COURSE CATALOG 2020-2021

BIG BEND COMMUNITY COLLEGE

7662 Chanute Street NE ■ Moses Lake, Washington

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Welcome to Big Bend!

Big Bend Community College (BBCC) has delivered excellence in teaching and learning since 1962. Residents in Big Bend's 4,600-mile service district in the central Columbia Basin, the state of Washington, the United States, and around the world have benefited from our college's caring staff, committed faculty, and highly-valued programs. Our Big Bend Campus Community is grateful for the
Opportunity to serve and help you achieve your educational goals.

BBCC takes pride in being "student ready." We offer a variety of services and programs that are built around the needs of our students and local community and focused on helping both achieve their vision of success. No matter your educational goal, or your training need, BBCC has a success strategy and support services to help you achieve it! We have designed the 2020-2021 Course Catalog to answer your questions about the college resources that are available to help you succeed. We hope that you will explore this catalog, and the various support services that may interest you, and use this information to chart your personal journey to success.

Thank you for being a part of our Big Bend Campus Community. We wish you every success as you make your educational dreams come true!

Terrence Leas
BBCC President

Calendar 2020-2021

		Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
Financial Aid Priority Deadline		April 15	July 15	Nov. 15	Feb. 15	April 15
Advising Begins		April 27	April 27	Oct. 19	Feb. 1	May 3
Priority Registration	*Currently Enrolled Students*	May 18-20	May 18-20	Nov. 9, 10, 12	Feb. 22-24	May 24-26
	Previously Enrolled Students	May 21	May 21	Nov. 13	Feb. 25	May 27
Open Registration		May 26	Sept. 8	Dec. 7	March 8	May 25
Tuition Due		June 18	Sept. 10	Dec. 17	March 18	June 17
Instruction Begins		July 6	Sept. 21	Jan. 4	April 5	July 1
Last day to add a class to your schedule (with instructor permission)		July 8	Sept. 24	Jan. 7	April 8	July 6
Last day to drop a class		August 7	Nov. 19	March 3	June 1	August 5
Instruction ends		August 14	Dec. 3	March 17	June 15	August 12
Final exams		Last day of instruction	Dec. 7-9	March 22-24	June 16-18	Last day of instruction
Grades available		August 21	Dec. 18	April 1	June 24	August 19
Commencement					June 18	
No classes held these days:		Independence Day July 3	Veterans' Day Nov. 11 Thanksgiving Nov. 25-27	Martin Luther King, Jr. Day Jan. 18 Presidents' Day Feb. 15	Memorial Day May 31	Independence Day July 5

Tentative calendar, subject to change without notice

Updated 04/22/2020

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Accreditation

Big Bend Community College is accredited by the Northwest Commission on Colleges and Universities. Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation. Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Board of Trustees

Ms. Anna Franz
(Appointed 3/2012), Moses Lake

Mr. Jon Lane
(Appointed 12/2010), Moses Lake

Mr. Stephen McFadden - Chair
(Appointed 12/2011), Ritzville

Ms. Juanita RIchards
(Appointed 10/2014), Moses Lake

Mr. Thomas Stredwick
(Appointed 10/2017), Soap Lake

The above listed citizens are Trustees of BBCC and are responsible to citizens of the Big Bend Community College service district for the operation of the college. The board meets regularly every six weeks. Each is appointed by the governor of the state of Washington and confirmed by the Washington State Senate to staggered five year terms.

History

Big Bend Community College was authorized by the Washington State Board of Education in 1961. Beginning fall quarter 1962 BBCC held its first regular classes at night in Moses Lake High School. The college opened classes in a new facility located a short distance southeast of the city of Moses Lake fall quarter 1963. In 1966, BBCC acquired a 159-acre tract of land on the former Larson Air Force Base, which became the permanent college campus for all programs in 1975.

The Washington State Legislature's Community College Act of 1967 designated Big Bend Community College as District 18 of the state community college system. The district includes Adams and Grant Counties, and the Odessa Consolidated School District in Lincoln County.

Mission

Big Bend Community College Delivers lifelong learning through commitment to student success, excellence in teaching and learning, and community engagement.

Vision

Big Bend Community College inspires every student to be successful.

Values

Student Success
Excellence in Teaching & Learning
Inclusion
Community Engagement
Integrity and Stewardship

Board Ends Statements

E-1 Mission

BBCC delivers lifelong learning through commitment to student success, excellence in teaching and learning, and community engagement.

E-2 Student Success

BBCC provides the diverse population of its entire district with access to opportunities, assists students in completion of their goals, and develops skills for lifelong learning.

E-3 Excellence in Teaching and Learning

BBCC supports innovation, variety, and creativity; maintains high academic and industry standards; and supports professional development for continued growth.

E-4 Community Engagement

BBCC supports economic development by nurturing community and industry partnerships and support to the college to enhance access and service to our district population

E-5 Integrity and Stewardship

BBCC acts as a responsible steward of resources by promoting accountability, sustainability, ethics and honesty, and prudent resource management to provide quality and affordable resources to the diverse population of our service district.

E-6 Inclusion and Climate

BBCC provides and maintains a climate of inclusiveness for students, employees and partners by maintaining a safe learning environment and promoting cultural inclusiveness, understanding, and respect by embracing diversity, access, opportunity, and equity.

(Approved by the Board of Trustees 1/16/14)

Civil Rights Non-Discrimination Statement

Big Bend Community College District 18 provides equal opportunity in education and employment and does not discriminate against anyone on the basis of race, sex, sexual orientation, gender identity/expression, religion, age, color, creed, national or ethnic origin, the presence of any physical, mental, or sensory disability, use of a trained guide dog or service animal by a person with a disability, marital status, pregnancy status or families with children, a mother breastfeeding her child, AIDS/HIV or hepatitis C, genetic information and/or status as a veteran, or any other legally protected status.

BBCC provides reasonable accommodations for qualified students, employees, and applicants with disabilities in accordance with the Americans with Disabilities Act and Section 504 of the Federal Rehabilitation Act of 1973.

Big Bend Community College encourages persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact the individuals noted below as soon as possible to allow sufficient time to make arrangements.

The following persons have been designated to handle inquiries regarding non-discrimination policies and requests for accommodations:

Kimberly A. Garza, Vice President of Human Resources & Labor
Equal Opportunity Officer/Title IX Coordinator/Section 504 Coordinator
Building 1400, Second Floor, Room 1449
509.793.2010

Azucena Halmsteiner, Disability Support Services Coordinator
Building 1400, First Floor, Room 1472
509.793.2027 or TDD 509.793.2325

Discrimination

Big Bend Community College provides equal opportunity in education and employment and does not discriminate against anyone on the basis of race, sex, sexual orientation, gender identity/expression, religion, age, color, creed, national or ethnic origin, the presence of any physical, mental, or sensory disability, use of a trained guide dog or service animal by a person with a disability, marital status, pregnancy status or families with children, a mother breastfeeding her child, AIDS/HIV or hepatitis C, genetic information and/or status as a veteran, or any other legally protected status.

BBCC is prohibited from discriminating in such a manner by college policy and by state and federal law. All college personnel and persons, vendors and organizations with which the college does business are required to comply with applicable federal and state statutes and regulations designed to promote affirmative action and equal opportunity.

The following persons have been designated to handle inquiries regarding the non-discrimination policies:

Kimberly A. Garza
VP of Human Resources
EO/Title IX Coordinator
7662 Chanute Street NE Building 1400, Office 1449 Moses Lake, WA 98837 (509) 793-2010
TDD (509) 762-6335

Azucena (Azi) Halmsteiner
Disability Services Coordinator
7662 Chanute Street NE Building 1400, Office 1473 Moses Lake, WA 98837 (509) 793-2027

Affirmative Action and Diversity Statement

Big Bend Community College is an equal employment opportunity and affirmative action employer. Applicants with multicultural experience and/or backgrounds which will add cultural richness and diversity to Big Bend Community College as well as protected groups are encouraged to apply.

Big Bend Community College District 18 provides equal opportunity in education and employment and does not discriminate against anyone on the basis of race, sex, sexual orientation, gender identity/expression, religion, age, color, creed, national or ethnic origin, the presence of any physical, mental, or sensory disability, use of a trained guide dog or service animal by a person with a disability, marital status, pregnancy status or families with children, a mother breastfeeding her child, AIDS/HIV or hepatitis C, genetic information and/or status as a veteran, or any other legally protected status.

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VP of Human Resources
EO/Title IX Coordinator 7662 Chanute Street NE Building 1400, Office 1449 Moses Lake, WA 98837 (509) 793-2010
TDD (509) 762-6335

To receive this information in an alternative format, please contact:

Azucena (Azi) Halmsteiner
Disability Services Coordinator
7662 Chanute Street NE Building 1400, Office 1473 Moses Lake, WA 98837 (509) 793-2027

Clery Act

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (Clery Act) is a federal statute codified at 20 U.S.C. § 1092(f), with implementing regulations in the U.S. Code of Federal Regulations at 34C.F.R. 668.46.The ViolenceAgainst WomenAct of 2013 adds additional requirements under the Campus Sexual Violence Act (SaVE Act) provision, Section 304.

The Clery Act requires all colleges and universities that participate in federal financial aid programs to keep and disclose information about crime on and neartheirrespectivecampuses.ComplianceismonitoredbytheUnitedStates Department ofEducation,which can impose civil penalties(up to $54,789 per violation) against institutionsfor each infraction and can suspend institutions from participating in federal student financial aid programs.

The law is named for Jeanne Clery, a 19-year-old Lehigh (Penn.) University freshmanwhowasrapedandmurdered in her campus residence hall in 1986. The backlash against unreported crimes on numerous campuses across the country led to the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act. The CleryAct, signed in 1990, was originally known as the Crime Awareness and Campus Security Act.

In compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (Clery Act), BBCC's Annual Security and Fire Report contains statistics of Clery Act crimes that are reported and that occurred on campus, in other locations owned or controlled by BBCC, and on public property within or immediately adjacent to and accessible from the campus for the three most recent calendar years.

All students are encouraged to review the report and to report all criminal or fire related incidents promptly to the Campus Safety Department.

For more information on the Clery Act and BBCC's Annual Security and Fire Safety Report,visit www.bigbend.edu/student-life/campus-safety/ To view Cleary Act Crime statistics, visit www.bigbend.edu/student-life/campus-safety/annual-crime-report/ A printed copy of the report may be obtained by calling Campus Safety at 509-793-2286, or visiting at 7662 Chanute St NE, Moses Lake, Washington.

Disclaimer Statement

This catalog and its components shall not constitute a contract between Big Bend Community College and prospective or enrolled students. The information contained in this catalog reflects the current policies and regulations of the college. However, the college reserves the right to make changes in its policies and regulations at any time. If policies or regulations of the college at any time conflict with information contained in this catalog, the policies and regulations will govern, unless expressly determined otherwise by the Board of Trustees. The college reserves the right to eliminate, cancel, phase out or reduce in size courses and/or programs for financial, curricular or programmatic reasons.

Limitations of Liability

The college's total liability for claims arising from a contractual relationship with the student in any way related to classes or programs shall be limited to the tuition and expenses paid by the student to the college for those classes or programs. In no event shall the college be liable for any special, indirect, incidental or consequential damages, including but not limited to, loss of earnings or profits.

Our degrees and certificates largely fall within one of our six focus areas. Each of these areas may include workforce and transfer options

Aviation

- Commercial Pilot/Flight (AVF)
- Aviation Maintenance Technology Powerplant/ Airframe (AMT)
- Unmanned Aerial Systems Commercial Remote Pilot (Drone) (UMS)

Business

- Accounting (ACCT)
- Agribusiness-Agriculture Programs (AGR)
- Business Administration (BUS)
- Business Information Management (BIM)

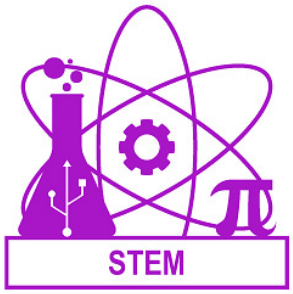
Healthcare

- Medical Assistant (MA)
- Medical Office and Billing Support Services (BIM)
- Medical Records and Healthcare information
- Medical Simulation (SIM)
- Nursing Assistant (NA-C)
- Nursing (NUR)
- Pre-Professional Transfer (Pre-MED)

Industry, Manufacturing & Trades

- Automotive Technology (AUT)
- Agriculture (AGR)
- Commercial Drivers License (CDL)
- Computer Science (CS)
- Industrial Systems Technology (IST)
- Mechatronics (MCT)
- Welding (WLD)

STEM



- Agriculture (AGR)
- Astronomy (ASTR)
- Biology (BIOL)
- Botany (BOT)
- Chemistry (CHEM)
- Computer Science (CS)
- Engineering (ENGR)
- Mathematics (MATH)
- Mechatronics (MCT)
- Medical Simulation (SIM)
- Physic (PHYS)

The Arts, Education and Human Services

- Anthropology (ANTH)
- Art (ART)
- Criminal Justice (CJ)
- Early Childhood Education (ECE)
- Economics (ECON)
- English (ENGL)
- History (HIST)
- Homeland Security and Emergency Management (HSEM)
- Music (MUSC)
- Philosophy (PHIL)
- Physical Education (PEH)
- Political Science (POLS)
- Psychology (PSYC)
- Religious Studies (RELS)
- Sociology (SOC)
- World Languages (Previously Foreign Languages) (FRCH, GERM, SPAN)

Admissions

BBCC accepts all applicants who are 18 years of age or older. Those under 18 years of age who have graduated from an accredited high school, have an equivalent certificate, e.g., the General Education Development Test, or qualify as a Running Start student will be admitted. Applicants who are younger than 18 and who do not meet these requirements must provide BBCC with a written release from their school principal authorizing BBCC to admit them. All applicants must be 16 years of age or older unless they have graduated from high school or are part of a state approved program such as Running Start. Some programs have specific admission procedures and limited space; therefore, admission to BBCC does not guarantee availability of all programs.

Students enrolling in a degree or certificate program must apply for admission. BBCC will assign an advisor and evaluate transfer course work for officially admitted students. Registration priority is given to admitted students. Individuals who must obtain a certificate to keep a job due to a change in regulations may complete a single certificate without being admitted. This exception is limited to certificates requiring fewer than 45 credits, and does not apply to students who must have transfer credits evaluated for completion.

To apply for admission at BBCC a student must:

1. Apply online at www.bigbend.edu or obtain and complete an application for admission form. A printable form is available online at https://www.bigbend.edu/admissions/ or paper copies are available in the Admissions/Registration Office, 1st floor, Bldg. 1400.
2. Send for official transcripts from former colleges attended. Transcripts received directly from students must be in envelopes sealed by the originating school. Veterans must submit transcripts from all previous colleges, including Joint Service Military Transcripts if applicable.

Admission Checklist

1. Students entering BBCC for the first time must apply for admission. Applications may be completed online at www.bigbend.edu or the form may be obtained online at https://www.bigbend.edu/admissions/ ,in the Admissions/Registration Office (Building 1400), or by calling 509.793.2061.
   Transfer students must send for official college transcripts. Transcripts should be mailed to: Admissions/Registration, Big Bend Community College, 7662 Chanute Street NE, Moses Lake, WA 98837-3299. Most schools require the student's signature and many require a fee for official transcripts. Prospective students should check with their former school for transcript ordering procedures.
2. Financial aid forms are available on the Federal Student Aid website www.studentaid.gov. Please consult Financial Aid Office staff in the Financial Aid Office (Building 1400) or by calling 509.793.2088 for application deadlines and assistance accessing the application. Scholarship and other information is also available online at https://www.bigbend.edu/admissions/paying-for-college/ or from Financial Aid Office staff.
3. Math and English placement tests should be taken by new students seeking a BBCC degree or those planning to enroll in a math or English course. Students usually complete both tests in three to four hours. The fee is $10.00 per test. To explore other placement options, visit the Testing Center web page at https://www.bigbend.edu/admissions/testing-services/. If you quality for alternative placement, submit documents to admissions@bigbend.edu. For additional information see the Placement Tests section of this catalog.
4. All new students are required to complete an online orientation before attending new student registration. To access the online orientation, visit orientation.bigbend.edu. Students will need to set up an account to complete orientation. The online orientation is a resource for students to refer back to any time.
5. New student registration sessions occur before fall, winter, and spring quarters. During these sessions, advisors will help students understand their placements, how to find essential resources on the BBCC website, choose first quarter classes, and learn how to register for classes. View dates, times, and the procedure for signing up at https://www.bigbend.edu/getting-started/.
6. Registration in classes is not official until tuition and fees are paid. Students should check the academic calendar for payment due dates. Payment options are available, stop by the business office in the 1400 building or call 509.793.2018.

Resident Classification for Tuition

To be considered a resident for purpose of tuition, a person must be either (1) a financially independent student who has had a domicile in the state of Washington for a period of one year immediately prior to the commencement of the quarter for which

the student has registered and has established a bona fide domicile for purposes other than educational; or (2) a dependent student whose parent(s) or legal guardian(s) has maintained a domicile in the state of Washington for at least one year prior to commencement of the quarter for which the student has registered.

United States citizens or INS permanent residents who do not live in Washington State qualify for a waiver of part of the nonresident tuition.

Students who are not permanent residents or citizens of the United States but who have met the following conditions may qualify for resident status: resided in Washington State for the three years immediately prior to receiving a high school diploma, and completed the full senior year at a Washington high school, or completed the equivalent of a high school diploma and resided in Washington State for the three years immediately before receiving the equivalent of the diploma, and continuously resided in the state since earning the high school diploma or its equivalent. Such students must complete a declaration form available in the Admissions/ Registration Office.

A nonresident student enrolled for more than six credit hours per quarter shall be considered as attending primarily for educational purposes. Such period of enrollment shall not be counted toward establishment of domicile in this state, unless the student proves domicile was established for purposes other than educational.

Once a student has been classified as resident or nonresident and registered, the classification will remain unchanged until satisfactory evidence showing cause for change is presented in writing. The conditions listed below, which typically must be accomplished one year prior to classification as a resident, may be required evidence of having become a Washington resident.

- Permanent full-time or part-time employment in the state of Washington.
- Purchase of property in the state of Washington.
- Registration of all vehicles in the state of Washington.
- Registration to vote in the state of Washington.
- Valid Washington State driver's license.
- Rent receipts from an apartment or home in the state of Washington.
- Establishment of bank accounts in the state of Washington.

Forms to petition for a change in residency status are available in the Admissions/Registration Office and must be submitted before the fifth day of the quarter if the change is to take effect for the current quarter.

Placement Testing

New students seeking a BBCC degree or planning to enroll in math or English courses must take placement tests or provide other approved placement information prior to meeting with an advisor and registering for classes unless they have previously fulfilled BBCC math and English requirements at another college or university. The fee is $10.00 per test. Placement test scores are void after two years. To see other alternative placement options visit the Testing Center web page at bigbend.edu. Students living out of the area may take math and English placement tests at a local college. Scores should be sent directly to the BBCC Admissions/Registration Office. For further information or to make a placement test appointment call the Test=ing Center at 509.793.2064.=

Viking Online Orientation

(New Student Orientation)

All new students are required to complete an online orientation prior to attending New Student Registration (NSR). The orientation is self-paced. New students will gain knowledge on general college information, paying for college, connecting to support programs, student life, campus safety and next steps. The online orientation can serve as a resource tool allowing students to refer back to anytime they have questions.

Dual-Credit Programs

Dual-credit programs, sometimes referred to as dual-enrollment programs, provides the opportunity for high school students to earn both high school and college credits in the same course at the same time. There are four main types of dual-credit programs: Running Start, College in the High School, CTE Dual Credit (formerly called Tech Prep) and Advanced Placement (AP)/ International Baccalaureate (IB).

Running Start

Running Start allows qualified high school juniors and seniors to enroll tuition-free in college-level courses as part of their high school programs of study. Books, supplies, lab fees, and transportation are the responsibility of the student. Students are responsible to pay for any courses numbered below 100.

Subject to total credit load limitations, high school students attending BBCC under the Running Start program may simultaneously earn high school and college credits. Students interested in applying for entry to BBCC through the Running Start Program must first contact their local high school to determine eligibility. Application of college courses toward meeting specific high school graduation requirements is determined by local school districts. Prior to college registration, school district advising and approval/certification of student programs is required.

To be admitted to BBCC as a Running Start student, students must: be registered as a junior or senior in a Washington state public school, be under 21 years of age, and place into a college-level English or college-level mathematics course. (College-level classes are numbered 100 and above.)

Students who will take only professional/technical courses, such as welding, industrial systems technology, etc., may qualify by placement into the required English and mathematics for that program.

Home schooled students and students attending private schools must be evaluated at the junior or senior level by a public high school official and enroll at that school.

Students who have passed the GED and who do not have a high school diploma may enroll through their high school and be eligible for the Running Start program until the age of 21.

For additional program information, students may contact their high school counselor or the BBCC Counseling Center at 509.793.2035.

Career and Technical Education (CTE)

Dual Credit (Formerly Tech Prep)

CTE Dual Credit provides the opportunity for high school students to earn college credit in their high school career and technical education (CTE) classes without leaving their high school campus. CTE Dual Credit classes are taught at the high school or skills center and integrate academics with technical skills to help prepare students for advanced education and careers related to workforce occupations. Students should contact their high school to find out which classes qualify for CTE Dual Credit.

College in the High School

College in the High School (CiHS) programs provide college-level academic courses in high schools for qualified students. To provide CiHS classes, a high school contracts with a college or university. CiHS courses are taught at the high school by high school teachers who have met college qualifications to teach the class. CiHS courses must be approved college curriculum, listed in the college catalog; they are the same courses offered at the college, held to the same standards of grading and evaluation, but are taught at the high school. Students should contact their high school to find out which College in the High School classes are offered.

Advanced Placement (AP)

International Baccalaureate (IB)

Most colleges award college credit for students who achieve certain scores on the Advanced Placement (AP) or International Baccalaureate (IB) exams. Students take AP or IB classes located at the high school, but to earn college credit for those classes, students must pass an exam with a certain score. Students pay exam fees. Every college has its own policy for awarding or transferring in credits and coursework.

Entering Transfer Students

Admitted students transferring to BBCC will be given appropriate credit for college level work completed at a regionally accredited institution. Students must submit official transcripts from each institution attended to the Admissions/Registration Office. Credit will be awarded on the basis of official transcripts only. Once official transcripts have been received by BBCC, processing may take 2 to 4 weeks during high-volume periods for admitted students. Students will be contacted via email after transfer credits have been evaluated and posted. The cumulative grade point average of all credits accepted must be 2.00 or higher. Although there is no limit on the number of credits a student may transfer to BBCC before graduating, the student must meet all BBCC degree requirements; including residency requirements (see Degree and Certificate Requirements section).

BBCC subscribes to the statewide Policy on Inter-College Transfer and Articulation among Washington Public Colleges and Universities endorsed by the public colleges and universities of Washington State and the State Board for Community and Technical Colleges and adopted by the Student Achievement Council. For more detailed information contact the Admissions/Registration Office or the Counseling Center.

In programs where appropriate, credits may also be given for military service schools attended. These are normally awarded as recommended by the ACE Guide to the Evaluation of Educational Experience in the Armed Services. Current and former military members may obtain information on ordering a military transcript at the following website: https://jst.doded.mil/smart/welcome.do.

CTC Reciprocity Agreement

Washington community and technical colleges (CTCs) offer reciprocity to students transferring within the CTC system who are pursuing the Associate in Arts & Science - Direct Transfer Agreement (DTA) degree or the Associate in Science – Transfer (AS-T) degree. Students who completed an individual course that met distribution degree requirements or fulfilled entire areas of their degree requirements at a prior college will be considered to have met those same requirements at BBCC if they plan to complete the same degree when they transfer. These degree requirements include communication skills, quantitative skills, or one or more distribution area requirements. Students must initiate the review process and must be prepared to provide necessary documentation. For complete information, students should contact staff in the Admissions/Registration Office. The policies and procedures can be found on the BBCC website at www.bigbend.edu.

Transfer Rights and Responsibilities

The following are rights and responsibilities for all students transferring from or into public colleges and universities in the state of Washington as published by the Washington Student Achievement Council (www.wsac.wa.gov).

Student Rights and 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 and University Rights and 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).

International Students

BBCC encourages and welcomes applications for admission from students of other countries who wish to pursue a quality educational experience in the United States. BBCC provides a variety of educational opportunities in the liberal arts and technical program areas and is committed to increasing understanding and exchange of social awareness, cultural enrichment and sharing of ideas.

Upon successful completion of the admission requirements below, students who are approved for admission will be issued an I-20. Students must then apply for and be granted an F-1 visa.

Prospective students may request an application for international student admission from the Admissions/Registration Office, Big Bend Community College, 7662 Chanute Street NE, Moses Lake WA 98837 or at the BBCC website www.bigbend.edu.

International Student Admission Requirements

(The following admission requirements must be completed 60 days prior to the first day of class.)

- BBCC application for admission must be submitted
- Official copy of high school and/or college transcripts must be submitted with official English translation.
- Proof of adequate financial support for all expenses for one academic year (September to June) must be documented with the Declaration and Certification of Finances form and official bank documents or original, signed letters verify funds are available.
- English proficiency must be documented. One of the following is acceptable.
    - A minimum TOEFL (Test of English as a Foreign Language) Score of 450 on the paper exam or 48 on the internet based exam with a minimum score of 12 on each section: reading, writing, speaking and listening. An official score report must be submitted to the Admissions/Registration Office. Copies are not acceptable.
    - For students already in the United States, a satisfactory score on the BBCC English Placement Test. This test must be taken on campus. See the Placement Tests section of this catalog for more information.
    - Minimum IELTS score of 4 in every band.

After the above requirements have been met, the Admissions/Registration Office will request a non-refundable advance payment of tuition and fees in the amount of $50.00 U.S. This deposit must be received before the I-20 will be issued.

Once the I-20 is issued the prospective student must apply for their student visa at the United States Embassy or Consulate closest to their home. Their passport, bank statement or sponsorship papers and proof of payment of the SEVIS fee (I-901) will be required. Students may go to the following website for more information regarding the SEVIS fee: www.ice.gov/sevis.

International students transferring from U.S. institutions must be in compliance with F-1 visa requirements as defined by the U.S. Department of Homeland Security. BBCC requires completion of an Intent to Transfer form which will be sent to students upon request.

All international students are required to take the math and English placement test prior to registration, unless they have U.S. college transfer credits in math or English. International students must enroll in an English class each term until they have reached the English level required for their major program. International students must live in a college residence hall during the first quarter of attendance.

International students are encouraged to have medical/health insurance or purchase one of the insurance plans available to them in the United States. Students who drive cars should have minimum liability auto insurance as required by state law to cover injuries to persons or damage to property.

Student Responsibilities

Students attending BBCC on an F-1 visa must:

- Keep passport, I-20 and I-94 valid.
- Complete at least 12 college credits each quarter.
- Maintain satisfactory standards of progress.
- Obtain an official signature on the I-20 ID each time they leave the country.

Advising

Counselors, full-time instructors and other trained staff serve as advisors to help students set educational and career goals. Advisors provide students with individualized attention needed to discuss educational support services, goals, programs and course selections.

Students are encouraged to participate in advising services at BBCC to assist in the completion of their programs of study. Meeting with an advisor prior to registering for classes each quarter can be helpful in the educational planning of a student's degree or program. Students who intend to transfer need to take the time to learn about their prospective transfer school's requirements early in their educational planning process.

Advising prior to registration each quarter is mandatory for some students including new students, students with fewer than 30 earned credits, and students on academic probation.

Although advisors are available to assist with education, it is the student's responsibility to be informed about their degree or program requirements and college policies.

Dropping a class

A student may drop classes up to ten days before the beginning of final exams without written permission of the instructor. The final date to drop is printed in the Academic Calendar. Students may drop classes online using the BBCC Student Kiosk at www.bigbend.edu or by completing paperwork in the Admissions/Registration Office. Students who are receiving financial aid and wish to withdraw completely must inform personnel in the Financial Aid Office. Courses that are dropped during the first ten days of the quarter are not included on the student's academic transcript (Summer Quarter: first six days). Courses dropped after the 10th day will be recorded with a "W" on the transcript.

Refund Policy

Students who stop attending class without completing the process to drop classes may not be eligible for refunds and may receive failing grades. Students requested to withdraw for disciplinary reasons or delinquent attendance may not be eligible for refunds. Students who withdraw from a class or from BBCC using proper procedures may be entitled to a refund on the following basis:

Prior to first instructional day.....100% refund
During first week of quarter.....80% refund
During second week of quarter.....50% refund
During the third week of quarter.....40% refund
After third week of quarter..... No refund

* Summer Quarter-see summer quarter Important Dates for refund dates.

Financial aid recipients who complete zero credits, stop attending or withdraw from all classes may owe a repayment of the aid for which they were not eligible. This policy applies to all federal and state financial aid except work study earnings. The last date the student attended a class or officially withdrew is used to determine the amount of the repayment. For more information please visit: http://www.bigbend.edu/admissions/financial-aid/what-if-i-withdraw. Active military personnel or reservists in any branch of the U.S. Armed Forces who withdraw because they are called to active duty during a quarter will be eligible for a 100% tuition refund for that quarter. A copy of the military orders must be provided.

Students required to withdraw during the first half of a quarter because of the students' medical condition will be eligible for a 100% tuition refund for the quarter. A doctor's statement must be provided.

Registration

All students must complete the registration process before attending classes at BBCC. Registration sessions are scheduled before the beginning of each quarter for new students. At the new student registration sessions students will meet with an advisor for help with class selection. Staff members are also available to assist with the online registration process. A class schedule is published on the BBCC web site approximately six weeks before the beginning of each quarter. Detailed information about registration dates and times and class information is in the class schedule. Students are encouraged to use the BBCC Student Kiosk at www.bigbend.edu to register.

Registration Access Time

Registration access times are for registration only, not advising. Students are responsible for arranging appointments with their advisors prior to their registration access time. Big Bend Community College is proud to offer priority registration for Veterans and Service Members. Students identified as Veterans or Service Members are eligible to register for classes before other student groups on the first day of priority registration. Please see the Academic Calendar for priority registration dates. Continuously enrolled students are issued priority registration access times based on the total number of credits earned. Current students may find their access time at the BBCC Student Kiosk at www.bigbend.edu. Former BBCC students may contact the Admissions/ Registration Office for a registration access time. New students with 30 or more transfer credits register after currently enrolled students. Information concerning times is included in the class schedule. New students with fewer than 30 transfer credits register after all student Veterans/Service Members, current, and former students during new student registration sessions or open registration.

Resident Student Tuition

1-10 credits, per credit $110.26
11-18 credits, additional per credit $54.58
Over 18 credits, additional per credit $98.93
Over 18 credits, Prof/Tech per credit $10.00

Non-Resident Waiver (U.S. Citizen) Student Tuition

1-10 credits, per credit $124.85
11-18 credits, additional per credit $55.35
Over 18 credits, additional per credit $98.93
Over 18 credits, Prof/Tech per credit $10.00

Non-Resident International (Not U.S. Citizen) Student Tuition

1-10 credits, per credit $288.13
11-18 credits, additional per credit $61.83
Over 18 credits, additional per credit $276.80
Over 18 credits, Prof/Tech per credit $33.00

A $5.65 per credit technology fee will be added to the amounts above.

Some courses have special lab fees in addition to normal credit hour charges. A listing of additional fees will be printed in the quarterly class schedule.

On-Line Orientation Fee $30.00
Strong Vocational Interest Inventory Test $15.00
General Education Development Test (GED) $120.00
Flight Insurance (estimate) $95.00
Placement Tests (each) $10.00

Audit Student

Audit fees are the same as listed above depending on classification of student status.

Flight Fees

Aviation Flight Performance Deposit $200.00

Students applying for the commercial pilot program must submit a deposit before being accepted into the flight program. This deposit is applicable to the first quarter flight fees. Should an accepted student decide not to enroll, a refund will be made as follows:

- 80% refund if notice is received prior to June 1.
- 60% refund if notice is received prior to July 1.
- 40% refund if notice is received prior to August 1.
- 20% refund if notice is received prior to September 1.
- No refund is allowed on September 1 or thereafter.

Aviation Flight Fee

Before students are allowed to fly they must have paid the required flight fees. Flight fees are based on projected flying for the quarter and must be paid in advance. Flight fees vary depending on the type of flying. For the current fee schedule, contact the Aviation Department .

Nursing Fees

Nursing Program Deposit $250.00

Students who are accepted into the Nursing program will be required to submit a deposit. The deposit will be applied to required background checks and testing fees. Should an accepted student decide not to enroll, a refund will be made as follows:

- 80% refund if notice is received prior to June 1.
- 60% refund if notice is received prior to July 1.
- 40% refund if notice is received prior to August 1.
- 20% refund if notice is received prior to September 1.
- No refund is allowed on September 1 or thereafter.

Residence Hall Fees

Subsequent years may vary according to the cost of living increase. Meal plans are not included.

Room and Damage Deposit* $200.00
Shared Room (per quarter) $960.00
Single Room (per quarter, if available) $1,300.00

Summer quarter rates are determined each year. Rates are approximately half of the regular quarter rate.

*The $200.00 room and damage deposit fee must be received by the BBCC Business Office before a room assignment can be confirmed.

NOTE:
Annual increases to tuition are subject to State of Washington Legislation. Please check the tuition and fee schedule on the Big Bend Webpage, under the admissions tab, follow the Pay for College button, for the most up-to-date rates.
URL address:
https://www.bigbend.edu/wp-content/uploads/2018/05/2019-20-BBCC-tuition-schedule.pdf

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

The Student Center/Administration Building (1400) houses the Associated Student Body (ASB) Office, Student Activities, Student Success Center, TRiO - Student Support Services, Outreach and Recruitment, Testing Center, Student Administrative Support Services Offices (Admissions/Registration Office, Financial Aid, Student Employment, Veterans' Education Benefits, Counseling Center, the Dean of Student Services), and the Vice President of Learning and Student Success. Also located in this building are the administrative offices (Business Office, Human Resources, Institutional Research, Public Information Office, and the President's Suite) and the BBCC Bookstore. Student information such as student bulletins, event notices, announcements, etc. are posted in this building.

Academic Advising

Counselors, full-time instructors and other trained staff serve as advisors to help students set educational and career goals. Advisors provide students with individualized attention needed to discuss educational support services, goals, programs and course selections. Students are encouraged to participate in advising services at Big Bend Community College to assist in the completion of their programs of study. Meeting with an advisor prior to registering for classes each quarter can be helpful in the educational planning of a student's degree or program. Students who intend to transfer need to take the time to learn about their prospective transfer school's requirements early in their educational planning process. All new students must meet with an advisor before registering, either at New Student Registration, or individually. Students with fewer than 30 earned credits must meet with an advisor prior to registration each quarter. All students on academic probation must see their advisor before registering for courses. Although advisors are available to assist with education planning, it is the student's responsibility to be informed about their degree or program requirements and college policies.

Baccalaureate Opportunities on Campus

Students in the BBCC service district have the opportunity to complete several different baccalaureate degree programs through Central Washington University (CWU).

CWU delivers courses at BBCC via two-way interactive television with sites in Ellensburg, Wenatchee and Yakima. Students attending in Moses Lake can earn the following degrees, M.Ed. Master Teacher and B.S. Flight Technology. Students can also take courses leading to degrees in B.S. Accounting, B.S. Business Administration and Teaching Certificate. For admission, registration or program information, contact the CWU Moses Lake office at 509.793.2384.

Bookstore

The BBCC Bookstore is located in Building 1400 and is owned and operated by the college. The bookstore carries all the textbooks (new, used, rentals and e-books) and course materials necessary for courses offered through BBCC. The bookstore also carries school supplies, college-logo imprinted clothing, and other emblematic items, reference books, snacks, drinks and gift items. The BBCC Bookstore is open 7:30 a.m. to 4:00 p.m. Monday through Thursday, and 7:30 a.m. to 1:30 p.m. on Fridays. In addition, the bookstore will be open extended hours during Buy Back days and the beginning of each quarter. Textbooks, college logo clothing, and gift items are also available by ordering online at www.bbccbookstore.com or through the bookstore link on the BBCC home page

Refund Policy

Course materials and textbooks purchased for the current quarter are returnable during the first two weeks of the quarter providing the materials are in the same condition as sold, including all original packaging, tags, accessories, labels and paperwork. If the item was shrink wrapped a fee will apply. The original receipt/ packing slip and valid student identification are required for all refunds and exchanges. Course materials may not be returned after a class has ended. Full refunds will be processed for students providing proof that a class was dropped through the second week of the quarter. Students without proof of a dropped class may receive an 80% refund during the first two weeks of the quarter. Rental course materials follow the same refund guidelines. Students who miss the refund dates may sell textbooks back to the BBCC Bookstore during scheduled book buy back days

Book Buy Back Policy

The bookstore offers a book buyback service during the three days of final exams each quarter. The price paid for books varies and is dependent upon the book being used for classes the following quarter. Receipts are not required for buy back.

Career Planning Services

A wide range of occupational information and career planning publications are available in the college library. Students have access to a variety of books, brochures, videos, and computer programs describing many aspects of the work world and how to obtain a job. College catalogs and directories, representing most colleges and universities in the state of Washington, as well as many in other states, are also available for student use.

Career Advising and Assessment

Occupational interest assessment testing, job search tips, and professional/technical program information are among the services offered.

Students may take an online career assessment and research specific occupational fields. Students may also take the Strong Vocational Interest Inventory and the Myers-Briggs Type Indicator personality profile in the Counseling Center.

For more information about career planning services, please contact the Counseling Center at 509.793.2035.

BBCC Learning Center Childcare

The BBCC Learning Center Childcare building is located on campus at 7726 Bolling Street. Opened in 2004, the BBCC Learning Center Childcare accommodates children from the age of one year through school age. The center is licensed by the Department of Social and Health Services. Trained staff provides a safe, caring and healthy environment for the children. The center is open from 7:30 a.m. until 6:00 p.m. to accommodate students enrolled for day classes. Drop in care is provided on a space-available basis. The center is available to the children of BBCC students, staff, and the community. For information regarding fees and availability of space in the Learning Center please call 509.793.2173.

Counseling

The Counseling Center offers personal, confidential, professional assistance to students. It is open to BBCC students in all programs; a student may meet with the counselor of theirr choice.

Counselors use a "whole person" approach in their work. Students often find that certain personal issues need to be addressed in order to take advantage of all the college has to offer. Counselors help students explore options and teach them to make better educational decisions. BBCC counselors assist students with referrals to off campus professionals if necessary.

International, or foreign, students have particular needs; the Counseling Center offers specialized advising for international students.

Appointments are preferred, although counselors are generally available to walk-in visitors. To see a counselor, please call 509.793.2035 or visit the Counseling Center in the Student Center Building 1400.

Disability Support Services

BBCC complies with section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. BBCC is free from discrimination in the recruitment, administration, and treatment of students. The Disability Support Services (DSS) office at BBCC provides voluntary and confidential support services for students with documented disabilities in one or more of the following categories: Deaf/Hearing, Speech/Language, Blind/Visual, Neurological/Nervous System, Psychological/Emotional, Mobility, Learning, Chronic/Acute Health, and Temporary/Other. To ensure maximum participation by all students with disabilities, the college will:

- Provide programs and facilities that are accessible to all students with disabilities
- Determine and implement reasonable accommodations that meet the individual needs of students with disabilities

Contact Information

- The DSS office is located in the Administration Building (1400), Room 1473
- The telephone number for the Coordinator of Disability Services is 509.793.2027. To schedule an appointment, call 509.793.2035
- Email: dss@bigbend.edu
- A Telecommunications Device for the Deaf (TDD) is available in the Disability Support Services/Counseling area, Room 1474, for incoming and outgoing calls. **The TDD telephone number is 509.793.2325**

Obtaining Services/Procedures

Requests for disability services are processed through the DSS office. We value a collaborative process with students as we work to determine and implement reasonable accommodations and services.

- To begin the process, students need to contact the Coordinator of Disability Services to request services, provide information about prior use of accommodations and services in other settings, and discuss the likely impact of the disability on the student's educational experience at BBCC.
- The student will need to complete and submit an intake packet. Relevant documentation from external sources may also be requested to substantiate the disability and the student's eligibility for requested accommodations and services.
- Once the intake packet and requested documentation have been received, the student will meet with the Coordinator of Disability Services to discuss eligibility for services and accommodation requests.
- The Coordinator of Disability Services will prepare a Letter of Accommodation (LOA). It is the student's responsibility to provide instructors with the LOA and discuss how the accommodations will be implemented in the classroom. LOA's need to be requested by the student each quarter.It is the responsibility of the student to inform the instructor and the Coordinator of Disability Services if there are questions regarding the implementation of the approved accommodations. We will work corroboratively to ensure implementation.

