlo R. Calvillo**  
Start Year: 2020  
Completion Coach, Counseling and Advising  
**Susan C. Campbell**  
Start Year: 2017  
M.S.N., Whitworth University  
Assistant Director for Nursing, Nursing  
**Melinda M. Carmona**  
Start Year: 2010  
M.P.A., B.A., Eastern Washington University  
Director for Veterans Education and Transition Services, Veterans Services

**Melanie R. Casciato**  
Start Year: 2014  
M.B.A., B.S., Eastern Oregon University  
Director for Student Recruitment, College Recruitment  
**Sean D. Chesterfield**  
Start Year: 2020  
M.S., Western Governors University  
Director for Emergency Management and Campus Security, Security  
**Royce Cone**  
Start Year: 2018  
M.S., B.S., University of Texas of The Permian Basin  
Assistant Director for IT Customer Success, Information Services  
**Lucas T. DeLuca**  
Start Year: 2020  
Director for Disability Support Services, Disability Support Services  
**Haylie B. Devine**  
Start Year: 2020  
Development Officer  
**Brian Dexter**  
Start Year: 1999  
M.S., Western Governors University  
B.A.S., A.A.S., A.A., Columbia Basin College  
Interim Vice President for Administrative Services, Administration  
**Kristen Duggan**  
Start Year: 2016  
B.A., Washington State University  
Onboarding and Talent Development Manager, Human Resources  
**Jamie L. Duncan**  
Start Year: 2019  
B.A., Whitworth University  
Assistant Director for Student Recreation and Wellness, Student Services  
**Joshua Ellis**  
Start Year: 2017  
Ph.D., Utah State University  
M.S., B.S., Idaho State University  
Director for Institutional Research, Organizational Learning  
**Eli Enger**  
Start Year: 2019  
J.D., University of Arizona  
B.A., Washington State University  
Assistant General Counsel, Human Resources  
**Pär Jason Engle**  
Start Year: 2016  
Ph.D., M.P.S., University of Wisconsin  
Dean for Organizational Learning, Organizational Learning  
**Victoria M. Enriquez**  
Start Year: 2014  
M.Ed., Washington State University  
Completion Coach, Counseling and Advising  
**Miriam M. Fierro**  
Start Year: 2006  
M.A., Eastern Washington University  
B.A., Western Washington University  
Director for CAMP, CAMP



# Board of Trustees, Faculty & Administrative Exempt

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Start Year: 2019

M.B.A., Maryhurst University  
Executive Director/CEO of the CBC Foundation, Foundation

## **Jason A. Fraser**

Start Year: 2015

B.S., Washington State University  
A.A.S., Columbia Basin College  
Assistant Director for IT Infrastructure and Security, Information Services

## **Stephanie Fuentes**

Start Year: 2019

B.A., Eastern Washington University  
Retention Specialist for the High School Equivalency Program, HEP

## **Keeley E. Gant**

Start Year: 2009

M.Ed., B.S., Washington State University  
Director of CTE Dual Credit and Workforce Enrollment, CTE Dual Credit

## **Janet K. Garza**

Start Year: 2005

B.A., Washington State University  
A.A., A.A.S., Columbia Basin College  
Associate Registrar, Student Records

## **Ericka E. Garza-Hoag**

Start Year: 2020

B.A., Washington State University  
Assistant Director for Opportunity Grant/Early Achievers Grant, Workforce Education Center

## **Camilla Glatt**

Start Year: 2004

J.D., Gonzaga University School of Law  
B.A., Washington State University  
Vice President for HR and Legal Affairs, Human Resources

## **Leslie Guzman**

Start Year: 2017

M.P.A., B.A., Eastern Washington University  
Retention Specialist, CAMP

## **Monica R. Hansen**

Start Year: 2013

Ph.D., M.Ed., University of Idaho  
B.A., University of Wyoming, Laramie  
Dean for Social Sciences & Education, Social Sciences

## **Zachary J. Hawks**

Start Year: 2018

B.A., Western Washington University  
Completion Coach, Counseling and Advising

## **Kristen D. Heinemeyer**

Start Year: 2012

B.A., Pacific Lutheran University  
Director for CBC Guided Pathways, Administration

## **Elisa B. Hernandez**

Start Year: 2020

M.S., Mount Saint Mary's University  
Director for Career Services, Career Services

## **Elizabeth Hernandez-Osorio**

Start Year: 2013

B.A., Eastern Washington University  
Completion Coach, Counseling and Advising

## **Cheryl L. Holden**

Start Year: 2001

M.A., Antioch University-McGregor  
B.A., Central Washington University  
Vice President for Student Services, Administration

## **Katé Holestine**

Start Year: 2019

M.S., Eastern Washington University  
Career and Technical Education Programs  
Director, Career & Technical Education

## **Erin Holloway**

Start Year: 2015

B.A., University of Washington  
Director for Transitional Studies Operations, Transitional Studies

## **Douglas J. Hughes**

Start Year: 2014

M.A., California State University, Fresno  
B.A.S., Boise State University  
Dean for Health Sciences, Health Sciences

## **Jessica M. James**

Start Year: 2017

B.A., Eastern Washington University  
Assistant Registrar, Student Records

## **Erica E. Jesberger**

Start Year: 2007

B.A., Washington State University  
Executive Assistant for Administrative Services, Administration

## **Sandya Kesoju**

Start Year: 2017

Ph.D., The University of Idaho  
M.S., NorthWest Missouri State University  
Director for Agriculture Education, Research and Development, Agriculture

## **Gregg L. Koelzer**

Start Year: 2019

Assistant Director for Farm Operations

## **Scott Koopman**

Start Year: 2019

M.B.A., Washington State University  
Director for the Workforce Education Center, Workforce Education Center

## **Kylee R. Lacy**

Start Year: 2014

B.A., Eastern Washington University  
A.A., Walla Walla Community College  
Director for Employee Relations and Payroll, Human Resources

## **Roman Lara Alvarado**

Start Year: 2018

B.A., Washington State University  
Completion Coach, Counseling and Advising

## **Daphne S. Larios**

Start Year: 2007

M.H.E.A., Upper Iowa University  
B.A., Heritage University  
Dean for Transitional Studies, Transitional Studies

## **Michael Lee**

Start Year: 1999

Ph.D., Idaho State University  
M.A., Western Washington University  
B.A., University of Idaho  
Vice President for Instruction, Administration

## **Jerrold N. Lewis**

Start Year: 1993

M.B.A., Western Governors University  
B.A., University of Washington  
Director for Virtual Campus/e-Learning, Virtual Campus/e-Learning

## **Keri A. Lobdell**

Start Year: 2018

M.S., Walden University  
Associate Dean for Library & Instructional Services, Library

## **Jacqueline A. Marrast-Simpson**

Start Year: 2017

J.D., M.P.A., University of Pittsburgh  
Assistant General Counsel, Human Resources

## **Amber Martinez**

Start Year: 2017

M.S., Western Governors University  
B.A., Ashford University  
Executive Assistant to the Vice President for Human Resources & Legal Affairs, Human Resources

## **Joscelyn Martinez**

Start Year: 2019

B.A., Heritage University  
Retention Specialist, Disability Support Services

## **Miguel Martinez**

Start Year: 2019

B.A., Eastern Washington University  
Assistant Director for General Accounting, Accounting Services

## **Melissa K. McBurney**

Start Year: 2006

M.S., University of North Carolina  
B.A., North Carolina State University  
Dean for Accreditation & Assessment, Administration

## **William L. McKay**

Start Year: 1992

M.M., University of Texas at Austin  
B.A., University of Washington  
Dean for Arts and Humanities, Arts and Humanities

## **Nicole N. Meharry**

Start Year: 2018

B.A., Union College  
Executive Assistant to the Vice President for Student Services, Administration

## **Jessica L. Miller**

Start Year: 2012

B.A., Washington State University  
A.A., Columbia Basin College  
Director for Talent Acquisition and Benefits, Human Resources

## **Jesus Mota**

Start Year: 2015

M.B.A., Eastern Oregon University  
B.A., Washington State University  
A.A., A.A.S., Columbia Basin College  
Dean for Career & Technical Education, Career & Technical Education

## **Sarah Murphy**

Start Year: 2019

B.S., Utah State University  
Director for Strategic Initiatives, Foundation

# Board of Trustees, Faculty & Administrative Exempt

**Kelsey M. Myers**

Start Year: 2004

M.Ed., B.A., Western Washington University  
Assistant Vice President for Enrollment Services  
and Registrar, Administration

**Tom M. Nguyen**

Start Year: 2001

B.A., Washington State University  
Academic Advisor - Tutor Coordinator, Upward  
Bound/Student Services

**Sarah North**

Start Year: 2019

Ed.S., Fort Hays State University  
Director for Library Services, Library

**Janet E. O'Neill**

Start Year: 1990

B.S., Oregon State University  
B.A., Eastern Oregon State College  
Assistant Director for Financial Aid, Financial  
Aid

**Anthony Owens**

Start Year: 2020

B.A., University of Providence  
Completion Coach/Head Men's Basketball  
Coach, Athletics/Counseling and Advising

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Start Year: 2015

B.S., Washington State University  
Director for MESA, MESA

**Soo H. Park**

Start Year: 2018

M.A., Purdue University  
Assistant Dean for Instruction, Instruction

**Joseph M. Patti**

Start Year: 2017

M.A.T., Western Governors University  
Completion Coach, Counseling and Advising

**Arianna Pedroza**

Start Year: 2016

B.S.W., Eastern Washington University  
Retention and Transfer Specialist, Student  
Support Services

**Nancy R. Peterson**

Start Year: 2016

M.Ed., M.A.T., Grand Canyon University  
B.S., Montana State University  
Retention Specialist- Disability Services,  
Disability Support Services

**Troy Phillips**

Start Year: 2019

B.S., Washington State University  
Director for Facilities Services & Capital Projects,  
Administration