Accessible Parking

Students, staff, and visitors who have a state-issued disabled parking permit may use the designated accessible parking spaces in BBCC parking lots. Those who have a temporary need for accessible parking, may request a temporary disabled parking permit through the DSS or Campus Safety offices.

Disability Related Complaints

Students who have complaints regarding disability related issues should contact the Coordinator of Disability Services at 509.793.2027 or the Dean of Student Services at 509.793.2077. Complaint procedures are found in the student handbook under the Discrimination, Harassment, and/or Sexual Harassment section.

Drug & Alcohol Abuse Prevention

One of the most important social decisions a college student will make is to use or not use alcohol and other drugs. The choice is an individual decision.

Before making this decision, all students should be informed about the effects of alcohol and drugs and the potential consequences of using them.

Big Bend Community College prohibits the unlawful manufacture, delivery, possession, or use of alcohol, marijuana in any form, other controlled substances, and drug paraphernalia while on college property, while conducting college business, and while participating in any college-sponsored activities whether on campus or not.

Board Policy 3019, Drug Free/Alcohol Free Workplace Policy and Administrative Process 3019, Drug & Alcohol Abuse Prevention are intended to meet, at a minimum, the requirements of all applicable federal and state laws, including but not limited to the Drug-Free Schools and Communities Act of 1989 and the Drug-Free Workplace Act Of 1988.

Sanctions

Big Bend Community College will impose disciplinary sanctions on students found accountable for violations of BP 3019, Drug Free/Alcohol Free Workplace Policy. Sanctions will be imposed in accordance with the provisions of the Student Code of Conduct. Sanctions that may be imposed include but are not limited to:

- Warning
- Reprimand
- Prevention education program
- Disciplinary probation
- Loss of privileges
- Suspension
- Professional evaluation

As required by federal law, the college cooperates with law enforcement authorities in referring for prosecution of unlawful possession, use or distribution of alcohol and illicit drugs by students or employees on college premises or as part of any of its activities.

If you have been convicted of drug possession while on financial aid, you will be ineligible for federal financial aid for one year for one year form the date of your conviction after the first offense, two years after the second offense, and indefinitely after the third offense. If you have been convicted for selling drugs while on financial aid you will be ineligible for federal financial aid for two years form the date of your conviction after the first offense, and indefinitely after the second offense. If you lose your eligibility for federal financial aid, you can regain eligibility early by successfully completing an approved drug rehabilitation programA description of the health risks associated with the abuse of alcohol and use of illicit drugs

Alcohol – Alcohol abuse is involved in the majority of violent behavior incidents: sexual assault, sexual misconduct, vandalism, fights, and driving under the influence. Alcohol (and other depressant) abuse results in impaired judgment and coordination, aggressive behavior, impairment in learning & memory, respiratory depression, coma, and possibly death when taken in excess or combined with other depressants.

Club Drugs (GHB, Rohypnol & Ecstasy) – GHB is an illegal depressant (liquid or powder) which is odorless & colorless (therefore it can be easily slipped into drinks undetected). GHB can be used to facilitate rape because it causes impairments in judgment, sleepiness & amnesia. Rohypnol also known as "Roofies" is a strong depressant drug, commonly known as the "Date Rape" drug. When ingested with alcohol or other drugs, effects begin within three (3) minutes and peak within two (2) hours. MDMA/Ecstasy/XTC is a hallucinogenic mind-altering drug. Adverse effects include confusion, depression, sleep problems, severe anxiety & paranoia, nausea, blurred vision, faintness, and the possibility long-term brain damage.

Marijuana – The effects associated with marijuana use include: increased blood pressure, blood-shot eyes, dry mouth, hunger, impairment of short-term memory and concentration, altered sense of time, decreased coordination and motivation, psychological dependence, lung cancer, and possibly chronic lung disease after long-term use.

Methamphetamines/Amphetamines & other Stimulants – Symptoms of stimulant abuse include: increased heart & respiratory rates, elevated blood pressure, dilated pupils, excessive perspiration, headache, dizziness, sleepiness, anxiety, and loss of appetite, coma, and death may result

Ritalin – A prescription drug used to treat ADHA, ADD and other conditions. It has similar effects to those of cocaine and amphetamines. Ritalin is often abused for appetite suppression and/or to stay awake.

Narcotics (Heroin, Morphine, Codeine, Demerol, Percodan) – Narcotics initially produce a feeling of euphoria followed by drowsiness, nausea, and vomiting. Overdose may cause slow and shallow breathing, clammy skin, convulsions, coma, and possibly death.

Hallucinogens (LSD, Mescaline, Cannabis, Magic Mushrooms) – Hallucinogens or psychedelics are mind-altering drugs which affect the mind's perceptions, causing bizarre, unpredictable behavior and severe, sensory disturbances that may place users at risk of serious injuries or death. The combination of hallucinogens with other substances, like alcohol or marijuana, can increase the chances of adverse effects and the risk of overdose.

Inhalants (glue, paint thinner, gasoline, laughing gas, aerosol sprays) – Psychoactive substances inhaled as gases. Adverse effects may include nausea, sneezing, coughing, nosebleeds, fatigue, lack of coordination, brain & nervous system damage and possibly death.

Cocaine – Use produces psychological & physical dependence. Adverse effects include elevated blood pressure, heart rate, respiratory rate & body temperature, increased risk of contracting HIV/AIDS (sharing needles), chronic use can result in ulceration and rupture of the mucous membrane.

Anabolic Steroids (Anadrol, Oxandrin, Durabolin, Stanozol, Dianabol) – Man-made substances related to male sex hormones. Steroids are taken to improve physical performance as well as to enlarge muscles and increase strength. Negative effects of steroids include baldness, cysts, shrinking of testicles, oily hair and skin, acne, heart attack, stroke and change in voice. Hostility is also a frequent side effect of anabolic steroids.

Tranquilizers (Valium) – Use of tranquilizers can induce calm and relaxation. Feelings will range from mild euphoria to drowsiness, confusion and light headedness. Hostility, blurred vision, hallucinations, lethargy, memory loss and irritability can also occur.

Information, Education, and Counseling

Big Bend Community College emphasizes the importance of information and education helping to prevent alcohol and drug abuse. The college is committed to helping students prevent and address alcohol and drug abuse problems. For additional information about counseling, assessment, and referral services, contact:

BBCC Counseling Center
509.793.2035

Alcoholics Anonymous
509.664.6469

Central WA Narcotics Anonymous
877.664.0398

Grant County Prevention and Recovery Center
509.765.5402

Dean of Student Services
509.793.2077

Available Counseling, Treatment or Rehabilitation

Students with alcohol or drug related problems are encouraged to contact the BBCC Counseling Office for information and referral. Students may also take advantage of services provided by the Grant County Prevention and Recovery Center 509.765.5402. The center provides such services as alcohol and drug assessments, individual counseling, family counseling, group therapy, an intensive outpatient program and an alcohol and other drug information school. Private practitioners and agencies are listed in the local telephone directory.

Extra-Curricular Activities

BBCC strives to provide a well-balanced program of extra-curricular activities for all students. This is in keeping with the belief that participation in college activities contributes to the development of a well-rounded personality and to the growth of leadership ability. These activities help to promote school spirit, to furnish outlets for special interests and talents of students, and to enhance their cultural development. Students interested in extra-curricular activities or serving as Associated Student Body (ASB) officers should contact personnel in the Student Activities Office, Building 1400 or call 509.793.2066.

Intercollegiate Athletics

The athletic program gives full-time students an opportunity to participate in competitive intercollegiate sports. As a member of the Northwest Athletic Conference (NWAC), the college sponsors teams in women's volleyball, men's and women's basketball, men's baseball, and women's softball (fast pitch).

Wrestling is also available for students. As a member of the National Collegiate Wrestling Association (NCWA), the college sponsors men's and women's teams.

Students interested in being involved in intercollegiate athletics may contact one of the coaches or the athletic director at 509.793.2225. Scholarships are available.

Intramural Activities

Intramural activities are programmed in response to student interests and may include basketball, volleyball, racquetball, pool, dodgeball, recreational gym, and softball. Opportunities for sports instruction are offered through the physical education department.

Music

All students are eligible to participate in music performance groups. For more information about music performance groups call 509.793.2140.

Student Government

All students enrolled at BBCC and who hold a valid ASB card are automatically members of the ASB. The ASB is officially recognized as the students' voice in the governance of the college. Student government is an integral part of the college structure. ASB officers serve on college committees, hear student complaints, entertain requests for funding student clubs, and plan and schedule activities. In addition, officers communicate student needs directly to college administrators and provide student representation at BBCC Board of Trustees meetings.

The selection process for ASB Officers is held annually in the spring quarter and every eligible student is encouraged to apply for a position. The Programming Board is appointed by the ASB Executive Council. Executive officers and Programming Board members receive a stipend for their services. ASB Executive Officers are as follows:

- President
- Vice President
- Secretary
- Public Relations Officer
- Programming Director

Student Organization & Areas of Involvement

Clubs and Communities are organizations developed in response to specific student interests, skills, educational programs, cultural heritage, or social causes. All students are encouraged to participate in existing organizations or to start new organizations. Current active Clubs and Communities include: Aviation Maintenance Technology Club; Professional Agriculture Students Club; American Welding Society Club; Aviation Club; Engineering Club; Sexuality and Gender Acceptance Community; LDS Student Association (LDSSA) Community; Lindy Hoppers (Swing Dance) Club; M.E.Ch.A. Club; Nursing Club; Phi Theta Kappa Club, Story Club and Dungeons and VIkings Club. For information regarding joining or organizing a club or community, please contact the Student Activities Office in the Building 1400 or call 509.793.2066.

Financial Aid

WASHINGTON OPPORTUNITY PATHWAYS

Financial aid can lower the cost of a Big Bend Community College education. The college offers a comprehensive program which includes funding from federal, state, college and private sources. The Big Bend Foundation provides scholarships for students pursuing the different certificate or degree programs at BBCC.

How to Apply

To be considered for financial aid the student should complete the applicable application:

*F*ree Application for Federal Student Aid, FAFSA - The FAFSA requests information about the student's and, in some cases their parents', income and asset information in order to determine eligibility for financial aid. Complete the FAFSA online at www.fafsa.gov.

Washington Application for State Financial Aid, WASFA. Students who are not eligible to complete the FAFSA because they are non-citizens, may be eligible for the State Need Grant by completing the WASFA. Complete the WASFA online at: www.readysetgrad.org/wasfa

The financial aid year starts July 1st and ends June 30th. SStudent need to reapply for financial aid every year. The financial aid applications are available October 1st each year. Check the Financial Aid page on the Big Bend Community College website to determine the priority funding dates for each quarter.

Eligibility Requirements

To be eligible for federal and/or state financial aid the student must meet the conditions listed below. There often are other sources of aid for students who do not meet these requirements.

- Have a valid Social Security number
- Be a U.S. citizen or eligible non-citizen
- Have high school diploma or GED
- If male, be registered with Selective Service

- Does not have a conviction for an offense involving possession or sale of a controlled substance while receiving federal student aid
- Does not owe a loan or grant overpayment
- Does not have a Ford Direct Loan or Stafford Loan in default
- Has not borrowed in excess of loan limits
- Is maintaining satisfactory academic progress
- Is not currently enrolled in high school

Recent state laws expanded eligibility of the Washington College Grant to undocumented student who meet the program's income and eligibility requirements in addition to one of the two criteria listed below 1079 standard:

- You must graduate from a Washington high school (or earn a GED or equivalent) after living in Washington for at least three consecutive years.
- Live in Washington after earning high school diploma or equivalent until being admitted to college.
- Sign an affidavit (written promise) saying you meet the above requirements. Non-U.S. Citizens must also promise that they will apply to become a permanent U.S. resident as soon as they are eligible. The affidavit is included as part of the WASFA.
- Both students without DACA or with DACA can qualify.

Financial Aid Programs

College Bound Scholarship – This program is an early commitment of state financial aid to eligible students who sign up in middle school and fulfill the pledge.

Federal Work Study – This federally funded program provides employment opportunities both on and off campus for students with financial need. Reading or math tutors for local school districts are examples of federal work study off campus jobs.

Federal Supplemental Educational Opportunity Grant This is a federal grant program for the neediest students who are eligible for Pell.

Ford Direct Loans (Subsidized and Unsubsidized) – These educational loans which must be repaid after the student graduates, provide another source of funding for the eligible student. The student must be enrolled for at least 6 credits. Loan applications and information are available in the Financial Aid office and on the Financial Aid webpage on the Big Bend website, www.bigbend.edu.

Pell Grant – Pell is the largest federal grant program for needy students. It is an entitlement program which means, if the student is eligible, the funds will be available during the school year.

PLUS Loans – Parents of dependent students can borrow these non-need based loans. Additional information is available in the Financial Aid office or on the Big Bend Community College website at www.bigbend.edu.

State Work Study – This state funded program provides employment opportunities both on and off campus for students with financial need. When possible, students are placed in positions relating to their major field of study or career goals.

Washington College Grant – This is a state grant program for undergraduate students who meet the program's income and Washington state residency requirements

Washington Tuition Waiver – This program waives a portion of the tuition for eligible Washington residents. The tuition waiver is awarded based on the student's need.

Washington Tuition Grant – The tuition grant is awarded based on the student's need.

Scholarships

All BBCC scholarship information, including application forms, may be obtained from the Financial Aid Office and online at www.bigbend.edu. BBCC scholarships are awarded each spring.

BBCC Foundation Scholarship

The BBCC scholarship application is online at https://bbcc.awardspring.com and filters applicants based on answers into scholarships whose criteria is met. At Big Bend Community College, we have over 100 scholarships and offer three different types of scholarships: Named Scholarships, Foundation General Scholarships, and Intervention Scholarships.

Intervention scholarships can help cover unexpected emergencies that arise which prevent a student from completing their education and are awarded on emergency basis only. The application for the Emergency Funds Scholarship can be found online at https://www.bigbend.edu/emergency-funding-application/.

The BBCC Foundation governs a majority of the BBCC scholarships, and their office is located in the University Center Hallway in the ATEC/1800 building. More information, including the application, can be found online at: **https://www.bigbend.edu/admissions/financial-aid/misc-scholarships/.**

Scholarships Awarded by Outside Organizations

A number of scholarships are awarded directly by organizations to BBCC students. These scholarships may be for students returning to BBCC the next year or for BBCC graduates pursuing a degree at a four-year institution. Information about these scholarships is posted online at www.bigbend.edu

BBCC Grant & Funding Resources

Basic Food Employment and Training

The Basic Food Employment and Training (BFET) program provides assistance with tuition, fees, books, transportation, and other support services to students who receive food benefits from DSHS. Participation in the BFET program will allow a student to keep food benefits while attending college, as well as access child care assistance through Working Connections Child Care. Students must be in a short-term (two-year or less) workforce education program of study in order to qualify.

Early Achievers Grant

The Early Achievers Grant is for students who are working toward a certificate or degree in Early Childhood Education and are employed in a childcare center or family home that is participating in Washington Early Achievers for a minimum of 40 hours per month or 10 hours per week. (See the Department of Early Learning web site for more information about Washington Early Achievers. http://www.del.wa.gov/care/qris/) The program will cover tuition, fees, books, and other support services for eligible students. Must be a Washington resident in order to qualify.

Opportunity Grant

The Opportunity Grant is for Washington State residents who meet the income criteria of 200% of poverty level. The program provides 45 credits of tuition and fee assistance, up to $1000 per year for books and tools, and other support services for students in the following approved workforce programs: Accounting, Automotive Technology, Aviation Maintenance Technology, Business Information Management, Business Medical, CDL, Computer Science, Early Childhood Education, Industrial Electrical Technology, Maintenance Mechanics Technology, Medical Assistant, Nursing, Nursing Assistant-Certified, and Welding. To qualify, students must have less than a two year degree, be low-income and pursuing coursework that will satisfy requirements to achieve a certificate and/or two-year professional technical degree developing workplace skills and increased wage earnings.

WorkFirst

WorkFirst is Washington State's welfare reform program for individuals who receive Temporary Assistance for Needy Families (TANF). DSHS administers TANF, which provides temporary cash for families in need. The WorkFirst program helps participants access education and training in order to find and keep jobs. Enrolling in Adult Education classes, including GED, High School Diploma, and ESL as well as Workforce Education, qualify as WorkFirst participation. Through Workforce Education Services, participants may receive tuition and textbook assistance as well as advising and mentoring to ensure graduation and completion.

Worker Retraining

The Worker Retraining funding is a program which provides options for unemployed or underemployed workers to access education and training to maintain employment or to re-enter the workforce. The eligibility criteria includes: ◦Currently receiving unemployment benefits ◦Eligible to receive unemployment benefits ◦Exhausted unemployment benefits within the past 48 months ◦Displaced homemaker (loss of primary income due to becoming widowed, separated or divorced within the past 48 months) ◦Military veteran discharged within the past 48 months. Students may be eligible to receive unemployment benefits while attending school and not participate in job search activities if the training meets the Commissioner Approved Training criteria approved by the Employment Security Department.

Student Employment

The career services coordinator provides career counseling to help students select a major and career pathway; assists students in the process of finding employment by assessing their skills and helping them to market those skills; provides job search assistance such as training in interviewing techniques, resume writing, etc. and locates local and regional employment opportunities. Career Services is located in the Student Center, Building 1400. For more information call 509.793.2069.

On-Campus Employment

Students interested in on-campus employment should contact financial aid personnel in the Student Administrative Support Services in the Building 1400.

Library

Building 1800 (509).793.2350
http://www.bigbend.edu/library
email: librarymail@bigbend.edu

The William C. Bonaudi Library opened its doors Jan. 3, 2005. The facility includes two large multimedia equipped computer labs (rooms 1801 & 1802), lots study space and lounge seating, over 70 computers in the library commons area, and 10 study rooms. Most study spaces also offer power and USB plugs to keep your tech charged and BBCC offers free WIFI access to campuswide. The eLearning Coordinator, Career Services, and Writing Center share this location as well.

The library's primary purpose is to support the educational mission of the college by providing access to information resources as well as instruction and assistance in the research process. The library also serves as a cultural and educational resource for the surrounding communities.

Please check the library's web page or call to confirm days and hours the library will be open.

In addition to standard reference and circulation services during hours the building is open the library has 24/7 chat assistance linked from any of its web pages.

The library has an extensive collection of books including children's books, young adult, graphic novels, current fiction and nonfiction, and standard research materials, but has more than just books.

The library offers a wide and growing array of online resources including eBooks, journal articles, online newspapers, reference materials, basic skills and test preparation training, and more, covering topics ranging from agriculture to philosophy, all available whenever you need them with your BBCC login and password.

The library also has a collection of textbooks and laptops that check out for the quarter, as well as other technology including digital microphones, webcams, video cameras, and keyboards.

The library has printers and a scanner/copier/color printer available for use. Need to add funds to your printing account? The library is also the home to the Papercut pay station.

We welcome your use of the library and encourage you to become familiar with the library's services and policies via our webpage.

Online Classes/Distance Education/eLearning

eLearning Support is located in the Library
Building 1800 (509) 793-2350
Email: elearningadmin@bigbend.edu

Big Bend recognizes the need to provide learning options designed for students whose educational opportunities might be limited by time or distance constraints.

Students considering taking online courses for the first time are strongly encouraged to visit www.bigbend.edu and click on Academics to find the Tutorials for Online classes.

In online or hybrid classes, some or all coursework is performed through the college's web-based education system. Students need to have access to a reliable Internet connection. Basic computer and internet skills will also prove helpful.

Additional fees are charged to support the cost of online instruction. See the current class schedule for fee details.

Religious Accommodations

Reasonable Accommodations for Religion/Conscience: Students who will be absent from course activities due to reasons of faith or conscience may seek reasonable accommodations so that grades are not impacted. Students seeking accommodation must submit written notice to the instructor(s) within the first two weeks of the quarter and should follow the procedures listed in the Religious Accommodations section of the Student Handbook.

STEM Center

Building 1200 (509).793.2159

The Science, Technology, Engineering and Math (STEM) Center is dedicated to providing access to high quality tutoring support, updated technology, and instructional services for all levels of math, science, and engineering courses. The STEM Center, located in the Math/Science Building (1200), is a collaborative study area open to all BBCC enrolled students, including GED/DVS. Aside from tutoring services, the STEM Center also provides access to Wi-Fi, computer workstations, white board tables, dry-erase windows, science and engineering course software, printing and scanning, lap tops and calculators for daily checkout, anatomy and physiology models, a microscope, textbooks with selective answers, private study rooms, and STEM related advising. Non-BBCC students wishing to use the STEM facilities must register for MATH 010.

Student Housing/Residence Halls

Student housing facilities are available on the BBCC campus. BBCC is one of the few community colleges in the state of Washington that has the ability to provide a traditional on-campus college living experience.

Housing facilities are well maintained, affordable, and offer students spacious rooms. Each room is furnished with twin beds, two desks, two chairs and three large locker type storage closets for clothes and personal items. Each room has high speed internet installed at no extra cost. Each floor has a TV lounge, VCR, and a microwave oven .Three kitchens are equipped with appliances which are available for students use. The laundry room is located on the first floor of the residence halls and is equipped with clothes washers and dryers; this service is also free for residents use.

Other conveniences include weekday public bus services, recreational facilities and free parking. The residence halls are located close to the main campus classrooms, vending, library and gymnasium. Intramural sports and associated student body activities are available to students. A full-time residence hall director and live-in residence assistants provide supervision. For additional information or to request a residence hall application call 509.793.2291.

Disabled Student Access

Philips Hall is accessible to physically challenged students.

Discrimination, Harassment, Sexual Harassment and Sexual Misconduct

Big Bend Community College (BBCC) recognizes its responsibilities pursuant to state and federal law, rules, and regulations including the responsibility for investigation, resolution, implementation of corrective measures, and monitoring the educational environment and workplace to stop, remediate, and prevent discrimination, harassment, sexual misconduct and retaliation consistent with these provisions.

BBCC's is committed to provide equal opportunities in employment and to provide a work and academic environment that is free from conduct or behaviors that constitute discrimination, harassment, sexual harassment, sexual misconduct, domestic violence, dating violence, stalking and/or retaliation by or against its employees, students, guests, trustees, visitors and contractors.

BBCC prohibits discrimination on the basis of a protected status that is so severe, pervasive, persistent, and objectively offensive that it effectively bars the victim from the benefit of an educational or work opportunity or benefit. Protected status includes, but is not limited to, race, sex, sexual orientation, gender identity/expression, religion, age, color, creed, national or ethnic origin, the presence of any physical, mental or sensory disability, use of a trained guide dog or service animal by a person with a disability, marital status, pregnancy status or families with children, a mother breastfeeding her child, AIDS/HIV or hepatitis C, genetic information and/or protected veteran or military status, or any other legally protected classification.

Sexual harassment and sexual misconduct are other forms of discrimination that are prohibited. Sexual misconduct includes, but is not limited to, intimate partner/domestic violence, non-consensual sexual intercourse, non-consensual sexual contact, sexual assault, stalking, and dating violence. Sexual harassment may include unwelcome sexual advances, unwelcome requests for sexual favors or requests for sexual favors in exchange for some benefit, sexual assault, offensive remarks about a person's gender, and/or unwelcome verbal or physical conduct of a sexual nature by a male or female, of the same or differing sex.

The following person has been designated to handle inquiries regarding non-discrimination policies and requests for accommodations:

Kimberly A. Garza
VP of Human Resources & Labor
EO/Section 504/Title IX Coordinator
7662 Chanute Street NE
Building 1400, Office 1449
Moses Lake, WA 98837
509.793.2010
TDD 509.793.2325

Azucena Halsteiner
Disability Services Coordinator
7662 Chanute Street NE
Building 1400, Office 1473
Moses Lake, WA 98837
509.793.2027

Student's Rights & Responsibilities/ Student Handbook

Student's rights and responsibilities are defined in the BBCC Student Handbook. The handbook provides students with an in-depth explanation of rights and responsibilities as they pertain to the community and the college. Information contained in the document includes the Student Code of Conduct, jurisdiction of college personnel, procedures for initiating disciplinary actions, academic appeal procedures, academic grievance procedures, and all other student due process procedures. The handbook also provides information about the college community including how to access student support services, campus resources, student activities, etc. The handbook is available on the BBCC website.

Testing Services

BBCC provides a testing service to assist students in making both academic and career choices. In addition, BBCC serves the broader community as a testing center for the General Educational Development Test (GED) examinations.

The GED test battery is used to determine if an individual's educational development is equivalent to that of a high school graduate. Examinees having scores meeting state standards are eligible to receive a Washington State High School Equivalency Certificate. State residents 19 years of age or older are eligible to take the GED examination and receive the Washington State issued equivalency certificate. Applicants 16-18 may be tested with appropriate authorization. The current fee for GED testing is $120.00.

The testing center provides certification exams for PAN, Pearson VUE and WSDA Pesticide Testing. The testing center also proctors CLEP exams as well as TEAS testing for applying to neighboring nursing schools.

Questions regarding eligibility and test scheduling should be directed to the Testing Center in Building 1400, phone 509.793.2064.

TRiO-Student Support Services

The BBCC TRIO Student Support Services program is a U.S. Department of Education Title IV grant. An annual funding of $281,462 provides extensive academic services to 190 eligible students during each grant cycle.

Student Support Services program is designed to help students find success in college. TRIO SSS students benefit from academic tutoring, academic monitoring, success workshops, and academic/financial aid/transfer/career advising.

To be eligible, students must be a U.S. Citizen or Permanent Resident and meet one or more eligibility criteria: 1) first-generation, neither parent of student has a bachelor's degree; 2) low-income; 3) disabled-documented disability. These at-risk groups are strongly supported regardless of degree program, however preference given to transfer students

For additional information, please visit our SSS office in 1400 Building or call 509.793.2040.

TRiO-Upward Bound

TRiO Upward Bound, formally known as College Bound, is a federally funded program through the U.S. Department of Education designed to encourage high school students to complete their high school education and pursue higher education. Every year, 115 students participate in the program from the following target high schools: Moses Lake, Othello, Royal City, and Warden. TRiO Upward Bound has been in operation at Big Bend Community College since 1967 and is the oldest program of its kind in Washington State. Its purpose is to provide equal access to post-secondary education for high school students by providing them with adequate preparation to enter college. The program achieves this by providing its participants with academic and personal advising, career planning, SAT/ACT preparation, monthly Saturday enrichment activities, college admission assistance including financial aid and scholarships. The program offers a six-week residential summer school where 52 selected students live in the BBCC residence halls and receive intensive academic instruction to build skills and increase knowledge with particular emphasis in math, English, and science. Cultural and recreational activities and field trips enhance the value of this worthwhile experience. TRiO Upward Bound offers a Bridge Program to assist recent high school graduates in the transition from secondary school to college. Selected participants attend summer quarter at BBCC with tuition, books, and room and board paid by TRiO Upward Bound. They also participate in a "work study" like program and earn money for college while working at an on-campus job matched with their career choice. Students are eligible to apply if they are enrolled in one of the target high schools and have completed the 8th grade but not yet started their senior year. Also, they need to be a first-generation college bound student whose parents have not completed a Bachelor's degree and/or their family's taxable income meets federal income guidelines. Students must be a U.S. Citizen or legal resident and be motivated and have the academic potential to succeed in college. BBCC receives an annual grant from the U.S. Department of Education for $540,298 to operate the program; this grant covers 100% of the total program costs.

**There is no charge for any services offered.

Veterans Services

BBCC academic programs of study are approved by the Washington Student Achievement Council's State Approving Agency (WSAC/SAA) for enrollment of persons eligible to receive educational benefits under Title 38 and Title 10 USC. Selected programs of study at BBCC 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.

BBCC 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.

The Department of Veterans Affairs (VA) will pay educational benefits to eligible students enrolled in approved degree programs at BBCC. Students eligible for VA educational benefits must apply for benefits and receive program approval. Depending upon eligibility, the Department of Veterans Affairs will determine the number of months, and monthly amount of benefits for each applicant. The monthly amount is based upon the enrolled credits that count toward the approved program.

Enrollment status is- Fall-Spring and 7+ for Summer:

Full Time = 12 credits or more
3/4 Time = 9 through 11 credits
1/2 Time = 6 through 8 credits
Less than 1/2 Time = 5 or fewer credits

If a student withdraws from a class during a quarter and this reduces the certified enrollment status, the Department of Veterans Affairs may bill the student for repayment of the difference from the beginning of the quarter, unless there are mitigating circumstances as approved by the VA. This same situation may occur if a student does not complete all enrolled variable credits resulting in a reduced enrollment status. Students approved for VA benefits must contact the VA certifying official, after registering for classes each quarter, to assure proper certification.

VA recipients are responsible for providing the necessary information to the Veterans certifying official, to be informed and in compliance with the Minimum Standards of Progress requirements, and to initiate any changes in program.

The VA pays monthly allowances and book stipend benefits directly to the student for all Post-911 veterans up to their percentage of eligibility. All other veteran students should allow for the initial startup time and have their own funds to register and pay for books and supplies. The VA pays BAH (monthly allowance and book stipend) benefits directly to the student. Students usually receive their BAH early in the month for the preceding month.

All veterans are encouraged to complete the Free Application for Federal Student Aid (FAFSA). Financial aid can help lower the cost of a Big Bend Community College education. Your eligibility will be calculated using the federal and state financial aid regulations based on the information submitted on the FAFSA. Awards may consist of any combination of grants, loans and/or work study. Receipt of VA educational benefits will not affect your eligibility for financial aid.

For additional information and assistance, contact the Veterans certifying official, located in the Financial Aid Office in the Student Administrative Support Services Department, located in the Building 1400 or call 509.793.2088 or 509.893.2061

Minimum Standards of Progress for Veterans and Other Eligible Persons

There are two elements of Satisfactory Academic Progress measurement, Credits and Grade Point Average. Veterans and other eligible persons must maintain a 2.00 quarterly grade point average to graduate in their approved degree program. VA recipients who fail to maintain minimum standards of progress during any quarter enrolled will be subject to VA probation/cancellation of benefits. Depending upon enrollment status, the following requirements apply:

If your enrollment status is:	You must complete	You will be on VA Probation if you complete	Your benefits will be canceled if your cumulative GPA is less than 1.0 or you complete less than
Full Time	12 credits/quarter	6-11 credits/quarter	5 credits/quarter
¾ Time	9 credits/quarter	6-8 credits/quarter	5 credits/quarter
½ Time	5 credits/quarter	3-5 credits/quarter	5 credits/quarter

Minimum standards of progress for less than 1/2 time enrollment requires completion of all credits enrolled and at least a 2.00 cumulative grade point average in their next quarter of attendance or their VA benefits will be canceled. Failure to do so will result in probation the next quarter enrolled. VA benefits will be canceled any quarter that no credits are completed.

Students who are on probation must complete the required credits for their enrollment status and maintain at least a 2.00 cumulative grade point average or their VA benefits will be canceled and the VA informed accordingly.

Only numerical grades of 0.7 to 4.0 and the letter grade "P" will count toward completed credits. Grades of 0.0, "I," "N," and "W" do not count toward completed credits and do not meet minimum standards of progress requirements.

The Department of Veterans Affairs will not pay a person to repeat a course except when "F" or 0.0 grades are received for courses required for graduation.

Students cannot be certified to the VA as re-enrolled in a course in which an incomplete grade was received unless an incomplete has been converted to a final grade that is unacceptable for graduation.

If there is a change in the number of credits completed or grade point, the probation/cancellation status of the student may be changed. If so, previous action for the quarter may be voided. Please contact certifying official for re-evaluation.

A student whose benefits have been canceled for not making minimum standards of progress may be reinstated if the student submits a Satisfactory Academic Progress Appeal to the Veterans certifying official.

Writing Center

Building 1800 in the Library, Room 1832 509.793.2361

Students can bring writing assignments from any of their classes to be reviewed in the Writing Center. Help is also available with developing essays and doing research papers using MLA, APA, or CMS.

FALL, WINTER, & SPRING QUARTER HOURS

Monday-Thursday	**8:00 a.m. - 8:00 p.m.**
Friday	**8:00 a.m. - 2:30 p.m.**

SUMMER QUARTER HOURS

Monday-Friday	**8:00 a.m. - 2:00 p.m.**

Academic Amnesty

Under the provisions of the BBCC Academic Amnesty procedure, a student may apply for Academic Amnesty if they: are currently enrolled at BBCC, did not enroll in college for at least two consecutive years following the period in which they had academic problems (grade point average below 2.00), have completed 24 or more credits with a grade point average of 2.50 or higher since returning to college, and have not withdrawn from more than five credits in any quarter since returning to college. If amnesty is approved, all grades will still appear on the transcript but will not be calculated in the BBCC cumulative grade point average. Further information may be obtained from the Counseling Center.

Auditing a Course

A student may enroll in a course on an audit basis. An auditing student is not expected to take exams, but the instructor may require reasonable attendance and class participation. No college credit is received for audited courses; regular tuition charges apply. Changes from audit to credit are permitted after the 10th instructional day of the quarter with instructor approval. Changes from credit to audit are permitted up to the final date to drop a class. Changes may not be made after the last day to withdraw unless approved by the instructor.

Course Numbering System

The following course numbers are used at BBCC:

010-049: Courses in this series do not apply toward graduation from BBCC.

050-099: Courses in this series are below college level. Some of the courses may be applied toward graduation from BBCC under the Associate in General Studies degree only. (DVS prefixed courses DO NOT apply toward graduation.)

100-299: Courses in this series may apply toward graduation in a degree program at BBCC.

Common course numbering is designed to make course transfer between and among the 34 community and technical colleges as easy as possible for students, advisors and receiving institutions. Courses with an "&" as part of the prefix are designated as common across the Washington community and technical college system.

Course Repeat Policy

Under the provisions of this policy, students may elect to repeat a course in which a grade of 1.9 or lower was received and then have the highest grade received count toward their cumulative (graduation) grade point average (GPA). A course may be repeated only once. Students must notify the Admissions/Registration Office after they have repeated a class.

Students should be aware that the original enrollment and grade received will remain on the transcript; only the cumulative GPA subsequent to the repeat is affected by the second grade received. Students who are receiving financial aid or VA benefits should consult with the Financial Aid Office prior to enrolling in any course for a second time; aid eligibility may be lost or reduced as a result.

Credit by Examination

In addition to standardized tests for specific course credits, students may obtain college credit for courses listed in the current catalog by passing an examination in that course, and/or demonstrating to the department concerned that both content and method have been mastered adequately. This process does not include visiting or auditing a class followed with a request for a special examination as a means of acquiring credit. This privilege is intended to evaluate informal and/or comparable educational experiences that may be the equivalent of organized class work.

The procedure is as follows:

1. The student obtains written approval from his/her advisor, the course instructor, and an Admissions/Registration staff member. Forms are available in the Admissions/Registration Office.
2. After approval, the student pays the required fee at the Business Office, and upon showing the receipt to the instructor, is allowed to proceed with the examination.
3. The actual time of giving an approved examination for credit is a matter of mutual convenience between the instructor and student.

A maximum of 22 credits awarded by examination of any type will be allowed toward an associate degree. Each division has different policies for which, if any, classes can be given credit by examination. Check with the division chair for details.

Credits & Credit Load

The academic year is divided into three quarters of approximately 11 weeks each. To be considered full time a student must be enrolled in at least 12 credits per quarter. The typical course load per quarter is approximately 15 quarter hours of credit. A lecture class that meets five hours per week for one quarter will yield five quarter hours of credit. Laboratory courses require two hours of class time per week for one hour of credit. Credit is given only for classes in which the student is officially registered and passes.

End of Term Grades

Grades are available online one week after final exams have completed. To obtain grades online students go to the BBCC Student Kiosk at www.bigbend.edu and choose Grades/Unofficial Transcript. A valid student identification number and PIN are required to view grades. Students requesting a copy of their grades in person must provide picture identification.

General Examination Credit

Nationally standardized tests fall into two general categories: general subject matter exams, e.g. social science and natural science; and specific subject matter examinations, e.g. history of western civilization and college calculus. Current students having satisfactory scores on standardized tests may be awarded credit toward BBCC degrees. Such credit may, if appropriate, be issued to satisfy specific distribution requirements or general electives.

Official score reports must be submitted to the Admissions/Registration Office for evaluation. No fee is charged for evaluation and awarding of credit for admitted BBCC students. For credits awarded for CLEP, IB, and College Board Advanced Placement Exams students should check the admissions section of the BBCC website at www.bigbend.edu.

Grading Symbols

BBCC instructors report grades using a numerical grading system from 4.0 to 0.7 in .1 increments and also the grade 0.0. The number 0.0 is assigned for failing work for which no credit hours are earned. Letter grade equivalents are approximated by the following distribution:

4.0 - 3.8 ..... A Excellent
3.7 - 3.5 ..... A-
3.4 - 3.2 ..... B+
3.1 - 2.9 ..... B Very Good
2.8 - 2.5 ..... B-
2.4 - 2.2 ..... C+
2.1 - 1.9 ..... C Average
1.8 - 1.5 ..... C-
1.4 - 1.2 ..... D+
1.1 - 0.9 ..... D Below Average
0.8 - 0.7 ..... D-
0.0 ..... F Failing
(0.7 lowest passing grade)

Grade Point/Grade Point Average Calculations:

Earned grade points equal the product of the number of credits for a course and the grade given. For example:
5 (credits) X 2.7 (grade in course) = 13.5 grade points

The grade point average (GPA) for a number of courses equals the total of grade points earned in those courses divided by the sum of the credit hours for those courses. For example, a student is enrolled in courses X, Y, and Z that are 5, 4, and 3 credit hours respectively during one quarter. The student receives a 3.1 grade in course X, a 1.5 grade in course Y, and a 2.3 in course Z.

The Total Grade Points Equals:

Course X 5 X 3.1 = 15.5
Course Y 4 X 1.5 = 6.0
Course Z 3 X 2.3 = 6.9
28.4 Total Grade Points for Quarter
Total credits attempted = 5+4+3 = 12 for quarter
Grade Point Average for quarter = 28.4/12 = 2.37

The cumulative GPA over multiple quarters is calculated in the same way using all courses in which a numerical grade has been given.

"I" Grade

The "I" grade is used to indicate a grade has been deferred. The instructor can choose to award an "I" grade to students making satisfactory progress who, for reasons beyond their control, are unable to complete their work on time. The instructor must submit on the "Incomplete Requirements" form, a written explanation of work to be completed with any grade turned in as an "I". REMOVAL OF INCOMPLETE: Once a student has completed the necessary requirements for a decimal grade, the instructor will notify the Admissions/Registration Office, via a change of grade form, of the grade obtained by the student. The incomplete is then removed from the student's record and the new grade is substituted. An incomplete "I" grade will revert to a failing "0.0" grade if the change of grade form is not in the Admissions/Registration Office by the following dates:

"I" grade received:	**Requirements must be completed by:**
Summer Quarter	November 1
Fall Quarter	February 20
Winter Quarter	May 20
Spring Quarter	November 1

"W" Grade

A student may withdraw from classes up to two weeks prior to the last day of instruction for each quarter. Students who stop attending classes but do not officially withdraw from classes may receive a failing (0.0) grade. Students withdrawing from classes within the time permitted will receive a "W" grade.

"N" Grade

The "N" grade is given in courses in which a student has enrolled as an "auditor." (See "Auditing a Course").

Pass-Fail Grading Option

A maximum of 15 credits completed with a pass "P" grade may be applied toward a BBCC degree. The "P" grade is not included in the grade point average calculation. A failing (0.0) grade earned in a class graded using the pass/fail option is included in the GPA calculation. A "P" grade in a math or science class indicates a grade of 2.0 or above was earned.

Students enrolling in a course on a pass/fail basis should indicate this at the time of registration. Students are advised to speak with the instructor before enrolling in a class on a pass/fail basis. After the 10th day of the quarter, the instructor and the student's advisor must approve changing an enrolled course to pass/fail grading. Students may not change a course to pass/fail option after the last day to withdraw.

Students intending to transfer to universities should not use the pass/fail option for courses in their intended major. Courses being used for the Associate in Science degree or as basic or breadth requirements in the Associate in Arts and Science (DTA) degree may not be taken pass/fail.

Time Limitation to Change a Grade

A student who believes that an error has been made in the grade received for a course should contact the instructor as soon as possible to discuss the issue. Instructors may authorize a grade change within one quarter from the date the grade was issued. Summer quarter is excluded (i.e. spring quarter and summer quarter grade changes must be made by the end of fall quarter).

Honors at Graduation

A student graduates with "Honors" if they've earned a cumulative BBCC GPA of 3.33-3.74.
A student graduates with "Highest Honors" if they've earned a cumulative BBCC GPA of 3.75-4.00.

Quarterly Academic Honors

Students completing 12 or more credit hours in graded courses. (Excludes pass credits)

Vice President's List: GPA of 3.33-3.74
President's List: GPA of 3.75-4.00

Standards of Progress

Each student must earn a cumulative grade point average of 2.00 or above to remain in good standing. A student earning a cumulative GPA below 2.00 will be placed on academic probation or suspension, depending on the criteria listed below. The category depends upon the criteria listed below. A student will be considered in good academic standing when her/his cumulative grade point average is raised to 2.00 or above.

Academic Probation

A student with 11 or more cumulative graded credits and a cumulative grade point average below 2.00 will be placed on academic probation status. A student in this category is required to meet with her/his assigned advisor prior to registering for future quarters.

Academic Suspension

A probationary student will be placed on academic suspension when the student's number of cumulative graded credits at BBCC is greater than 23 credits and cumulative grade point average falls below 2.00 and subsequent quarterly grade point average is below 2.00. A student in this category will be suspended from enrollment in classes for one quarter. A student who has preregistered for the following quarter will be withdrawn from classes and a refund will be processed for any tuition and fees paid for that quarter. A student returning after suspension is required to meet with her/his assigned advisor prior to registering for future quarters and must earn a 2.00 quarterly grade point average at the end of every quarter until her/his cumulative grade point average is above 2.00.

Appeals

A suspended student may appeal academic suspension and request immediate reinstatement. The student must provide proof of extenuating circumstances and/or a plan for making measurable and substantial progress towards repairing her/his cumulative GPA. A letter of appeal must be submitted to the Vice President of Learning and Student Success. The Vice President will call a meeting of the Academic Council to hear the appeal. The Academic Council may grant the appeal, may allow the student to continue under certain conditions, or may deny the appeal. The decision of the Academic Council is final.

Academic Dismissal

A student who fails to meet minimum standards and is subject to suspension a second time will be placed on academic dismissal. Academic dismissal results in suspension from enrollment in classes for one calendar year. A student who has preregistered for the following quarter will be withdrawn from classes and a refund will be processed for any tuition and fees paid for that quarter. A student returning after dismissal is required to meet with her/his assigned advisor prior to registering for future quarters and must earn a 2.00 quarterly GPA at the end of every quarter until her/his cumulative GPA is above 2.00. There is no appeal.

Student Records Confidentiality

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records. They are:

1. The right to inspect and review the student's educational records within 45 days of the day BBCC receives a request for access.
2. The right to request an amendment of the student's educational records that the student believes is inaccurate or misleading.
3. The right to consent to disclosures of personally identifiable information contained in the student's educational records, except to the extent that FERPA authorizes disclosure without consent. One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is: a person employed by BBCC in an administrative, supervisory, academic, or support staff position; a person or company with whom BBCC has contracted (such as an attorney, auditor, National Student Clearinghouse); a person serving on the Board of Trustees; or a student serving on an official committee or assisting another school official in performing his or her tasks. Unless restricted by the student, BBCC may disclose the following information without the student's written consent: student's name, address, telephone listing, electronic mail address, participation in officially recognized activities and sports, weight and height of members of athletic teams, enrollment status, dates of attendance, honor roll, degrees and awards received, and the most recent previous educational agency or institution attended by the student.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Big Bend Community College to comply with the requirements of FERPA.

Transcripts

An official transcript is a copy of a student's permanent academic record that is signed by the Registrar and has the college seal imprinted on it. A transcript will be released only upon authorization of the student. Transcripts may be withheld if any financial obligations to BBCC have not been met. Information on ordering official transcripts is available on the BBCC web site at www.bigbend.edu or by calling 509.793.2061. Students may print an unofficial copy of their BBCC transcript from the BBCC Student Kiosk at www.bigbend.edu.

BBCC offers the following Degrees, Certificates, and Diplomas:

Degrees

Degrees intended for transfer to a university

- Direct Transfer Agreement (DTA) Associate Degrees
- Direct Transfer Agreement (DTA) Major Related Program (MRP) Degrees
- Associate in Science-Transfer Major Related Program (MRP) Degrees

Degrees intended for direct entry into the workforce or entering a bachelor of applied science program

- Associate in Applied Science (AAS) Degrees

Degree not intended for transfer

- Associate in General Studies Degree

Certificates

Certificates of Achievement
Certificates of Accomplishment

Diploma

High School Diploma

Resident Credit Requirement

A minimum of 30 quarter hours must be earned through enrollment in BBCC courses. Exceptions to this policy may be granted with approval of the student's advisor and the Dean of Student Services.

General Education

What is General Education?

General education is the part of a college curriculum shared by all students seeking a degree. It provides broad exposure to multiple disciplines and forms the basis for developing important intellectual and civic capacities.

Why General Education?

For a job:

- Business leaders and other employers tell BBCC that employees need to be able to work alongside others, to speak and write clearly, and to be able to reason quantitatively.
- More and more Americans change jobs several times during their lifetime. General education skills carry over from one job to another and enable students to be more flexible as they navigate the changing world of work.

For life:

- General education provides the skills students need to think through the pressing problems of today so they can be actors in their personal, national and international life, rather than victims.
- General education prepares students to enjoy the complex, multifaceted and changing world they live in-whether that's through a musical concert or a magnificent rock formation.

All degrees offered at BBCC incorporate general education. The learning outcomes that describe our general education goals are designated as Institutional Outcomes because these three outcomes are found within every degree at BBCC. The Institutional Outcomes are:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

Associate in Arts and Science DTA

Associate in Arts and Science AA&S DTA degree is awarded to students completing the requirements of the college transfer program. The AA&S DTA degree represents the broad knowledge generally acquired in the first two years of a four-year program leading to a Bachelor of Arts degree. When students earn the AA&S DTA, they may transfer to a baccalaureate institution within the state of Washington with assurance that they have satisfied all or most of the basic requirements (General University Requirements/Distribution Requirements). This means, generally, that AA&S DTA transfer students can begin work on their specialized, major-area course work as soon as they transfer.

Since programs differ at each college, students should consider program outlines published by the college or university where the student plans to continue his/her course of study. The following recommended courses will prepare students for most senior institutions. In addition to the general requirements listed below, derivative programs may have additional requirements as listed in the Programs of Study section. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in their transfer area. Students should seek out their advisor for more information and guidance on possible courses to take to complete this degree and to prepare and plan for future transfer.

Associate in Arts and Science DTA (90 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Cultural, Social, Political Aspects
  Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.
- PO5 Problem Solving
  Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.

Degree Requirements

To earn the Associate in Arts and Science DTA degree, a student must:

- Complete their degree within three years from the quarter of entry based on the catalog in use at time of entering BBCC. After that date, students must meet any changes in graduation.
- Complete at least 90 transferable credits in courses numbered 100 or above with a grade point average (GPA) of 2.0 or higher.
- Earn a grade of at least a 1.0 in each college level course used in the degree.
- Complete and submit an application for graduation to the Student Administrative Support Services Office before a degree with be awarded.

Note: No course may be used more than once for meeting degree requirements.

The 90 transferable credits must include the following:

Basic Requirements ..... 15 cr
A. Communication Skills [BS] ..... 10 cr
ENGL& 101 and: ENGL& 102, ENGL 201*, or ENGL& 235
* Students who take ENGL 201 must also take a literature class as one of the Humanities breadth courses (this option recommended for students planning to transfer to Eastern Washington University).

B. Quantitative Skills [SQR] ..... 5 cr
Symbolic or Quantitative Reasoning
Mathematics (MATH) - Any 5 credit MATH course above 101; Philosophy (PHIL) - PHIL& 120
Note: Intermediate algebra or higher placement score is required for entrance into all SQR courses. Enrollment into any BBCC math course requires placement at the appropriate entrance level.)

Breadth Requirements ..... 50 cr

A. Humanities [HU, HP] ..... 15 cr
Select from at least two of the disciplines listed on the Humanities distribution list with no more than 10 credits from any one discipline. No more than 5 credits in foreign language at the 100 level may apply to this category. No more than 5 credits in humanities performance/skill credits (HP) may apply to this requirement.

B. Social Science [SS] ..... 15 cr
Select from at least three of the disciplines listed on the Social Science distribution list.

C. Natural Science [NS, LS, MS] ..... 15 cr
Select from at least two of the disciplines listed on the Natural Science distribution list. Select courses distributed as follows:
Part 1:
Lab Science 5 cr
Non-lab Science 5 cr Part 2:
Lab science, Non-lab science, or Mathematics ..... 5 cr

D. Additional Breadth ..... 5 cr
Select any courses from the Humanities, Social Science, or Natural Science distribution list.

Specified Electives [SE] ..... 10 cr
Select any courses from the Specified Elective distribution list or from the Breadth (Humanities, Social Science, or Natural Science) distribution lists.

Physical Education/Health & Wellness ..... 3 cr
Complete one of the following:
A. Three PEH Activity [AC] credits
No more than 3 PEH AC credits may be used in the degree.
B. PEH 100
C. PEH 178

General Electives ..... 12 cr
Select up to 12 transferrable credits in courses numbered 100 or above to bring the total credits to 90. ..... No more than 3 PEH Activity [AC] credits may be used in the degree.

Total credits required: ..... 90 cr
Note: No course may be used more than once for meeting degree requirements.

Foreign Language Advisory

Although the Associate in Arts and Science DTA degree does not have a specific requirement for foreign language, all potential transfer students need to be aware that many universities have either an admission or graduation requirement of two years of a single foreign language in high school or two or three quarters of a single foreign language in college.

If a student is certain of the university where she/he will transfer, she/he should carefully review the foreign language requirements of that college. In general, students not having two years of high school foreign language are well advised to include a year of college foreign language (through the 123 level) in their degree program at BBCC.

Math/Science Advisory

Students planning to transfer to Washington State University should carefully plan course work to complete math/science breadth requirements with assistance of a college counselor or transfer advisor.

Advising Maps

An advising map for the AA&S DTA degree is available on the BBCC Website; use the Academics dropdown and choose the Programs & Degrees link below the Explore heading. The advising map is helpful to prepare for advising and registration each quarter. Students should maintain an accurate record of courses completed and bring their advising map with them for advising appointments.

The following schedule of courses is a recommended guide for completing this degree. See a program advisor for specific courses. Refer to the distribution lists to help you choose classes within each distribution category that meet your educational goals and interests. Refer to the Programs of Study pages for a full listing of courses in each discipline and which quarter each course will be taught; there are a lot of choices; ask your advisor to help you choose.

First Year
Fall Quarter

ENGL& 101 English Composition I BS..... 5
SQR – MATH above 100 or PHIL& 220* 5
General Elective..... 2
PEH 100 or PEH 178** 3

* If you have placed below 100 in ENGL or MATH you should start taking those classes in your first quarter. If you take several classes below 100 in ENGL or MATH, you may have to attend an additional quarter or take a class or two during Summer Quarter.
** Instead of PEH 100 or PEH 178 take 3 PEH AC classes during three different quarters.

Winter Quarter

ENGL& 102 Composition II BS 5
Continue on with MATH if needed MS..... 5
or
Humanities Breadth HU
Social Science Breadth SS..... 5

Spring Quarter

Humanities Breadth HU/HP 5
Specified Elective SE 5
Natural Science NS/LS..... 5

Second Year
Fall Quarter

Humanities Breadth HU 5
Social Science Breadth SS 5
Natural Science course if needed NS 5

Winter Quarter

Natural Science LS 5
Specified Elective SE 5
General Elective 5

Spring Quarter

Social Science Breadth SS 5
Humanities Breadth if needed HU or General Elective 5
Additional Breadth HU/HP/SS/NS/LS/MS 5

Total Credits required: ..... 90 cr

Distribution Lists=Associate in Arts & Science DTA

In this catalog, courses commonly used in the AA&S DTA are identified by their distribution category. The following lists the Distribution Category along with its abbreviation.

BS Basic Requirements/Skills
SQR Symbolic Reasoning
HU Humanities
HP Humanities Performance
SS Social Science
NS Non-lab Science
LS Lab Science
MS Math/Science
SE Specified Elective
AC PE Activity Credit
-- General Elective courses carry no abbreviation

Basic Requirements

Communications BS

ENGL& 101 English Composition I 5
ENGL& 102 Composition II 5
ENGL 201 Advanced Academic Research Writing 5
ENGL& 235 Technical Writing 5

Quantitative Skills SQR

PHIL& 120 Symbolic Logic 5
MATH& 107 Math in Society 5
MATH& 141 Precalculus I 5
MATH& 142 Precalculus II 5
MATH& 146 Introduction to Statistics 5
MATH& 148 Business Calculus 5
MATH& 151 Calculus I 5

Quantitative Skills SQR - continued

MATH& 152 Calculus II 5
MATH& 163 Calculus 3 5
MATH 220 Linear Algebra 5
MATH 230 Differential Equations 5
MATH& 254 Calculus IV 5

Breadth Requirements

Humanities HU

ART& 100 Art Appreciation 5
ART 212 American Art 5
ART 216 Prehistoric-Medieval Art History 5
ART 217 Renaissance –Mid-nineteenth Century 5
ART 218 Western Art: Impressionism to Art aft. 1945 5
ASL& 121 Am Sign Language I 5
ASL& 122 Am Sign Language II 5
ASL& 123 Am Sign Language III 5
CMST& 102 Introduction to Mass Communications 5
CMST& 210 Interpersonal Communications 5
CMST& 220 Public Speaking 5
CMST 229 Advanced Public Speaking 5
ENGL& 102 Composition II 5
ENGL 105 Moral of the Story 5
ENGL 198 Special Projects in English 1-3
ENGL 211 Creative Writing: Fiction 5
ENGL 212 Creative Writing: Poetry 5
ENGL 216 The Art of Film 5
ENGL& 220 Intro to Shakespeare 5
ENGL 221 Creative Writing II: Fiction 5
ENGL 234 Science Fiction as Literature 5
ENGL& 235 Technical Writing 5
ENGL 239 The Mystery Story as Literature 5
ENGL 240 World Literature 5
ENGL 243 The American Novel 5
ENGL& 244 American Literature I 5
ENGL& 245 American Literature II 5
ENGL& 246 American Literature III 5
ENGL& 256 World Literature III 5
ENGL 261 Women's Literature 5
ENGL 272 Graphic Novel as Literature 5
FREN& 121 French I 5
FREN& 122 French II 5
FREN& 123 French III 5
FREN& 221 French IV 5
FREN& 222 French V 5
FREN& 223 French VI 5
GERM& 121 German I 5
GERM& 122 German II 5
GERM& 122 German III 5
HUM 108 Introduction to Gender Studies 5
HUM 110 Greek Mythology 5

Humanities HU - continued

HUM 214 Diversity Issues: Race, Class and Gender 5
MUSC 100 Introduction to Music 5
MUSC& 105 Music Appreciation 5
MUSC 170 History of Jazz 5
MUSC 174 History of Rock and Roll 5
MUSC 175 Music of the World 5
MUSC 204 Music Technology Workshop 3
PHIL& 101 Intro to Philosophy 5
PHIL 102 Ethics and Policy in Healthcare I 1
PHIL 103 Ethics and Policy in Healthcare II 1
PHIL& 120 Symbolic Logic 5
PHIL 201 Ethics and Policy in Healthcare III 1
PHIL 202 Ethics and Policy in Healthcare IV 1
PHIL 203 Ethics and Policy in Healthcare V 1
PHIL 210 Ethics 5
PHIL 211 Ethics for Criminal Justice 5
PHIL 230 East Indian Philosophy 5
PHIL 240 Philosophy of Religion 5
PHIL 250 Asian Philosophy 5
REL 201 World Religions 5
REL 211 Religion in America 5
SPAN& 121 Spanish I 5
SPAN& 122 Spanish II 5
SPAN& 123 Spanish III 5
SPAN& 211 Spanish for Spanish Speakers I 5
SPAN& 212 Spanish for Spanish Speakers II 5
SPAN& 213 Spanish for Spanish Speakers III 5
SPAN& 221 Spanish IV 5
SPAN& 222 Spanish V 5
SPAN& 223 Spanish VI 5

Humanities HP

ART 101 Design I 5
ART 102 Design II 5
ART 103 Design III 5
ART 104 Drawing I 5
ART 105 Drawing II 5
ART 106 Drawing III 5
ART 121 Ceramics I 2-5
ART 122 Ceramics II 2-5
ART 123 Ceramics III 2-5
ART 140 Introduction to Digital Art 5
ART 198 Special Projects 1-5
ART 221 Watercolor I 1-5
ART 222 Watercolor II 1-5
ART 223 Watercolor III 1-5
ART 230 Painting/Drawing Workshop 5
ART 231 Oil Painting I 5
ART 232 Oil Painting II 5
ART 233 Oil Painting III 5
JOU 140 Digital Photojournalism 3

Humanities HP - continued

MUSC 101 Ukulele Orchestra (Ukestra) 1
MUSC 110 College Chorus 1
MUSC 114 Mariachi Workshop 3
MUSC 115 Group Piano I 2
MUSC 116 Group Piano II 2
MUSC 117 Group Piano III 2
MUSC 120 College Band 1
MUSC 124 Orchestra I 1
MUSC 134 Group Guitar 2
MUSC 215 Group Piano IV 2
MUSC 216 Group Piano V 2
MUSC 217 Group Piano VI 2
MUSC 224 Orchestra II 1
MUSC 270 Musical Theatre Workshop 1

Social Science SS

ANTH& 100 Survey of Anthropology 5
CJ&101 Intro to Criminal Justice 5
ECON 200 Introduction to Economics 5
ECON& 201 Micro Economics 5
ECON& 202 Macro Economics 5
HIST 110 The American Experience 5
HIST& 116 Western Civilization I 5
HIST& 117 Western Civilization II 5
HIST& 118 Western Civilization III 5
HIST 121 History of Mexico 5
HIST& 126 World Civilization I 5
HIST& 127 World Civilization II 5
HIST& 128 World Civilization III 5
HIST& 136 U.S. History 1 5
HIST& 137 U.S. History 2 5
HIST 201 American History to 1840 5
HIST 210 Tudor England 5
HIST 215 Women in American History 5
HIST 219 Native American History 5
HIST 230 Ancient Near East 5
HIST 245 The American Civil War & Reconstruction 5
HIST 250 Ancient Greece 5
HIST 270 The Roman World 5
POLS& 101 Introduction to Political Science 5
POLS& 202 American Government 5
POLS& 203 International Relations 5
PSYC& 100 General Psychology 5
PSYC 101 Psychosocial Issues in Healthcare I 1
PSYC 102 Psychosocial Issues in Healthcare II 1
PSYC 103 Psychosocial Issues in Healthcare III 1
PSYC 201 Psychosocial Issues in Healthcare IV 1
PSYC 202 Psychosocial Issues in Healthcare v 1
PSYC& 200 Lifespan Psychology 5
PSYC 225 Psychology and the Legal System 5
SOC& 101 Intro to Sociology 5

Social Science SS - continued

SOC& 201 Social Problems 5
SOC 204 Gender and Power 5
SOC 220 Marriage and the Family 5

Natural Science - Lab Science LS

ASTR& 101 Intro to Astronomy 5
BIOL& 100 Survey of Biology 5
BIOL& 160 General Biology with Lab 5
BIOL& 221 Majors Ecology/Evolution 5
BIOL& 222 Majors Cell/Molecular 5
BIOL& 223 Majors Organismal Phys 5
BIOL& 241 Human A & P 1 5
BIOL& 242 Human A & P 2 5
BIOL& 260 Microbiology 5
BOT 130 Botany 5
BOT 140 Field Botany 5
CHEM& 110 Chemical Concepts w/Lab 5
CHEM& 121 Intro to Chemistry 5
CHEM& 131 Intro to Organic/Biochem 5
CHEM& 161 General Chem w/Lab I 5
CHEM& 162 General Chem w/Lab II 5
CHEM& 163 General Chem w/Lab III 5
GEOL& 101 Intro Physical Geology 5
PHYS& 110 Physics for Non-Science Majors with Lab 5
PHYS& 114 General Physics I with Lab 5
PHYS& 115 General Physics II with Lab 5
PHYS& 116 General Physics III with Lab 5
PHYS& 221 Engineering Physics I w/Lab 5
PHYS& 222 Engineering Physics II w/Lab 5
PHYS& 223 Engineering Physics III w/Lab 5

Natural Science-Non-Lab Science NS

ASTR& 100 Survey of Astronomy 5
AVF 113 Meteorology 5
AVF 213 Advanced Meteorology 5
BIOL& 170 Human Biology 5
CHEM& 105 Chemical Concepts 5
ENGR 201 Material Science 5
ENGR& 204 Electrical Circuits 5
ENGR 205 Electrical Circuits Lab 5
ENGR& 214 Statics 5
ENGR& 215 Dynamics 5
ENGR& 224 Thermodynamics 5
ENGR& 225 Mechanics of Materials 5
ENGR 240 Applied Numerical Methods 5
ENVS& 100 Survey of Environmental Science 5
NUTR& 101 Nutrition 5
SCI 101 Survey of Science 5

Natural Science - Math Science MS

MATH& 107 Math in Society 5
MATH& 141 Precalculus I 5
MATH& 142 Precalculus II 5
MATH& 146 Introduction to Statistics 5
MATH& 146 Introduction to Statistics 5
MATH& 147 Finite Math 5
MATH& 151 Calculus I 5
MATH& 152 Calculus II 5
MATH& 163 Calculus 3 5
MATH 220 Linear Algebra 5
MATH 230 Differential Equations 5
MATH& 254 Calculus IV 5

Specified Elective SE

ACCT& 201 Prin of Accounting I 5
ACCT& 202 Prin of Accounting II 5
ACCT& 203 Prin of Accounting III 5
ASTR 105 Observational Astronomy 3
BIOL 104 Core Concepts in Biology 2
BUS& 101 Intro to Business 5
BUS& 201 Business Law 5
CMST 234 Small Group Discussion 3
CS 101 Intro to Computer Science 3
CS& 131 Computer Science I: C++ 5
CS& 132 Advanced Programming with C++ 5
CS& 141 Computer Science I: Java 5
CS 142 Advanced Programming with Java 5
CJ& 105 Introduction to Corrections 5
CJ& 106 Juvenile Justice 5
CJ& 110 Criminal Law 5
CJ 210 Introduction to American Policing 5
EDUC& 115 Child Development 5
EDUC& 202 Intro to Education 5
EDUC& 204 Inclusive Education 5
ENGR& 111 Engineering Graphics I 5
ENGR& 112 Engineering Graphics II 5
ENGR 202 Design of Logic Circuits 6
ENGL 201 Advanced Academic Research Writing 5
PEH 100 Lifetime Wellness 3
PEH 102 Theory of Basketball 3
PEH 103 Theory of Wrestling 3
PEH 105 Theory of Baseball 3
PEH 106 Theory of Fast Pitch Softball 3
PEH 107 Theory of Volleyball 3
PEH 178 Principles of Fitness 3
SCI 104 Math for Science and Engineering 2

PEH Activity Credit AC

PEH 112 Running or Walking for Fitness 1
PEH 114 Basketball 1
PEH 119 Fast Pitch 1
PEH 122 Volleyball 1
PEH 125 Conditioning 1
PEH 128 Social Dance 1
PEH 130 Indoor Cycling / Spinning 1
PEH 131 Circuit Weight Training 1
PEH 132 Fitness 1
PEH 133 Weight Training 1
PEH 135 Beginning Yoga 1
PEH 137 Beginning Brazilian Jiu-Jitsu 1
PEH 149 Jogging for Health 1
PEH 153 Lifeguard Training 1
PEH 155 Body Toning 1
PEH 158 Racquetball 1
PEH 160 Baseball Skills 1

Associate in Science-Transfer, AS-T 1 and AS-T 2

Careful planning is important in all of the degrees offered by BBCC. In the case of the AS-T degree, it is essential to have information about general requirements and also major requirements for the specific Bachelor of Science degree at the intended baccalaureate institution from the beginning and throughout the degree planning process.

The purpose of the degree is to allow the student who plans to complete a Bachelor of Science degree in biology, chemistry, computer science, engineering or physics the opportunity to make substantial progress toward fulfilling major requirements while completing at least half of the liberal arts, or general requirements, in studies such as English, the humanities and the social sciences. The degree is accepted by many baccalaureate institutions in the state of Washington. Completing the AS-T degree will prepare students for upper division study; it does not guarantee students admission to the major.

While BBCC faculty advisors consult with students to help them plan effectively, the ultimate responsibility to plan rests with the student. The college recommends that the student identify one or two potential transfer schools and then contact qualified program advisors at those institutions as early as possible to obtain specific, course-by-course advice. Throughout one's enrollment at BBCC, the program advisors at the transfer institution should be consulted.

Unlike the DTA degree, the AS-T degree does not automatically fulfill the lower division (first and second year) general requirements at a university. Typically the AS-T degree holder's BBCC transcript will be evaluated on a course-by-course basis according to both its general requirements and major requirements. In the admissions process, the AS-T degree typically offers the same advantages as the DTA—it is generally easier to be admitted as a transfer student with a transferable degree.

Associate in Science-Transfer AS-T 1 and AS-T 2 (90 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Cultural, Social, Political Aspects
  Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.
- PO5 Problem Solving
  Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.

Degree Requirements:

To earn the Associate in Science-Transfer degree, a student must:

- Complete their degree within three years from the quarter of entry based on the catalog in use at time of entering BBCC. After that date, students must meet any changes in graduation.
- Complete at least 90 transferable credits in courses numbered 100 or above with a grade point average (GPA) of 2.0 or higher.
- Earn a grade of at least a 1.0 in each college level course used in the degree.
- Complete and submit an application for graduation to the Student Administrative Support Services Office before a degree will be awarded.

Note: No course may be used more than once for meeting degree requirements.

Associate in Science-Transfer AS-T 1

The 90 transferable credits must include the following:

Basic Requirements

A. Communication Skills [BS] .....5 credits
1. ENGL& 101, ENGL& 102, ENGL& 235, or ENGL& 201

B. Mathematics [SQR].....10 credits
1. MATH& 151 and MATH& 152

Note: Enrollment into any BBCC math course requires placement at the appropriate entrance level.

C. Humanities [HU, HP] and Social Science [SS] .....15 credits

Select at least 5 credits from Humanities distribution list and at least 5 credits from Social Science distribution list plus and additional 5 credits from either the Humanities or the Social Science distribution lists.

1. Humanities distribution
2. Social science distribution
3. Humanities or Social Science distribution

Pre-Major Program

Complete one of the following two Pre-major Programs:

AS-T 1: Biology Pre-major .....45-50 credits

BIOL& 221, 222, 223

CHEM& 161, 162, 163

MATH& 141*, 142*, and 146 (or 163)

Additional 10-15 credits in any science or math course normally taken for science majors, preferably in a two or three course sequence as approved by advisor.

* If student takes MATH& 141 and 142 due to math placement below MATH& 151, these credits count toward the Additional 10-15 credits specified in #4.

AS-T 1: Chemistry Pre-major .....45-50 credits

CHEM& 161, 162, 163

PHYS& 221, 222, 223

MATH& 146 (or 163)

Additional 10-15 credits in PHYS, GEOL, BIOL, or MATH, consisting of courses normally taken for science majors, preferably in a two or three course sequence as approved by advisor.

Physical Education/Health & Wellness .....3 credits

Three PEH Activity [AC] credits, PEH 100 or PEH 178

Remaining Credits .....10-15 credits

Sufficient additional college-level credits so that total credits earned are coursework, or specific general education or other university requirements, as approved by the advisor.

Total credits required: .....90 credits

Associate in Science-Transfer AS-T 2

The 90 transferable credits must include the following:

Basic Requirements

D. Communication Skills [BS] .....5 credits

ENGL& 101, ENGL& 102, ENGL& 235, or ENGL& 201

E. Mathematics [SQR].....10 credits

MATH& 151 and MATH& 152

Note: Enrollment into any BBCC math course requires placement at the appropriate entrance level.

F. Humanities [HU, HP] and Social Science [SS] .....15 credits

Select at least 5 credits from Humanities distribution list and at least 5 credits from Social Science distribution list plus and additional 5 credits from either the Humanities or the Social Science distribution lists.

- Humanities distribution
- Social science distribution
- Humanities or Social Science distribution

Pre-Major Program

Complete one of the following two Pre-major Programs

AS-T 2: Computer Science or Physics Pre-major .....25 credits

- PHYS& 221, 222, 223
- MATH& 146 (or 163)
- One 5-credit course as approved by advisor based on the requirements of the specific discipline at the baccalaureate institution the student plans to attend.

AS-T 2: Engineering Pre-major .....25 credits

- PHYS& 221, 222, 223
- CHEM& 161
- MATH& 146 (or 163)

AS-T 2: Specified Electives [SE] .....20-25 credits

- Refer to the lists included within the AS-T MRP degrees that follow this general degree description.
- Credits approved by the advisor based on the requirements of the specific discipline at the transfer institution the student plans to attend, with no more than 5 credits of general electives. A minimum of 90 transferable credits must be earned for an AS-T degree.

Remaining Credits ..... 10-15 cr

1. Sufficient additional college-level credits so that total credits earned are coursework, or specific general education or other university requirements, as approved by the advisor.

Total credits required: .....90 credits

Advising Maps

Advising maps for the AS-T degrees offered at BBCC are available on the BBCC Website:

- AS-T 1: Biology Pre-major degree
- AS-T 1: Chemistry Pre-major degree
- AS-T 2: Pre-engineering MRP Electrical/Computer degree
- AS-T 2: Pre-engineering MRP Mechanical/Civil/Aeronautical/Industrial/Materials Science degree

Use the Academics dropdown and choose the Programs & Degrees link below the Explore heading and scroll down to the bottom of the page to the Advising Maps button. Once on the Advising Maps page look for:

- Biology – Transfer AS-T Track I
- Chemistry – Transfer AS-T Track I
- Engineering CEE AS-T Track II MRP
- Engineering OTRE AS-T Track II MRP

The advising map is helpful to prepare for advising and registration each quarter. Students should maintain an accurate record of courses completed and bring their advising map with them for advising appointments.

Many courses are designated within this degree. Refer to the distribution lists to help you choose the remaining classes within each distribution category that meet your educational goals and interests. Refer to the Programs of Study pages for a full listing of courses in each discipline, which quarter each course will be taught, and a sample schedule of courses. See a program advisor for specific courses.

Associate in General Studies

The Associate in General Studies (AGS) degree is designed to provide recognition for the student who is not planning to complete a transfer degree program or a specific professional/technical program. This degree requires students to complete certain general requirements while exploring elective areas.

Associate in General Studies (90 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

Degree Requirements:

To earn the Associate in General Studies degree, a student must:

- Complete their degree within three years from the quarter of entry based on the catalog in use at time of entering BBCC. After that date, students must meet any changes in graduation.
- Complete at least 90 credits with a grade point average (GPA) of 2.0 or higher, including at least 65 credits in courses numbered 100 or above.
- Earn a passing grade of at least a 0.7 grade point in each course used in the degree.
- Complete and submit an application for graduation to the Student Administrative Support Services Office before a degree will be awarded.

Note: No course may be used more than once for meeting degree requirements.

The 90 credits must include the following:

A. Communication Skills ..... 10 cr minimum
Courses in English, Communication Studies, Business Communications, Business Writing, World Languages (ASL, FREN, GERM, SPAN), and Journalism may be used to satisfy this requirement.

B. Humanities [HU, HP] ..... 10 cr minimum
Courses in Art, Communication Studies, English, Humanities, Music, Philosophy, Religious Studies, and World Languages (ASL, FREN, GERM, SPAN) may be used to satisfy this requirement.

C. Mathematics or Science [NS, LS, MS] ..... 10 cr minimum
Courses in Astronomy, Biology, Chemistry, Engineering, Environmental Science, Geography, Geology, Mathematics, Nutrition, Physics, and Science may be used to satisfy this requirement.

D. Social Science [SS] ..... 10 cr minimum
Courses in Anthropology, Criminal Justice, Economics, History, Political Science, Psychology, and Sociology/Social Science may be used to satisfy this requirement.

E. Physical Education/Health & Wellness ..... 3 cr
Complete 3 PEH Activity [AC] credits or PEH 100 or PEH 178.

F. General Electives ..... 47 cr
Total credits required: ..... 90 cr
Note: No course may be used more than once for meeting degree requirements.

Certificate of Accomplishment

The Certificate of Accomplishment is designed to provide recognition for the student who does not plan to complete a degree program but is interested in training and instruction in specialized areas.

This certificate does not necessarily include related instruction and varies in length from 5 credits to less than 45 credits.

Certificates of Accomplishment are offered through the following programs:

Accounting Technician
Automotive Technology
Aviation (Commercial Pilot)
Aviation Maintenance Technology
Business Information Management
Commercial Driver's License
Computer Science
Early Childhood Education
Industrial Systems Technology
Nursing Assistant
Simulation Technology
Unmanned Systems
Welding

Refer to the Program of Study section for additional information.

Certificate of Achievement

The Certificate of Achievement is designed to provide recognition for the student who does not plan to complete a degree program. Application for the Certificate of Achievement must be approved by the program advisor and the appropriate instructional dean.

This certificate includes related instruction and a minimum of 45 credits in an approved program, including:

3-5 credits in oral communications
3-5 credits in written communications
3-5 credits in human relations
3-5 credits in computational skills, and
25-31 credits in the program major
45 minimum total credits

Students working toward a Certificate of Achievement need to develop a program outline with the faculty advisor in their professional/technical area of interest that includes all related instruction components.

Certificate of Achievements are offered through the following programs:

Accounting Technician
Agriculture
Aviation (Commercial Pilot)
Aviation Maintenance Technology
Business Information Management
Chemical Laboratory Technology
Computer Science
Early Childhood Education
Industrial Systems Technology
Manufacturing
Medical Assistant
Welding Technology

High School Diploma

The high school diploma is designed to provide recognition for the student who has successfully completing a high school completion program through Big Bend Community College by demonstrating competency/mastery.

This diploma includes related instruction and a minimum of 20 credits in approved courses:

- Reading/Writing/Communication (3 credits)
- 3rd Year Math (Career or Algebra II) (1 credit)
- Algebra I (1 credit)
- Geometry (1 credit)
- Lab Science (1 credit)
- Non-Lab Science (1 credit)
- Health and Fitness (1 health & 1 fitness credit)
- US Constitution and Government (1 credit)
- WA State Government and History (0.5 credit)
- Contemporary World Problems (1 credit)
- Civics (0.5 credit)
- Fine Arts (1 credit)
- Occupational Education (1 credit)
- Electives (4.5 credits)
- Portfolio (1 credit)

Students entering BBCC may prepare for direct entry into a career or complete the first two years of a four-year college program before transferring.

These suggested programs of study are available at BBCC. The suggested outlines are to be used as guides only. Each student is strongly encouraged to consult a department faculty advisor for assistance to develop an individual program of study.

Students planning to transfer to four-year colleges or universities should consult the current catalog of the institution to which they intend to transfer and develop a program in consultation with a faculty advisor and/or college counselor. Many current four-year college and university catalogs are available in the counseling center.

Accounting

Preston Wilks ***509.793.2194*** ***email: prestonw@bigbend.edu***

Accounting is often referred to as the language of business. This reference is because the primary function of accounting is to provide key financial information to business stakeholders to be used in assessing the economic performance and condition of a business. Those choosing to enter the field of accounting should have strong problem solving abilities, excellent oral and written communication skills, and quantitative skills.

Accounting Technician AAS (90 credits)

The Accounting Technician program is designed to develop proficiencies and skills necessary to obtain entry-level employment in bookkeeping and accounting career paths. Jobs are available in corporate offices, industrial plants, mortgage and commercial banks, investment firms, insurance offices, real estate offices, retailing operations, and in general, any small business.

Program Learning Outcomes:

- IO1 Communication
  Communicate the cumulative effect of business transactions by preparing basic financial statements
- IO2 Quantitative Reasoning
  Analyze the financial health of a business by interpreting business data obtained from financial statements
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO4 Record business transactions in traditional accounting journals by using common accounting practices (GAAP-Generally Accepted Accounting Principles)
- PO5 Record, classify, and summarize business transactions by using current accounting software
- PO6 Demonstrate an understanding of concepts and terminology related to operating in a business environment by completing various business-related projects and exams

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year
Fall Quarter

ACCT 105 Introduction to Accounting^ 5
BIM 101 Basic Keyboarding^ 2
BIM 181 Introduction to Microsoft Word 3
BUS 102 Business Mathematics 5

Winter Quarter

BIM 110 Microsoft Office Essentials 3
BUS& 101 Intro to Business 5
BUS 121 Business English 5
BUS 161 Business Calculators 2

Spring Quarter

BIM 182 Introduction to Microsoft Excel....2
BUS 122 Business Communications....5
CMST& 220 Public Speaking....5
ECON 200 Introduction to Economics....5

Second Year
Fall Quarter

ACCT& 201 Principles of Accounting I....5
ACCT 262 Intro to QuickBooks®....2
BIM 109 Internet Communications....1
BUS& 201 Business Law....5
FAD 150 Industrial First Aid....2

Winter Quarter

ACCT& 202 Principles of Accounting II....5
BIM 183 Intro to MS Office: Access....1
BIM 190 Spreadsheets 1....3
BUS 120 Human Relations on the Job....4

Spring Quarter

ACCT& 203 Principles of Accounting III....5
ACCT 233 Intro to Payroll Taxes....2
ACCT 260 Computer Accounting....3
BUS 170 Consumer Finance....5

^Students who have had accounting and/or typing in high school and can demonstrate proficiency may replace these courses with other business electives with advisor approval

Accounting One-Year Certificate of Achievement (52 credits)

Program Learning Outcomes:

- IO1 Communication
  Communicate the cumulative effect of business transactions by preparing basic financial statements
- IO2 Quantitative Reasoning
  Analyze the financial health of a business by interpreting business data (obtained from financial statements)
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO5 Record, classify, and summarize business transactions by using current accounting software

Upon completion of the following courses, the student will earn a Certificate of Achievement from BBCC.

ACCT 105 Introduction to Accounting....5
ACCT& 201 Principles of Accounting I....5
ACCT& 202 Principles of Accounting II....5
ACCT& 203 Principles of Accounting III....5
ACCT 260 Computer Accounting....3
BIM 110 Microsoft Office Essentials....3
BIM 190 Spreadsheets 1....3
BUS 102 Business Mathematics....5
BUS 120 Human Relations on the Job....4
BUS 121 Business English....5

BUS 161 Business Calculators 2
CMST& 220 Public Speaking 5
FAD 150 Industrial First Aid 2

Certificate of Accomplishment

Upon completion of each of the following options, the student will earn a Certificate of Accomplishment from BBCC. Additionally, a student may select to complete any option, in any order. Upon completion of all four options, a student may select to complete the remaining program credits in order to earn an AAS degree in Accounting Technician.

Basic Office Computing Certificate of Accomplishment (15 credits)

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Create professional documents that would be used in an office environment

BIM 101 Basic Keyboarding 2
BIM 110 Microsoft Office Essentials 3
BIM 181 Introduction to Microsoft Word 3
BIM 182 Introduction to Microsoft Excel 2
BIM 190 Spreadsheets 1 3
BUS 161 Business Calculators 2

Accounting Principles Proficiency Certificate of Accomplishment (20 credits)

Program Learning Outcomes:

- IO1 Communication
  Communicate the cumulative effect of business transactions by preparing basic financial statements
- PO4 Record business transactions in traditional accounting journals by using common accounting practices (GAAP-Generally Accepted Accounting Principles)

ACCT 105 Introduction to Accounting 5
ACCT& 201 Principles of Accounting I 5
ACCT& 202 Principles of Accounting II 5
ACCT& 203 Principles of Accounting III 5

Computerized Accounting Applications Certificate of Accomplishment (5 credits)

Program Learning Outcomes:

- PO5 Record, classify, and summarize business transactions by using current accounting software

ACCT 260 Computer Accounting 3
ACCT 262 Introduction to QuickBooks® 2

Business Communications Certificate of Accomplishment (19 credits)

Program Learning Outcomes:

- IO1 Communication
  Write, speak, and present information effectively and professionally

BUS 120 Human Relations on the Job 4
BUS 121 Business English 5
BUS 122 Business Communications 5
CMST& 220 Public Speaking 5

Remaining Program Courses to receive Associate in Applied Science Degree

BIM 109 Internet Communications..... 1
BIM 183 Intro to MS Office: Access..... 1
BUS& 101 Intro to Business..... 5
BUS 102 Business Mathematics..... 5
BUS 170 Consumer Finance..... 5
BUS& 201 Business Law..... 5
BUS 233 Introduction to Payroll Taxes..... 2
ECON 200 Introduction to Economics..... 5
FAD 150 Industrial First Aid..... 2
Total remaining program credits: 31

Agriculture

Ethan Tonnemaker, Program Coordinator 509.793.2117 ethant@bigbend.edu

The Agriculture department offers two pathways for students pursuing a degree in agriculture. The transfer pathway, Associate in Applied Science-Transfer degree (AAS-T), allows students to seamlessly transfer to Washington State University and earn a bachelor's degree in agriculture. While an Associate in Applied Science (AAS) Agriculture Technology degree prepares students for a direct route to start their career in the agricultural industry.