**Megan Pylican**

Start Year: 2014

B.A., Washington State University  
Deputy Title IX Coordinator, Human Resources

**Daniel Quock**

Start Year: 2017

M.S., Missouri State University  
Director for Resident Life, Residence Life

**Anneke M. Rachinski**

Start Year: 2015

B.A., Western Washington University  
A.A., Columbia Basin College  
Director for Resource Development and  
Planned Giving, Foundation

**Martin Ramirez**

Start Year: 2020

Completion Coach/Head Men's Soccer Coach,  
Athletics/Counseling and Advising

**Ralph A. Reagan**

Start Year: 2013

M.A., B.S., Washington State University  
Assistant Dean for Student Conduct and  
Activities, Administration

**Angelina Rodriguez**

Start Year: 2000

Assistant Director for Financial Aid, Financial  
Aid

**Scott D. Rogers**

Start Year: 1997

M.A., B.Ed., Gonzaga University  
A.A., Bellevue Community College  
Athletic Director, Athletics

**Spencer Roland**

Start Year: 2019

M.A., Washington State University  
Assistant Athletic Director, Athletics

**Maira Ruiz**

Start Year: 2020

B.A., University of Washington  
College Outreach and Recruitment Specialist,  
College Recruitment

**Julie Y. Russell**

Start Year: 2015

M.Ed., Whitworth University  
M.A., Eastern Washington University  
B.A., Washington State University  
Workforce Education Training Specialist,  
Workforce Education Center

**Stefan Salazar-McGovern**

Start Year: 2019

M.S., Capella University  
Completion Coach/Head Baseball Coach,  
Athletics/Counseling and Advising

**Nicole R. Salter-Tobin**

Start Year: 2008

B.A.S., A.A., Columbia Basin College  
Workforce Education Training Specialist,  
Workforce Education Center

**Tammy Sanderson**

Start Year: 2017

M.S., University of Bridgeport  
Director for Dental Hygiene, Dental Hygiene

**Madison Sandilands**

Start Year: 2018

B.A., The University of California, Santa Barbara  
M. Ed., Central Washington University  
Completion Coach, Counseling and Advising

**Leslie Sandoval**

Start Year: 2019

B.A., Portland State University  
Workforce Education Center Training Specialist,  
Workforce Education Center

**Daron Santo**

Start Year: 2017

B.S., Washington State University  
College Outreach and Recruitment Specialist,  
College Recruitment

**Alice B. Schlegel**

Start Year: 2004

M.A., Prescott College  
B.A., University of Montevallo  
Director for Student Activities, Student  
Activities

**Eleanor M. Schroeder**

Start Year: 2017

B.A., Whitman College  
Grant Writer, Business Services

**Lorena Schubert**

Start Year: 2004

B.A.S., A.A.S., Columbia Basin College  
Workforce Education Training Specialist,  
Workforce Education Center

**Lane D. Schumacher**

Start Year: 2002

M.Ed., B.A., Northwest Nazarene University  
Associate Dean for Student Retention and  
Completion, Counseling & Advising

**Darlene R. Scrivner**

Start Year: 2017

M.Ed., B.S., Washington State University  
Special Assistant to the President,  
Administration

**Dmytro Serhiychuk**

Start Year: 2011

B.S., Western Governors University  
A.A.S., Columbia Basin College  
Assistant Director for System Admin. and  
Development, Information Services

**Deborah A. Severin**

Start Year: 2014

A.A.S., Columbia Basin College  
Paralegal, Human Resources

**Lendah Siah**

Start Year: 2013

Director for Assessment Center, Assessment  
Center

**Kelsie J. Smith**

Start Year: 2016

M.S.W., Eastern Washington University  
B.A., Washington State University  
Assistant Director for Transitional Studies,  
Transitional Studies

**Roosevelt Smith**

Start Year: 2019

B.S., Central Washington University  
Completion Coach/Head Women's Basketball  
Coach, Athletics/Counseling and Advising

**David A. Spiel**

Start Year: 2008

A.S., A.A., Columbia Basin College  
A.A.S., A.S., Spokane Falls Community College  
Web Services Design and e-Learning Specialist,  
eLearning

**Donna L. Starr**

Start Year: 1995

B.S., Washington State University  
Assistant Director for Student Records, Student  
Records

# Board of Trustees, Faculty & Administrative Exempt

**Erin T. Steinert**

Start Year: 2013

B.A., Drury University

Director for the Planetarium & Observatory, Planetarium

**Troy H. Stratford**

Start Year: 2003

B.S., University of Idaho

Paramedic Program Director, Paramedic, EMT/EMS

**Amy R. Stroud**

Start Year: 2006

M.Ed., B.A., Washington State University

A.A., Columbia Basin College

Director for Student Support Services, Student Support Services

**Roderick Taylor**

Start Year: 2018

M.B.A., Gonzaga University

Dean for Math and Science, Math and Science

**Kaitlin Teague**

Start Year: 2017

Director for Running Start

**Anna L. Tensmeyer**

Start Year: 2018

B.S., University of Idaho

Marketing and Communications Director, College Relations

**Alexander M. Thornton**

Start Year: 2017

M.Ed., University of Washington

Director for Students Recreation and Wellness, Student Services

**Juri Tikerpuu**

Start Year: 2020

Assistant Director for IT Projects

**Kimberley A. Tucker**

Start Year: 1997

Ph.D., University of Northern Colorado

M.N., B.S.N., Washington State University

Director for Nursing Programs, Nursing

**Amanda J. Ursino**

Start Year: 2017

B.A., Washington State University

Director for Enrollment Services, Enrollment Services

**Susan A. Vega**

Start Year: 1989

M.Ed., B.A., Washington State University

A.A., Columbia Basin College

Upward Bound Project Director, Upward Bound

**Jose Vidot**

Start Year: 2016

Ph.D., Walden University

M.Ed., Heritage University

M.A., Columbia University

B.S., Albany State University

Director for Title V STAA, Title V Student Transitions and Achievement Grant

**Debra J. Wagar**

Start Year: 2003

M.A., Washington State University

B.A., Central Washington University

Assistant Director for the Workforce Education Center, Workforce Education Center

**Heidi Wasem**

Start Year: 2017

B.A.Ed., Pacific Lutheran University

Director for Information Services, Information Services

**David Wilkie**

Start Year: 2017

A.A.S-T., Bend Community College

Assistant Director for Central Services, Purchasing

**Senia Winston**

Start Year: 2019

B.A., Washington State University

Retention Specialist, Transitional Studies

**Rebekah S. Woods**

Start Year: 2017

Ph.D., J.D., Regent University

President, President's Office

**Catalina Yopez**

Start Year: 2018

B.S., Washington State University

College Outreach and Recruitment Specialist,

College Recruitment

**Kathryn Yohey**

Start Year: 2020

M.A., Ball State University

Retention Specialist, Transitional Studies

**Joaquin Zambrano**

Start Year: 2019

Assistant Director for Custodial Services, Custodial Services

## Faculty

**Alexandria S. Anderson**

Start Year: 2008

M.S., B.A., Western Washington University

Senior Associate Professor, Mathematics

**Cara L. Anderson**

Start Year: 2011

J.D., Rutgers School of Law - Camden

M.B.A., Oregon State University

B.A., Washington State University

Associate Professor, Bachelor of Applied Science (BAS) Business

**Shannon Ardamica-Hall**

Start Year: 2019

M.A., Gonzaga University

Instructor, Communication Studies

**David F. Arnold**

Start Year: 1998

Ph.D., M.A., University of California, Los Angeles

B.A., Washington State University

Professor, History/Intercultural Studies

**Adam C. Austin**

Start Year: 2014

Ph.D., M.A., University of North Dakota

B.A., Saint Cloud State University

Associate Professor, Psychology

**Julie L. Bacon**

Start Year: 2014

M.S., Central Washington University

B.A., Washington State University

Associate Professor, Communication Studies

**Stephen P. Badalamente**

Start Year: 1994

M.L.S., B.A., University of Washington

Senior Associate Professor, Library Services

**A. Lorena Barboza**

Start Year: 2010

Ph.D., Kansas State University

M.A., Florida International University

B.A., Universidad de Costa Rica

Senior Associate Professor, Spanish

**Margaret A. G. Bartrand**

Start Year: 1992

Ph.D., M.S., Washington State University

B.A., Whitman College

Senior Professor, Mathematics

**Joshua T. Bee**

Start Year: 2002

M.Ed., B.S., Heritage University

Associate Professor, Computer Science

**Karina Bethje**

Start Year: 2019

B.S.N., Western Governors University

Assistant Professor, Nursing

**Tanya Big Mountain**

Start Year: 2019

A.A., Columbia Basin College

Assistant Professor, Manufacturing Technology

**Kerrin A. Bleazard**

Start Year: 2007

M.S., B.S., Washington State University

Professor, Agriculture

**Matthew A. Boehnke**

Start Year: 2015

M.A., Embry-Riddle Aeronautical University

B.A., Eastern Washington University

Associate Professor, Computer Science

**Chaoura Bourouh**

Start Year: 2008

Ph.D., M.A., American University

Professor, Sociology

**Josephine L. Brooks**

Start Year: 2017

M.S., B.S., University of Nevada, Reno

Assistant Professor, Engineering Technology

**Donna T. Brouns**

Start Year: 1990

M.S.W., Eastern Washington University

B.A., Washington State University

A.A., Columbia Basin College

Senior Associate Professor, Counseling

**Amy K. Buehler**

Start Year: 2017

B.S., DePaul University, Chicago

Instructor, High School Academy

**Janie K. Burlingame**

Start Year: 2014

M.S., University of Washington

B.A., Pepperdine University

Instructor, Nutrition and Food Science

**Laura J. Burns**

Start Year: 1998

M.N., B.S.N., Montana State University

A.D.N., College of St. Mary

Senior Associate Professor, Nursing

# Board of Trustees, Faculty & Administrative Exempt

**Ronald E. Campbell**

Start Year: 2002  
M.F.A., Humboldt State University  
B.F.A., University of Idaho  
Senior Associate Professor, Theatre