Ag Technology & Management (non-transfer) AAS (95-108 credits)

BBCC provides students interested in Agricultural Technology and Management a comprehensive Associate in Applied Science (AAS) degree with three customized pathways intended to provide graduates with the skills needed to independently operate or support local, regional and national agriculture industries. The degree plan specifically outlines pathways for students interested in specializing in Agricultural Business, Agronomy, and/or the use of Unmanned Aerial Vehicles (UAVs).

Program and Degree Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO4 Students will demonstrate critical-thinking and problem-solving skills as they make decisions in agricultural management situations
- PO5 Students will demonstrate knowledge of scientific principles when applied to a variety of crop production systems
- PO6 Students will show knowledge of workplace safety when handling food, chemical/pesticides, and equipment.
- PO7 Students will select and use the appropriate precision and software application technology.

Agricultural Business

The following schedule of courses is the recommended program for completing the AAS degree with the Agricultural Business specialization. See a program advisor for substitute courses.

First Year
Fall Quarter

AGR 101 Introduction to Ag Industry & Careers 2
AGR 261 Plant Science 5
BUS& 101 Introduction to Business 5
MAP 117 Applied Math for Workforce Programs I 5
or
MAP 103 Applied Mathematics (IST)
or
BUS 102 Business Mathematics

Winter Quarter

AGR 263 Soils 5
ACCT& 105 Introduction to Accounting 5
BUS 120 Human Relations on the Job 4

Spring Quarter

AGR 212 Ag Safety and Pesticides 5
BIM 110 Microsoft Office Essentials 3
ECON& 201 Micro Economics 5

Second Year
Fall Quarter

ACCT 262 Introduction to Quickbooks 2
AGR 120 Introduction to Precision Agriculture 5
AGR 241 Farm & Ranch Management 5
ENGL 109 Applied Technical Writing 3

Winter Quarter

AGR 272 Food Sustainability & Safety 5
BUS 200 Supervision 5
CMST 100 Human Communications 4
FAD 150 Industrial First Aid 2

Spring Quarter

AGR 271 Ag Sales & Marketing 5
BUS 170 Consumer Finance 5
Approved Elective 5

Summer Quarter

AGR 295 Work-based Learning Internship 4
AGR 297 Work-based Learning Seminar 1
or
CDL 100 Commercial Driver's License 17

Agronomy

Agronomy is the science of soil management and crop production. Soil and crop production are the base of the agriculture industry. The following schedule of courses is the recommended program for completing the AAS degree with the Agronomy specialization. See a program advisor for substitute courses.

First Year
Fall Quarter

AGR 101 Introduction to Ag Industry & Careers 2
AGR 261 Plant Science 5
ENGL 109 Applied Technical Writing 3
MAP 117 Applied Math for Workforce Programs I 5
or
MAP 103 Applied Mathematics (IST)
or
BUS 102 Business Mathematics

Winter Quarter

AGR 263 Soils 5
AGR 212 Ag Safety and Pesticides 5
BIM 110 Microsoft Office Essentials 3
BUS 120 Human Relations on the Job 4

Spring Quarter

AGR 251 Integrated Pest Management 5
CMST 100 Human Communications 4
ECON& 201 Micro Economics 5

Second Year
Fall Quarter

AGR 120 Introduction to Precision Agriculture 5
AGR 241 Farm & Ranch Management 5
AGR 265 Crop Production 5

Winter Quarter

AGR 272 Food Sustainability & Safety 5
BUS 200 Supervision 5
CHEM& 105 Chemical Concepts 5
FAD 150 Industrial First Aid 2

Spring Quarter

AGR 211 Ag Weeds Identification and Controls 5
AGR 110 Water Management in Agriculture 3
AGR 271 Ag Sales & Marketing 5

Summer Quarter

AGR 295 Work-based Learning Internship 4
AGR 297 Work-based Learning Seminar 1
or
CDL 100 Commercial Driver's License 17

Unmanned Systems

The following schedule of courses is the recommended program for completing the AAS degree with the Unmanned Systems specialization. See a program advisor for substitute courses.

First Year
Fall Quarter

AGR 101 Introduction to Ag Industry & Careers 2
AGR 261 Plant Science 5
GIS 110 Geographical Information Systems (GIS) I 4
UMS 112 UAS Ground School 5

Winter Quarter

AGR 212 Ag Safety and Pesticides 5
AGR 263 Soils 5
MAP 117 Applied Math for Workforce Programs I 5
or
MAP 103 Applied Mathematics (IST)
or
BUS 102 Business Mathematics

Spring Quarter

ECON& 201 Micro Economics 5
BIM 110 Microsoft Office Essentials 3
BUS 120 Human Relations on the Job 4
UMS 142 UAS Flight Lab 6

Second Year
Fall Quarter

AGR 120 Introduction to Precision Agriculture 5
AGR 241 Farm & Ranch Management 5
ENGL 109 Applied Technical Writing 3

Winter Quarter

AGR 272 Food Sustainability & Safety 5
BUS 200 Supervision 5
CMST 100 Human Communications 4
GIS 210 Geographical Information Systems (GIS) II 3

Spring Quarter

AGR 271 Ag Sales & Marketing 5
FAD 150 Industrial First Aid 2
GIS 220 Remote Sensing 3
UMS 107 Commercial Remote Pilot Certification 2

Summer Quarter

AGR 295 Work-based Learning Internship 4
AGR 297 Work-based Learning Seminar 1
or
CDL 100 Commercial Driver's License 17

Agriculture Transfer AAS-T (94 credits)

This AAS-T degree program is designed to give students a strong foundation in the agricultural fields and aligns with the specific WSU majors within the Integrated Plant Sciences and Agricultural Food Systems degrees. Students completing this degree will be prepared to begin upper division work in agriculture at WSU.

Program and Degree Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO4 Students will demonstrate critical-thinking and problem-solving skills as they make decisions in agricultural management situations
- PO5 Students will demonstrate knowledge of scientific principles when applied to a variety of crop production systems

The following schedule of courses is the recommended program for completing the AAS-T degree. See a program advisor for substitute courses.

First Year
Fall Quarter

AGR 101 Introduction to Ag Industry & Careers 2
AGR 261 Plant Science 5
ANTH& 100 Survey of Anthropology 5
ENGL& 101 Composition I 5

Winter Quarter

AGR Elective* 5
BOT 130 Botany 5
ECON& 201 Micro Economics 5

Spring Quarter

ART& 100 Art Appreciation 5
CMST& 220 Public Speaking 5
MATH& 146 Introduction to Statistics 5

Second Year
Fall Quarter

AGR Elective* 5
CHEM& 161 General Chemistry 5
HIST& 116 Western Civilization I 5
or
HIST& 118 Western Civilization III

Winter Quarter

AGR 263 Soils 5
CHEM& 162 General Chemistry 5
PSYC& 100 General Psychology 5
or
SOC& 101 Introduction to Sociology

Spring Quarter

AGR Elective* 5
CHEM& 163 General Chemistry 5
FAD 150 Industrial First Aid 2
*Approved AGR Electives: AGR 212, 241, 251, 271, 272, 295, 297

Agriculture Science – WSU Transfer AAS-T (99-104 credits)

Customized Articulation Agreements are intended to eliminate duplication of coursework and better integrate programs to ensure a more efficient pathway to graduation. The agreements provide Big Bend Community College student with a more efficient transfer pathway to Washington State University (WSU). The current Custom Articulation Agreement options include the following:

- Field Crop Management
- Agricultural and Food Business Economics
- Agricultural Technology and Production Management

Program and Degree Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO4 Students will demonstrate critical-thinking and problem-solving skills as they make decisions in agricultural management situations
- PO5 Students will demonstrate knowledge of scientific principles when applied to a variety of crop production systems

Field Crop Management: The following schedule of courses is the recommended program for completing Field Crop Management option. See a program advisor for substitute courses.

First Year
Fall Quarter

AGR 101 Introduction to Ag Industry & Careers 2
AGR 261 Plant Science 5
ENGL& 101 Composition I 5
MATH& 141 Pre-Calculus I 5

Winter Quarter

ART& 100 Art Appreciation 5
BOT 130 Botany 5
FAD 150 Industrial First Aid 2
MATH& 146 Introduction to Statistics 5

Spring Quarter

ECON& 201 Micro Economics 5
HIST& 116 Western Civilization I 5
or
HIST& 118 Western Civilization III
MATH& 142 Intermediate Algebra 5

Summer Quarter

AGR 295 Work-based Learning Internship 4
AGR 297 Work-based Learning Seminar 1

Second Year
Fall Quarter

AGR 241 Farm & Ranch Management 5
ANTH& 100 Survey of Anthropology 5
CHEM& 161 General Chemistry 5

Winter Quarter

AGR 212 Ag Safety & Pesticides 5
AGR 263 Soils 5
CHEM& 162 General Chemistry 5
CMST& 220 Public Speaking 5

Spring Quarter

AGR 251 Ecologically Based Pest Management 5
CHEM& 163 General Chemistry 5
PSYC& 100 General Psychology 5
or
SOC& 101 Introduction to Sociology

Ag & Food Business Economics

The following schedule of courses is the recommended program for completing Ag & Food Business Economics option. See a program advisor for substitute courses.

First Year
Fall Quarter

AGR 101 Introduction to Ag Industry & Careers 2
AGR 261 Plant Science 5
ANTH& 100 Survey of Anthropology 5
ENGL& 101 Composition I 5

Winter Quarter

ART& 100 Art Appreciation 5
BOT 130 Botany 5
CMST& 220 Public Speaking 5
ECON& 202 Macro Economics 5

Spring Quarter

AGR 271 Ag Sales & Marketing 5
ECON& 201 Micro Economics 5
PSYC& 100 General Psychology 5
or
SOC& 101 Introduction to Sociology

Summer Quarter

AGR 295 Work-based Learning Internship 4
AGR 297 Work-based Learning Seminar 1

Second Year
Fall Quarter

AGR 241 Farm & Ranch Management 5
CHEM& 161 General Chemistry 5
FAD 150 Industrial First Aid 2
MATH& 141 Pre-Calculus I 5

Winter Quarter

AGR 263 Soils 5
CHEM& 162 General Chemistry 5
MATH& 146 Introduction to Statistics 5

Spring Quarter

CHEM& 163 General Chemistry 5
HIST& 116 Western Civilization I 5
or
HIST& 118 Western Civilization III
MATH& 148 Business Calculus 5

Ag Technology & Production Management

The following schedule of courses is the recommended program for completing Ag Technology & Production Management option. See a program advisor for substitute courses.

First Year
Fall Quarter

AGR 101 Introduction to Ag Industry & Careers 2
AGR 261 Plant Science 5
ECON& 201 Micro Economics 5
ENGL& 101 Composition I 5

Winter Quarter

AGR 272 Sustainable Agriculture 5
AGR 212 Ag Safety & Pesticides 5
BOT 130 Botany 5
FAD 150 Industrial First Aid 2

Spring Quarter

AGR 251 Ecologically Based Pest Management 5
AGR 271 Ag Sales & Marketing 5
CMST& 220 Public Speaking 5
HIST& 116 Western Civilization I 5
or
HIST& 118 Western Civilization III

Summer Quarter

AGR 295 Work-based Learning Internship 5
AGR 297 Work-based Learning Seminar 1

Second Year
Fall Quarter

AGR 241 Farm & Ranch Management 5
CHEM& 161 General Chemistry 5
MATH& 146 Introduction to Statistics 5

Winter Quarter

AGR 263 Soils 5
ANTH& 100 Survey of Anthropology 5
CHEM& 162 General Chemistry 5

Spring Quarter

ART& 100 Art Appreciation 5
CHEM& 163 General Chemistry 5
PSYC& 100 General Psychology 5
or
SOC& 101 Introduction to Sociology

Certificate of Achievement

The Certificate of Achievement is designed to provide recognition for the student who does not plan to complete an AAS degree program. A student who completes one of the following options will earn a certificate of achievement from BBCC.

Agriculture Business Certificate of Achievement (45 credits)

Agricultural business is a large sector of the agriculture industry. This certificate will provide students the foundational knowledge and skills to work in or operate an agricultural business. Upon completion of the following courses, the student will earn a Certificate of Achievement. See a program advisor for substitute courses.

Program and Degree Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO4 Students will demonstrate critical-thinking and problem-solving skills as they make decisions in agricultural management situations
- PO8 Students will demonstrate knowledge of business principles when applied to agricultural businesses and operations.

ACCT 105 Introduction to Accounting 5
AGR 101 Introduction to Ag Industry & Careers 2
AGR 241 Farm & Ranch Management 5
AGR 271 Ag Sales and Marketing 5
BUS& 101 Introduction to Business 5
BUS 102 Business Mathematics 5
BUS 120 Human Relations on the Job 4
BUS 170 Consumer Finance 5
CMST 100 Human Communications 4
ENGL 109 Applied Technical Writing 3
FAD 150 Industrial First Aid 2

Agricultural Unmanned Systems Certificate of Achievement (47 credits)

Program and Degree Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO 9 Students will select and use the appropriate precision and software application technology
- PO 10 Students will collect and evaluate data from various technologies and make management decisions from the data collected.
- PO 11 Students will apply the rules, protocols, and safety required to operate an unmanned aerial system for commercial agriculture purposes

ENGL 109 Applied Technical Writing....3
FAD 150 Industrial First Aid....2

Agricultural Unmanned Systems Certificate of Achievement (47 credits)

Program and Degree Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO 9 Students will select and use the appropriate precision and software application technology
- PO 10 Students will collect and evaluate data from various technologies and make management decisions from the data collected.
- PO 11 Students will apply the rules, protocols, and safety required to operate an unmanned aerial system for commercial agriculture purposes

Upon completion of the following courses, the student will earn a Certificate of Achievement. See a program advisor for substitute courses.

AGR 101 Introduction to Ag Industry & Careers....2
AGR 120 Introduction to Precision Agriculture....5
BUS 102 Business Mathematics....5
BUS 120 Human Relations on the Job....4
CMST 100 Human Communications....4
ENGL 109 Applied Technical Writing....3
FAD 150 Industrial First Aid....2
GIS 110 GIS I....4
GIS 210 GIS II....3
GIS 220 Remote Sensing....3
UMS 101 Intro to Unmanned Aerial Systems....5
UMS 107 Remote Pilot Certification....2
UMS 229 Independent Project....5

Agricultural Agronomy Certificate of Achievement (53 credits)

This certificate will provide students the foundational knowledge and skills to work in or support crop production. Upon completion of the following courses, the student will earn a Certificate of Achievement. See a program advisor for substitute courses.

Program and Degree Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO4 Students will demonstrate critical-thinking and problem-solving skills as they make decisions in agricultural management situations
- PO12 Students will apply plant and soil science concepts to crop production.

AGR 101 Introduction to Ag Industry & Careers 2
AGR 110 Water Management in Agriculture 3
AGR 211 Ag Weeds Identification and Controls 5
AGR 251 Integrated Pest Management 5
AGR 261 Plant Science 5
AGR 263 Soils 5
AGR 265 Crop Production 5
BUS 120 Human Relations on the Job 4
CHEM& 105 Chemical Concepts 5
CMST 100 Human Communications 4
ENGL 109 Applied Technical Writing 3
FAD 150 Industrial First Aid 2
MAP 117 Applied Math for Workforce Programs I 5

Anthropology

David Holliway ***509.793.2179*** ***DavidHo@bigbend.edu***
Suzanne Reilly ***509.793.2183*** ***SuzanneR@bigbend.edu***

Anthropology courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Social Science Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Anthropology is the study of humankind. This broad field includes the study of human biological origins, evolution, diversity, and nature, as well as the study of the origin, evolution, diversity, and nature of human cultural and social life. Anthropology represents an attempt to grasp and celebrate the whole context of human experience, including all people, from all cultures, across all time. Among the career possibilities in anthropology are: archaeology, education, social work, Foreign Service, and governmental agency work.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Art

Rie Palkovic ***509.793.2276*** ***email: art@bigbend.edu***

Art courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Humanities Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Art is a human expression dating back to prehistoric times. Humans made naturalistic and abstract expressions in their environments. As we delve into art making we tap into an essential characteristic of being human. In the art department, the studio method of learning emphasizes the development of individual creativity. Through the learning experience of technical competence, the art department encourages students to achieve a sense of involvement and integrity in making projects. Through the study of art history in other cultures and time periods the students may make connections to human expressions throughout the world community.

The department provides basic disciplines in the arts for art majors, other students, and citizens of the community. In developing each individual's talent and interests, equal emphasis is on mastery and the appreciation of all art forms. The curriculum probes aspects of visual communication, which focus the eye, mind, and hand in the technical and creative awareness the student needs to adequately prepare for his/her major area of study and for transfer to a four-year college or university.

A variety of art courses are offered for the student and the community. The art student may select from such fields as art education, two and three-dimensional design, drawing, painting or ceramic art. Some possible career options for art and art history majors are: artist, art educator, museum curator, art critic, graphic designer, photographer, web designer, industrial design, and many others. The study of the arts and art history may help other majors in problem solving techniques, creative thinking, and working with others.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses Credits

ART 101 Design I 5
ART 102 Design II 5
ART 103 Design III 5
ART 104 Drawing I 5
ART 105 Drawing II 5
ART 05 Drawing III 5
ART 140 Introduction to Digital Art 5
ART 216 Prehistoric-Medieval Art History 5
ART 217 Renaissance –Mid-nineteenth Century 5
ART 218 Western Art: Impressionism to Art after 1945 5

Recommended Art Electives (12 credits)

ART 121 Ceramics I 2-5
ART 122 Ceramics II 2-5
ART 123 Ceramics III 2-5
ART 221 Watercolor I 1-5
ART 222 Watercolor II 1-5
ART 223 Watercolor III 1-5
ART 231 Oil Painting I 5
ART 232 Oil Painting II 5
ART 233 Oil Painting III 5
ART 230 Painting/Drawing Workshop 5

Astronomy

Jim Hamm ***509.793.2147*** ***JimH@bigbend.edu***

Astronomy courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Natural Science Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Astronomy is the study of the entire universe, ranging from descriptions of and explanations for the daily, seasonal, and annual motions we observe with our eyes to trying to understand the origin and evolution of the universe itself. Between those extremes astronomy includes the study of the increasing number of known solar systems, the stars and other matter that make up galaxies, and the way galaxies and clusters of galaxies interact in the warped fabric of space and time. A course in astronomy introduces a learner to a wide range of material in the area, but also looks at how we know what we know, incorporating material from other fields such as chemistry, geology, and physics.

Most professional astronomers work in academia, combining research with teaching. Some work in business or private industry, some in planetariums or science museums, some in purely teaching positions in high schools or community colleges. The large number of science and mathematics courses necessary for a degree in astronomy are applicable in many different employment fields.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Automotive Technology

Dick Wynder ***509.793.2255*** ***richardw@bigbend.edu***
John Martin ***509.793.2256*** ***johnma@bigbend.edu***

The Automotive Technology program is two years (six quarters) in length and is designed to develop entry-level employment skills for those seeking career opportunities in the automotive repair field. As long as there are vehicles on the road, there will always be a need for highly skilled automotive technicians to maintain, service and repair them. According to Washington State labor market information, over 2,500 annual job openings are projected in automotive related industries.

A student in the BBCC Automotive Technician program receives training in all eight ASE Certification areas. Modern repair and diagnostic test equipment is used in training the student to accurately repair the complex vehicles of today. The curriculum also includes shop safety and environmental training, Industrial First Aid Certification, EPA Section 609 Refrigerant Certification, basic welding skills, and hydraulics, as well as degree required general education classes. Graduates of the Automotive Technology program obtain employment as automotive repair technicians and in related occupations such as automotive parts merchandising, alignment, tire service, and fleet maintenance. The agricultural equipment service and repair industry also provides employment opportunities for our graduates. A high-tech career in automotive technology gives a person job mobility with the security of knowing that his/her skills will always be in demand.

Any applicant who is 18 years of age or older or is a graduate of an accredited high school or has an equivalent certificate (GED) or is a qualified Running Start student is eligible for entry into the Automotive Technology program. Applications for admittance are accepted throughout the year. Students normally begin the program in the fall quarter, but may start in the winter or spring quarters. Advanced standing may be requested for prior education or experience.

Automotive Technology AAS (137 credits)
Program and Degree Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations

- PO4 Graduates will demonstrate proper shop safety procedures and hazardous waste handling while performing repairs and diagnostics in the lab
- PO5 Graduates will use proper tools during repair and diagnostic work in the lab
- PO6 Graduates demonstrate the ability to retrieve service information from manuals and on-line sources
- PO7 By program completion, graduates will pass the ASE Student Exams including engine repair, automatic transmissions, manual transmissions, steering and suspension, brakes, electrical/electronics, HVAC, and engine performance

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year
Fall Quarter

AUT 115 Shop Safety & Environmental Issues 1
AUT 124 Brake System Service 9
AUT 125 Suspension, Steering, & Alignment 9
AUT 190 Projects Lab 2
MAP 101 Applied Mathematics (AUT/WLD) 5
or
MAP 117 Applied Math for Workforce Programs I

Winter Quarter

AUT 121 Auto Electrical & Electronic Systems 15
AUT 132 Hydraulics Systems 3
AUT 190 Projects Lab 2
WLD 101 Oxy-Acetylene Welding for AUT 2
WLD 102 ARC/CMAW Welding for AUT 2

Spring Quarter

AUT 105 Auto Personal Computer Applications 2
AUT 111 Auto Engine Service 9
AUT 131 Manual Drive Train & Axles 8
AUT 190 Projects Lab 2

Second Year
Fall Quarter

AUT 220 Engine Performance 18
AUT 290 Projects Lab 2
CMST 100 Human Communications 4

Winter Quarter

AUT 212 Automatic Transmission Repair 8
AUT 213 Automotive Servicing I 6
AUT 290 Projects Lab 2
ENGL 109 Applied Technical Writing 3

Spring Quarter

AUT 211 Auto Convenience Systems 2
AUT 223 Automotive Servicing II 6
AUT 231 Auto Heating & Air Conditioning 6
AUT 290 Projects Lab 2
BUS 120 Human Relations on the Job 4
FAD 150 Industrial First Aid 2

Certificate of Accomplishment

Students not desiring a degree but who are interested in training and instruction in specialized areas may be awarded Certificates of Accomplishment. The Certificate of Accomplishment is designed to provide recognition of completion of certain approved courses or small modules of courses offered through a particular workforce program. This certification is designed for the occasional and or part-time student that does not plan to complete an AAS degree or a Certificate of Achievement.

Automotive Technology Certificates of Accomplishment correspond with the eight ASE/NATEF certification areas and are available as follows:

Automatic Transmission & Transaxle Repair Certificate of Accomplishment (10 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AUT 115 Shop Safety & Environmental Issues* 1
AUT 212 Automatic Transmission Repair 8

*All certificates require the completion of AUT 115 Automotive Shop Safety and Environmental Issues. Students seeking to earn multiple certificates only need to complete AUT 115 once regardless of number of certificates intended.

Automotive Heating and Air Conditioning Certificate of Accomplishment (7 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AUT 115 Shop Safety & Environmental Issues* 1
AUT 231 Auto Heating & Air Conditioning 6

*All certificates require the completion of AUT 115 Automotive Shop Safety and Environmental Issues. Students seeking to earn multiple certificates only need to complete AUT 115 once regardless of number of certificates intended.

Brake Repair Certificate of Accomplishment (10 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AUT 115 Shop Safety & Environmental Issues* 1
AUT 124 Brake System Service 9

*All certificates require the completion of AUT 115 Automotive Shop Safety and Environmental Issues. Students seeking to earn multiple certificates only need to complete AUT 115 once regardless of number of certificates intended.

Electrical/Electronic Systems Certificate of Accomplishment (16 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AUT 115 Shop Safety & Environmental Issues* 1
AUT 121 Auto Electrical & Electronic Systems 15

*All certificates require the completion of AUT 115 Automotive Shop Safety and Environmental Issues. Students seeking to earn multiple certificates only need to complete AUT 115 once regardless of number of certificates intended.

Engine Performance Certificate of Accomplishment (19 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AUT 115 Shop Safety & Environmental Issues* 1
AUT 220 Engine Performance 18

*All certificates require the completion of AUT 115 Automotive Shop Safety and Environmental Issues. Students seeking to earn multiple certificates only need to complete AUT 115 once regardless of number of certificates intended.

Engine Repair Certificate of Accomplishment (10 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AUT 115 Shop Safety & Environmental Issues* 1
AUT 111 Auto Engine Service 9

*All certificates require the completion of AUT 115 Automotive Shop Safety and Environmental Issues. Students seeking to earn multiple certificates only need to complete AUT 115 once regardless of number of certificates intended.

Manual Drive Train and Axle Certificate of Accomplishment (9 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AUT 115 Shop Safety & Environmental Issues* 1
AUT 131 Manual Drive Train & Axles 8

*All certificates require the completion of AUT 115 Automotive Shop Safety and Environmental Issues. Students seeking to earn multiple certificates only need to complete AUT 115 once regardless of number of certificates intended.

Suspension and Steering Certificate of Accomplishment (10 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AUT 115 Shop Safety & Environmental Issues* 1
AUT 125 Suspension, Steering, & Alignment 9

*All certificates require the completion of AUT 115 Automotive Shop Safety and Environmental Issues. Students seeking to earn multiple certificates only need to complete AUT 115 once regardless of number of certificates intended.

Aviation (Commercial Pilot)

509.793.2241
email: aviation@bigbend.edu

John-Marc Swedburg II ***509.793.2247***
Chief Flight Instructor
Benjamin Altrogge ***509.793.2250***
John Gillespie ***509.793.2246***
Aaron Linthicum ***509.793.2249***

The Commercial Pilot Training program combines course work in flight training along with other ground school courses to prepare students for obtaining a commercial pilot certificate with instrument rating. To meet these requirements, most students require more than six quarters to complete the training. Because of this need, classes are scheduled each summer quarter. Additional ratings for flight instructor, instrument flight instructor, multi-engine, and seaplane may be earned through special arrangements. Special departmental rules and procedures stated in the BBCC Professional Pilot Course Handbook apply to this program.

Students desiring admission into the Commercial Pilot Training Program must meet appropriate admission requirements stated in section 1.1 of the BBCC Professional Pilot Course Handbook. Contact the Aviation

Department 509.793.2241 or aviation@bigbend.edu for specific admission requirements. If some of the basic education requirements have pre-approved substitutions, and all course requirements are met, it is possible for the commercial pilot student to receive both the AA&S and the AAS degrees during the two-year program.

Commercial Pilot AAS (90 credits)

BBCC offers a two-year Workforce program in aviation for students who wish to prepare for a career as a commercial pilot and not transfer to a four-year college.

Students are required to take all the courses listed below plus any electives necessary to meet quarterly and program credit totals. See the Associate in Applied Science section under Degrees and Certificates for substitutions if you desire both the AA&S and the AAS degrees.

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.
- PO5 Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.

First Year

Fall Quarter

BUS 120 Human Relations on the Job 4
or
PSYC& 100 General Psychology
or
SOC& 101 Introduction to Sociology
FAD 150 Industrial First Aid 2
AVF 111 Preflight Ground School 1
AVF 112 Private Pilot Ground School 5
AVF 141 Private Pilot Flight (Stage 1) 4

Winter Quarter

ENGL 109 Applied Technical Writing 3
or
ENGL&101 English Composition I
MAP 103 Applied Math (AVF) 3
or
MAP 117 Applied Math for Workforce Programs I
or
MATH& Any college-level SQR course
AVF 113 Meteorology 5
AVF 142 Private Pilot Flight (Stage 2) 4
AVF 117 Aviation Emergency Preparedness 1

Spring Quarter

AVF 114 Theory of Flight 5
AVF 143 Private Pilot Flight (Stage 3) 4
CMST 100 Human Communications 4
or
AVF 225 Effective Communications in Flight Instruction
or
CMST& 220 Public Speaking

Second Year
Fall Quarter

AVF 223 Instrument Ground School....5
AVF 251 Commercial Pilot Flight (Stage 4)....4
Advisor approved electives/transfer courses*

Winter Quarter

AVF 221 Commercial Pilot Ground School....5
AVF 252 Commercial Pilot Flight (Stage 5)....4
Advisor approved electives/transfer courses*

Spring Quarter

AVF 253 Commercial Pilot Flight (Stage 7)....4
AVF 254 Night Flying....1
AVF 261 Instrument Flight (Stage 6)....4
Advisor approved electives/transfer courses/FAA rating courses*

*Electives needed to meet 90 total credits for the AAS. To meet AA&S degree requirements, see advisor for substitute courses.

NOTE: AVF 141, 142, 143, 251, 252, 253, 254, and 261 must be taken to complete the associated stage flight laboratory portion of the program.

Commercial Pilot Certificate of Achievement (67 credits)

The Certificate of Achievement is designed to provide recognition for the student who does not plan to complete an Associate in Applied Science degree program.

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.
- PO5 Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.

AVF 111 – AVF 261 51
BUS 120 Human Relations on the Job....4
or
PSYC& 100 General Psychology
or
SOC& 101 Introduction to Sociology
CMST 100 Human Communications....4
or
AVF 225 Effective Communications in Flight Instruction
or

CMST& 220 Public Speaking
ENGL 109 Applied Technical Writing 3
or
ENGL&101 English Composition I
MAP 103 Applied Math (AVF) 3
or
MAP 117 Applied Math for Workforce Programs I
or
MATH& Any college-level SQR course
FAD 150 Industrial First Aid 2

Certificate of Accomplishment

Students who are interested in training in specialized areas of flight will be awarded Certificates of Accomplishment from BBCC as follows:

Aircraft Solo Certificate of Accomplishment (5 credits)

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 111 Preflight Ground School 1
AVF 141 Private Pilot Flight (Stage 1) 4

Private Pilot Certificate Certificate of Accomplishment (18 credits)
Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 112 Private Pilot Ground School 5
AVF 113 Meteorology 5
AVF 142 Private Pilot Flight (Stage 2) 4
AVF 143 Private Pilot Flight (Stage 3) 4

Commercial Pilot Certificate of Accomplishment (23 credits)

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 114 Theory of Flight 5
AVF 221 Commercial Pilot Ground School 5
AVF 251 Commercial Pilot Flight (Stage 4) 4
AVF 252 Commercial Pilot Flight (Stage 5) 4
AVF 253 Commercial Pilot Flight (Stage 7) 4
AVF 254 Night Flying 1

Instrument Pilot Certificate of Accomplishment (19 credits/2 quarters)

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 223 Instrument Ground School 5
AVF 261 Instrument Flight Instruction (Stage 6) 4

Flight Instructor (CFI) Certificate of Accomplishment (9 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.

AVF 225 Effective Communication in Flight Instruction 5
AVF 270 Flight Instructor 4

Flight Instructor Instrument (CFII) Certificate of Accomplishment (2 credits)

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 271 Flight Instructor Instrument Airplane 2

Sea Plane Certificate of Accomplishment (2 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 272 Sea Plane Flight 2

Multi-Engine Certificate of Accomplishment (2 credits)

Program Learning Outcomes:

- IO3Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 275 Multi-Engine Flight 2

Simulator Training Certificate of Accomplishment (1 credit)

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 276 Simulator Training/Instrument Training 1

Multi-Engine Instructor (MEI) Certificate of Accomplishment (2 credits)

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 291 Multi-Engine Instructor 2

ATP: Multi-Engine Certificate of Accomplishment (1 credit)

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 292 ATP: Multi-Engine 1

Aviation Maintenance Technology

Erik Borg ***509.793.2253***
Dan Moore ***509.793.2254***
email: amt@bigbend.edu

The Aviation Maintenance Technology program at BBCC is designed to prepare students for FAA airframe and powerplant maintenance certification and for employment in aviation maintenance careers. Courses offer quality training to serious and motivated students through a structured competency-based curriculum provided by industry experienced instructors. Instruction includes the basics of maintenance, servicing, inspection, repair, troubleshooting, and overhaul of aircraft airframes, powerplants, and their related systems and components associated with general and commercial aviation in the proper environment in which students may become professional aviation maintenance technicians.

Hours of instruction required by FAA regulation, FAR part 147, Par. 147.21 (b), will be at least:
1. Airframe - 1150 hours (400 general plus 750 airframe)
2. Powerplant - 1150 hours (400 general plus 750 powerplant)
3. Combined Airframe and Powerplant - 1900 hours (400 hours general plus 750 hours airframe and 750 hours powerplant)

Students are required to furnish their own hand tools and purchase their own texts; estimated cost of tools and books is $1,500 to $2,500.

Note: All aviation maintenance courses are subject to change as required by the Federal Aviation Administration. BBCC courses and programs are suggested curricula to meet the current FAA rules and regulations.

Aviation Maintenance Technology AAS

Program and Degree Learning Outcomes:

- IO1 Communication
  Students will be able to identify and explain a variety of airframe and/or powerplant systems and components as evaluated by the completion of the FAA written, oral and practical exams.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, and appropriate safety awareness and/or workplace specific skills through instructor observation.
- PO4 Students will be able to asses a variety of airframe and/or powerplant systems and components and be able to troubleshoot various systems components as evaluated by the completion of the FAA written, oral and practical exams.
- PO5 Students will show knowledge of Federal Aviation rules and regulations components as evaluated by.

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year
Fall Quarter

MAP 100 Applied Mathematics (AMT)* 2
AMT 148 AMT General Electricity 7
AMT 150 AMT General 12

Winter Quarter

AMT 149 AMT Airframe Electricity 3
AMT 150 AMT General 4
AMT 151 Airframe Mechanics I 11
WLD 103 Beginning AMT Welding* 2
BUS 120 Human Relations on the Job 4

Spring Quarter

AMT 151 Airframe Mechanics I 11
AMT 152 Airframe Mechanics II 9
CMST 100 Human Communications 4

Second Year
Fall Quarter

AMT 152 Airframe Mechanics II 12
AMT 251 Powerplant Mechanics I 8
ENGL 109 Applied Technical Writing 3

Winter Quarter

AMT 249 AMT Powerplant Electricity 2
AMT 251 Powerplant Mechanics II 8
AMT 252 Powerplant Mechanics II 10
FAD 150 Industrial First Aid 2

Spring Quarter

AMT 252 Powerplant Mechanics II 4
AMT 253 Powerplant Mechanics III 16

*Approved by FAA

Note: All AMT courses are approved by FAA

Certificate of Achievement

The Certificate of Achievement is designed to provide recognition for the student who does not plan to complete an AAS degree program.

Students may be eligible to take the FAA written, oral, and practical examinations after successful completion of the general curriculum and the airframe or powerplant curriculum.

Airframe Maintenance Technician Certificate of Achievement (63 credits)

Program and Certificate Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.
- PO5 Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.

Upon completion of the following courses, the student will earn a Certificate of Achievement.

AMT 149 AMT Airframe Electricity 3
AMT 151 Airframe Mechanics I 22
AMT 152 Airframe Mechanics II 21
BUS 120 Human Relations on the Job 4
CMST 100 Human Communications 4
ENGL 109 Applied Technical Writing 3
FAD 150 Industrial First Aid 2
MAP 100 Applied Mathematics (AMT)* 2
WLD 103 Beginning MT Welding* 2
*Approved by FAA

Powerplant Maintenance Technician Certificate of Achievement (63 credits)

Program and Certificate Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.
- PO5 Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.

AMT 249 AMT Powerplant Electricity 2
AMT 251 Powerplant Mechanics II 16
AMT 252 Powerplant Mechanics II 14
AMT 253 Powerplant Mechanics III 16
BUS 120 Human Relations on the Job 4
CMST 100 Human Communications 4
ENGL 109 Applied Technical Writing 3
FAD 150 Industrial First Aid 2
MAP 100 Applied Mathematics (AMT)* 2
*Approved by FAA

Certificate of Accomplishment

The Certificate of Accomplishment is designed to provide recognition of completion of certain approved courses or small modules of courses offered through a particular technical program. This certification is designed for the occasional and or part-time student that does not plan to complete an AAS degree or a Certificate of Achievement.

BBCC upon request by application, may issue Certificates of Accomplishment upon successful completion of the following approved modules with an earned minimum grade of 2.0 for each course.

Aviation Maintenance – General Certificate of Accomplishment (25 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AMT 148 AMT General Electricity 7
AMT 150 AMT General 16
MAP 100 Applied Mathematics (AMT)* 2

Airframe Mechanic I Certificate of Accomplishment (25 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AMT 149 AMT Airframe Electricity 3
AMT 151 Airframe Mechanic I 22

Airframe Mechanic II Certificate of Accomplishment (23 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AMT 152 Airframe Mechanic II 21
WLD 103 Beginning AMT Welding* 2

Powerplant Mechanic I Certificate of Accomplishment (16 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AMT 251 AMT Powerplant Mechanic I 16

Powerplant Mechanic II Certificate of Accomplishment (16 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AMT 249 AMT Powerplant Electricity 2
AMT 252 AMT Powerplant Mechanic II 14

Powerplant Mechanic III Certificate of Accomplishment (16 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AMT 253 AMT Powerplant Mechanic III 14

Composite Technician Certificate of Accomplishment (33 credits/2 quarters)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AMT 150 AMT General Electricity 16
MAP 100 Applied Mathematics (AMT)* 2
CPT 120 Composite Fabrication 4
CPT 124 Composite Assembly 4
CPT 130 Composite Repair 4
CPT 145 Special Projects 3

Biological Sciences and Related Pre-Professional Studies

Theresa Calip	***509.793.2148***	***TheresaC@bigbend.edu***
Christy Welch	***509.793.2156***	***ChristyW@bigbend.edu***
Mariah Whitney	***509.793.2149***	***MariahW@bigbend.edu***

Biology and botany courses may be taken as part of the Associate in Arts and Science DTA degree or as part of the Associate in Science-Transfer degree. Within the Associate in Arts and Science DTA degree, these courses may be used toward the Natural Science Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Within the Associate in Science-Transfer degree, biology courses satisfy the AS-T 1 Biology pre-major. The Associate in Science-Transfer degree allows students to prepare for upper division study toward a Bachelor of Science degree in biology (as well as other sciences). This degree gives students the opportunity to make substantial progress toward fulfilling major requirements while completing at least half of the Breadth requirements for Humanities and Social Science.

A degree in biological sciences opens the door to a wide variety of choices—from the health sciences to environmental technology, from biomedical research to wildlife biology. The range of possibilities is limited only by a student's own interests, aptitudes, and imagination! The biology program provides courses to meet a variety of student needs.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

These courses are recommended for all areas of life science majors, including but not limited to: pre-dental, pre-medicine, pre-pharmacy, pre-veterinary, environmental science, forensic science and nutrition.

AS-T 1 Biology Pre-major (90 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Cultural, Social, Political Aspects
  Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.
- PO5 Problem Solving
  Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year
Fall Quarter

CHEM& 161 General Chem w/Lab I 5
ENGL& 101 English Composition I 5
MATH& 141 Precalculus I 5

Winter Quarter

CHEM& 162 General Chem w/Lab II 5
ENGL& 235 Technical Writing or advisor approved elective 5
MATH& 142 Precalculus II 5

Spring Quarter

CHEM& 163 General Chem w/Lab III 5
MATH& 146 Introduction to Statistics** if needed 5
Advisor approved HU/SS 5

Second Year
Fall Quarter

BIOL& 221 Majors Ecology/Evolution 5
MATH& 151 Calculus I 5
CMST& 220 Public Speaking or advisor approved HU/SS 5

Winter Quarter

BIOL& 222 Majors Cell/Molecular 5
MATH& 152 Calculus II 5
HUM 214 Diversity Issues or advisor approved HU/SS 5

Spring Quarter

BIOL& 223 Majors Organismal Phys 5
MATH& 163 Calculus 3 if needed 5
PEH 100 or PEH 178 3

Most science courses have prerequisites; see the catalog section "Course Descriptions" for specific course information.