**Zana A. Carver**

Start Year: 2017  
Ph.D., Washington State University  
M.S., University of Saint Joseph  
Assistant Professor, Biology

**David L. Cazier**

Start Year: 1993  
M.M., B.A., Central  
Washington University  
A.A., Columbia Basin College  
Senior Associate Professor, Music

**Robert B. Chisholm**

Start Year: 2000  
Ph.D., University of Pittsburgh  
B.A., M.A., Queen's University, Ontario, Canada  
Senior Associate Professor, History/Political  
Science

**Heidi L. Clarke**

Start Year: 2003  
A.A.S., Pima Medical Institute  
Assistant Professor, Medical Assistant

**Jason S. Clizer**

Start Year: 2001  
M.A., Gonzaga University  
B.A., Eastern Washington University  
Senior Associate Professor, English Language  
Acquisition (ELA)

**Jonathan Cowles**

Start Year: 2019  
M.S., Andrews University  
B.S., Walla Walla University  
Assistant Professor, Biology/Environmental  
Science

**Curtis Crawford**

Start Year: 1990  
M.Div., Golden Gate Baptist Theological  
Seminary  
M.S., B.S., Western Washington University  
Senior Associate Professor, Mathematics

**Nicholas D. Criddle**

Start Year: 2006  
M.S., B.S., Washington University  
A.A., Columbia Basin College  
Senior Associate Professor, Mathematics

**Antonio Cruz**

Start Year: 1996  
M.A., B.A., Washington State University  
Professor, Intercultural Studies/Spanish

**Donald W. Curry**

Start Year: 2005  
A.A.S., Columbia Basin College  
Certified Welder  
Senior Associate Professor, Welding

**Carolyn Deleon**

Start Year: 2000  
M.Ed., Washington State University  
B.A., University of Massachusetts  
A.A., Endicott College  
Senior Associate Professor, Counseling

**Robert A. Delorto**

Start Year: 2017  
M.S., Eastern Washington University  
Assistant Professor, Mathematics

**Adam R. Diaz**

Start Year: 2015  
M.Tx., University of Denver  
B.S., University of Idaho  
A.A.S., Columbia Basin College  
Associate Professor, Accounting

**Amy Donovan**

Start Year: 2018  
Ph.D., University of Massachusetts  
M.P.H., University of Washington  
B.A., University of Puget Sound  
Assistant Professor, Biology

**Kathleen Driggers**

Start Year: 2019  
MSLS, University of Kentucky  
B.A., University of Oregon  
Instructor, Library

**Madeleine Dupuy**

Start Year: 2019  
Ph.D., Utah State University  
Assistant Professor, Biology

**Steven M. Dye**

Start Year: 2009  
B.A., Washington State University  
Instructor, Worker Retraining

**Leon Erickson**

Start Year: 2018  
M.A., B.A., Western Washington University  
Assistant Professor, English

**Katherine Feliciano- Nguyen**

Start Year: 2013  
B.S., Washington State University  
A.A.S., Columbia Basin College  
Associate Professor, Nursing

**Melissa B. Filkowski**

Start Year: 2014  
Ed.D., University of Washington  
M.A., Pacific Lutheran University  
B.S., Washington State University  
Assistant Professor, Human Development

**Jana D. Freese**

Start Year: 2008  
M.Ed., Heritage University  
B.A., University of California, Davis  
Senior Associate Professor, Mathematics

**Nicholas R. Gardner**

Start Year: 2012  
M.S., University of Illinois - Chicago  
B.S., University of Washington  
Senior Associate Professor, Mathematics

**Anissa Goehring**

Start Year: 2019  
M.P.M., Keller Graduate School of Management  
M.Ed., University of Nebraska - Lincoln  
M.S., Mountain State University  
M.B.A., Strayer University  
B.A., Indiana University  
Instructor, Project Management

**Lori Goff**

Start Year: 2019  
Ph.D., Walden University  
Assistant Professor, Early Childhood Education

**Kristi Green**

Start Year: 2018  
M.S., B.S., Western Governors University  
Assistant Professor, Nursing

**Padmaja Gunda**

Start Year: 2014  
Ph.D., M.S., The City University of New York  
M.P., M.S., University of Hyderabad  
Assistant Professor, Chemistry

**Tim A. Harris**

Start Year: 2015  
M.S., Kaplan University  
B.S., University of Phoenix  
Associate Professor, Criminal Justice

**Kristy L. Henscheid**

Start Year: 2008  
Ph.D., University of Oregon  
B.S., University of Idaho  
Senior Associate Professor, Biology/  
Planetarium

**Christopher D. Herbert**

Start Year: 2013  
Ph.D., University of Washington  
M.A., B.A., Simon Fraser University  
Senior Associate Professor, History

**Melissa K. Holmes**

Start Year: 1999  
M.A., B.A., Western Washington University  
Senior Associate Professor, English

**Gerald B. Hombel**

Start Year: 2012  
M.A., Grand Canyon University  
B.A., Pacific Lutheran University  
A.A.S., Pierce Community College  
Instructor, High School Academy