* Check Prerequisites

** Some medical schools and veterinary schools require statistics.

Depending upon which Pre-Med major a student chooses, they may be required to take Vertebrate A&P rather than Human A&P, separate Anatomy and Physiology courses rather than combined, or possibly 3 quarters rather than 2. Check with the college to which you intend to transfer.

Recommended Courses for Pre-Nursing and Allied Health Majors (12 credits)

BIOL& 160 General Biology with Lab* 5
BIOL& 241 Human A & P 1* 5
BIOL& 242 Human A & P 2* 5
BIOL& 260 Microbiology* 5
CHEM& 121 Intro to Chemistry 5
CHEM& 131 Intro to Organic/Biochem** 5
MATH& 146 Introduction to Statistics** 5

Most science courses have prerequisites; see the catalog section "Course Descriptions" for specific course information

* Check Prerequisites

** Required for students intending to complete a BSN degree.

Business DTA

Preston Wilks ***509.793.2194*** ***prestonw@bigbend.edu***

Business Transfer (DTA/MRP) (90+ credits)

Students intending to transfer to a baccalaureate institution and major in Business Administration have two degree options-The Business DTA or the Associate in Arts and Science DTA. Completing all of the prescribed courses listed for the Business DTA will enable students to be major ready when they transfer to any public baccalaureate institution in the state of Washington. See the catalog for more information concerning the Associate in Business-DTA and the specific required class for this degree. Business students choosing to transfer with an Asscíate in Arts and Science-DTA degree should consult program outlines published by the college or university to which they intend to transfer. However, the following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area. Please see the catalog for general education requirements for the Associate in Arts and Science Degree.

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills
- PO4 Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.
- PO5 Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources

Degree Requirements

To earn the Associate in Business DTA MRP degree, a student must:

- Complete their degree within three years from the quarter of entry based on the catalog in use at time of entering BBCC. After that date, students must meet any changes in graduation.
- Complete at least 90 transferable credits in designated courses numbered 100 or above with a grade point average (GPA) of 2.0 or higher.
- Earn a grade of at least a 1.0 in each college level course used in the degree.
- Complete and submit an application for graduation to the Student Administrative Support Services Office before a degree will be awarded.

Note: No course may be used more than once for meeting degree requirements.

The 90 transferable credits must include the following:

Basic Requirements ..... 20 cr

A. Communication Skills [BS]

1. ENGL& 101 5
2. ENGL& 102, ENGL& 235, or ENGL& 201 5

B. Quantitative Skills [SQR]

Symbolic or Quantitative Reasoning

1. MATH& 141 5
2. MATH& 148 5

Note: Intermediate algebra or higher placement score is required for entrance into all SQR courses. Enrollment into any BBCC math course requires placement at the appropriate entrance level.

Breadth Requirements

A. Humanities [HU, HP] ..... 15 cr

Select from at least two of the disciplines listed on the Humanities distribution list with no more than 10 credits from any one discipline. No more than 5 credits in foreign language at the 100 level may apply to this category. No more than 5 credits in humanities performance/skill credits (HP) may apply to this requirement.

1. CMST& 220 5
2. Student choice for remaining credits in this category 10

B. Social Science [SS] ..... 15 cr

Select from at least two of the disciplines listed on the Social Science distribution list

1. ECON& 201 5
2. ECON& 202 5
3. Student choice for remaining credits in this category 5

C. Natural Science [NS, LS, MS] ..... 15 cr

Select from at least two of the disciplines listed on the Natural Science distribution list

1. MATH& 146 5
2. Lab Science 5
3. Non-lab Science or Lab Science 5

Business Core Requirements ..... 20 cr

1. ACCT& 201 5
2. ACCT& 202 5
3. ACCT& 203 5
4. BUS& 201 5

Physical Education/Health & Wellness ..... 3 cr
Complete one of the following:
A. Three PEH Activity [AC] credits
No more than 3 PEH AC credits may be used in the degree.
B. PEH 100
C. PEH 178

General Electives ..... 2 cr

Total credits required: ..... 90 cr
Note: No course may be used more than once for meeting degree requirements.

Many courses in this degree are designated. Refer to the Distribution lists to help you choose a class within the distribution categories that meets your educational goals and interests. Refer to the Departments and Programs of Study pages for a full listing of courses in each discipline and which quarter each course will be taught; ask your advisor to help you.

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year
Fall Quarter

ACCT 105 Introduction to Accounting 5
or
BUS& 101 Intro to Business
ENGL& 101 Composition I 5
As needed per English/Math placement or Elective 5

Winter Quarter

ECON& 201 Microeconomics 5
or
ECON& 202 Macroeconomics
MATH& 141 Pre-Calculus I 5
Humanities or Social Science 5

Spring Quarter

ECON& 201 Microeconomics 5
or
ECON& 202 Macroeconomics
MATH& 148 Business Calculus 5
Lab or Natural Science 5

Summer Quarter

As needed per English/Math placement

Second Year
Fall Quarter

ACCT& 201 Principles of Accounting I 5
Lab or Natural Science 5
MATH& 146 Introduction to Statistics 5

Winter Quarter

ACCT& 202 Principles of Accounting II 5
BUS& 201 Business Law 5
Humanities/Social Science 5

Spring Quarter

ACCT& 203 Principles of Accounting III 5
CMST& 220 Public Speaking 5
ENGL& 102 Composition II 5
or
ENGL 201 Advanced Academic Research Writing (for those interested in attending EWU)

Summer Quarter

As needed per English/Math placement
or
last remaining Humanities/Social Science

Physical Education/Health & Wellness (PEH) 3
An advisor approved university requirement ..... 2+
Elective or equivalent course of at least 2 credits

Breadth Requirement Options:

Humanities 10
Art, Communications, Diversity, English, Foreign Languages, Music, Philosophy, Religious Studies

Social Sciences 5
Anthropology, Criminal Justice, History, Political Science, Psychology, Sociology

Natural Sciences and Lab Sciences 10
Lab Sciences: ASTR& 101, BIOL& 100, BOT 130 or 140, GEOL& 101 CHEM& 121, PHYS& 110 Natural Sciences and Non-lab Sciences: ASTR& 100, BIOL& 170, CHEM& 105, ENVS& 100, NUTR& 101

Business Information Management

bimlab@bigbend.edu

Ryan Duvall ***509.793.2175***
Trudie Roy ***509.793.2182***

The Business Information Management (BIM) program degrees and certificates outlined are suggested courses of study for students interested in pursuing careers in a business office environment. Students successfully completing a two-year program will earn one of two AAS degrees. Each of the BIM AAS degrees is transferable toward the online Bachelor of Applied Science (BAS) Administrative Management at Central Washington University.

Our classes prepare you for the world of work and apply to nearly every sector of the economy. All organizations need administrative professionals. Each program offers a job readiness component preparing you to write winning resumes, have successful interviews and job performance.

Electives provide students with flexibility while pursuing their degrees and the opportunity to focus study on interest or need. Electives include business management, law, accounting, Spanish, and various office/financial management applications at both introductory and advanced levels.

Most courses are competency-based, variable credit classes. Please refer to the description portion of the catalog to determine if the course is competency-based, variable credit, or structured. Competency-based courses are designed to allow each student to work individually at his or her own pace to accomplish the required course objectives and balance the workload of daily life.

Administrative Professional Services AAS (94 credits)

This option emphasizes the need for quality customer service, human relations, communication, and technology skills in the office where employment opportunities increase significantly for those who have these essential skills and can assume responsibility and perform a variety of office functions.

Program Learning Outcomes:

- IO1 Communication
  Students will write, speak, and present information effectively by creating professional documents that would be used in an office or medical office environment.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, professionalism, and/or workplace specific skills.
- PO4 Students will identify the interpersonal and ethical attributes needed for success in the profession by developing a professional portfolio and/or successfully completing a mock Interview with industry professionals.
- PO5 Students will develop proficient Microsoft Office techniques by creating professional business documents while meeting an 85% competency level.

The following schedule of courses is the recommended program for completing this degree. Depending on a student's English or Math placement, and keyboarding skills, additional courses may be required. Substitutions must be approved by a BIM advisor. Some electives are not available every quarter or year. Ask about other classes in which you may be interested.

First Year
Fall Quarter

BIM 102 Document Formatting....4
BIM 103 The Administrative Professional....2
BUS 120 Human Relations on the Job....4
or
PSYC& 100 General Psychology
or
SOC& 101 Intro to Sociology
CSS 102 Focus on Success....3
or
CSS 100 College Success Skills

Winter Quarter

BIM 104 Intermediate Keyboarding....3
BIM 130 Filing....2
BUS 121 Business English....5
CMST 100 Human Communications....4
or
CMST 220 Public Speaking (5 cr)

Spring Quarter

BUS 122 Business Communications 5
BIM 112 Proof & Edit 3
BIM 180 Introduction to MS Office 5

Summer Quarter*

BUS 215 Customer Service 3
BIM 109 Internet Communications 2

Second Year
Fall Quarter

BIM 280 Advanced MS Office 5
BIM 285 MOS Prep & Certification (Word, Excel) 2
BUS& 101 Intro to Business 5
BUS 102 Business Mathematics 5

Winter Quarter

BUS 200 Supervision 5
Electives^ 10

Spring Quarter

BIM 262 Professional Preparation 3
BUS 114 Business Ethics 5
Electives^ 5

Summer Quarter*

FAD 150 Industrial First Aid 2
Electives^ 2

*Students who do not plan to take summer classes, should complete summer quarter classes in additional quarter or add to previous quarter.

^Approved BIM Program Electives:

Medical Office and Billing Support Services AAS (98 credits)

This option is designed for students who are interested in specializing in medical office administration and billing. This degree consists of a combination of medical knowledge, accounting and business skills, and computer applications.

Program Learning Outcomes:

- IO1 Communication
  Students will write, speak, and present information effectively by creating professional documents that would be used in an office or medical office environment.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, professionalism, and/or workplace specific skills.
- PO4 Students will identify the interpersonal and ethical attributes needed for success in the profession by developing a professional portfolio and/or successfully completing a mock Interview with industry professionals.
- PO5 Students will develop proficient Microsoft Office techniques by creating professional business documents while meeting an 85% competency level.

The following schedule of courses is the recommended program for completing this degree. Depending on a student's English or Math placement, and keyboarding skills, additional courses may be required. Substitutions must be approved by a BIM advisor. Some electives are not available every quarter or year. Ask about other classes in which you may be interested.

First Year
Fall Quarter

BIM 102 Document Formatting 4
BIM 103 The Administrative Professional 2
CSS 102 Focus on Success 3
or
CSS 100 College Success Skills
HED 119 Medical Terminology 5

Winter Quarter

BIM 104 Intermediate Keyboarding 3
BUS 120 Human Relations on the Job 4
or
PSYC& 100 General Psychology
or
SOC& 101 Intro to Sociology
BUS 121 Business English 5
HED 239 Medical Ethics 2

Spring Quarter

BUS 102 Business Mathematics 5
BUS 122 Business Communications 5
BIM 112 Proof & Edit 3
BIM 180 Introduction to MS Office 5

Summer Quarter*

BUS 215 Customer Service 3
BIM 109 Internet Communications 2

Second Year
Fall Quarter

BIM 130 Filing 2
BIM 280 Advanced MS Office 5
BIM 285 MOS Prep & Certification (Word, Excel) 2
CMST 100 Human Communications 4
or
CMST 220 Public Speaking

Winter Quarter

BUS 161 Business Calculators 2
BUS 200 Supervision 5
BIM 113 Introduction to the Medical Office 5

Spring Quarter

ACCT 105 Introduction to Accounting^ 5
BIM 117 Medical Accounts Receivable 4
BIM 262 Professional Preparation 3
Electives^ 4

Summer Quarter*

FAD 150 Industrial First Aid 2
Electives^ 4

*Students who do not plan to take summer classes, should complete summer quarter classes in additional quarter or add to previous quarter.

^Approved BIM Program Electives:
ACCT 105 Introduction to Accounting 5
BIM 106 Advanced Keyboarding 3
BIM 109 Internet Communications 1
BIM 173 Word Processing I 5
BIM 190 Spreadsheets I 5
BIM 210 Internet 2
BIM 285 MOS Prep & Certification (additional MS Apps) 3
BUS 161 Business Calculators 2
BUS& 201 Business Law 5
CJ& 101 Intro Criminal Justice 5
CJ& 110 Criminal Law 5

Certificate of Achievement

The Certificate of Achievement is designed to provide recognition for the student who does not plan to complete an AAS degree program. Upon completion of the following options, the student will earn a Certificate of Achievement from BBCC.

Customer Service Associate Certificate of Achievement (53 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will write, speak, and present information effectively by creating professional documents that would be used in an office or medical office environment.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, professionalism, and/or workplace specific skills.
- PO4 Students will identify the interpersonal and ethical attributes needed for success in the profession by developing a professional portfolio and/or successfully completing a mock Interview with industry professionals.
- PO5 Students will develop proficient Microsoft Office techniques by creating professional business documents while meeting an 85% competency level.

BUS& 101 Intro to Business 5
BUS 102 Business Mathematics 5
BUS 120 Human Relations on the Job 4
BUS 121 Business English 5
BUS 122 Business Communications 5
BUS 215 Customer Service 3

BIM 102 Document Formatting 4
BIM 103 The Administrative Professional 2
BIM 104 Intermediate Keyboarding 3
BIM 109 Internet Communications (1st credit) 1
BIM 130 Filing 2
BIM 180 Introduction to MS Office 2
CSS 102 Focus on Success 3
or
CSS 100 College Success Skills
CMST 100 Human Communications 4
FAD 150 Industrial First Aid 2

Administrative Assistant Certificate of Achievement (66 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will write, speak, and present information effectively by creating professional documents that would be used in an office or medical office environment.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, professionalism, and/or workplace specific skills.
- PO4 Students will identify the interpersonal and ethical attributes needed for success in the profession by developing a professional portfolio and/or successfully completing a mock Interview with industry professionals.
- PO5 Students will develop proficient Microsoft Office techniques by creating professional business documents while meeting an 85% competency level.

BUS& 101 Intro to Business 5
BUS 102 Business Mathematics 5
BUS 120 Human Relations on the Job 4
BUS 114 Business Ethics 5
BUS 121 Business English 5
BUS 122 Business Communications 5
BUS 215 Customer Service 3
BIM 102 Document Formatting 4
BIM 103 The Administrative Professional 2
BIM 104 Intermediate Keyboarding 3
BIM 109 Internet Communications (1st credit) 1
BIM 112 Proof & Edit 3
BIM 130 Filing 2
BIM 180 Introduction to MS Office 5
BIM 280 Advanced MS Office 5
CSS 102 Focus on Success 3
or
CSS 100 College Success Skills
CMST 100 Human Communications 4
FAD 150 Industrial First Aid 2

Medical Office Technician Certificate of Achievement (58 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will write, speak, and present information effectively by creating professional documents that would be used in an office or medical office environment.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, professionalism, and/or workplace specific skills.
- PO4 Students will identify the interpersonal and ethical attributes needed for success in the profession by developing a professional portfolio and/or successfully completing a mock Interview with industry professionals.
- PO5 Students will develop proficient Microsoft Office techniques by creating professional business documents while meeting an 85% competency level.

BUS 102 Business Mathematics 5
BUS 120 Human Relations on the Job 4
BUS 121 Business English 5
BUS 161 Business Calculators 2
BUS 215 Customer Service 3
BIM 102 Document Formatting 4
BIM 103 The Administrative Professional 2
BIM 104 Intermediate Keyboarding 3
BIM 109 Internet Communications 2
BIM 113 Introduction to the Medical Office 5
BIM 130 Filing 2
BIM 180 Introduction to MS Office 5
CSS 102 Focus on Success 3
or
CSS 100 College Success Skills
CMST 100 Human Communications 4
FAD 150 Industrial First Aid 2
HED 119 Medical Terminology 5
HED 239 Medical Ethics 2

Customer Service Associate Certificate of Achievement (53 credits)

Program Learning Outcomes:

- IO1Communication
  Students will write, speak, and present information effectively by creating professional documents that would be used in an office or medical office environment.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, professionalism, and/or workplace specific skills.
- PO4 Students will identify the interpersonal and ethical attributes needed for success in the profession by developing a professional portfolio and/or successfully completing a mock Interview with industry professionals.
- PO5 Students will develop proficient Microsoft Office techniques by creating professional business documents while meeting an 85% competency level.

BUS& 101 Intro to Business 5
BUS 102 Business Mathematics 5
BUS 120 Human Relations on the Job 4
BUS 121 Business English 5
BUS 122 Business Communications 5
BUS 215 Customer Service 3
BIM 102 Document Formatting 4
BIM 103 The Administrative Professional 2
BIM 104 Intermediate Keyboarding 3
BIM 109 Internet Communications (1st credit) 1
BIM 130 Filing 2
BIM 180 Introduction to MS Office 5
CSS 102 Focus on Success 3
or
CSS 100 College Success Skills
CMST 100 Human Communications 4
or
CMST 220 Public Speaking
FAD 150 Industrial First Aid 2

Certificate of Accomplishment

Upon completion of each of the following options, the student will earn a Certificate of Accomplishment from BBCC.

Medical Office Receptionist Certificate of Accomplishment (33 credits)

Program Learning Outcomes:

- PO5 Students will develop proficient Microsoft Office techniques by creating professional business documents while meeting an 85% competency level.

BUS 120 Human Relations on the Job 4
BUS 121 Business English 5
BUS 215 Customer Service 3
BIM 102 Document Formatting 4
BIM 103 The Administrative Professional 2
BIM 109 Internet Communications (1st credit) 1
BIM 113 Introduction to the Medical Office 5
BIM 130 Filing 2
HED 119 Medical Terminology 5
HED 239 Medical Ethics 2

Office Assistant Certificate of Accomplishment (32 credits)

Program Learning Outcomes:

- PO5 Students will develop proficient Microsoft Office techniques by creating professional business documents while meeting an 85% competency level.

BUS 120 Human Relations on the Job 4
BUS 121 Business English 5
BUS 215 Customer Service 3
BIM 102 Document Formatting 4
BIM 103 The Administrative Professional 2
BIM 104 Intermediate Keyboarding 3
BIM 109 Internet Communications (1st credit) 1
BIM 130 Filing 2
BIM 180 Introduction to MS Office 5
CSS 102 Focus on Success 3
or
CSS 100 College Success Skills

Office Clerk Certificate of Accomplishment (16 credits)

Program Learning Outcomes:

- PO5 Students will develop proficient Microsoft Office techniques by creating professional business documents while meeting an 85% competency level.

BUS 120 Human Relations on the Job 4
BUS 215 Customer Service 3
BIM 102 Document Formatting 4
BIM 103 The Administrative Professional 2
BIM 109 Internet Communications (1st credit) 1
BIM 130 Filing 2

Business Information Management Program Approved Electives

ACCT 105 Introduction to Accounting 5
BIM 106 Advanced Keyboarding 3
BIM 109 Internet Communications (2nd/3rd credits) 2
BIM 173 Word Processing I 5
BIM 190 Spreadsheets I 5
BIM 210 Internet 2
BIM 285 MOS Prep & Certification (Other MS Apps) 3
BUS 161 Business Calculators 2
BUS& 201 Business Law 5
CJ& 101 Introduction Criminal Justice 5
CJ& 110 Criminal Law 5
HED 121 The Human Body and Disease I 5
HED 122 The Human Body and Disease II 5
HED 123 The Human Body and Disease III 5

The Center For Business & Industry Services (CBIS)-- Department of Continuing Education

Beth Laszlo ***509.793.2425*** ***email: bethl@bigbend.edu***

Big Bend Community College supports education as a lifelong process. Through the Center for Business and Industry Services (CBIS), BBCC offers training and programming whether you are an employee in need of additional skills for professional development or as a community member exploring fun, new avenues of personal growth. It is the mission of CBIS to meet the diverse needs of all community members and industries located in our service district.

Workforce/Contracted Training

CBIS is committed to supporting the internal growth of our local industries and employment partners, as well as their ability to remain globally competitive through quality workforce training. CBIS incorporates expertise from across Washington State and the country, including the academic excellence of BBCC instructors. Training can be brought to the industry door step, increasing the effectiveness and scope of what each company can offer, and also saving the employer thousands of dollars in travel and accommodations each year. Workforce training is initiated by the industry and customized for their employees' skill enhancement and industry certification, but not college credit. Often times, the cost of training can be supported by outside grant funding accessed through the Washington State Board for Community and Technical Colleges (SBCTC).

Community Education

Lifelong learning can include industry certification, but it can also include personal exploration for your own enjoyment. Through CBIS, Big Bend Community College offers workshops and trainings relating to special interest and required industry regulations that are not typically offered for college credit. Topics have included Community Choir, Drama, Private Instrument and Vocal Training, Pottery, Electrical CEU's, Steam and Pump Training, Air Rescue and Fire Fighting (ARFF) Certification, Suicide Prevention, and CPR/First Aid

Ed2Go Online Training Programs

Ed2Go is a third party vendor that CBIS works with to provide online courses that are affordable, fun, fast, convenient, and geared just for you. We offer a wide range of interactive courses that you can take entirely online. Ed2Go offers online instructor-led courses in 6-week formats with lessons each month. Examples of these courses include Accounting, Business, Computer Applications, Healthcare and Medical, Personal Development, and Teaching and Education. Online Career Training Programs (CTP) are designed by a team of professionals from each respective field and are aligned with in-demand, fast-growing careers. Examples of CTP programs include Arts and Design, Business, Construction and Trade, Computer Programming, Hospitality, Health and Fitness, Writing, and Legal courses.

Chemistry

Lindsay Groce ***509.793.2157*** ***chm@bigbend.edu***
Sarah Bauer ***509.793.2151*** ***chm@bigbend.edu***

Chemistry courses may be taken as part of the Associate in Arts and Science DTA degree or as part of the Associate in Science-Transfer (AS-T 1) degree. Within the Associate in Arts and Science DTA degree, these courses may be used toward the Natural Science Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Within the Associate in Science-Transfer degree, chemistry courses satisfy the AS-T 1 Chemistry pre-major. The Associate in Science-Transfer degree allows students to prepare for upper division study toward a Bachelor of Science degree in chemistry (as well as other sciences). This degree gives students the opportunity to make substantial progress toward fulfilling major requirements while completing at least half of the Breadth requirements for Humanities and Social Science.

Chemistry is a known as the central science because it is the study of the structure and behavior of all materials. This includes everything from the most infinitesimal particles to the vastness of the cosmos. A major in chemistry prepares students for career fields such as medicine, pharmacology, environmental science, engineering, education, ecology, or public service, and forensic science. The chemistry program provides courses to meet a variety of student needs.

For science and engineering majors, up to one year of college transfer course work is available (General Chemistry). The following recommended courses prepare students for most baccalaureate institutions, but students should still consult the program outlines published by the college or university to which they intend to transfer to make sure the courses taken here are in alignment with the specific transfer program. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

AS-T 1 Chemistry Pre-major (90 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Cultural, Social, Political Aspects
  Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.
- PO5 Problem Solving
  Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year

Fall Quarter

CHEM& 161 General Chem w/Lab I 5
ENGL& 101 English Composition I 5
MATH& 141 Precalculus I 5

Winter Quarter

CHEM& 162 General Chem w/Lab II 5
MATH& 142 Precalculus II 5
Advisor approved HU/SS 5

Spring Quarter

CHEM& 163 General Chem w/Lab III 5
ENGL& 235 Technical Writing or advisor approved HU/SS 5
MATH& 151 Calculus I 5

Summer Quarter

Advisor approved HU/SS 5
BIOL& 100 Survey of Biology if needed 5
or
PEH 100 or PEH 178 3

Second Year
Fall Quarter

BIOL& 221 Majors Ecology/Evolution** 5
MATH& 152 Calculus II 5
PHYS& 221 Engineering Physics I w/Lab* 5

Winter Quarter

BIOL& 222 Majors Cell/Molecular** 5
MATH& 163 Calculus 3 or MATH& 146 5
PHYS& 222 Engineering Physics II w/Lab* 5

Spring Quarter

BIOL& 223 Majors Organismal Phys** 5
PHYS& 223 Engineering Physics III w/Lab* 5
PEH 100 or PEH 178 if needed 3
or
Advisor approved HU/SS if needed 5

* Many universities accept General Physics courses instead of Engineering Physics.

** With placement into MATH& 151, Calculus I, at first semester, majors biology sequence can be replace by additional math courses: MATH& 254 Calculus IV, MATH 220 Linear Algebra, and MATH& 230 Differential Equations or another year would be needed to take both the majors biology sequence and the advanced math classes.

Recommended Courses for Pre-Nursing and Allied Health Majors (12 credits)

CHEM& 121 Intro to Chemistry* 5
CHEM& 131 Intro to Organic/Biochem** 5

* Required for Nursing DTA*

** Required for students intending to complete a BSN degree.

College Success Skills (CSS)

Dawnne Ernette	***509.793.2360***	***dawnnee@bigbend.edu***
Zach Olson	***509.793.2362***	***zacho@bigbend.edu***
Jerry Workman		***jerryworkman@bigbend.edu***
Rhonda Kitchen	***509.793.2354***	***rhondak@bigbend.edu***

CSS courses helps students become more effective learners and achieve their goals at Big Bend Community College. National studies show that students who take CSS courses are more likely to stay in college and graduate than students who do not. CSS courses teach students skills that research has identified as essential to college success. CSS courses add to or build on the skills students already have as students debate the purpose of college, practice reading and studying techniques, engage in critical thinking, and explore the many resources Big Bend Community College offers to help them succeed.

Library 101 is designed to prepare students with academic level research skills necessary to create search strategies, locate resources, identify formats, evaluate search results, understand APA and other citation styles, and avoid plagiarism. Prerequisite: Placement into ENGL 099 or successful completion of ENGL 098 with a 2.0 or higher All course work for this class will be completed online through Canvas.

Commercial Driver Training

Program Info – Julia Gamboa 509.793.2045 juliag@bigbend.edu
Faculty – Guillermo Garza 509.793.2221 guillermog@bigbend.edu

Contact Workforce Education Services (WES) for eligibility for tuition and fee assistance (509.793.2310).

A shortage of long-haul drivers prompted the creation of Big Bend Community College's Commercial Truck Driving Program. The course provides classroom study and behind-the-wheel driving and experience. The program covers a variety of professional topics and prepare students for entry-level job opportunities. Class includes defensive driving techniques, brake adjustment, equipment inspection, hazardous material transportation, DOT log books, trip planning, and other job-related topics. Class space is limited and early registration is strongly recommended. Dorms are available.

This 4-6 week course provides classroom study and 160 hours of driving instruction experience. Class includes Class A license with no air brake restrictions and the endorsements for doubles and triples, tankers and hazardous material, defensive driving techniques, brake adjustment, equipment inspection, hazardous material transportation, DOT log books, trip planning, and other job-related topics.

The CDL program prepares students for the CDL driving examination and entry-level employment. Regular attendance and punctuality are critical for successful completion. To be eligible for admissions to the BBCC Commercial Driver's License program applicants must complete the following (and is recommended that items be completed in this order):

1. Completed State of Washington Community and Technical College Application for Admission (Application for Admission BBCC).
2. Completed CDL Program Application.
3. Completed BBCC Class Registration Form.
4. Copy of a valid Washington State Driver's License
5. Copy of the completed Department of Transportation (DOT) physical form and card.
6. Pay all tuition and fees at the time of registration.
7. Student must have CDL permit before the start of class
8. A pre-enrollment controlled substances test is mandatory. The test will be taken at the start of the program no later than the 3rd day of class. If the controlled substances test results are positive, the applicant will be expelled.

Commercial Driver's License Certificate of Accomplishment (17 credits)

The Certificate of Accomplishment is designed to provide recognition of completion of an approved course offered through a particular program. Upon completion of the following option, the student will earn a Certificate of Accomplishment from BBCC.

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills

CDL 100 Commercial Driver's License 17

Communications

Barbara Bush 509.793.2367 BarbaraBu@bigbend.edu

Communication studies courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Basic Requirement, the Humanities Breadth requirement, or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Communication Studies is the study of the creation, delivery, and reception of verbal and nonverbal communication. Students will learn to prepare and give effective and ethically grounded speeches, improve interpersonal communication, develop critical thinking and research skills, and analyze the production and content of media messages. Communication Studies is committed to a hands-on approach that brings together theory and real-world communication practices. The department approaches

communication as a social and cultural process that is both about upholding individual identity as well as collective action as a way to find solutions for pressing social and political problems. Some of the possible career possibilities in Communication Studies are: politics, education, journalism, activism, research, mediation, podcasting, event planning, social media management, and broadcasting.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses Credits

CMST& 102 Introduction to Mass Communications CWU, EWU 5
CMST& 210 Interpersonal Communications CWU, EWU 5
CMST& 220 Public Speaking CWU, EWU* 5
CMST 229 Advanced Public Speaking CWU, EWU* 5
CMST 234 Small Group Discussion CWU, EWU 3

* CMST& 220 AND CMST 229 transfer as same EWU course.

Computer Science

Arthur Wanner ***509.793.2080*** ***arthurw@bigbend.edu***
Tom Willingham ***509.793.2191*** ***tomwi@bigbend.edu***

The Computer Science program offers industry-recognized training for high-demand careers in various sectors of information technology at Big Bend Community College. Students can earn associate degrees, short-term certificates, or take courses for transfer to a four-year college or University.

Current Department of Labor statistics indicate that 8 of the 9 fastest growing occupations will be in the area of Information Technology. According to Money Magazine, 23 of the top 100 best jobs in America are in the Information Technology sector in fields such as Network Administrator, IT Specialist, Software Developer, Software Tester, Information Systems Security, IT Manager, Web Master, and Programmer.

Program prerequisites: Basic computer literacy, keyboarding, and familiarity with word processing and spreadsheet software; pre-college math and English courses may be required depending on student placement level.

Degree options include an Associate in Computer Science DTA/MRP and a Systems Administration, Associate in Applied Science degree.

Certificate options include Cisco Networking Certificate of Achievement and Certificate of Accomplishment, Computer Support Specialist Certificate of Accomplishment, a Network Support Specialist Certificate of Accomplishment, and a Systems Administration Certificate of Achievement.

Systems Administration

The Systems Administration program prepares students for careers in network systems and administration. Network administrators install and maintain computer workstations and server software, set up user accounts, maintain system resources and operations, trouble shoot systems and network problems, and manage system security.

Students are trained in technical support of PC systems and in administration of Windows Server and Linux server based operating systems. All types of industries and businesses including data centers, hospitals, school districts, corporations and governments that use networked computers, servers, and online tools require systems administration skills.

Students develop skills to:

- Install, upgrade, and repair stand-alone computers
- Install, wire, configure, administer, maintain, and troubleshoot Local Area Networks
- Setup and configure network protocols
- Install, configure, maintain and troubleshoot routers and switches
- The program prepares students to take industry certification exams in CompTIA A+, Network+, Microsoft Technology Associate (MTA), Microsoft Certified Solutions Associate (MCSA), Cisco Certified Network Associate (CCENT and CCNA) and others

Systems Administration AAS (93+credits)

Program Learning Outcomes:

- IO1 Communication
  Communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Analyze and solve computational problems using a modern program language.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Demonstrate the ability to build, upgrade, and repair computer hardware
- PO5 Configure, troubleshoot, and administer computer networks and networking hardware
- PO6 Deploy and manage server hardware and software to support organizational operations and goals
- PO7 Identify basic components of databases, virtualization, security, and project management

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year
Fall Quarter

CS 104 Intro to Computer Hardware 3
CS 105 Intro to Computer Operating Systems 3
CS 110 Networking Fundamentals 4
ENGL 109 Applied Technical Writing 3
or
ENGL& 101 English Composition I
WKED 101 Professional Preparation-Occupation Specific I 1

Winter Quarter

CS 120 A+ Certification Prep 1
CS 205 Windows Server Administration 5
MATH& 141 Pre-Calculus 5
BUS 120 Human Relations on the Job 4
or
PSYCH 100 General Psychology
or
SOC& 101 Intro to Sociology
WKED 102 Professional Preparation-Occupation Specific II 1

Spring Quarter

CS 121 Network+ Certification Prep 1
CS 171 Cisco Networking: Intro to Networks 6
CS 206 Linux Server Administration 5
CMST 100 Human Communications 4
or
CMST&220 Public Speaking
FAD 150 Industrial First Aid 2
WKED 103 Professional Preparation-Occupation Specific III 1

Second Year
Fall Quarter

CS 106 Intro to Virtualization 5
CS 111 Intro to Programming 5
Approved Electives 5

Winter Quarter

CS 115 Intro to Database Design & Management 5
CS 172 Cisco Networking: Routing & Switching 6
CS 207 Intro to Security Administration 5

Spring Quarter

CS& 131 Computer Science I: C++ 5
or
CS& 141 Computer Science I: Java
CS 173 Cisco Networking: Enterprise Networking 6
or
Approved Elective
CS 289 Project Management for CS 5

Systems Administration Certificate of Achievement (45+ Credits)

This certificate prepares students to enter the work force as entry-level computer technicians. The Certificate of Achievement is designed for students wishing to complete short-term (one-year) training. Students gain the necessary skills to prepare for and take industry recognized computer certification exams in CompTIA A+, Microsoft MTA, and Cisco CCENT.

Students take related instruction courses in math, English, and communication and, if desired, can continue training and apply all earned credits to the Associate in Applied Science degree.

Program Learning Outcomes:

- IO1 Communication
  Communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Demonstrate the ability to build, upgrade, and repair computer hardware
- PO5 Configure, troubleshoot, and administer computer networks and networking hardware
- PO6 Deploy and manage server hardware and software to support organizational operations and goals

BUS 120 Human Relations on the Job 4
or
PSYC& 100 General Psychology
or
SOC& 101 Intro to Sociology
CMST 100 Human Communications 4
or
CMST& 220 Public Speaking
CS 104 Intro to Computer Hardware 3
CS 105 Intro to Operating Systems 3
CS 110 Networking Fundamentals 3
CS 120 A+ Certification Prep 1

CS 121 Network+ Certification Prep 1
CS 171 Cisco Networking: Intro to Networks 6
CS 205 Windows Server Administration 5
Approved CS Elective 5
ENGL 109 Technical Writing 3
or
ENGL& 101 English Composition I
FAD 150 Industrial First Aid 2
MATH& 141 Pre-Calculus 5
or
MAP 117 Applied Math for Workforce Programs I
or
MAP 103 Applied Mathematics (IST)

Cisco Networking Certificate of Achievement (47+ credits)

The Cisco Networking Academy prepares students to take the Cisco certification exams to become a Cisco Certified Network Associate (CCENT and CCNA). Certification validates the ability to install, configure, operate, and troubleshoot medium-size routed and switched networks, including implementation and verification of connections to remote sites in a WAN.

Students complete related instruction courses and, if desired, can continue training and apply all earned certificate of achievement credits to the Associate in Applied Science degree.

Program Learning Outcomes:

- IO1 Communication
  Communicate clearly and effectively within a workplace context
- IO2 Quantitative Reasoning
  Analyze and solve computational problems using a modern program language
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills
- PO4 Demonstrate the ability to build, upgrade, and repair computer hardware
- PO5 Configure, troubleshoot, and administer computer networks and networking hardware
- PO8 Configure WAN technologies and network services required by converged applications in a complex network
- PO9 Troubleshoot routers & switches; resolve common VLAN routing issues in both IPv4 & IPv6 networks

CS 104 Intro to Computer Hardware 3
CS 105 Intro to Operating Systems 3
CS 110 Intro to Networks 4
CS 121 Network+ Certification Prep 1
CS 171 Cisco Networking: Intro to Networks 6
CS 172 Cisco Networking: Routing & Switching 6
CS 173 Cisco Networking: Enterprise Networking 6
BUS 120 Human Relations on the Job 4
or
PSYC& 100 General Psychology
or
SOC& 101 Intro to Sociology
CMST 100 Human Communications 4
or
CMST& 220 Public Speaking
ENGL 109 Technical Writing 3
or

ENGL& 101 English Composition I
FAD 150 Industrial First Aid 2
MATH& 141 Pre-Calculus 5
or
MAP 117 Applied Math for Workforce Programs I
or
MAP 103 Applied Mathematics (IST)

Certificate of Accomplishment

Upon completion of each of the following options, the student will earn a Certificate of Accomplishment from BBCC. Upon completion, a student may select to complete the remaining program credits in order to earn a Certificate of Achievement or an AAS degree.

Cisco Networking Academy Certificate of Accomplishment (18 credits)

This short term training option is designed for students seeking the Cisco CCENT and CCNA certifications. If desired, students can continue training and apply all earned credits to the Cisco Networking Academy Certificate of Achievement and Associate of Applied Science degree options.

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

CS 171 Cisco Networking: Intro to Networks 6
CS 172 Cisco Networking: Routing & Switching 6
CS 173 Cisco Networking: Enterprise Networking 6

Computer Support Specialist Certificate of Accomplishment (25 credits)

Computer Support Specialists provide help and support to people and organizations using computer software or equipment. Some, called Help Desk Technicians, provide technical help to non-IT computer users. Students completing this short-term training option are prepared for entry-level employment in the Information Technology (IT) industry. Students are prepared to take industry certification exams validating their skills. If desired, students can continue training and apply all earned credits to the Systems Administration Certificate of Achievement and Associate in Applied Science degree.

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specificskills

CS 104 Intro to Computer Hardware 3
CS 105 Intro to Operating Systems 3
CS 110 Networking Fundamentals 4
CS 205 Windows Server Administration 5
CS 207 Intro to Security 5
CS Elective 5

Network Support Specialist Certificate of Accomplishment (27 credits)

Network Support Specialists support IT employees within their organization. They typically test and evaluate existing network systems, perform regular maintenance to ensure that networks operate correctly, and troubleshoot local area networks (LANs), wide area networks (WANs), and Internet systems. Students completing this short-term training option are prepared for entry-level employment in the Information Technology (IT) industry. Students are prepared to take industry certification exams validating their skills. If desired, students can continue training and apply all earned credits to the Systems Administration Certificate of Achievement and Associate in Applied Science degree.

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

CS 104 Intro to Computer Hardware 3
CS 105 Intro to Operating Systems 3
CS 110 Networking Fundamentals 4
CS 121 Network+ Certification Prep 1
CS 171 Cisco Networking: Intro to Networks 6
CS 205 Windows Server Administration 5
CS 206 Linux Server Administration 5
or
Approved CS Elective

Computer Science Transfer
Associate in Computer Science DTA/MRP

Big Bend Community College offers the Associate in Computer Science DTA/MRP degree to prepare students for transfer to a four-year university and complete a bachelor's degree in Computer Science. Graduates may be able to transfer with junior status with all or most prerequisites for the computer science major completed. A computer science bachelor's degree prepares students to work in careers such as software development, computer programming, and scientific computing. Since programs differ at each college, students should consult program outlines in the catalog of the college or university to which they plan to transfer. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in the transfer area and the requirements of the intended college or university.

Program prerequisites:

- Complete BBCC admissions process
- Complete English and math placement tests; precollege course may be required
- Meet with a CS program advisor to develop a professional development plan
- MATH&141 Pre-Calculus I and MATH&142 Pre-Calculus II
- Basic computer literacy, keyboarding, and familiarity with word processing and spreadsheet software

Associate in Computer Science DTA/MRP (95 credits^)
Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.
- PO5 Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.

Degree Requirements:

To earn the Associate in Computer Science DTA MRP degree, a student must:

- Complete their degree within three years from the quarter of entry based on the catalog in use at time of entering BBCC. After that date, students must meet any changes in graduation.
- Complete at least 90 transferable credits in designated courses numbered 100 or above with a grade point average (GPA) of 2.0 or higher.
- Earn a grade of at least a 1.0 in each college level course used in the degree.
- Complete and submit an application for graduation to the Student Administrative Support Services Office before a degree with be awarded.

Note: No course may be used more than once for meeting degree requirements.

The 90 transferable credits must include the following:

Basic Requirements ..... 15 cr

A. Communication Skills [BS]

1. ENGL& 101 5
2. ENGL& 235, or ENGL& 102 (EWU) 5

B. Quantitative Skills [SQR]

Symbolic or Quantitative Reasoning

1. MATH& 151 5

Note: Intermediate algebra or higher placement score is required for entrance into all SQR courses. Enrollment into any BBCC math course requires placement at the appropriate entrance level.

Breadth Requirements

A. Humanities [HU, HP] ..... 15 cr

Select from at least two of the disciplines listed on the Humanities distribution list with no more than 10 credits from any one discipline. No more than 5 credits in foreign language at the 100 level may apply to this category. No more than 5 credits in humanities performance/skill credits (HP) may apply to this requirement. Recommended:

1. PHIL 210 Ethics (EWU, Gonzaga) 5
2. PHIL& 120 Symbolic Logic (WSU, Gonzaga) 5
3. Student choice for remaining credits in this category 5

B. Social Science [SS] ..... 15 cr

Select from at least two of the disciplines listed on the Social Science distribution list

1. ECON& 201 or 202 5
2. Student choice for remaining credits in this category 10

C. Natural Science [NS, LS, MS] ..... 15 cr

Select from at least two of the disciplines listed on the Natural Science distribution list

1. PHYS& 221 5
2. PHYS& 222 5
3. MATH& 152 5

Major Core Requirements ..... 15-20 cr

1. CS& 131 or CS& 141 5
2. CS 132 or CS 142 5
3. CS 111 (UW-Tacoma w/ Java class) 5
4. CS 235 (CWU) 5
5. MATH& 163 (WSU) 5
6. MATH& 254 (WSU) 5

University Specific Requirements ..... 0-10 cr

1. PHYS& 223 (WSU, Gonzaga, Heritage, Whitworth, WWU) 5
2. MATH 220 (EWU) 5
3. MATH 230 (Gonzaga) 5
4. ENGR 202 (EWU) 5

Gonzaga, Heritage, and WSU require a Discrete Math (Structures) prerequisite that is not currently offered at Big Bend Community College.

Physical Education/Health & Wellness ..... 3 cr

Complete one of the following:

A. Three PEH Activity [AC] credits

No more than 3 PEH AC credits may be used in the degree.

B. PEH 100

C. PEH 178

General Electives ..... 0-17 cr

Some recommendations:

1. MATH& 146 (CWU)
2. MATH& 141
3. MATH& 142

Total credits required: ..... 90+ cr*

Note: No course may be used more than once for meeting degree requirements.

* Some universities may require more classes to meet prerequisites.

Program Major Requirements:

This is a complicated DTA degree with many university-specific requirements. Students must see their advisor for these university-specific requirement. Any course without an "&" requires approval. Other classes may be accepted or substituted. Refer to the Humanities and Social Science Distribution lists to help you choose classes within the distribution categories that meets your educational goals and interests. Refer to the Departments and Programs of Study pages for a full listing of courses in each discipline and which quarter each course will be taught; ask your advisor to help you.

- See advisor for university-specific requirements
- Any course without an & requires approval
- Other classes may be accepted or substituted with approvals

The following recommended courses prepare students for most baccalaureate institutions. Degree Requirements will vary with each college.

First Year
Fall Quarter

CS 111 Intro to Programming (CWU, UW-Tacoma w/Java class) 5

or

CS elective

ENGL& 101 English Composition I 5

Math&141 Pre-Calculus I 5

Winter Quarter

CS& 131 Computer Science I: C++ (WSU) 5
or
CS& 141 Computer Science I: Java (CWU, Heritage, UW) 5
ENGL& 235 Technical Writing 5
or
ENGL& 102 English Composition II (EWU)
MATH& 142 Pre-Calculus II 5

Spring Quarter

CS 132 Advanced Programming with C++ (WSU) 5
or
CS 142 Advanced Programming with Java (CWU, Heritage, UW)
Humanities/Social Science** 5
MATH& 151 Calculus I 5

Second Year

Fall Quarter

Humanities/Social Science** 5
MATH& 152 Calculus II 5
PHYS& 221 Eng. Physics I w/Lab 5
MATH& 146 Statistics (CWU, Heritage, UW-Bothell)* 5
or
CS Elective

Winter Quarter

Humanities/Social Science** 5
MATH& 163 Calculus 3 (WSU)* 5
or
MATH& 153 and MATH& 254 (WSU) (10 credits)
MATH& 220 Linear Algebra (EWU)* 5
or
CS Elective
PHYS& 222 Eng. Physics II w/Lab 5

Spring Quarter

Humanities/Social Science** 5
Humanities/Social Science** 5
PHYS& 223 Eng. Physics III w/Lab (Gonzaga, Heritage, Whitworth, WSU, WWU) 5
or
CS Elective

^Some universities may require more classes to meet prerequisites.
*Math and English Requirements

- Any course without an & requires approval
- See advisor for university-specific requirements
  - o Gonzaga, Heritage, and WSU require a Discreet Math (Structures) prerequisite that is not currently offered at Big Bend Community College.
  - o MATH 230 Differential Equations (Gonzaga)
  - o MATH& 254 Calculus IV (Gonzaga, WSU)

- CS 235 Data Structures & Algorithms (WSU)
- ENGR 202 Design of Logic Circuits (EWU)
- Other classes may be accepted or substituted with approvals

**Humanities and Social Science Requirements

- Social Sciences: Must include courses from three different disciplines (15 credits)
- Humanities: At least two disciplines. No more than 5 credits in 100 level foreign language. Maximum of 5 humanities performance/skill credits may be applied to breadth (15 credits)
- Any course without an & requires approval
- See advisor for university-specific requirements
- CMST& 210 Interpersonal Communications
- PHIL& 120 Symbolic Logic (Gonzaga, WSU)
- PHIL 120 Ethics (EWU)
- ECON& 201 Micro Economics (WSU-Vancouver)
- ECON& 202 Macro Economics (WSU-Vancouver)
- PSYC& 100 General Psychology
- SOC& 101 Intro to Sociology
- Other classes may be accepted or substituted with approval

Criminal Justice

Jody Quitadamo ***509.793.2177*** ***JodyQ@bigbend.edu***
crj@bigbend.edu

Criminal Justice involves the scientific study of crime. This program is designed to broaden students' awareness of how our society deals with criminals using law enforcement, the courts, and correctional institutions. This area of study is intended for individuals already working within, or want to work within, the criminal justice system or those who will eventually transfer to four-year college or university.

The world of Criminal Justice is growing in popularity based on scientific advances and the interest that current media has generated. We now understand more about the benefits of science in solving crimes and how certain techniques used in the Criminal Justice System impact its outcomes. If you want to learn more about law enforcement, the courts, or the corrections system, please contact me.

I can give you information about job possibilities in the field. No longer does a criminal justice degree mean that you are becoming only a law enforcement officer. You can now become a forensic scientist, legal psychologist, corrections officer, lawyer, and much, much, more. I would love to chat with you if you are interested in anything related to the justice system and reducing crime.

We have two degree options that can be tailored to your specific career and academic goals. One degree option will prepare you to go straight into work and the other will prepare you to transfer to a university. Contact me using the information on this page so we can find the program and courses that are right for you. As your advisor, I will sit with you every quarter and help you plan your courses. We will take into account you specific career goals, your current time or financial constraints, and your enthusiasm for particular topics. Email is the best way to reach me; contact me today!

Criminal Justice AAS (90 credits)

The Criminal Justice Workforce Program is designed to develop the proficiencies and skills necessary to obtain entry-level employment in Criminal Justice related career paths. Job possibilities after completing this degree include but are not limited to entry-level police officer, corrections officer in a prison or jail, or other criminal justice job that requires a 2-year degree or less. This program assists the development of skills that employers are looking for and was specifically designed not to teach specific police or corrections tactics but to give a well-rounded foundation to any criminal justice related career.

Program Learning Outcomes:

- IO1 Communication
  Execute effective oral and written communication skills related to their discipline (e.g., report writing)
- IO2 Quantitative Reasoning
  Execute mathematical reasoning using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Explain ethical decision making and know why high personal ethics is vital in criminal justice
- PO4 Identify what is required to enter various Criminal Justice careers including knowledge, skills, abilities, physical fitness and agency specific standards
- PO5 Demonstrate an understanding of the role and structure of leadership in Criminal Justice and how to employ leadership techniques
- PO 6 Explain professionalism as it relates to criminal justice in all aspects of the field
- PO 7 Explain the role of discretion in criminal justice and how to respond appropriately to fluid situations
- PO 8 Describe the personal impact of a career in criminal justice
- PO 9 Explain how the criminal justice system impacts the community including connections between diverse cultural, social, or political contexts

The following recommended courses will prepare students for most entry-level positions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in their area of study so that any needed substitutions can be made. The recommended courses prepare students for most baccalaureate institutions. Degree Requirements will vary with each college.

First Year
Fall Quarter

CJ&101 Intro to Criminal Justice 5
ENGL&101 English Composition I 5
MATH&107 Math in Society 5
or
MATH& 146 Statistics

Winter Quarter

CMST&210 Interpersonal Communications 5
or
CMST&220 Public Speaking
CJ& 105 Introduction to Corrections 5
ENGL& 235 Technical Writing 5

Spring Quarter

BUS 120 Human Relations on the Job 4
or
PSYC&100 General Psychology
CJ 217 Advanced Report Writing 3
CJ Approved Elective 5
FAD 150 Industrial First Aid 2
PEH Activity Course 1

Second Year
Fall Quarter

CJ 210 Introduction to American Policing 5
CJ Approved Electives 10
PEH Activity Course 1

Winter Quarter

CJ&110 Criminal Law 5
CJ&106 Juvenile Justice 5
CJ Approved Electives 7
PEH Activity Course 1

Spring Quarter

CJ Approved Electives 11

Criminal Justice Program Approved Electives:

BIOL& 100 Survey of Biology 5
CHEM& 105 Chemical Concepts 5
CHEM& 121 Intro to Chemistry 5
CJ 198 – Special Topics 1-2
CJ 203 – Leadership and Administration 5
CJ 209 – Police Psychology 5
CJ 215 – Criminal Investigations 5
CJ 295 – Work-Based Learning 1
HSEM 102 – Introduction to HSEM 5
HSEM 157 – Public Information Officer 2
NUTR& 101 – Nutrition 5
PHIL 210 – Ethics (Either PHIL210 or PHIL211 5
PHIL 211 – Ethics for Criminal Justice (Either PHIL210 or PHIL211) 5
POLS& 203 – International Relations 5
PSYC 225 – Psychology and the Legal System 5
PSYC&200 – Lifespan Psychology 5
REL 201 – World Religions (Either REL 210 or REL 211) 5
REL 211 – Religion in America (REL 210 or REL 211) 5
SOC& 101 Introduction to Sociology 5
SOC&201 – Social Problems 5
UMS 107 – Commercial UAS Remote Pilot 2
UMS 112 – UAS Ground School I 5
UMS 142 – UAS Flight Lab 6

Early Childhood Education

Jenny Nighswonger ***509.793.2216*** ***jennyn@bigbend.edu***
Michele Reeves ***509.793.2230*** ***micheler@bigbend.edu***

The Early Childhood Education Program (ECE) offers certificates to meet the requirements of Steps 5, 6, 7 of Level 2 on the Washington State Career Lattice for Early Care and Education Professionals. Students can begin with coursework to obtain a State Initial Early Childhood Education Certificate (12 credits-Step 5). These same 12 credits apply toward the Short Certification in Early Childhood Education (20 credits-Step 6). The 20 credits from the Short Certificate of Specialization in Early Childhood Education apply toward the State Early Childhood Education Certificate (54 credits--Step 7). The credits earned in the "State Early Childhood Education Certificate" apply toward the "91-credit" Associate in Applied Science in Early Childhood Education degree (Steps 8 & 9).

Many of the ECE courses are offered once a year; however, classes are offered in the evening and online to allow individuals to work and attend school. Some courses are offered as I-BEST (Integrated Basic Education and Skills Training) models to support students with basic skills; such as reading, writing, and mathematics.

Early Childhood Education AAS-T (95 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Establish, implement, evaluate and analyze an early care and education setting (Program Planning and Development)
- PO4 Describe how children acquire language and creative expression and develop physically, cognitively and socially (Child Growth and Development)
- PO5 Establish an environment that provides learning experiences to meet children's needs, abilities and interests (Curriculum and Learning Environment)
- PO6 Observe and assess what children know and can do in order to plan and provide curriculum that meets their developmental needs (Ongoing Measurement of Child Progress)
- PO7 Develop strong relationships with families and work collaboratively with agencies/organizations to meet children's needs and to encourage the community's involvement with early care and education (Families and Community Partnerships)
- PO8 Establish and maintain an environment that ensures children's safety, health, and nourishment (Health, Safety, Nutrition)
- PO9 Establish supportive relationships with children and guide them as individuals and as part of a group (Interactions)
- PO10 Serve children and families in a professional manner and participate in the community as a representative of early care and education (Professional Development and Leadership)

Eastern Washington University Articulation Agreement

Big Bend Community College and Eastern Washington University developed an articulation agreement to transfer the Associate in Applied Science Transfer (AAS-T) degree from BBCC into the Education program to complete a Bachelor of Arts in Early Childhood Education with Preschool-Grade 3 teaching certification at EWU If you are interested in this degree option, you will need to work closely with your BBCC Advisor and Eastern Washington University. For more information, call (509) 359-4817 or visit EWU online at: www.ewu.edu. In addition to completing the AAS-T degree, students must also complete the West B Exam prior to acceptance into the ECE program at EWU.

Students must pass both a Washington State Patrol and Washington State Department of Children, Youth, and Families background check prior to program entrance. Students are also required to complete a Tuberculin skin test, provide results, and acquire Washington Education Association liability insurance, prior to enrolling in ECED& 120-Practicum.

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year
Fall Quarter

CMST& 220 Public Speaking 5
ECED& 105 Intro to Early Childhood Education 5
ECED& 170 Environments – Young Child 3
FAD 150 Industrial First Aid & CPR + Bloodborne Pathogens 2

Winter Quarter

ECED& 107 Health/Safety/Nutrition 5
ECED& 120 Practicum: Nurturing Relationships 2
ECED& 132 Infants/Toddler Care 3
PSYC& 100 General Psychology 5

Spring Quarter

ECED& 180 Language/Literacy Development 3
EDUC& 115 Child Development 5
EDUC 190 Classroom Experience 3
ENGL& 101 English Composition I 5

Second Year
Fall Quarter

EDUC& 130 Guiding Behavior 3
EDUC& 150 Child/Family/Community 3
HUM 214 Diversity Issues 5
MATH& 107 Math in Society 5

Winter Quarter

BIOL& 100 Survey of Biology 5
ECED& 160 Curriculum Development 5
EDUC 190 Classroom Experience 3
ENGL& 102 English Composition II 5

Spring Quarter

CHEM& 121 Introductory Chemistry 5
EDUC& 204 Inclusive Education 5
PSYC& 200 Lifespan Psychology 5

Early Childhood Education AAS (91 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Establish, implement, evaluate and analyze an early care and education setting (Program Planning and Development)
- PO4 Describe how children acquire language and creative expression and develop physically, cognitively and socially (Child Growth and Development)
- PO5 Establish an environment that provides learning experiences to meet children's needs, abilities and interests (Curriculum and Learning Environment)

- PO6 Observe and assess what children know and can do in order to plan and provide curriculum that meets their developmental needs (Ongoing Measurement of Child Progress)
- PO7 Develop strong relationships with families and work collaboratively with agencies/organizations to meet children's needs and to encourage the community's involvement with early care and education (Families and Community Partnerships)
- PO8 Establish and maintain an environment that ensures children's safety, health, and nourishment (Health, Safety, Nutrition)
- PO9 Establish supportive relationships with children and guide them as individuals and as part of a group (Interactions)
- PO10 Serve children and families in a professional manner and participate in the community as a representative of early care and education (Professional Development and Leadership)

The coursework in the Associate in Applied Science in Early Childhood Education degree meets Level 3-Steps 8 & 9 on the Career Lattice. Students who complete the AAS in ECE may work with children birth to age eight as in-home or center-based child care providers, administrators, lead or assistant preschool teachers, or Paraeducators in public schools.

Program Requirements

- High School Diploma or GED (if applying for Financial Aid)
- Pass Washington State Patrol background check
- Pass a Washington State Department of Children, Youth and Families background check (fingerprints may be required)
- Complete Tuberculin skin test
- Obtain Washington Education Liability Insurance (if applicable)
- Maintain an overall 2.0 GPA (if receiving Financial Aid and to earn degree)

Washington State University Articulation Agreement

Big Bend Community College and Washington State University developed an articulation agreement to transfer the Associate in Applied Science (AAS) in ECE degree from BBCC directly into the Bachelor of Arts in Human Development program at Washington State University. If you are interested in this degree option, you will need to work closely with your BBCC Advisor and Washington State University, located in Pullman. For more information, call (509) 335-9203 or visit Washington State University online at: www.wsu.edu.

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year
Fall Quarter

CSS 100 College Success Skills 3
ECED& 105 Intro to Early Childhood Education 5
ECED& 170 Environments – Young Child 3
EDUC& 130 Guiding Behavior 3
EDUC& 150 Child/Family/Community 3

Winter Quarter

ECED& 107 Health/Safety/Nutrition 5
ECED& 120 Practicum: Nurturing Relationships 2
ECED& 132 Infants/Toddler Care 3
ECED& 160 Curriculum Development 5
ECED& 190 Observation/Assessment 3

Spring Quarter

ECED& 180 Language/Literacy Development....3
EDUC 106 Issues in Child Abuse....2
EDUC& 115 Child Development....5
ENGL& 101 English Composition I....5

Second Year
Fall Quarter

CMST& 220 Public Speaking....5
EDUC 190 Classroom Experience....3
SOC& 101 Introduction to Sociology....5

Winter Quarter

EDUC 190 Classroom Experience....3
FAD 150 Industrial First Aid & CPR + Bloodborne Pathogens....2
MATH& 107 Math in Society....5
PSYC& 100 General Psychology....5

Spring Quarter

EDUC 190 Classroom Experience....3
EDUC& 204 Inclusive Education....5
HUM 214 Diversity Issues....5

State Early Childhood Education Certificate of Achievement (54 credits)

Program and Certificate Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Establish, implement, evaluate and analyze an early care and education setting (Program Planning and Development)
- PO4 Describe how children acquire language and creative expression and develop physically, cognitively and socially (Child Growth and Development)
- PO5 Establish an environment that provides learning experiences to meet children's needs, abilities and interests (Curriculum and Learning Environment)
- PO8 Establish and maintain an environment that ensures children's safety, health, and nourishment (Health, Safety, Nutrition)
- PO9 Establish supportive relationships with children and guide them as individuals and as part of a group (Interactions)

CMST& 220 Public Speaking....5
ECED& 105 Intro to Early Childhood Education....5
ECED& 107 Health/Safety/Nutrition....5
ECED& 120 Practicum: Nurturing Relationships....2
ECED& 160 Curriculum Development....5
ECED& 170 Environments-Young Child....3
ECED& 180 Language/Literacy Development....3
ECED& 190 Observation/Assessment....3
EDUC& 115 Child Development....5
EDUC& 130 Guiding Behavior....3
EDUC& 150 Child/Family/Community....3

ENGL& 101 English Composition I 5
FAD 150 Industrial First Aid & CPR + Bloodborne Pathogens 2
MATH& 107 Math in Society 5

State Initial Early Childhood Education Certificate of Accomplishment (12 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

ECED& 105 Intro to Early Childhood Education 5
ECED& 107 Health/Safety/Nutrition 5
ECED& 120 Practicum: Nurturing Relationships 2

State Short Certificate of Specialization – General Certificate of Accomplishment (20 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

ECED& 105 Intro to Early Childhood Education 5
ECED& 107 Health/Safety/Nutrition 5
ECED& 120 Practicum: Nurturing Relationships 2
EDUC& 115 Child Development 5
EDUC& 130 Guiding Behavior 3

State Short Certificate of Specialization – Infant/Toddler Certificate of Accomplishment (20 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

ECED& 105 Intro to Early Childhood Education 5
ECED& 107 Health/Safety/Nutrition 5
ECED& 120 Practicum: Nurturing Relationships 2
ECED& 132 Infants/Toddler Care 3
EDUC& 115 Child Development 5

State Short Certificate of Specialization – School Age Care Certificate of Accomplishment (20 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

ECED& 105 Intro to Early Childhood Education 5
ECED& 107 Health/Safety/Nutrition 5
ECED& 120 Practicum: Nurturing Relationships 2
EDUC& 115 Child Development 5
EDUC& 136 School Age Care 3

State Short Certificate of Specialization – Family Child Care Certificate of Accomplishment (20 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

ECED& 105 Intro to Early Childhood Education 5
ECED& 107 Health/Safety/Nutrition 5
ECED& 120 Practicum: Nurturing Relationships 2
ECED& 134 Family Childcare Management 3
EDUC& 115 Child Development 5

State Short Certificate of Specialization – Administration Certificate of Accomplishment (20 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

ECED& 105 Intro to Early Childhood Education 5
ECED& 107 Health/Safety/Nutrition 5
ECED& 120 Practicum: Nurturing Relationships 2
ECED& 139 Administration of Early Learning Programs 3
EDUC& 115 Child Development 5

State Short Certificate of Specialization – Home Visitor/Family Engagement Certificate of Accomplishment (20 credits)

Program and Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

ECED& 105 Intro to Early Childhood Education 5
ECED& 107 Health/Safety/Nutrition 5
ECED& 120 Practicum: Nurturing Relationships 2
ECED& 138 Home Visitor/Family Engagement 3
EDUC& 115 Child Development 5

Economics

Terry Pyle ***509.793.2186*** ***terryp@bigbend.edu***

Students majoring in economics may elect to specialize in the following professional career areas: business, labor economics, money and banking, public finance, international trade, law, economics education, healthcare, economic development, government, and entrepreneurship. Those planning to enter the field of economics should have above average reading, comprehension, and computational skills.

Since programs differ at each of the four-year colleges, students who intend to transfer should consider program outlines published by the college or university. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Engineering

Jim Hamm ***509.793.2147*** ***jimh@bigbend.edu***

Engineering courses may be taken as part of the Associate in Arts and Science DTA degree or as part of the Associate in Science-Transfer (AS-T 2) degree. Within the Associate in Arts and Science DTA degree, these courses may be used toward the Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Within the Associate in Science-Transfer degree, engineering courses satisfy the AS-T 2 Pre-Engineering MRP Degree path. The AS-T 2 Pre-Engineering MRP Degree path allows students to prepare for upper division study toward a Bachelor of Science degree in engineering and enter the college or university at junior standing should they be admitted to the school's engineering program. This degree gives students the opportunity to make substantial progress toward fulfilling major requirements while completing at least half of the Breadth requirements for Humanities and Social Science.

At a basic level, engineers apply scientific and mathematical principles to make the world a better place. They may design machines, roads, buildings, or circuitry; combine the inventions of others to develop or improve processes; oversee the operation of technological equipment in facilities ranging from waste treatment plants to large manufacturing facilities to water purification plants; develop new materials that are stronger, lighter, or more environmentally friendly.

Since programs differ at each college, students should consider program outlines published by the college or university where the student plans to continue his/her course of study. The following recommended courses will prepare students for most senior institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in their transfer area. Students should seek out their advisor for more information and guidance on possible courses to take to complete this degree and to prepare and plan for future transfer.

Advising Maps

Advising maps for the AS-T 2 Pre-Engineering MRP degrees are offered at BBCC are available on the BBCC Website. Use the Academics dropdown and choose the Programs & Degrees link below the Explore heading and scroll down to the bottom of the page to the Advising Maps button. Once on the Advising Maps page look for:

- Engineering CEE AS-T Track II MRP (Electrical/Computer)
- Engineering OTRE AS-T Track II MRP (Mechanical/Civil/Aeronautical/Industrial/Materials Science)

The advising map is helpful to prepare for advising and registration each quarter. Students should maintain an accurate record of courses completed and bring their advising map with them for advising appointments.

Associate in Science-Transfer AS-T 2 (100+ credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Cultural, Social, Political Aspects
  Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.
- PO5 Problem Solving
  Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.

Degree Requirements:

To earn the Associate in Science-Transfer AS-T 2: Pre-Engineering MRP degree, a student must:

- Complete their degree within three years from the quarter of entry based on the catalog in use at time of entering BBCC. After that date, students must meet any changes in graduation.
- Complete at least 100+ transferable credits in courses numbered 100 or above with a grade point average (GPA) of 2.0 or higher.
- Earn a grade of at least a 1.0 in each college level course used in the degree.
- Complete and submit an application for graduation to the Student Administrative Support Services Office before a degree will be awarded.

Note: No course may be used more than once for meeting degree requirements.

Associate in Science-Transfer AS-T 2 MRP Electrical/Computer (100 credits)

The 100 transferable credits must include the following:

Basic Requirements ..... 40 cr

A. Communication Skills

1. ENGL& 101, ENGL& 102, ENGL& 235, or ENGL& 201 ..... 5 cr

B. Mathematics

1. MATH& 151, MATH& 152, MATH& 163 ..... 15 cr

Note: Enrollment into any BBCC math course requires placement at the appropriate entrance level.

C. Engineering Physics

1. PHYS& 221, PHYS & 222, PHYS& 223 ..... 15 cr

D. Chemistry

1. CHEM& 161 ..... 5 cr

Pre-Major Core Requirements ..... 20 cr

A. Mathematics

1. MATH220, MATH230 ..... 10 cr

B. Electrical Engineering

1. ENGR& 204 ..... 5 cr

C. Programming

1. CS& 131 or CS 141 ..... 5 cr

AS-T 2: Specified Electives ..... 25 cr

Select 5 courses, at least 25 credits, as appropriate for intended major and intended bachelor's institution:

- CHEM& 162 (Required for WSU/semester transfers)
- ENGL& 235 Technical Writing
- ENGR 202 Design of Logic Circuits
- ENGR 205 Electrical Circuits Lab (1 credit lab required for WSU transfers)
- ENGR& 214 Statics
- ENGR& 215 Dynamics
- ENGR& 224 Thermodynamics
- ENGR 240 Applied Numerical Methods
- MATH& 254 Calculus IV
- A second course in computer programming

Humanities and Social Science ..... 15 cr

Select at least 5 credits from Humanities distribution list and at least 5 credits from Social Science distribution list plus and additional 5 credits from either the Humanities or the Social Science distribution lists.

Additional general education requirements, cultural diversity requirements, and foreign language requirements, as required by the receiving institution, must be met prior to completion of the baccalaureate degree. Please meet with your advisor to determine which courses to take in this area.

1. CMST& 220 and ECON& 201 or ECON& 202 (required by WSU, UW, and EWU)

Total credits required: ..... 100 cr

Many courses are designated within this degree. See a program advisor for substitute courses. Refer to the distribution lists to help you choose the remaining classes within each distribution category that meet your educational goals and interests.

The following schedule of courses is the recommended program for completing this degree and prepares students for most baccalaureate institutions, but since programs differ at each college, students should still consult the program outlines published by the college or university to which they intend to transfer to make sure the courses taken here are in alignment with the specific transfer program. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

First Year

Fall Quarter

MATH& 151 Calculus I 5
PHYS& 221 Engineering Physics I w/Lab 5
ENGL& 101 English Composition I 5

Winter Quarter

MATH& 152 Calculus II 5
PHYS& 222 Engineering Physics II w/Lab 5
Advisor approved HU/SS 5

Spring Quarter

MATH& 163 Calculus 3 5
PHYS& 223 Engineering Physics III w/Lab 5
CS& 131 Computer Science I: C++ 5

Second Year

Fall Quarter

CHEM& 161 General Chem w/Lab I 5
MATH& 254 Calculus IV 5
ENGR& 214 Statics 5

Winter Quarter

CHEM& 162 General Chem w/Lab II 5
MATH 220 Linear Algebra 5
Advisor approved HU/SS 5

Spring Quarter

MATH 230 Differential Equations 5
ENGR& 204 Electrical Circuits 5
ENGR 205 Electrical Circuits Lab if needed 1
ENGR& 215 Dynamics 5

Third Year
Fall Quarter

ENGR 202 Design of Logic Circuits 6
Advisor approved HU/SS 5
Total credits: ..... 102 cr

Additional Courses that could be taken to fill out a Third Year:

CHEM& 163 General Chem w/Lab III if needed 5
CS 132 Advanced Programming with C++ 5
ENGR 240 Applied Numerical Methods 5
ENGR& 224 Thermodynamics 5
ENGR 110 Intro to Science and Engineering or MCT 110 3
ENGL& 235 Technical Writing 5
MATH& 141 Precalculus I if needed* 5
MATH& 142 Precalculus II if needed* 5

Associate in Science-Transfer AS-T 2 MRP
Mechanical/Civil/Aeronautical/Industrial/Materials Science
(105 credits)

The 105 transferable credits must include the following:

Basic Requirements ..... 45 cr

E. Communication Skills

1. ENGL& 101, ENGL& 102, ENGL& 235, or ENGL& 201 ..... 5 cr

F. Mathematics

1. MATH& 151, MATH& 152, MATH& 163 ..... 15 cr

Note: Enrollment into any BBCC math course requires placement at the appropriate entrance level.

G. Engineering Physics

1. PHYS& 221, PHYS & 222, PHYS& 223 ..... 15 cr

H. Chemistry

1. CHEM& 161, CHEM& 162 ..... 10 cr

Pre-Major Core Requirements ..... 25 cr

D. Mathematics

1. MATH220, MATH230 ..... 10 cr

E. Electrical Engineering

1. ENGR& 214, ENGR& 215, ENGR& 225 ..... 15 cr

AS-T 2: Specified Electives ..... 20 cr

1. Select 4 courses, at least 20 credits, as appropriate for intended major and intended bachelor's institution:
   - CS& 131 or CS& 141
   - ENGL& 235 Technical Writing
   - ENGR& 111 Engineering Graphics I (CAD) or ENGR& 112 Engineering Graphics II (3D)
   - ENGR 201 Material Science
   - ENGR& 204 Electrical Circuits
   - ENGR 205 Electrical Circuits Lab (1 credit lab required for WSU transfers)
   - ENGR& 224 Thermodynamics
   - ENGR 240 Applied Numerical Methods
   - MATH& 254 Calculus IV

Humanities and Social Science ..... 15 cr

Select at least 5 credits from Humanities distribution list and at least 5 credits from Social Science distribution list plus and additional 5 credits from either the Humanities or the Social Science distribution lists.

Additional general education requirements, cultural diversity requirements, and foreign language requirements, as required by the receiving institution, must be met prior to completion of the baccalaureate degree. Please meet with your advisor to determine which courses to take in this area.

2. CMST& 220 and ECON& 201 or ECON& 202 (required by WSU, UW, and EWU)

Total credits required: ..... 105 cr

Many courses are designated within this degree. See a program advisor for substitute courses. Refer to the distribution lists to help you choose the remaining classes within each distribution category that meet your educational goals and interests.

The following schedule of courses is the recommended program for completing this degree and prepares students for most baccalaureate institutions, but since programs differ at each college, students should still consult the program outlines published by the college or university to which they intend to transfer to make sure the courses taken here are in alignment with the specific transfer program. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

First Year

Fall Quarter

ENGL& 101 English Composition I 5
MATH& 151 Calculus I 5
PHYS& 221 Engineering Physics I w/Lab 5

Winter Quarter

MATH& 152 Calculus II 5
PHYS& 222 Engineering Physics II w/Lab 5
Advisor approved HU/SS 5

Spring Quarter

MATH& 163 Calculus 3 5
PHYS& 223 Engineering Physics III w/Lab 5
Advisor approved HU/SS 5

Second Year

Fall Quarter

CHEM& 161 General Chem w/Lab I 5
MATH& 254 Calculus IV 5
ENGR& 214 Statics 5

Winter Quarter

MATH 220 Linear Algebra 5
CHEM& 162 General Chem w/Lab II 5
ENGR& 225 Mechanics of Materials 5

Spring Quarter

MATH 230 Differential Equations 5
CHEM& 163 General Chem w/Lab III required for WSU 5
ENGR& 215 Dynamics 5

Third Year
Fall Quarter

ENGR& 112 Engineering Graphics I 5
Advisor approved HU/SS 5

Winter Quarter

ENGR 240 Applied Numerical Methods 5

Total credits: ..... 105 cr

Additional Courses that could be taken to fill out a Third Year:
ENGR 110 Intro to Science and Engineering or MCT 110 3
MATH& 141 Precalculus I if needed* 5
MATH& 142 Precalculus II if needed* 5
CHEM& 163 General Chem w/Lab III if needed 5
CS& 131 Computer Science I: C++ 5
ENGL& 235 Technical Writing 5

English

Steve Close ***509.793.2387*** ***email: eng@bigbend.edu***
Allison Palumbo ***509.793.2178***
Sean Twohy ***509.793.2188***
Dawnne Ernette ***509.793.2360*** ***dawnnee@bigbend.edu***
Zach Olson ***509.793.2362*** ***zacho@bigbend.edu***

Associate in Arts and Science Transfer Option

English courses are be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward Basic Requirements, Humanities Breadth requirements, or for Specified or General Elective credit. Students seeking an Associate in Arts and Science DTA degree should refer to the Arts & Science DTA Program pages for a detailed description of program outcomes and courses that will satisfy the degree requirements.

An English major might find employment as a teacher, a writer, or an editor of magazines, books, or advertising, or might plan to enter a profession requiring a graduate degree for which a background in English is desirable, such as law or librarianship. English courses are designed to provide students who plan to major in English, as well as other college students, with opportunities to improve their written and visual communications.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Most sections of ENGL 098 Basic English Skills and ENGL 099 English Skills offer ENGL & 101 Composition I instruction with accelerated learning support. Students who place into ENGL 098 or ENGL 099 have the opportunity to complete ENGL & 101 in one quarter rather than two or three quarters. Additionally, some sections of ENGL 098 Basic English Skills and ENGL 099 English Skills offer ENGL 109 Applied Technical Writing instruction with accelerated learning support to help students complete ENGL 109 within the time frames of their programs. Please contact Dawnne Ernette or Zach Olson for more information regarding accelerated ENGL & 101 or ENGL 109 courses.

Environmental Science

Mariah Whitney ***509.793.2149*** ***email:MariahW@bigbend.edu***

Environmental science courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Natural Science Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Environmental science is an interdisciplinary field that blends the natural sciences with the social sciences in order to better understand how our natural world works, how human interactions and behaviors impact our environment, and how the natural world impact its resident human species. Biology, ecology, chemistry, and geology blend with anthropology, sociology, political science, and economics to name just a few disciplines involved. The issues and problems investigated rarely have simple solutions with many opposing viewpoints and stakeholders which make environmental science a compelling field to study.

Environmental scientists work as ecologists, anthropologists, environmental consultants, climatologists, and conservation scientists, to name a few of the many occupations within the field. Some work for private businesses, others for governmental organizations and others for public entities.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Foreign Languages (see World Languages)

Geology

Lindsay Groce ***509.793.2151*** ***email: LindsayG@bigbend.edu***

Geology courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Natural Science Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

The field of geology studies the Earth and the processes that have shaped the Earth over its 4.6 billion-year history. Geologists study earthquakes, volcanoes, landslides, and floods. They study the rocks and minerals that make up the Earth's crust as well as the slow movements of large pieces of crust and upper mantle called tectonic plates that account for mountain building, earthquake zones, and volcanic activity. The landscape of the Columbia Basin was shaped by ice age floods that repeatedly swept through and carved out our channeled basalt cliffs leaving behind Dry Falls. Geologists studied our unique area and gathered the evidence to help to explain what we see in our own backyard. Geologists may spend time in laboratories or out in the field; they may work for universities, government agencies, non-profit organizations, or natural resource companies.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Geographic Information System (GIS)

A geographic information system (GIS) is a framework for capturing and analyzing data and tying it to specific geographic locations. GIS is used in a multitude of industries and organizations. At BBCC, GIS classes are included in the Agriculture and Unmanned Systems programs.

History

Chris Riley ***509.793.2184*** ***email: chrisr@bigbend.edu***
Jody Quitadamo ***509-793-2177*** ***email: jodyq@bigbend.edu***

History courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Social Science Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

History undertakes the study of past human affairs in order to understand who we are and where we might be going. It takes into account societies in diverse areas of the world from the earliest civilizations to the present day. History is an important part of a general liberal arts education. Students who plan to major in history may prepare for a number of careers, including public school teaching, government service, law, library and museum work, or professional historian.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses (20 credits*)

HIST& 136 U.S. History 1 CWU & EWU 5
HIST& 137 U.S. History 2 CWU & EWU 5
HIST& 126 World Civilization I CWU 5
HIST& 127 World Civilization II CWU 5
HIST& 128 World Civilization III CWU 5
Or may substitute Western Civ for World Civ (CWU)
HIST& 116 Western Civilization I CWU & EWU 5
HIST& 117 Western Civilization II CWU & EWU 5
HIST& 118 Western Civilization III CWU 5
* Choose four courses, CWU

Humanities

Dennis Knepp ***509.793.2190*** ***DennisK@bigbend.edu***

Humanities courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Humanities Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Humanities involve studying human culture and asking questions about the human condition and existence: how we deal the fragility of life, what the nature of truth is, the purpose and experience of human emotions, the nature of human drives, how to live in a world with other humans, how to be better humans, and how our experiences as humans shape us. In essence, these courses help us understand more about what it means to be a human being.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Industrial Systems Technology

James Ayers ***509.793.2265*** ***jamesa@bigbend.edu***

Electrical and control system technologies are increasingly sophisticated and complex. Electrical/Electronic technologies have changed the fabric of our existence. We are truly living the electronic age. New innovations seem to be routine, daily occurrences. Today's competitive business climate pushes Industry to grasp new technology to maintain tighter control of their processes, knowing better control – better bottom line! Today's industrial electrician is a multi-faceted technician. Modern industrial plants require technician level individuals who, maintain, calibrate, repair, troubleshoot, and wish to grow with new innovation.

Industrial Electrical Technology AAS (100+ credits)

The Industrial Electrical Technology program provides comprehensive two-year curriculum designed to prepare students for career opportunities as industrial electrical technicians. Students receive instruction in safety, electrical and electronic theory, process control, instrumentation, and Programmable Logic Controllers.

Our mission is to prepare students for entry in the world of industrial electricity, with a thorough understanding of electrical safety, and safe practices. We wish to instill the enthusiasm to learn, think, and grow, now and into the future! Favorable opportunities, now and into the foreseeable future, make Industrial Electricity an interesting, outstanding career choice.

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations
- PO4 Students will be able to apply electronic principals to electro-maintenance activities
- PO5 Students will be able to install electrical/electronic apparatus using appropriate techniques
- PO6 Students will be able to access controls automation logic equipment for monitoring and troubleshooting purposes
- PO7 Students will be able to demonstrate proper mechanical techniques to assembly/disassembly activities
- PO8 Students will be able to fabricate simple fixtures as situations generally require

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year
Fall Quarter

IST 100 Intro. to Industrial Safety and Health 3
IST 102 Technical Drawing Interpretation 3
IST 105 Basic Electricity: DC Circuit Analysis 5
MAP 103 Applied Mathematics 5
or
MAP 117 Applied Math for Workforce Ed

Winter Quarter

BUS 120 Human Relations on the Job 4
CMST 100 Human Communications 4
FAD 150 Industrial First Aid & CPR 2
IST 106 Basic Electricity: AC Circuit Analysis 5
IST 120 Intro. to Preventive/Predictive Maintenance 3

Spring Quarter

ENGL 109 Applied Technical Writing 3
IST 107 Industrial Electricity I 5
IST 110 Intro. to National Electrical Code 2
IST 113 Ind. Elec. Installation Techniques 5
IST 221 Electronics I (Principles) 5

Second Year
Fall Quarter

IST 111 National Electrical Code II 2
IST 150 Intro. to Programmable Logic Controls I 5
IST 207 Industrial Electricity II 5
IST 222 Electronics II (Applications) 5

Winter Quarter

IST 112 National Electrical Code III 2
IST 152 Programmable Automation Control 5
IST 170 Intro. to Instrumentation 5
IST 223 Electronics III (Industrial) 5

Spring Quarter

IST 208 Industrial Electricity III 5
IST 270 Instrumentation II & Control Actuators 5
IST Approved Electives ..... 2+

Certificate of Achievement

The Certificate of Achievement is designed for students who wish to take specialized courses in a particular field and desire certification acknowledging completion of specific program modules. These modules contain the mathematics, written and oral communications, and human relations related instruction requirements and accepted course requirements for certification.

Electronics Technology Certificate of Achievement (48 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO4 Students will be able to apply electronic principals to electro-maintenance activities
- PO5 Students will be able to install electrical/electronic apparatus using appropriate techniques

The following is a suggested sequence of courses. Interested students must work out courses and schedules with the IST program advisor.