**Virginia M. Hughes**

Start Year: 2013  
M.S., B.S., Washington State University  
Senior Associate Professor, Mathematics

**Donald M. Humphrey**

Start Year: 2006  
M.Ed., Heritage University  
B.S., Eastern Washington University  
A.A., Columbia Basin College  
Senior Associate Professor, Computer Science

**Janice L. Hylden**

Start Year: 2008  
Ph.D., University of Minnesota  
B.S., College of St. Benedict  
Assistant Professor, Chemistry

**Leslie K. Irwin**

Start Year: 2008  
M.N., Washington State University  
B.S.N., Walla Walla College  
Senior Associate Professor, Nursing

**Angela Johnson**

Start Year: 2019  
M.Ed., Washington State University  
Assistant Professor, Bachelor of Applied  
Science (BAS) Education

**Benjamin A. Johnson**

Start Year: 2013  
M.A., Eastern Washington University  
B.A., Western Washington University  
Associate Professor, English



# Board of Trustees, Faculty & Administrative Exempt

**Miriam Kerzner**

Start Year: 2018  
M.P.I.A, University of Pittsburgh  
B.A., Queen's University  
Instructor, Political Science

**Su-Hyun Kim**

Start Year: 2013  
Ph.D., The University of  
M.S., B.S., Hanyang University  
Senior Associate Professor, Physics

**Jay M. King**

Start Year: 2017  
M.B.A., Walden University  
A.S., Community College of Allegheny County  
Assistant Professor, Radiological Technology

**Cheryl L. Klym**

Start Year: 2008  
M.Ed., Heritage University  
B.S.W., Walla Walla University  
Senior Associate Professor, English Language  
Acquisition (ELA)

**Annalee K. Kodman**

Start Year: 2013  
Ph.D., M.A., University of Delaware  
M.A., East Tennessee State University  
B.A., B.M., Carson-Newman College  
Associate Professor, English

**Krystal A. Lancaster**

Start Year: 2014  
M.S., Gonzaga University  
Associate Professor, Nursing

**Andrea J. Leach**

Start Year: 2017  
M.S., Western Governors University  
B.S., Oregon Institute of Technology  
A.A.S., Yakima Valley College  
Assistant Professor, Dental Hygiene

**Elise N. Leahy**

Start Year: 2016  
M.S., Portland State University  
B.S., University of Oregon  
Assistant Professor, Human Development

**Rebecca S. Luttrell**

Start Year: 2014  
M.S., Eastern Washington University  
B.S., Whitworth University  
Associate Professor, Mathematics

**Ryan M. Malm**

Start Year: 2016  
M.B.A., California State University, Sacramento  
Associate Professor, Business

**David Mandeville**

Start Year: 2018  
Ph.D., M.S., University of Oregon  
Assistant Professor, Exercise Science/Physical  
Education

**Eudelio Martinez**

Start Year: 2018  
Ph.D., University of California Irvine  
Instructor, Intercultural Studies

**Matt Mathesius**

Start Year: 1993  
M.A., B.A., Western Washington University  
A.A., Community Colleges of Spokane  
Senior Associate Professor, English

**Melissa R. McNickle**

Start Year: 2006  
M.S., B.S., Montana State University  
Senior Associate Professor, Mathematics

**Elaina M. Meiners**

Start Year: 2006  
M.Ed., Washington State University  
M.A., B.A., Eastern Washington University  
A.A., Walla Walla Community College  
Senior Associate Professor, English

**Eric S. Melby**

Start Year: 2017  
Ph.D., M.S., B.S., University of Wisconsin-  
Madison  
Assistant Professor, Chemistry

**Christopher F. Mitchell**

Start Year: 2006  
A.A.S., Columbia Basin College  
Senior Associate Professor, Welding

**Melissa A. Mitchell**

Start Year: 2007  
M. Ed., B.A., Portland State University  
Senior Associate Professor, English/Reading

**Matthew Montoya**

Start Year: 2018  
B.A., Brigham Young University  
M.A., Central Washington University  
Assistant Professor, English

**Molly E. Mooney**

Start Year: 2016  
M.S., University of Michigan  
Assistant Professor, Library Services

**Peter Neilson**

Start Year: 2019  
Instructor, Automotive Technology

**Shawn Nyman**

Start Year: 2018  
M.A., The University of Alabama at Birmingham  
B.A., University of Washington  
A.S.N., Walla Walla Community College  
A.A., Walla Walla Community College  
Assistant Professor, Sociology

**Churairat T. O'Brien**

Start Year: 1993  
D.I.T., Capella University  
M.Ed., Heritage University  
B.S., Washington State University  
B.Ed., Srinakarinwirot University  
Professor, Computer Science

**Ryan M. Orr**

Start Year: 2014  
M.S., University of South Carolina  
B.A., Eastern Washington University  
Associate Professor, Mathematics

**Catherine Pattee**

Start Year: 2018  
M.A., B.A., Brigham Young University  
Assistant Professor, Intercultural Studies