BUS 120 Human Relations on the Job 4
CMST 100 Human Communications 4
ENGL 109 Applied Technical Writing 3
FAD 150 Industrial First Aid & CPR 2
IST 105 Basic Electricity: DC Circuit Analysis 5
IST 106 Basic Electricity: AC Circuit Analysis 5

IST 221 Electronics I (Principles) 5
IST 222 Electronics II (Applications) 5
IST 223 Electronics III (Industrial) 5
IST Approved Electives 5
MAP 103 Applied Mathematics 5
or
MAP 117 Applied Math for Workforce Ed

Industrial Electrical Certificate of Achievement (50 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO4 Students will be able to apply electronic principals to electro-maintenance activities
- PO5 Students will be able to install electrical/electronic apparatus using appropriate techniques

The following is a suggested sequence of courses. Interested students must work out courses and schedules with the IST program advisor.

BUS 120 Human Relations on the Job 4
CMST 100 Human Communications 4
ENGL 109 Applied Technical Writing 3
FAD 150 Industrial First Aid & CPR 2
IST 105 Basic Electricity: DC Circuit Analysis 5
IST 106 Basic Electricity: AC Circuit Analysis 5
IST 107 Industrial Electricity I 5
IST 207 Industrial Electricity II 5
IST 208 Industrial Electricity III 5
IST 221 Electronics I (Principles) 5
IST Approved Electives ..... 2+
MAP 103 Applied Mathematics 5
or
MAP 117 Applied Math for Workforce Ed

Programmable Logic Controllers Certificate of Achievement (48 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO4 Students will be able to apply electronic principals to electro-maintenance activities
- PO5 Students will be able to install electrical/electronic apparatus using appropriate techniques
- PO6 Students will be able to access controls automation logic equipment for monitoring and troubleshooting purposes

The following is a suggested sequence of courses. Interested students must work out courses and schedules with the IST program advisor.

BUS 120 Human Relations on the Job....4
CMST 100 Human Communications....4
ENGL 109 Applied Technical Writing....3
FAD 150 Industrial First Aid & CPR....2
IST 105 Basic Electricity: DC Circuit Analysis....5
IST 106 Basic Electricity: AC Circuit Analysis....5
IST 107 Industrial Electricity I....5
IST 150 Intro. to Programmable Logic Controls I....5
IST 152 Programmable Automation Control....5
IST 207 Industrial Electricity II....5
MAP 103 Applied Mathematics....5
or
MAP 117 Applied Math for Workforce Ed

Certificate of Accomplishment

The Certificate of Accomplishment is designed to provide recognition of completion of certain approved courses or small modules of courses offered through particular technical program. This certification is designed for the occasional and or part-time student that does not plan to complete an Associate in Applied Science degree or Certificate of Achievement.

Big Bend Community College upon request by application, may issue Certificates of Accomplishment upon successful completion of the following approved modules with an earned minimum grade of 2.0 for each course.

Basic Electricity Certificate of Accomplishment (15 credits)

Program Learning Outcomes

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 105 Basic Electricity: DC Circuit Analysis....5
IST 106 Basic Electricity: AC Circuit Analysis....5
IST 221 Electronics I (Principles)....5

Electronics Certificate of Accomplishment (15 credits)

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 221 Electronics I (Principles)....5
IST 222 Electronics II (Applications)....5
IST 223 Electronics III (Industrial)....5

Industrial Electricity Certificate of Accomplishment (20 credits)

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 107 Industrial Electricity I....5
IST 113 Ind. Elec. Installation Techniques....5
IST 207 Industrial Electricity II....5
IST 208 Industrial Electricity III....5

Instrumentation Certificate of Accomplishment (15 credits)

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 150 Intro. to Programmable Logic Controls I 5
IST 170 Intro. to Instrumentation 5
IST 270 Instrumentation II & Control Actuators 5

National Electric Code Certificate of Accomplishment (20 credits)

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 107 Industrial Electricity I 5
IST 113 Ind. Elec. Installation Techniques 5
IST 207 Industrial Electricity II 5
IST 208 Industrial Electricity III 5

Programmable Logic Controllers Certificate of Accomplishment (15 credits)

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 150 Intro. to Programmable Logic Controls I 5
IST 207 Industrial Electricity II 5
IST 152 Programmable Automation Control 5

Japanese Agricultural Training Program

CarlaLouise Christian 509.793.2297 email: carlalouisec@bigbend.edu

Initiated in 1966, the Japanese Agricultural Training Program is jointly sponsored by the Japan Agricultural Exchange Council and the BBCC Foundation. The JATP represents a continuing effort, not only to improve agriculture in Japan, but also to promote greater understanding between Japan and the United States. Over 5000 trainees have attended BBCC as part of the Japanese Agricultural Training Program. Trainees come to the United States for a 19-month training experience, spending approximately 5 total months in school and 14 months of work training on the farm. BBCC provides Phase I Institutional Training for all trainees. Upon arrival in the U.S., trainees spend approximately 9 weeks at BBCC where they are instructed in English as a Second Language (ESL) and an introduction to American culture and American agriculture.

Following instruction at BBCC, the trainees are placed on farms for approximately 14 months. Trainees are assigned to farms throughout the United States, where they work toward developing expertise in their chosen agricultural career specialty. Phase II Institutional Training takes place following the farm work/training experience. Trainees spend approximately 9 weeks at a U.S. college or university, receiving specialized agricultural instruction.

The Japanese Agricultural Trainees provide all of the financial support for this program.

Manufacturing Clerk (Logistics Tech) Certificate of Achievement (45+ credits) SkillSource Contract Training*

*This program is a contract program with SkillSource. This option is offered off campus. For advising contact SkillSource at 766-6315.

The Manufacturing Clerk Certificate is designed to provide entry-level or career-changing workers with the knowledge, skills and abilities needed to provide clerical, logistic or record keeping support in manufacturing environments. The program will provide students with skills needed to be successful at Big Bend Community College and in their future careers.

Program Learning Outcomes:

- IO1 Communication
  Students will write, speak, and present information effectively by creating professional documents that would be used in an office or medical office environment.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, professionalism, and/or workplace specific skills.
- PO5 Students will develop proficient Microsoft Office techniques by creating professional business documents while meeting an 85% competency level.

Upon completion of the following courses, the student will earn a Certificate of Achievement.

BUS 102 Business Mathematics....5
BUS 120 Human Relations on the Job....4
BUS 121 Business English....5
BUS 135 Logistics....3
BIM 102 Document Formatting....4
BIM 104 Intermediate Keyboarding....3
BIM 109 Internet Communications....1
BIM 130 Filing....2
BIM 180 Introduction to MS Office....5
BIM 182 Intro to Microsoft Excel....3
CSS 100 College Success Skills....3
CMST 100 Human Communications....4
IST 100 Intro to Industrial Health & Safety....3

Optional certificate courses:

BIM 101 Basic Keyboarding....2
BIM 106 Advanced Keyboarding....3

Manufacuring and Process Technology

The Manufacturing program provides students a broad range of career and academic options. Students can select direct entry into the workforce in areas such as manufacturing, processing, and facility operations by customizing their second year courses. Students can also tailor their degree to take advantage of possible transfer pathways available through Eastern Washington University.

Manufacturing & Process Technology (Maintenance Emphasis) AAS-T (90+ credits)

Program Learning Outcomes:

- IO1 Communication
  Communicate effectively and respectfully using verbal, written, and computer skills
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO4 Conduct measurements, analyze and interpret data, and propose methods for resolving problems
- PO5 Assist with the research, planning, and completion of projects, with consideration for processes, budgets, material, and time
- PO6 Draft, modify, and/or interpret technical drawings

The following schedule of courses is the recommended program for completing this degree. See a program advisor for specific courses needed for an emphasis in Maintenance or in Critical Missions.

First Year
Fall Quarter

IST 100 Introduction to Industrial Safety & Health 3
IST 102 Technical Drawing Interpretation 3
MAP 117 Applied Math: Workforce Ed Programs 5
MCT 100 Introduction to Modern Technology 5
or
Advisor Approved Elective

Winter Quarter

BIM 109 Internet Communications (Outlook) 1
BIM 110 Microsoft Office Essentials (Word, Excel) 2
ENGL& 101 Composition I 5
FAD 150 Industrial First Aid & CPR 2
MCT 101 Mechatronics I 5

Spring Quarter

CMST& 210 Interpersonal Communication 5
or
CMST& 220 – Public Speaking
MCT 102 Mechatronics II 5
PSYC& 100 General Psychology 5
or
SOC& 101 Introduction to Sociology

Second Year
Fall Quarter

ADVISOR APPROVED ELECTIVES 15

Spring Quarter

ADVISOR APPROVED ELECTIVES 14

Advisor Approved Electives
Electricity and Electronics Skill Courses

IST 105 Basic Electricity: DC Circuit Analysis 5
IST 106 Basic Electricity: AC Circuit Analysis 5
IST 107 Industrial Electricity I 5
IST 170 Intro to Instrumentation 5

Mechanical Skill Courses

IST 120 Intro. to Prevention/Predictive Maintenance 3
IST 130 Intro. to Refrigeration and AC 5
IST 136 Intro. to Industrial Boilers 5
IST 180 Machining I 5
IST 182 Machining II 5
IST 280 Mechanical Power Transmission 5
IST 282 Fluid Power Transmission 5
IST 284 Pump Hydraulics/Mechanics 4
MCT 100 Introduction to Modern Technology 5
MCT 103 Mechatronics III 5

Fabrication Skill Courses

WLD 111 Welding Process I 6
WLD 122 Gas Metal Arc Welding I 3
WLD 132 Gas Tungsten Arc Welding I (TIG) 3

Automation Skill Courses

MCT 100 Intro to Modern Technology 5
MCT 103 Mechatronics III 5
MCT 120 Robotics I 5
MCT 220 Robotics II 5

Business & Computer Science Skill Courses

BUS 135 Fundamentals of Logistics, Transportation, & Supply Chain Management 3
BUS 200 Supervision 5
BUS 215 Customer Service 3
CS 104 Intro to Computer Hardware1 3
CS 105 Intro to Computer Operating Systems 3
CS 110 Networking Fundamentals 4
CS 111 Intro to Programming 5
CS 115 Intro to Database Design & Management 5
CS& 131 Computer Science I: C++ 5
CS 132 Advanced Programming with C++ 5
CS 195/197 Internship: Work-based Learning 1-8
CS 235 Data Structures and Algorithms 5
CS 295/297 Internship: Work-based Learning II 1-8

Transfer Pathway Courses

CHEM& 105 Chemical Concepts 5
or
CHEM& 110 Chemical Concepts with Lab
or
CHEM& 121 Introductory Chemistry
ECON& 201 Microeconomics.....5
or
ECON& 202 Macroeconomics
ENGL& 235 Technical Writing 5
ENGR& 111 Engineering Graphics I (CAD).....5
ENGR& 112 Engineering Graphics II (SolidWorks) 5
MATH& 141 Precalculus I.....5

Degree Approved Electives

WKED 101 Professional Preparation I 1
WKED 102 Professional Preparation II 1
WKED 103 Professional Preparation III 1
WKED 110 Mission Critical Ops Management I 3
WKED 111 Mission Critical Ops Management II 5

Certificate of Achievement

The Certificate of Achievement is designed for students who wish to take specialized courses in a particular field and desire certification acknowledging completion of specific program modules. These modules contain the mathematics, written and oral communications, and human relations related instruction requirements and accepted course requirements.

Manufacturing Certificate of Achievement (46 credits)

As students make progress toward the completion of the Associate of Applied Science degree, they can also earn a Certificate of Achievement. The certificate incorporates fundamental skills and knowledge needed to be successful in entry-level positions.

Program Learning Outcomes:

- IO1 Communication
  Communicate effectively and respectfully using verbal, written, and computer skills
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.
- PO4 Conduct measurements, analyze and interpret data, and propose methods for resolving problems
- PO5 Assist with the research, planning, and completion of projects
- PO6 Draft, modify, and/or interpret technical drawings

The following is a suggested sequence of courses. Interested students must develop schedules with the program advisor.

CMST& 210 Interpersonal Communication.....5
or
CMST& 220 – Public Speaking
ENGL& 101 Composition I 5
MAP 117 Applied Math: Workforce Ed Programs 5
PSYC& 100 General Psychology 5
or

SOC& 101 Introduction to Sociology
BIM 109 Internet Communications (Outlook) 1
BIM 110 Microsoft Office Essentials (Word, Excel) 2
FAD 150 Industrial First Aid & CPR 2
IST 100 Introduction to Industrial Safety & Health 3
IST 102 Technical Drawing Interpretation 3
MCT 100 Introduction to Modern Technology 5
or
Advisor Approved Elective
MCT 101 Mechatronics I 5
MCT 102 Mechatronics II 5

Mathematics

Salah Abed ***509.793.2145***
David Mayhugh ***509.793.2152***
Tyler Wallace ***509.793.2150***
Johanna Doty-Fleming ***509.793.2146***
email: Math@bigbend.edu

Math courses may be taken as part of the Associate in Arts and Science DTA degree or as part of the Associate in Science-Transfer degree. Within the Associate in Arts and Science DTA degree, these courses may be used toward the Basic Quantitative Reasoning (SQR), the Natural Science Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Study within the science disciplines and engineering is supported at the most fundamental level with Math. Consequently, Math courses make up a portion of each Associate in Science-Transfer degree, both the AS-T 1 and the AS-T 2 degrees. The Associate in Science-Transfer degree allows students to prepare for upper division study toward a Bachelor of Science degree. This degree gives students the opportunity to make substantial progress toward fulfilling major requirements while completing at least half of the Breadth requirements for Humanities and Social Science.

The mathematics department at BBCC prepares students for successful transfer to a four-year college or university. At the university level, a math major student may prepare for a career in industry, government, or education.

One of the processes to prepare students to take classes at BBCC is to determine a student's math placement. There are multiple ways to determine what math class a student should begin with including standardized test scores such as the SAT or ACT, courses taken and grades earned in recent high school classes, a college transcript with prior math courses, or taking a placement test at BBCC. A math placement score is required to enroll in any math or science course with a math prerequisite.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses Credits
MATH& 151 Calculus I 5
MATH& 152 Calculus II 5
MATH& 163 Calculus 3 5
MATH 220 Linear Algebra 5
MATH 230 Differential Equations 5
MATH& 254 Calculus IV 5

Mechatronics

Gary Baker ***509.793.2114*** ***garyb@bigbend.edu***

The mechatronics courses are included in several programs at BBCC, such as Manufacturing and Industrial Systems Technology. They prepare students with the knowledge, skills, and abilities required to begin careers as technicians or entrepreneurs in electronics, robotics, internet of things (IoT), 3D manufacturing, control systems, communications, security, and many other emerging physical computing fields. Students study, circuits, sensors, troubleshooting, programming, communications, data acquisition, and data collection.

Mechatronics involves gaining knowledge of electronics, microcontrollers, microcomputers, Open-Source hardware and software, programming, 3D printing, and CAD design. Instead of buying expensive textbooks, students begin buying and owning their own lab composed of electronics, devices, components, test equipment, tools, and computers. Using these items they will study the theories of operation of both passive and active electronic components, servos, motors, sensors, LEDs, switches, indicators, breadboards, etc. Using their own lab equipment, students may build and program electronic systems, 3D printers, rovers, radio-controllers, quadcopters, GPS trackers, navigation systems, cloud connectivity, and mission control software.

Medical Assistant

Phone ***509.793.2133***

The Medical Assistant Program at BBCC prepares students to successfully work side by side with a doctor and other health care professionals in a clinic or hospital setting. Students will maintain the highest quality of patient care, learn to room patients for examination, draw blood for basic lab studies, administer some medications, do ECG's, assist with minor surgical procedures, and perform front office skills related to medical records and billing. Medical Assistants will be prepared for diverse front and back office medical positions by learned theory, lab and clinical skills combined with an extern experience in a physician's office.

Successful completion of the Medical Assistant Program prepares the student to take the National Certification Examination offered through American Medical Technologists. Successful completion of the examination and subsequent licensure allows the student to enter the workforce as a Medical Assistant – Certified

The program provides a two year Associate in Applied Science Degree and a Certificate of Achievement in Medical Assisting. Prerequisite and corequisite courses must be completed with a minimum of 2.0 in each course.

Physical and Psychosocial Requirements for the Medical Assistant Program:

Students planning on entering the Medical Assistant Program need to be aware of the fact that the physical requirements listed below are expected by employers. Therefore, students will be expected to meet the same criteria during clinical/lab instruction in the Medical Assistant program.

- Demonstrate good body mechanics, lift/carry a minimum of 25 lbs. independently and 50 lbs. with assistance.
- Have normal/corrected vision and hearing within normal range.
- Demonstrate ability to tolerate intermittent sitting, standing, stooping and walking. Full range of motion is required.
- Demonstrate good manual and finger dexterity.
- Demonstrate competency in computer documentation
- Demonstrate communication skills: Must be able to read and write in English. Must be able to communicate verbally in English both in person and on the phone.
- Demonstrate ability to stand on carpeting, linoleum, or be seated at a standard desk using an office chair for a varying amount of time.
- Demonstrate ability to work in high-paced facilities that include dealing with stress.
- Demonstrate emotional stability and maturity in various circumstances through interpersonal relationships with staff, patients, and visitors.
- Demonstrate ability to deliver care across the age spectrum with cultural and ethnic sensitivity.
- Demonstrate a consistent ability to deliver safe and competent patient care.

Clinical Series (MA 111, 112, 113, 195)

In order to be considered for placement in the clinical series starting in the Fall, students must submit a "Letter of Intent" by the specified due date. The letter of intent can be found on BBCC's Medical Assistant webpage.

Requirements for the Medical Assistant Program

- Letter of intent must be submitted by due date if student wishes to be considered for the fall clinical cohort (MA 111, MA 112, MA 113)
- Provide evidence of a satisfactory physical examination before the beginning of MA 112
- Provide evidence of a current Healthcare Provider CPR card prior to MA 112 (BBCC's Medical Assistant Program requires CPR cards to be updated annually)
- Provide evidence of up-to-date immunizations and have initiated the Hepatitis B series prior to MA 112
- Have a satisfactory criminal background check prior to MA 195
- Provide evidence of negative drug testing prior to the start of MA 195

Medical Assisting AAS (90 credits)

The MA program prepares students with the knowledge, skills, and abilities to obtain an entry level position as a national and state certified Medical Assistant. Completion of this program leads to roles in clinics, urgent care facilities and some larger hospitals. The certificate as well as the AAS degree will prepare students to use administrative and clinical skills in a healthcare setting that often includes multitasking, problem solving and the ability to work as a team with other healthcare professionals. Medical Assisting will prepare students to obtain adult and pediatric vital signs, perform clinic based laboratory testing, assist with minor surgeries and perform injections as well phlebotomy.

Program Learning Outcomes:

- IO1 Communication
  Demonstrate clear, effective communications with patients members of the healthcare team in a variety of structured settings
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Deliver a sound professional attitude and demonstrate professional behavior when caring for patients and working with your delegator as well as other health care professional at all times
- PO4 Demonstrate cultural competency when caring for patients experiencing selected health deviations
- PO5 Prioritize, organize, and complete assignments in a timely manner as directed by the delegator
- PO6 Demonstrate delegated skills and procedures

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year
Fall Quarter

CSS 105 Intro to Healthcare Studies 3
HED 119 Medical Terminology 5
HED 121 Human Body and Disease I 5

Winter Quarter

FAD 150 Industrial First Aid 2
HED 122 Human Body and Disease II 5
HED 239 Medical Ethics 2
MAP 117 Applied Mathematics 5

Spring Quarter

ENGL& 101 English Composition 1 5
HED 123 Human Body and Disease III 5
HED 160 Pharmacology for Allied Health 3

Second Year
Fall Quarter

MA 111 Clinical Procedures I 3
PSYC& 100 General Psychology 5
MA Program Approved Elective 6

Winter Quarter

BIM 113 The Medical Office 5
MA 112 Clinical Procedures II 4
NUTR& 101 Nutrition 5

Spring Quarter

CMST& 220 Public Speaking 5
MA 113 Clinical Procedures III 4
MA Program Approved Elective 1
PSYC& 200 Lifespan Psychology 5

Summer Quarter

MA 195 Externship/Practicum 6
MA 197 Externship/Practicum Seminar 1

MA Certificate of Achievement (62+ credits)

The Certificate of Achievement is designed for students who wish to take specialized courses in a particular field and desire certification acknowledging completion of specific program modules. These modules contain the mathematics, written and oral communications, and human relations related instruction requirements and accepted course requirements for certification.

Program Learning Outcomes

- IO1 Communication
  Demonstrate clear, effective communications with patients members of the healthcare team in a variety of structured settings
- IO 2Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Deliver a sound professional attitude and demonstrate professional behavior when caring for patients and working with your delegator as well as other health care professional at all times
- PO4 Demonstrate cultural competency when caring for patients experiencing selected health deviations
- PO5 Prioritize, organize, and complete assignments in a timely manner as directed by the delegator
- PO6 Demonstrate delegated skills and procedures

The following is a suggested sequence of courses. Interested students must work out courses and schedules with the MA program advisor.

BUS 120 Human Relations on the Job 4
or
PSYC& 100 General Psychology (5 credits)
CMST 100 Human Communications 4
or
CMST& 220 Public Speaking (5 credits)
ENGL 109 Applied Technical Writing 3
or
ENGL& 101 English Composition 1 (5 credits)
FAD 150 Industrial First Aid 2
HED 119 Medical Terminology 5
HED 121 Human Body and Disease I 5
HED 122 Human Body and Disease II 5
HED 123 Human Body and Disease III 5
HED 160 Pharmacology for Allied Health 3
HED 239 Medical Ethics 2
MA 111 Clinical Procedures I 3
MA 112 Clinical Procedures II 4
MA 113 Clinical Procedures III 4
MA 195 Externship/Practicum 6
MA 197 Externship/Practicum Seminar 1
MAP 117 Applied Mathematics 5

Music

John Owens ***509.793.2140*** ***JohnOw@bigbend.edu***

Music courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Humanities Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Music is a universal language. The music department emphasizes a world-wide perspective and appreciation for music from all over the world. Through specialized lecture courses, performance-based labs, and community ensembles students have the ability to express themselves through a variety of musical endeavors.

The department provides basic disciplines in music for music majors, non-majors, and people in the community. Each individual can expect development toward mastery in their field of choice and create a solid musical foundation. This enables them to transfer into a four-year college or university to pursue a baccalaureate degree in music. The program is also an appropriate course of study for individuals preparing for a career in the music field that does not require a degree or for their own personal enrichment.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses Credits
MUSC 115 Group Piano I 2
MUSC 116 Group Piano II 2
MUSC 117 Group Piano III 2
MUSC 215 Group Piano IV 2
MUSC 216 Group Piano V 2
MUSC 217 Group Piano VI 2

Nursing

Katherine Christian ***509.793.2130*** ***NursingProgram@bigbend.edu***
Director of Health Education Programs
Jennifer Reames Zilliox ***509.793.2138***
Mercedes Gonzalez-Aller ***509.793.2136***
Hannah Capelo ***509.793.2139***
Carmen Sauvage ***509.793.2132***

Nursing education presents concepts from the humanities, life and social sciences, and biological and physical sciences. It promotes competency-based learning at all levels of nursing practice. The goal of nursing education is the provision of a theoretical knowledge base, competent skill base, and professional value insights that enable a beginning nurse to deliver safe care and to demonstrate accountability for care delivered or delegated to others. The Nursing Program's curriculum is designed to incorporate the program's philosophy/ mission and nursing paradigm concepts. It is designed to demonstrate learning from the simple to the complex, from the conceptual to the empirical.

Successful completion of this degree prepares the student to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). Successful completion of the examination and subsequent licensure allows the student to enter the workforce as a Registered Nurse.

The Associate in Nursing DTA MRP degree is approved by the Washington State Nursing Care Quality Assurance Commission and the Washington State Board for Community and Technical Colleges, and accredited by the Accreditation Commission for Education in Nursing, 3342 Peachtree Rd NE, Suite 500, Atlanta, GA 30326; tel 404.975.5000.

The program provides a three year Associate in Nursing DTA MRP and a Certificate of Certificate of Accomplishment Nursing Assistant Program (one quarter).

Physical and Psychosocial Requirements for the Nursing Program:

Students planning on entering the Nursing Program need to be aware of the fact that the physical requirements listed below are expected by employers. Therefore, students will be expected to meet the same criteria during clinical/lab instruction in the Nursing program.

- Demonstrate ability to tolerate intermittent sitting, standing, stooping and walking. Full range of motion is required.
- Demonstrate good manual and finger dexterity.
- Demonstrate ability to differentiate odors and colors in the clinical setting.
- Demonstrate competency in computer documentation
- Demonstrate communication skills: Must be able to read and write in English. Must be able to communicate verbally in English both in person and on the phone.
- Demonstrate ability to stand on carpeting, linoleum, or be seated at a standard desk at the nurse's station using an office chair for a varying amount of time (i.e. 2-4 hours).
- Demonstrate ability to work in high-paced facilities that include dealing with stress.
- Demonstrate emotional stability and maturity in various circumstances through interpersonal relationships with staff, patients, and visitors.
- Demonstrate ability to deliver care across the age spectrum with cultural and ethnic sensitivity.
- Demonstrate a consistent ability to deliver safe and competent nursing care.

Application Procedure

Students are admitted each year in the fall quarter only. Prerequisite courses are done independently prior to applying to the nursing program. Students may apply to the program by obtaining a nursing application packet from the program's website; applications for Fall 2021 will be accepted from March 15, 2021-April 2, 2021. The application packet explains, in detail, how to prepare a complete application file. Incomplete application files will not be considered for admission.

Selection and Acceptance Process

Selection of new students to the nursing program is done on a points-based system (see application packet on the nursing program website for more information). Prerequisite courses must be completed or in progress prior to applying for a position in the BBCC Nursing program. Prerequisite and corequisite courses must be completed with a minimum of 2.0 in each course. The top 24 applicants will be admitted to the program. There will be an alternate pool of applicants that will be utilized if necessary should any of the first 24 accepted students decide not to attend. Admissions from the alternate pool will continue until the class has 24 confirmed new students. The alternate pool will remain in existence until the first day of orientation. Applicants must re-apply to be considered for admission in subsequent years.

Nursing ADN Program Requirements

Before beginning the Nursing program courses, the applicant must be able to:

a. Provide evidence of a satisfactory physical examination within the preceding six months, validating all physical requirements (see above)
b. Provide evidence of a current AHA BLS Provider CPR Card**
c. Have a satisfactory criminal background check
d. Provide evidence of up-to-date immunizations and have initiated the Hepatitis B series
e. Provide evidence of negative drug testing

BBCC's Nursing Program requires CPR cards to be updated annually

Transfer Students

Transfer students may be accepted from other nursing programs on a space-available basis following an evaluation of qualifications. Transfer students must meet all BBCC and nursing program requirements

(See application packet for application process). BBCC allows transfer credits from regionally accredited post-secondary institutions. The grade acceptable for credit must be a minimum of 2.0 in each class. Students must submit official transcripts from each institution attended to the Admissions/Registration Office, and copies of transcripts to the Director of Health Education Programs. Nursing course credit will be considered on an individual basis.

Attendance at BBCC is required for a minimum of two quarters prior to the completion of the nursing program. Twenty-four quarter credits, including the final twelve necessary to complete the degree, must be earned through enrollment in BBCC courses.

Associate in Nursing DTA MRP (135 credits)

Program Learning Outcomes:

- IO1 Communication
  Communicate effectively to deliver relevant, accurate and complete information to patients, families, and the healthcare team
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Participate as a member of the healthcare team for educational and institutional growth
- PO4 Deliver safe and effective physical, psychosocial, cultural, and spiritual care to the whole person in a variety of settings
- PO5 Plan, initiate, and evaluate patient teaching including assessment of current knowledge, use of appropriate materials and techniques
- PO6 Demonstrate clinical decision-making from a theoretical knowledge base utilizing the nursing process to develop patient care plans that ensure safe, effective care in a variety of settings
- PO7 Assume responsibility and accountability in the practice of registered nursing as defined by the professional standards and codes of nursing

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses. Refer to the Programs of Study pages for a full listing of courses in each discipline and which quarter each course will be taught. Ask your advisor to help you.

First Year – Prerequisites to Apply to Nursing Program
Fall Quarter

BIOL& 160 General Biology with Lab 5
CHEM& 121 Intro to Chemistry 5
ENGL& 101 English Composition 1 5

Winter Quarter

BIOL& 241 Human A & P 1 5
ENGL& 102 Composition II or ENGL& 235 Technical Writing 5
Advisor approved Humanities 5

Spring Quarter

BIOL& 242 Human A & P 2 5
BIOL& 260 Microbiology* 5
PSYC& 100 General Psychology* 5

Second Year – Level I ADN Program
Fall Quarter

NUR 110 Fundamentals of Nursing 4
NUR 111 Fundamentals of Nursing Practicum 3
NUR 135 Nursing Skills Laboratory 1
NUR 114 Pharmacology 2
PHIL 102 Ethics and Policy in Healthcare I 1
PSYC 101 Psychosocial issues in Healthcare I 1
BIOL& 260 Microbiology* if not taken previously 5

Winter Quarter

NUR 120 Beginning Nursing Concepts I 5
NUR 121 Beginning Nursing Practicum I 4
NUR 136 Nursing Skills Laboratory 1
PHIL 103 Ethics and Policy in Healthcare II 1
PSYC 102 Psychosocial issues in Healthcare II 1
NUTR& 101 Nutrition* if not taken previously 5

Spring Quarter

NUR 130 Beginning Nursing Concepts II 5
NUR 131 Beginning Nursing Practicum II 5
NUR 137 Nursing Skills Laboratory 1
PSYC 103 Psychosocial issues in Healthcare III 1
PSYC& 100 General Psychology* if not taken previously 4

Third Year – Level II ADN Program
Fall Quarter

NUR 210 Advanced Nursing Concepts I 4
NUR 211 Advanced Nursing Practicum I 5
NUR 235 Nursing Skills Laboratory 1
PHIL 201 Ethics and Policy in Healthcare III 1
PSYC 201 Psychosocial issues in Healthcare IV 1
PSYC& 200 Lifespan Psychology* if not taken previously 5

Winter Quarter

NUR 220 Advanced Nursing Concepts II 4
NUR 221 Advanced Nursing Practicum II 5
NUR 236 Nursing Skills Laboratory 1
PHIL 202 Ethics and Policy in Healthcare IV 1
CMST& 220 Public Speaking* if not taken previously 5

Spring Quarter

NUR 230 Advanced Nursing Concepts III 5
NUR 231 Advanced Nursing Practicum III 4
PHIL 203 Ethics and Policy in Healthcare V 1
PSYC 202 Psychosocial issues in Healthcare V 1
MATH& 146 Introduction to Statistics* if not taken previously 5
Total Credits required 135
NOTE: Courses marked with * may be completed at any point prior to entering the Nursing program or during the quarter in which they are listed.

Associate in Nursing DTA/MRP

Nursing education presents concepts from the humanities, life and social sciences, and biological and physical sciences. It promotes competency-based learning at all levels of nursing practice. The goal of nursing education is the provision of a theoretical knowledge base, competent skill base, and professional value insights that enable a beginning nurse to deliver safe care and to demonstrate accountability for care delivered or delegated to others. The Nursing Program's curriculum is designed to incorporate the program's philosophy/ mission and nursing paradigm concepts. It is designed to demonstrate learning from the simple to the complex, from the conceptual to the empirical.

Successful completion of this degree prepares the student to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). Successful completion of the examination and subsequent licensure allows the student to enter the workforce as a Registered Nurse.

The Associate in Nursing DTA MRP is approved by the Washington State Nursing Care Quality Assurance Commission and the Washington State Board for Community and Technical Colleges, and accredited by the Accreditation Commission for Education in Nursing, 3342 Peachtree Rd NE, Suite 500, Atlanta, GA 30326; tel 404.975.5000.

Since programs differ at each college, students should consider program outlines published by the college or university where the student plans to continue his/her course of study. The following recommended courses will prepare students for most senior institutions. In addition to the general requirements listed below, derivative programs may have additional requirements as listed in the Programs of Study section. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in their transfer area. Students should seek out their advisor for more information and guidance on possible courses to take to complete this degree and to prepare and plan for future transfer.

Associate in Nursing DTA MRP (135 credits)

Program Learning Outcomes:

- IO1 Communication
  Communicate effectively to deliver relevant, accurate and complete information to patients, families, and the healthcare team
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Participate as a member of the healthcare team for educational and institutional growth
- PO4 Deliver safe and effective physical, psychosocial, cultural, and spiritual care to the whole person in a variety of settings
- PO5 Plan, initiate, and evaluate patient teaching including assessment of current knowledge, use of appropriate materials and techniques

- PO6 Demonstrate clinical decision-making from a theoretical knowledge base utilizing the nursing process to develop patient care plans that ensure safe, effective care in a variety of settings
- PO7 Assume responsibility and accountability in the practice of registered nursing as defined by the professional standards and codes of nursing

Degree Requirements:

To earn the Associate in Nursing DTA MRP degree, a student must:

- Complete their degree within three years from the quarter of entry based on the catalog in use at time of entering BBCC. After that date, students must meet any changes in graduation.
- Complete at least 135 transferable credits in designated courses numbered 100 or above with a grade point average (GPA) of 2.0 or higher.
- Earn a grade of at least a 2.0 in each prerequisite and corequisite course.
- Complete and submit an application for graduation to the Student Administrative Support Services Office before a degree will be awarded.

Note: No course may be used more than once for meeting degree requirements.

The 135 transferable credits must include the following:

Basic Requirements.....15 credits

A. Communication Skills [BS]

ENGL& 101..... 5
ENGL& 102, ENGL& 235, or ENGL& 201..... 5

B. Quantitative Skills [SQR]

Symbolic or Quantitative Reasoning

MATH& 146..... 5

Note: Intermediate algebra or higher placement score is required for entrance into all SQR courses. Enrollment into any BBCC math course requires placement at the appropriate entrance level.

Breadth Requirements

A. Humanities [HU, HP].....15 credits

CMST& 220 5
PHIL 102 1
PHIL 103 1
PHIL 201 1
PHIL 202 1
PHIL 203 1
Student choice for remaining 5 credits in this category.....5

B. Social Science [SS] .....15 credits

PSYC& 100..... 5
PSYC& 200..... 5
PSYC 101..... 1
PSYC 102..... 1
PSYC 103..... 1
PSYC 201..... 1
PSYC 202..... 1

C. Natural Science [NS, LS, MS] ..... 30 credits
CHEM& 121 5
BIOL& 160 5
BIOL& 241 5
BIOL& 242 5
NUTR& 101 5
BIOL& 260 5

Nursing Core Requirements 60 credits

NUR 110 Fundamentals of Nursing 4
NUR 111 Fundamentals of Nursing Practicum 3
NUR 114 Pharmacology 2
NUR 120 Beginning Nursing Concepts I 5
NUR 121 Beginning Nursing Practicum I 4
NUR 130 Beginning Nursing Concepts II 5
NUR 131 Beginning Nursing Practicum II 5
NUR 135 Nursing Skills Laboratory 1
NUR 136 Nursing Skills Laboratory 1
NUR 137 Nursing Skills Laboratory 1
NUR 210 Advanced Nursing Concepts I 4
NUR 211 Advanced Nursing Practicum I 5
NUR 220 Advanced Nursing Concepts II 4
NUR 221 Advanced Nursing Practicum II 5
NUR 230 Advanced Nursing Concepts III 5
NUR 231 Advanced Nursing Practicum III 4
NUR 235 Nursing Skills Laboratory 1
NUR 236 Nursing Skills Laboratory 1

Total credits required: 135 credits
Note: No course may be used more than once for meeting degree requirements.

Most courses in this degree are designated. Refer to the Humanities distribution list to help you choose a class within this distribution category that meets your educational goals and interests. Refer to the Programs of Study pages for a full listing of courses in each discipline and which quarter each course will be taught; ask your advisor to help you. Prerequisite and corequisite courses must be completed with a minimum of 2.0 in each course.

Associate in Pre-Nursing DTA/MRP

This pathway is applicable to students planning to prepare for an upper division Bachelor of Science degree in Nursing BSN (Entry-to-practice/basic BSN pathway). Students should enter the college or university at junior standing however, admission to the nursing program at that college or university is not guaranteed. Students choosing this degree are advised to contact their potential transfer institution early his/her course of study regarding specific course choices in each degree area where options are listed as well as for minimum GPA requirements.

Since programs differ at each college, students should consider program outlines published by the college or university where the student plans to continue his/her course of study. The following recommended courses will prepare students for most senior institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in their transfer area. Students should seek out their advisor for more information and guidance on possible courses to take to complete this degree and to prepare and plan for future transfer.

Associate in Pre-Nursing DTA/MRP (90 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Cultural, Social, Political Aspects
  Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.
- PO5 Problem Solving
  Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.

Degree Requirements

To earn the Associate in Pre-Nursing DTA/MRP degree, a student must:

- Complete their degree within three years from the quarter of entry based on the catalog in use at time of entering BBCC. After that date, students must meet any changes in graduation.
- Complete at least 90 transferable credits in courses numbered 100 or above with a grade point average (GPA) of 2.0 or higher.
- Earn a grade of at least a 1.0 in each college level course used in the degree.
- Complete and submit an application for graduation to the Student Administrative Support Services Office before a degree will be awarded.

Note: No course may be used more than once for meeting degree requirements.

The 90 transferable credits must include the following:

Basic Requirements - 15 credits

A. Communication Skills [BS] ..... 10 cr

1. ENGL& 101
2. ENGL& 102, ENGL& 235, or ENGL& 201

B. Quantitative Skills [SQR] ..... 5 cr

Symbolic or Quantitative Reasoning

1. MATH& 146

Note: Intermediate algebra or higher placement score is required for entrance into all SQR courses. Enrollment into any BBCC math course requires placement at the appropriate entrance level.

Breadth Requirements - 50 credits

A. Humanities [HU, HP] ..... 15 cr

Select from at least two of the disciplines listed on the Humanities distribution list with no more than 10 credits from any one discipline. No more than 5 credits in foreign language at the 100 level may apply to this category. No more than 5 credits in humanities performance/skill credits (HP) may apply to this requirement.

1. CMST& 220
2. Student choice for remaining 10 credits in this category

B. Social Science [SS] .....15 cr
1. PSYC& 100
2. PSYC& 200
3. A SOC class

C. Natural Science [NS, LS, MS]..... ..... 20 cr
1. BIOL& 160
2. BIOL& 241
3. BIOL& 242
4. CHEM& 121

Specified Electives [SE] - 10 credits

1. CHEM& 131
2. BIOL& 260

Physical Education/Health & Wellness - 3 credits

Complete one of the following:
A. Three PEH Activity [AC] credits
No more than 3 PEH AC credits may be used in the degree.
B. PEH 100
C. PEH 178

General Electives - 12 credits

1. NUTR& 101
2. Student choice for remaining 7 credits

Total credits required: .....90 cr
Note: No course may be used more than once for meeting degree requirements.

Advising Maps

An advising map for the Associate in Pre-Nursing DTA/MRP degree is available on the BBCC Website; use the Academics dropdown and choose the Programs & Degrees link below the Explore heading and scroll down to the bottom of the page to the Advising Maps button. Once on the Advising Maps page look for Pre-Nursing – Transfer DTA MRP. The advising map is helpful to prepare for advising and registration each quarter. Students should maintain an accurate record of courses completed and bring their advising map with them for advising appointments.

The following schedule of courses is a recommended guide for completing this degree. See a program advisor for specific courses. Many courses are designated within this degree. Refer to the distribution lists to help you choose the remaining classes within each distribution category that meet your educational goals and interests. Refer to the Programs of Study pages for a full listing of courses in each discipline and which quarter each course will be taught. Ask your advisor to help you choose.

First Year
Fall Quarter

ENGL& 101 English Composition I BS 5
MATH 098* 5
pre-college, no credits earned toward degree 0
General elective of your choice 2
PEH 100 Lifetime Wellness ** 3

* If you have placed directly into MATH& 146, take it right away. If not you will need to take courses in pre-college math before you can take MATH& 146. Since many students place into MATH& 146 we are showing a possible schedule using that starting point.

** Instead of PEH 100 take PEH 178 or take 3 PEH AC classes during three different quarters.

Winter Quarter

ENGL& 102 Composition II BS 5
MATH& 146 Introduction to Statistics MS SQR 5
CHEM& 121 Intro to Chemistry LS 5

Spring Quarter

CMST& 220 Public Speaking HU 5
CHEM& 131 Intro to Organic/Biochem LS 5
PSYC& 100 General Psychology SS 5

Summer Quarter

BIOL& 100* ** Survey of Biology LS or course of your choice 5

* This class is scheduled during Summer Quarter to make up for less credits during your first quarter when taking MATH 098.