**Courtney Patterson**

Start Year: 2019  
Instructor, EMT/EMS

**Robert Pedersen**

Start Year: 1992  
M.A., B.A., Washington State University  
Senior Associate Professor, English

**Becky L. Phillips**

Start Year: 2016  
M.S.N., B.S.N., Washington State University  
Associate Professor, Nursing

**Joy C. Phillips**

Start Year: 2016  
M.F.A., State University of New York  
B.F.A., Columbus College of Art & Design  
Associate Professor, Art

**Phillip A. Ponn**

Start Year: 2016  
A.A., Columbia Basin College  
Associate Professor, Welding

**Bradley Powell**

Start Year: 2018  
M.A., Case Western Reserve University  
Assistant Professor, Sociology

**Monty L. Prather**

Start Year: 2005  
A.A.S., Columbia Basin College  
Senior Associate Professor, Automotive  
Technology

**Virginia Quinley**

Start Year: 1983  
M.A., B.A., Washington State University  
Professor, Communication Studies/Theatre

**Alyssa Reil**

Start Year: 2019  
M.A., University of Nebraska at Kearney  
Instructor, History

**Michael N. Reynolds**

Start Year: 2016  
Ph.D., M.A., Western Michigan University  
Associate Professor, Psychology

**Nicholas Robertson**

Start Year: 2018  
M.S., Eastern Washington University  
Assistant Professor, Exercise Science/Physical  
Education

**Terry J. Rueckert**

Start Year: 2011  
M.S., University of Oregon  
B.S., BA., Washington State University  
A.A., Columbia Basin College  
Assistant Professor, Social/Behavioral Sciences

**Tracie L. Russell**

Start Year: 2012  
M.S., University of Washington  
B.A., Maryville College  
Senior Associate Professor, Mathematics

**Jennifer L. Sainz**

Start Year: 2012  
M.A., San Diego State University  
B.A., Concordia University, Irvine  
Associate Professor, English

**Anthony A. Sako**

Start Year: 1995  
B.S., University of Washington  
Senior Associate Professor, Computer Science

**Dean T. Schau**

Start Year: 1986  
M.A., Washington State University  
B.A., Central Washington University  
Senior Associate Professor, Economics

# Board of Trustees, Faculty & Administrative Exempt

**Bradley J. Sealy**

Start Year: 1999  
M.S., Boise State University  
M.A., University of North Carolina  
B.A., University of California  
Senior Associate Professor, English

**Krista A. Smiley**

Start Year: 2018  
M.S., University of Idaho  
B.S., Oregon Institute of Technology  
Assistant Professor

**Rachel L. Smith**

Start Year: 2016  
M.F.A., University of Idaho  
Associate Professor, Art

**Richard D. Smith**

Start Year: 2010  
Ph.D., University of California  
B.S., Western Washington University  
Senior Associate Professor, Environmental Science/Biology/BAS

**John P. Spence**

Start Year: 2008  
M.S., University of Idaho  
B.S., Lewis-Clark State College  
Senior Associate Professor, Mathematics

**Kiera Squires**

Start Year: 2018  
M.A., Western Washington University  
Assistant Professor, English

**Steven Stauffer**

Start Year: 2016  
Ph.D., Indiana Institution of Technology  
M.P.M., Indiana University  
Associate Professor, Business

**Kay Lynn Stevens**

Start Year: 2003  
M.S., B.S., Washington State University  
Professor, Psychology

**Renae Stout**

Start Year: 2018  
M.S., Purdue University Global  
B.S., Central Washington University  
Assistant Professor, Accounting

**Joe Streetman**

Start Year: 2019  
Ph.D., Capella University  
Assistant Professor, Counseling Center

**Yongsheng Sun**

Start Year: 1994  
Ph.D., Washington State University  
M.Ed., Heritage University  
B.A., Inner Mongolia Teachers' University  
Assistant Professor, Intercultural Studies

**Mark A. Taff**

Start Year: 2000  
Ph.D., M.A., B.A., U.C., Berkeley  
Professor, Anthropology/Psychology

**Libby TenPas-Hunter**

Start Year: 2019  
M.Ed., B.S. Oregon State University  
Assistant Professor, Adult Basic Education (ABE)

**Kim Trinh**

Start Year: 2018  
M.A., University of Washington  
B.A., Whitman College  
A.A., Highline College  
Assistant Professor, English

**Chelsey Vandewall**

Start Year: 2018  
M.S., University of Idaho  
B.S., Pacific University  
Assistant Professor, Dental Hygiene

**Wilikinia A. Vasquez**

Start Year: 2017  
Ed.D., Argosy University  
Assistant Professor, Psychology

**Jennifer Von Reis**

Start Year: 2000  
Ph.D., Washington State University  
M.S., California Polytechnic State University  
B.S., University of Michigan  
Senior Associate Professor, Biology

**Christopher Wagar**

Start Year: 2013  
M.Ed., Western Governors University  
B.A., Washington State University  
Assistant Professor, ABE/Transitional Studies

**Clifford Wakeman**

Start Year: 1994  
M.A., San Francisco State California  
B.A., University of California  
A.A., Modesto Junior College  
Senior Associate Professor, English/Philosophy

**Bruce A. Walker, Jr.**

Start Year: 2014  
M.M., Central Washington University  
B.M., Southern Illinois University Edwardsville  
Associate Professor, Music

**Tracy L. Walker**

Start Year: 2001  
M.F.A., University of Cincinnati  
B.A., M.A., Central Washington University  
Professor, Art

**Tammy D. Wend**

Start Year: 2001  
M.P.Ac., B.S., Montana State University  
Professor, BAS/Accounting/Business

**Kristina Wildenborg**

Start Year: 2019  
B.S., Western Governors University  
Assistant Professor, Health Sciences/Nursing

**Collin Wilson**

Start Year: 2016  
D.M.A., M.M., University of Illinois  
Assistant Professor, Music

**Sylvia Withers**

Start Year: 2007  
M.S.W., Eastern Washington University  
B.S.W., Heritage University  
Senior Associate Professor, Counseling

**Debbie L. Wolf**

Start Year: 1999  
B.A., Washington State University  
A.A.S., Columbia Basin College  
Professor, Computer Science

**Amy Wortley**

Start Year: 2019  
M.A., Eastern Washington University  
Assistant Professor, English

**James L. Wutzke**

Start Year: 2006  
M.S., B.A., Washington State University  
Senior Associate Professor, Communication Studies

**Paige A. Wyatt**

Start Year: 1996  
M.S., Washington State University  
B.S., Oklahoma State University  
Professor, Engineering Technology

**Carol D. Wysocki**

Start Year: 1995  
Ph.D., M.B.A., Washington State University  
B.S., Eastern Oregon University  
B.S., Iowa State University  
Senior Associate Professor, Accounting/  
Business/BAS

**Sharon B. Yedidia**

Start Year: 2011  
M.A., University of Bath  
B.A., Anglia Polytechnic University  
Instructor, Spanish/Spanish Medical  
Interpreting

**Ying Yu**

Start Year: 2004  
M.S., University of Illinois at Urbana-Champaign  
B.A., Shaanxi Normal University  
Senior Associate Professor, Library Services

**Azhar Zaheer**

Start Year: 2019  
M.B.A., The University of Utah  
Assistant Professor, Business

**Limin Zhang**

Start Year: 1993  
Ph.D., M.S., Washington State University  
M.S., B.S., Northeast University of Technology  
Professor, Mathematics

# Academic Calendar

## Fall Quarter 2020

### September 21 to December 10, 2020

September 8 and 10 - Fall Quarter FYI  
September 14 to 18 - In-Service 2020  
September 21 - First Day of Fall Quarter  
November 11 - Holiday: Veteran's Day  
November 13 - Fall Quarter Teaching & Learning Day  
November 25 - Non-Instructional Day  
November 26 to 27 - Holiday: Thanksgiving  
December 7 - Fall Quarter Student Success Day  
December 8 to 10 - Finals  
December 14 - Grades Due  
December 25 - Holiday: Christmas

*Instructional Days: 53*

*Teaching & Learning Days: 1*

*In-Service Days: 5*

*Student Success Days: 1*

## Winter Quarter 2021

### January 4 to March 25, 2021

January 1 - Holiday: New Year's Day  
January 4 - First Day of Winter Quarter  
January 18 - Holiday: Martin Luther King, Jr. Day  
February 15 - Holiday: President's Day  
February 18 - Winter Quarter Teaching & Learning Day  
March 22 - Winter Quarter Student Success Day  
March 23 - to 25 Finals  
March 29 - Grades Due

*Instructional Days: 55*

*Teaching & Learning Days: 1*

*Student Success Days: 1*

## Spring Quarter 2021

### April 5 to June 18, 2021

April 5 - First Day of Spring Quarter  
April 30 - Spring Quarter Teaching & Learning Day  
May 31 - Holiday: Memorial Day  
June 15 - Spring Quarter Student Success Day  
June 16 to 18 - Finals  
June 18 - Commencement  
June 22 - Grades Due

*Instructional Days: 52*

*Teaching & Learning Days: 1*

*Student Success Days: 1*

## Summer Quarter 2021

### June 28 to August 20, 2021

June 28 - First Day of Summer Quarter  
July 5 - Holiday: Independence Day  
August 20 - Finals  
August 24 - Grades Due

*Instructional Days: 39*

## Calendar Terms and Definitions

### Academic Year

Four consecutive quarters beginning with summer quarter.

### 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.

### 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.

### Counselor/Librarian Faculty

Faculty who are employed as counselors or librarians.

### 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.

### Instructional Day

A contract day in which classes are scheduled for students and faculty.

### Instructional Faculty

Faculty whose primary assignment is teaching.

### Instructional Year

Three consecutive academic quarters beginning with fall quarter.

### 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.

### 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.

### 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.

### Student Success Days

Three scheduled days each instructional year occurring on the non-instructional day immediately preceding the first day of finals during which faculty engage in student-success-related activities