** BIOL& 100 is not required for this degree; it will count as one of your general electives. If it has been more than two or three years since you have taken any biology class or if your biology grade in high school was lower than a B, you should consider taking BIOL& 100 as a refresher course. BIOL& 160 is coming up next quarter, and you will want to be fully ready for this class. Talk to your advisor about this.

Second Year
Fall Quarter

BIOL& 160 General Biology LS 5
Any SOC course* SS 5
Any humanities breadth from distribution list HU 5

Winter Quarter

BIOL& 241 Human Anatomy & Phys I LS 5
NUTR& 101 Nutrition NS counts as a general elective 5
PSYC& 200 Lifespan Psychology SS 5

Spring Quarter

BIOL& 242 Human Anatomy & Phys II LS 5
Any humanities breadth from distribution list HU 5
BIOL& 260 Microbiology LS 5
Total credits required: ..... 90 cr

Note: No course may be used more than once for meeting degree requirements.

Nursing Assistant

email: nursingprogram@bigbend.edu

Successful completion of the one-quarter program prepares students to take the National Nurse Aid Assessment Examination. Successful completion of the examination is required to become licensed as a Nursing Assistant – Certified (NAC) in Washington State, prepared to work in community, long-term, and acute care settings.

The program is approved by the Washington State Nursing Care Quality Assurance Commission and is a valuable first step into the nursing profession.

Nursing Assistant Program Certificate of Accomplishment (9 credits)

Program Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

NUR 100 Nursing Assistant 9

Nutrition

Lindsay Groce 509.793.2151 LindsayG@bigbend.edu

Nutrition courses may be taken as part of the Associate in Arts and Science DTA degree as well as one of the courses included within the Nursing DTA. These courses may be used toward the Natural Science Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree or the Nursing DTA should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Nutrition studies what we eat and how that food supports our health. This field studies health issues that are related to diet and our behaviors related to the foods that we eat. Nutrition includes chemistry, biology, and social science. Many specialties include exercise science, health and wellness, and nutrition education.

Individuals with degrees in nutrition often become nutritionists or health educators for schools, corporations, and healthcare facilities. Others become registered dietitians that work alongside healthcare professionals.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Philosophy

Dennis Knepp 509.793.2190 email: Philosophy@bigbend.edu

Philosophy courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Humanities Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

A philosophy major may seek employment as a post-secondary teacher, a minister, or might plan to obtain a graduate degree in a profession such as law, for which a background in philosophy is often recommended. Philosophy, literally the "love of knowledge," is the parent of all other academic disciplines. One of philosophy's aims is to provide a way to see all knowledge as a whole in order to arrive at insights none of the other disciplines can achieve. Another of philosophy's functions is to seek answers to problems in its own specialties such as ethics and logic. Philosophy's concern is to deal with perplexing questions, which no other discipline can cope with, that people have been asking for thousands of years.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses

PHIL& 101 Intro to Philosophy....5
PHIL& 120 Symbolic Logic....5
PHIL 210 Ethics....5

Recommended Philosophy Electives

PHIL 230 East Indian Philosophy....5
PHIL 240 Philosophy of Religion....5

Physical Education

Michael De Hoog 509.793.2005 michaeld@bigbend.edu

Physical education courses may be taken as part of the Associate in Arts and Science DTA degree satisfying the Physical Education/Health & Wellness Requirement or as Specified or General Elective credit. Several other BBCC degrees also have a Physical Education/Health & Wellness Requirement. Students seeking Associate in Arts and Science DTA degree or other transfer degree at BBCC should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

The physical education department outlines suggestions for students pursuing careers in the field of physical education, coaching and related activities. The P.E. major consists of a field of study in physical performance and human health.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Physics

Jim Hamm 509.793.2147 jimh@bigbend.edu

Physics courses may be taken as part of the Associate in Arts and Science DTA degree or as part of the Associate in Science-Transfer (AS-T 2) degree. Within the Associate in Arts and Science DTA degree, these courses may be used toward the Natural Science Breadth requirements or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Physics is the study of nature at its most fundamental level. It is the science upon whose principles all other sciences and technologies are based. Courses offered are designed to introduce the student to each of the major physical theories — Newtonian mechanics, thermodynamics, waves, sound, optics, electricity, and magnetism. There may also be an exposure to special relativity and quantum theory. The student tests the theories in the laboratory, learning some of the standard experimental techniques needed to work with modern apparatus such as computers and various electronic devices.

The curriculum is designed to prepare students transferring to a four-year college or university with majors in the following: chemistry, mathematics, physics, engineering, computer science, and related physics fields.

Within the Associate in Science-Transfer degree, physics courses satisfy the AS-T 2 Physics or Computer Science pre-major. The Associate in Science-Transfer degree allows students to prepare for upper division study toward a Bachelor of Science degree in physics (as well as other sciences). This degree gives students the opportunity to make substantial progress toward fulfilling major requirements while completing at least half of the Breadth requirements for Humanities and Social Science.

The degree is accepted by many baccalaureate institutions in the state of Washington. Unlike the DTA degree, the AS-T degree does not automatically fulfill the lower division (first and second year) general requirements at a university. Typically the AS-T degree holder's BBCC transcript will be evaluated on a course-by-course basis according to both its general requirements and major requirements.

While BBCC faculty advisors consult with students to help them plan effectively, the ultimate responsibility to plan rests with the student. The college recommends that the student identify one or two potential transfer institutions and then contact qualified program advisors at those institutions as early as possible to obtain specific, course-by-course advice. A BBCC advisor or the office of admissions at the transfer institution can help the student to contact these advisors. Ongoing contact with program advisors at the transfer institution facilitates a smooth and efficient transfer.

Since programs differ at each college, students who intend to transfer should consult program outlines published by the college or university. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

AS-T 2 Computer Science or Physics Pre-major (90 credits)

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively.
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically.
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.
- PO4 Cultural, Social, Political Aspects
  Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.
- PO5 Problem Solving
  Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year

Summer Quarter

MATH& 141 Precalculus I if needed* 5
MATH& 142 Precalculus II if needed* 5
* if student's placement is below MATH& 151

Fall Quarter

CHEM& 161 General Chem w/Lab I 5
ENGL& 101 English Composition I 5
MATH& 151 Calculus I* 5
Activity PEH class 1

Winter Quarter

CHEM& 162 General Chem w/Lab II 5
MATH& 152 Calculus II 5
Advisor approved HU/SS 5
Activity PEH class 1

Spring Quarter

CHEM& 163 General Chem w/Lab III 5
ENGL& 235 Technical Writing or advisor approved HU/SS 5
MATH& 163 Calculus 3 or MATH& 146 5
Activity PEH class 1

Second Year
Fall Quarter

MATH& 254 Calculus IV** 5
PHYS& 221 Engineering Physics I w/Lab 5
Advisor approved HU/SS 5

Winter Quarter

MATH& 163 Calculus 3 or MATH& 146 5
PHYS& 222 Engineering Physics II w/Lab 5
MATH 220 Linear Algebra** 5

Spring Quarter

PHYS& 223 Engineering Physics III w/Lab 5
MATH 230 Differential Equations** 5
Advisor approved HU/SS 5

* If a student has not placed into MATH& 151, additional quarters will be required since this degree requires six sequential math classes to be taken starting with MATH& 151.

** MATH& 254, MATH 220, and MATH 230 are only offered one time per year; plan your schedules well in advance

Political Science

Chris Riley ***509.793.2184*** ***email: chrisr@bigbend.edu***
Jody Quitadamo ***509.793.2177*** ***email: jodyq@bigbend.edu***

Political science courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Social Science Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Political science undertakes the study of government and politics as it affects human affairs. It takes into account political conditions in America as well as in diverse areas of the world. As a discipline of study, political science is an important part of a general liberal arts education. Students who plan to major in political science may prepare for a number of careers, including public school teaching, government service, law, international business, or professional political scientist.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses

POLS& 101 Introduction to Political Science CWU & EWU* 5
POLS& 202 American Government CWU & EWU* 5
POLS& 203 International Relations CWU 5
CJ& 110 Criminal Law EWU 5

* EWU: POLS& 101 and POLS& 202 have same course equivalent

Psychology

David Holliway ***509.793.2179*** ***psy@bigbend.edu***

Psychology courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Social Sciences Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Psychology is a branch of science which seeks to describe and understand normal and abnormal human behavior. Students interested in psychology as a professional career usually spend several years beyond their bachelor's degree in graduate training to prepare themselves for such roles as psychotherapists, teachers of psychology, researchers, or industrial psychologists.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses

PSYC& 100 General Psychology CWU, EWU 5
PSYC& 200 Lifespan Psychology CWU, EWU 5
BIOL& 100 Survey of Biology CWU 5

Religious Studies

Dennis Knepp ***509.793.2190*** ***Religion@bigbend.edu***

Religious studies courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Humanities Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

A person majoring in religious studies might be preparing to be a member of the clergy, a church lay leader, or a teacher of religious studies. The purpose of religious studies is to seek to understand religion as an intellectual, historical, and cultural phenomenon. Big Bend's religious studies courses are designed to acquaint students with what members of various religions believe and why they believe what they do. Particular emphasis is placed on the basis for the major similarities and differences among religions and between denominations within religions.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses

REL 201 World Religions 5
REL 211 Religion in America 5

Simulation Technology

simulation@bigbend.edu

Simulation specialists replicate situations or environments, through the use of programming and robotics that allow healthcare professionals to experience simulated reality for the purpose of training. This program is designed to provide the programming, robotics, and healthcare basics needed to gain employment in a simulation center or lab. This course of study is intended for individuals who have an interest in working with robotics in the healthcare setting as well as individuals already working in simulation settings.

Program prerequisites:

- Complete BBCC admissions process.
- Complete English and math placement tests.
- Meet with the Medical Simulation program advisor to develop a professional development plan.
- Have a satisfactory criminal background check prior to SIM 295.

Physical and Psychosocial Requirements for the Medical Simulation program:

- Demonstrate good body mechanics, lift/carry a minimum of 25 lbs independently and 50 lbs with assistance.
- Demonstrate ability to tolerate intermittent sitting, standing, stooping and walking. Full range of motion is required.
- Demonstrate ability to work in high-paced facilities in various stressful circumstances while promoting positive professionalism with staff, community partners, and visitors.

The certificate of accomplishment is designed to provide recognition for the students that have completed the core dynamics of the Simulation Technology program. This certificate will provide foundational skills in basic programming, maintenance, and instructional strategies that the student can use to implement high fidelity medical simulation activities.

Medical Simulation Operations Certificate of Accomplishment (14+)

Program Learning Outcomes

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

Prerequisites:

HED 119 Medical Terminology 5
or
prior medical terminology course or experience
SIM 211 ADV. Life Support and Pediatric Scenarios 8
or
HED 121, 122, and 123 The Human Body and Disease I, II, and III 15
or
prior anatomy/physiology coursework, medical training, or experience
SIM 110 Intro to SIM Programming 4
SIM 130 Fundamentals of SIM Theory 4
SIM 140 Basic SIM Diagnostics 3
SIM 245 Basic Simulation Operations (Lab) 2
SIM 295 Practicum in the Community 1

Medical Simulation Educator Certificate of Accomplishment (18 credits)

Program Learning Outcomes

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

SIM 110 Intro to SIM Programming 4
SIM 130 Fundamentals of SIM Theory 4
SIM 140 Basic SIM Diagnostics 3
SIM 235 Principles of Debriefing 4
SIM 245 Basic Simulation Operations (Lab) 2
SIM 295 Practicum in the Community 1

Sociology

David Holliway ***509.793.2179*** ***davidho@bigbend.edu***
Suzanne Richards ***509.793.2193*** ***SuzanneR@bigbend.edu***

Sociology and social welfare courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Social Sciences Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Sociology is the scientific study of human groups and their social systems. Sociology includes the study of the North American system of marriage and family and the major social problems facing our society and the world. Sociology is a valuable major not only for students planning careers in social research, criminal justice, demography, social work, and education, but also for those pursuing a course of study in public administration, law, market research, gerontology, and drug and alcohol rehabilitation programs. Although a two-year degree in this field can aid employment in the human service field, students should be prepared to go for their bachelor's degree in sociology or social work at a four-year institution.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses

SOC& 101 Intro to Sociology 5
SOC& 201 Social Problems.....5

Social Welfare

Social welfare is a course of study about our society's response to human need. This program is designed to enhance student awareness and understanding of the fields of social welfare and social work and their response to this human need. Social welfare is a valuable major for those seeking careers in such fields as services to families, health care, mental health, corrections, gerontology, law, drug and alcohol rehabilitation, vocational rehabilitation, the clergy, and industry. Although a two-year degree with emphasis in this area may aid employment in the social welfare system, students should be prepared to continue their education through a bachelor's degree in social work at a four-year institution.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses

SOCW 110 Intro to Social Work 5

Transitional Studies - BEdA

Faviola Barbosa 509.793.2305
email: faviolab@bigbend.edu

Adult Basic Education

Adult Basic Education is a program for adults who did not finish high school and who wish to improve their skills in basic reading, writing, or arithmetic. Classes are open-entry and self-paced. Times and locations of classes may be found in the current quarterly class schedule or by calling the Basics Skills Program Assistant at 509.793.2304.

English as a Second Language

English as a Second Language classes provide instruction in beginning and intermediate English language skills for adults whose first language is not English. Classes emphasize listening, speaking, reading and writing skills. Daytime and evening classes are offered. Times and locations of classes may be found in the current quarterly class schedule or by calling the Opportunity Center at 509.793.2304.

High School Completion

A BBCC adult high school diploma may be earned through enrollment in college courses or through classes in the HS+ program. Prospective high school completion students should contact their former high school to obtain a transcript of prior credit earned. Contact Credit Evaluator at 509.793.2307 to make an appointment for credit evaluation and to plan enrollment

Integrated Basic Education and Skills Training (I-BEST)

The I-BEST programs/classes are designed to assist adults with gaining professional and technical skills in the above areas while also working on their basic skills (English as a Second Language or Adult Basic Skills). Programs and courses are approved through the State Board for Community and Technical Colleges for I-BEST designation for high wage, high demand employment sectors. Goals are to complete initial certificates of Accomplishment and Achievement or vocational certification, and where possible, continue towards the achievement of the Associates degree. Most classes are held evenings and weekends and bilingual assistance is available where necessary.

Open Doors

Open Doors is a program where BBCC partners with local school districts to offer students age 16-21 another opportunity to complete their High School Diploma or GED and possibly receive college level credits or career focused certificates. The program is voluntary, and students need to meet certain credit deficiency criteria to enroll. Contact your High School Counselor or call us at 509-793-2304 for more information. Email us at opendoorsinfo@bigbend.edu

GED Preparation

Individuals who wish to study before taking the GED test may enroll in a program to help them prepare for the test. Classes are open-entry and self-paced. Times and locations of classes may be found in the quarterly class schedule or by calling the ABE/GED Office at 509.793.2304.

Big Bend Transitional Studies is here for YOU!

Unmanned Aerial Systems (UAS) Technology

Ethan Tonnemaker ***509.793.2113*** ***ethant@bigbend.edu***

Welcome to the Unmanned Systems (UMS) homepage; your source for all things even "remotely" related to aerial, ground and maritime operations. This page serves as a hub for the UMS pathways, providing students with the knowledge and skills to be professional remote pilots and small Unmanned Aerial Systems (sUAS) technicians.

Unmanned Systems academic offerings are designed to meet the needs of local, regional and nationally growing industries. Please see Agriculture if interested in UAS

Unmanned Aerial Systems (UAS) Remote Pilot Certificate of Accomplishment (27+ credits)

Certificate Learning Outcomes:

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

GIS 110 Geographic Info Systems I 4
GIS 220 Remote Sensing 3
or
UMS 295 Independent Project (3 cr)
UMS 107 Part 107 UAS Remote Pilot....2
UMS 112 UAS Ground School 5
UMS 142 UAS Flight Lab 5
UMS 208 UAS Mission Planning 5
UMS 210 UAS Laws & Policies....5
or
GIS 210 Geographic Info Systems II (3 cr)

Welding

Shawn McDaniel ***509.793.2262*** ***email: wld@bigbend.edu***

The Welding Technology program is designed for persons to acquire the technical knowledge and skills required to obtain a career in welding, fabrication, and related occupations.

Graduates may qualify for positions in industries such as machinery fabrication, structural fabrication, pipe fabrication, plant maintenance, and trade occupations which require welding skills. Students who complete the first year of the program will gain sufficient training to obtain entry-level employment. The second year of the program will focus on advanced skills in welding applications in specialty areas.

Persons who complete the two-year program of study may earn the Associate in Applied Science degree in Welding Technology with an emphasis in structural welding, industrial production welding, or pipe welding. The one-year welding certificate of achievement is available for students who do not wish to complete a two-year degree. Local employers indicate that there are jobs available for students who complete either the certificate or the AAS degree.

Interested students must work out their individual programs with a department advisor. This program has been designed to allow students to enroll at the beginning of each quarter. Students entering the program will progress sequentially through the lab classes; lecture classes are offered during scheduled quarters only.

Welding Technology AAS 106+ credits

Program Learning Outcomes:

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills
- PO4 Students demonstrate safe shop practice by safely using tools and equipment
- PO5 Students demonstrate competent cutting procedures and welds to appropriate welding codes.
- PO6 Students diagnose and cure common welding defects

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

First Year
Fall Quarter

MAP 101 Applied Mathematics (AUT/WLD) 5
or
MAP 117 Applied Math for Workforce Programs
WLD 110 Welding Theory I 5
WLD 111 Welding Process I 6
WLD 112 Thermal Cutting and Welding 3
WLD 151 Technical Drawings Interpretation 3

Winter Quarter

ENGL 109 Applied Technical Writing 3
WLD 120 Welding Theory II 5
WLD 121 Welding Process II 6
WLD 122 Gas Metal Arc Welding I 3
WLD 152 Welding Layout I 3

Spring Quarter

BUS 120 Human Relations on the Job 4
WLD 130 Welding Theory III 5
WLD 131 Welding Process III 6
WLD 132 Gas Tungsten Arc Welding I (TIG) 3
WLD 153 Welding Layout II 3

Second Year
Fall Quarter

CMST 100 Human Communications 4
WLD 205 Weld Test Methods 4
WLD 212 Gas Metal Arc Welding II 6
Structural Option: WLD 241 Structural Weld Process I 6
or
Production Option: WLD 261 Production Weld Process I
or
Pipe Option: WLD 281 Pipe Welding I

Winter Quarter

FAD 150 Industrial First Aid 2
WLD 206 Welding Codes and Standards 4
Structural Option: WLD 242 Structural Welding I 3
Structural Option: WLD 243 Structural Weld Process II 6
or
Production Option: WLD 262 Production Welding I
Production Option: WLD 263 Production Weld Process II
or
Pipe Option: WLD 282 Gas Tungsten Arc Welding II (TIG)
Pipe Option: WLD 283 Pipe Welding II

Spring Quarter

WLD 207 Welding Metallurgy 4
Structural Option: WLD 244 Submerged Arc Welding 3
Structural Option: WLD 245 Structural Weld Process III 6
or
Production Option: WLD 264 Advanced Weld Process
Production Option: WLD 265 Production Weld Process III
or
Pipe Option: WLD 284 Gas Tungsten Arc Welding III (TIG)
Pipe Option: WLD 285 Pipe Welding III

Welding Program Electives

Students must meet with their faculty advisor before enrolling in Work-Based Learning

WLD 190 Skills Improvement* 1-6
WLD 290 Skills Improvement* 1-6
WLD 295 Work-Based Learning 1-4
WLD 297 Work-Based Learning Seminar 1

* Skill level improvement classes are not required but may be needed to achieve desired skill levels. See the program advisor.

Welding Technology Certificate of Achievement (55 credits)

The Certificate of Achievement is designed to provide recognition for the student who does not plan to complete an Associate in Applied Science degree program. This certificate includes related instruction and a minimum of 45 credits in the program.

Program Learning Outcomes

- IO1 Communication
  Students will be able to communicate clearly and effectively within a workplace context
- IO2 Quantitative Reasoning
  Students will be able to reason mathematically using methods appropriate to the profession
- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills
- PO4 Students demonstrate safe shop practice by safely using tools and equipment
- PO5 Students demonstrate competent cutting procedures and welds to appropriate welding codes.

The following is a suggested sequence of courses. Interested students must work out courses and schedules with the program advisor.

BUS 120 Human Relations on the Job 4
CMST 100 Human Communications 4
ENGL 109 Applied Technical Writing 3
FAD 150 Industrial First Aid 2
MAP 101 Applied Mathematics (AUT/WLD) 5
or
MAP 117 Applied Math for Workforce Programs
WLD 110 Welding Theory I 5
WLD 111 Welding Process I 6
WLD 112 Thermal Cutting and Welding 3
WLD 120 Welding Theory II 5
WLD 121 Welding Process II 6
WLD 122 Gas Metal Arc Welding I 3
WLD 132 Gas Tungsten Arc Welding I (TIG) 3
WLD 151 Technical Drawings Interpretation 3
WLD 152 Welding Layout I 3

Welding Technology Certificate of Accomplishment (37 credits)

The Certificate of Accomplishment is designed to provide recognition of completion of certain approved courses or modules of courses offered through a particular technical program. This certification is designed for the occasional and or part-time student who does not plan to complete an AAS degree or a Certificate of Achievement.

Program Learning Outcomes

- IO3 Human Relations/Workplace Skills
  Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

WLD 110 Welding Theory I 5
WLD 111 Welding Process I 6
WLD 112 Thermal Cutting and Welding 3
WLD 120 Welding Theory II 5
WLD 121 Welding Process II 6
WLD 122 Gas Metal Arc Welding I 3
WLD 132 Gas Tungsten Arc Welding I (TIG) 3
WLD 151 Technical Drawings Interpretation 3
WLD 152 Welding Layout I 3

World Language

Angela Leavitt ***509.793.2187*** ***email: angelal@bigbend.edu***

World language courses may be taken as part of the Associate in Arts and Science DTA degree. These courses may be used toward the Humanities Breadth requirement or for Specified or General Elective credit. Students seeking Associate in Arts and Science DTA degree should refer to the catalog section "Degrees & Certificates" for a detailed description of the degree, its program outcomes, and courses that will satisfy degree requirements.

Understanding other languages and cultures is vital in communicating with the increasingly global environment. Language and cultural skills open doors for careers in a wide variety of fields, particularly education, social services, translating and interpreting, international business and travel.

The world language curriculum is designed to prepare the student to transfer to a baccalaureate institution offering more advanced language study.

Since programs differ at each college, students should consult program outlines published by the college or university to which they intend to transfer. The following recommended courses prepare students for most baccalaureate institutions. Students should prepare their quarterly schedules with the assistance of an advisor knowledgeable in this transfer area.

Recommended Pre-Major Courses Credits
World language sequence, two years of a language sequence 30

Prior Learning Credit Policy

The World Language Department will award Prior Learning Credit to students who meet the following academic or prior learning criteria:

1. Students who have taken a year of high school level world language may be placed into the 122 level of the language offered at Big Bend Community College. If the student completes the 122 level of the language at the college and earns a 3.0 grade point or higher, the student will be awarded the same grade point for the 121 level of that world language. Students must have instructor approval to register.

2. Students who have taken two years of high school level world language may be placed into the 123 level of the language offered at Big Bend Community College. If the student completes the 123 level of the language at the college and earns a 3.0 grade point or higher, the student will be awarded the same grade point for the 121 level and the 122 level of that world language. Students must have instructor approval to register.

Prior learning credit is awarded based on a student's performance, a grade point of 3.0 or higher, in the first language class that the student attempts at Big Bend Community College. A student that takes 122 and then 123 will be awarded prior learning credit for 121 if they satisfy the student performance requirement in 122. A student that takes 122 twice and receives a 3.0 grade in their second attempt but not their first attempt will not receive prior learning credit for 121.

This section includes descriptions of frequently offered BBCC courses. The office of Instructional Services maintains a complete Master Course Outline file for all officially documented BBCC courses.

Associate in Arts and Science Degree Codes

Humanities Lecture ..... HU
Humanities Performance/Skill ..... HP
Social Science ..... SS
Math/Science Laboratory ..... LS
Math/Science Non-Laboratory ..... MS
Natural Science ..... NS
Specified Elective ..... SE
Physical Education Activity ..... AC
Symbolic or Quantitative Reasoning ..... SQR

Course Sequence

Fall ..... F
Winter ..... W
Spring ..... Sp
Summer ..... Su

Common Course Numbering

In an effort to ease student transfer between Washington community and technical colleges the colleges, as directed by the presidents, developed a common course numbering system. Courses that are common across the community and technical college system have the same course prefix, number and title. The prefix on common courses includes the "&" at the end, e.g. ENGL&.

Please note that because a class does not have the "&" it does not mean that the class does not transfer. Students needing a sequence of science classes for their major, e.g. BIOL& 241 and 242, are advised to complete the entire sequence at Big Bend. Individual classes within a sequence will not always transfer as easily as they do when all are taken at one college.

Accounting

ACCT 105 Introduction to Accounting 5 (55/0)
This course provides the student with an introductory level understanding of the fundamentals of bookkeeping and accounting. The student is provided the procedures for completing the accounting cycle for both a service entity and a merchandising entity within a single proprietorship. (F, W, Sp)

ACCT& 201 Prin of Accounting I 5 (55/0)
An introduction to the steps in the accounting cycle; accounting for merchandise; the adjusting process-deferrals and accruals; financial statements; cash transactions; receivables, inventories and internal controls. This course is the first in a three-course series designed for all accounting and business majors. Prerequisite: ACCT 105 recommended SE (F, W)

ACCT& 202 Prin of Accounting II 5 (55/0)
An introduction to the accounting for fixed assets and depreciation, intangible assets, current liabilities, corporations, partnerships, long-term liabilities, statement of cash flows, and financial statement analysis. This course is the second in a three-course series designed for all accounting and business majors. Prerequisite: ACCT& 201 SE (W, Sp)

ACCT& 203 Prin of Accounting III 5 (55/0)
An introduction to managerial accounting concepts and principles, job order and process cost systems, cost-volume-profit analysis, budgeting, variances and standard costs, performance analysis for decentralized operations; differential analysis; product pricing; and capital investment analysis. This course is the third in a three-course series designed for all accounting and business majors. Prerequisite: ACCT& 202 SE (Su, Sp)

ACCT 233 Intro to Payroll Taxes 2 (22/0)
This course offers an introduction to the proper calculation, payment, and reporting of payroll taxes incurred by businesses. The preparation of required tax returns and the various reporting periods to government agencies will also be discussed. This course is designed for the student with little or no prior experience in payroll taxes. Prerequisite: Complete ACCT& 201 OR have prior experience in business or accounting. (Sp)

ACCT 260 Computer Accounting 3 (11/44)
A presentation of Windows based accounting techniques used in a service business and a merchandising business. Also presented is the proper use of a voucher system, departmental accounting, partnership accounting, corporate accounting, financial statement analysis, fixed assets, inventory, payroll, and accounting system setup. Prerequisite: ACCT& 202 (Sp)

ACCT 262 Introduction to QuickBooks® 2 (11/22)
This course offers an introduction to QuickBooks®, the nation's leading accounting software package for small businesses. Basic functions and capabilities of the software will be reviewed in a hands-on environment. This course is designed for the student with little or no prior experience with QuickBooks®. Prerequisite: To enhance the learning experience, it is recommended that the student complete ACCT&201 OR have prior experience in business or accounting. (F)

Agriculture

AGR 101 Orientation to Agricultural Industries & Careers 2 (22/0)
This course will explore the Columbia Basin's agricultural industries along with the career opportunities available within the industries. This course includes industry tours, career research & planning, personal & professional development, and networking. (F)

AGR 110 Water Management in Agriculture 3 (22/22)

This course will provide students the opportunity to study water and its management for agronomic purposes. A broad range of topics will be covered including the Columbia Basin Irrigation project, hydrology, basic irrigation principles, water relationships, efficiency, and water quality & supply. Course topics and concepts will be reinforced with hands-on labs and activities Prerequisite: AGR 263 Soils recommended. (W)

AGR 120 Intro to Precision Agriculture 5 (55/0)

This course provides an overview of the fundamentals of precision agriculture. Specifically covering Global Positioning Systems (GPS), Geographic Information Systems (GIS), remote sensing, data analysis, mapping, and variable rate agriculture technologies. Course concepts will be applied and reinforced through laboratory instruction. (F)

AGR 211 Agriculture Weeds Identification and Control 5 (55/0)

This course covers the classification, identification and control of weeds that economically affect agriculture in the Columbia Basin and surrounding areas. (Sp)

AGR 212 Ag Safety and Pesticides 5 (55/0)

This course is an overview of safety in the agricultural industry by identifying safety hazards, applying procedures, analyzing safety rules and regulations. Emphasis will be placed on the relation to agricultural operations, technological changes, workplace violence, ethics, diversity, and personal/organizational responsibilities. This course will also focus on agricultural chemical applications, proper pesticide and fertilizer use. Upon completion of this course, students will be prepared for their Washington State Commercial Applicator License Exams. (Sp)

AGR 241 Farm and Ranch Management 5 (44/22)

In this course, students will study the management principles for profitable farming operations, ranches, and other agribusiness firms. Topics include economic concept application and analysis, record keeping, creating and evaluating financial statements, budgeting, taxes, and risk management. Course concepts will be reinforced through laboratory instruction. (F)

AGR 251 Integrated Pest Management 5 (55/0)

In this course, students will learn ecologically based pest management strategies for controlling weeds, insects, pathogens, nematodes, and vertebrate pests as well as how to set up sampling and monitoring programs in the field. The course will cover the biological nature of pests, focusing on how their population dynamics and ecological interactions with other species and how their environments contribute to their detrimental impacts on agriculture and human resources. (Previous Course Title Ecologically Based Pest Management) (Sp)

AGR 261 Plant Science 5 (44/22)

This course introduces principles of plant science as it relates to the production and management of crops. Topics will include plant classification, form and function, growth, processes, genetics, and reproduction. Course concepts will be applied through laboratory instruction. (F)

AGR 263 Soils 5 (44/22)

This course is an introduction to basic concepts of soil science, plant nutrition, and water management. Topics include soil formation and development, soil structure and composition, physical properties of soils, soil minerals, soil chemistry, soil fertility, soil microorganisms, soil ecology, fertilizers, plant, and soil and water relationships. (W)

AGR 265 Crop Production 5 (55/0)

This course takes an in depth look at the science and processes of crop production. Students will build on their knowledge of plant and soils sciences and apply it to crop production from the beginning stages of soil and seed to the final harvested product. Prerequisite: AGR 261 Plant Science and AGR 263 Soils or instructor permission. (F)

AGR 271 Agriculture Sales and Marketing 5 (55/0)

This course will provide students the opportunity to study the marketing system for agricultural commodities. Students learn to analyze topics related to market structure, supply, demand, price, price analysis, trade, spatial relationships, market price variation through time, institutional arrangements, and public policy as they relate to agricultural marketing. Additionally, the concept of futures markets is introduced as a tool for price risk management. Theoretical economic frameworks covered in this class are applied to the commodities relevant to the Columbia Basin. Prerequisite: ECON& 201 Micro Economics. (Sp)

AGR 272 Food Sustainability and Safety 5 (55/0)
Students will study the challenges and importance of sustainable and safe food production. Topics include history of agriculture, geography of hunger, the sustainability concept, agricultural systems, agroecology, biotechnology, and food safety. (W)

AGR 295 Work-Based Learning-Internship 5 (0/0/198)
This course provides students with a valuable and practical work experience in Agriculture. Learned agriculture topics from Agriculture curriculum will be applied to and enhance the work experience. This is a paid or volunteer experience that is a supervised position both by the employer and the Agriculture instructor. (Su)

AGR 297 Work-Based Learning Seminar 1 (11/0)
This seminar course covers topics related to professional employment in Agriculture. Students will share feedback and discussion to integrate work-based learning experiences with classroom instruction. (Su)

Aircraft Rescue & Fire Fighting

FIR 101 Aircraft Rescue and Fire Fighting 40 Hour Basic 2.5 (24/16)
This 40 hour course covers fundamental training required by the FAA as described in FAR 139.319. The course includes fire fighting equipment, aircraft types, engines, systems, live fires, fire fighting operations, fire fighter safety, extinguishing agents, and disaster planning. Practical fire fighting involving flammable fuel, laddering/extraction and Self contained Breathing Apparatus using an actual aircraft. Students are provided with the opportunity to utilize state of the art technology, equipment and techniques. Instruction begins in the classroom and evolves in the practical training exercises on various aircraft related topics. This course will prepare a student to receive a certificate of completion from Big Bend Community College and the Federal Administration.

FIR 102 Aircract Rescue and Fire Fighting Truck Operations 1.5 (6/20)
This course is providing training and experience for students to properly operate a crash truck during a crash truck during an aircraft fire.

FIR 103 Aircraft Rescue and Fire Fighting Recurrent – Live Fire Training .5 (2/6)
This course offers firefighters the opportunity to meet live fire requirements as specified in FAR 139.319, the FAA requirement that all rescue and firefighting personnel participate in at least one live fire drill every 12 months. Prerequisite: Completion of Big Bend Community College's 40 Hour Basic ARFF School OR meet all three equivalent training/experience criteria listed below:

- at least 4 years experience as a firefighter
- at least 40 hours of initial and recurrent instruction per Part 139.319
- Aircraft Rescue and Firefighting: Operational Requirements (j) Personnel
- participated in a least one live fire drill

FIR 104 ARFF Officer Development 1 (8/8)
This airport rescue firefighting officer development course covers strategic and tactical considerations in a hands-on, live-fire ground environment, as well as leadership training. Prerequiste: Current employment in firefighting industry for future or Commissioned Fire Officers

Anthropology

ANTH& 100 Survey of Anthropology 5 (55/0)
An introduction to anthropology with a primary focus on cultural diversity of the human experience. The course surveys four subfields of Anthropology including sociobiology, anthropological linguistics, cultural anthropology, and applied anthropology. Major themes addressed throughout the course include cultural relativity, ethnocentrism, cultural change, the conflict between "foreign" anthropologist and "native" peoples, the role of anthropology in modern society, and anthropology as a "personal lens" of change. Students will complete a two part "field study", become familiar with The HRAF (human relations area file - a major electronic data base in Anthropology), and learn potential applications of becoming an anthropologist. Prerequisites: There are no prerequisites. Strongly recommended placement in Math 098 or higher and placement in English 099 or higher. SS (F, W, Sp)

Art

ART& 100 Art Appreciation 5 (55/0)
Art is a visual language which artists use to record and interpret life experiences. The messages artists share are personal and social records. The ability to understand and appreciate visual art is a skill you can develop through observation and study and one you can utilize throughout your life. We will cover a general overview of artists' materials and techniques as well as historical context with lectures, slides, movies, and experiments with art media. Open to all students. HU (F, W, Sp, Su)

ART 101 Design I 5 (44/22)
Design I is an introduction to the study of the elements and principles of art that will be explored through various media in two dimensional problems. There will be projects addressing the specific elements of art: line, shape/form, perspective, texture, value. Using these elements, the projects will also demonstrate the principles of organization: rhythm and repetition, balance, harmony-unity, movement, proportion, space, dominance. Design I, II, and III can be taken in any order HP (F)

ART 102 Design II 5 (44/22)
An introduction to the study of color theory explored through projects. Design I, II, and III can be taken in any order. HP (W)

ART 103 Design III 5 (44/22)
An introduction to the study of three dimensional design explored through various media in sculpture. Design I, II, and III can be taken in any order. HP (Sp)

ART 104 Drawing I 5 (44/22)
An introduction to drawing based on observation, emphasizing composition, and form. This course is basic to all art practice courses and is an introduction to basic drawing techniques involving various media such as pencil, charcoal, color pastels, and ink. HP (F, Sp)

ART 105 Drawing II 5 (44/22)
Drawing II is a continuation in the exploration of drawing with emphasis on technique and interpretation of ideas using various media. You will learn drawing techniques with various media and develop an individual artistic voice by introducing content (meaning or message) into drawings. Drawing I, II, and III can be taken out of sequence.HP (W)

ART 106 Drawing III 5 (44/22)
Working from a live model, the student explores a range of drawing approaches including gestural drawings, sustained renderings, structural drawings and expressive treatment of the figure. Exercises are performed which emphasize anatomical structure and focus on fragments, such as hand studies and portraiture. The development of a personal approach to drawing the figure and an examination of how the figure can be handled in art is explored through such means as critiques, slide presentations and demonstrations. Drawing I or II recommended HP

ART 121 Ceramics I 2-5 (11-44/22)
Experiments and design in clay applied to pottery and sculpture. Work in various hand construction methods, glazing and kiln firing. HP (F, W, Sp)

ART 122 Ceramics II 2-5 (11-44/22)
Ceramics II continues in experiments and design in clay applied to pottery and sculpture by throwing on the pottery wheel, glazing and kiln firing. Prerequisite: ART 121 or instructor permission. HP (F, W, Sp)

ART 123 Ceramics III 2-5 (11-44/22)
Advanced experiments and design in clay applied to pottery and sculpture by working in various hand construction methods and in pottery wheel, glazing and kiln firing. Prerequisite: ART 121, 122 or instructor permission. HP (F, W, Sp)

ART 140 Introduction to Digital Art 5 (44/22)
This course is an introduction to digital art wherein students will use technology for creative expression and the sharing of ideas and artwork. HP(W, Sp)

ART 198, 298 Special Projects 1-5 (0/0/55-275)
Special projects in art - individual projects by special arrangement with instructor. Prerequisite: instructor permission HP

ART 212 American Art 5 (55/0)
Beginning with the era of the colonization of North America by European nations and ending with the 20th century, this course will trace the development of art in the United States. HU

ART 216 Western Art: Ancient to Medieval 5 (55/0)
A survey of the history of western art and architecture from ancient times to the medieval age. HU (Sp)

ART 217 Western Art: Renaissance to Mid Nineteenth Century 5 (55/0)
A survey of the history of western art and architecture from Renaissance times to the mid nineteenth century. We will explore the art of Leonardo daVinci and Michelangelo to the beginnings of photography in the mid nineteenth century HU (W)

ART 218 Western Art: Impressionism to Art After 1945 5 (55/0)
A survey of the history of western art and architecture from late nineteenth century to contemporary times. Explore the work of the Impressionists like Monet and the Cubism of Picasso to the modern artwork of Jackson Pollock. HU (F)

ART 221 Watercolor I 1-5 (11-44/22)
The study of water color painting from still life and nature with an introduction to the materials and techniques of watercolor painting.HP (Sp, Su)

ART 222 Watercolor II 1-5 (11-44/22)
A continuation of the study of water color painting from still life and nature with the materials and techniques of water color painting. Prerequisite: ART 221 or instructor permission HP (Sp, Su)

ART 223 Watercolor III 1-5 (11-44/22)
Advanced water color painting is an emphasis upon the student's artistic growth and the development of his or her own style and voice using watercolor techniques and materials. Prerequisite: ART 221 and 222 or instructor permission. HP (Sp, Su)

ART 230 Painting/Drawing Workshop 2-5 (22-44/22)
A workshop class designed to allow experimentation with 2D media such as pencil, charcoal, pastels, watercolor, acrylic paint. Prerequisite: None but studio class such as drawing or painting recommended HP

ART 231 Oil Painting I 5 (44/22)
Introduction to the materials and techniques of oil painting. Painting from still life and nature using creative compositions. HP (F, W, Sp)

ART 232 Oil Painting II 5 (44/22)
Continuation of exploration in oil painting materials and techniques with an emphasis on developing content or message in the paintings. Prerequisite: ART 231 or instructor permission. HP (F, W, Sp)

ART 233 Oil Painting III 5 (44/22)
Advanced oil painting is an emphasis upon the student's artistic growth and the development of his or her own style and voice using oil painting techniques and materials. Prerequisite: ART 231 and 232 or instructor permission. HP(F, W, Sp)

Astronomy

ASTR& 100 Survey of Astronomy 5 (55/0)
A survey course intended for the non-science major. Topics studied will include most of the following: historical astronomy, electromagnetic radiation, telescopes, the Earth-Moon system, the solar system, the sun, stars, stellar evolution, galaxies, quasars, and cosmology. This is a non-lab science course. Credit not granted for both ASTR& 100 and ASTR& 101. Prerequisite: Math 098 or higher placement NS

ASTR& 101 Intro to Astronomy 5 (44/22)
A survey course intended for the non-science major. Topics studied will include most of the following: historical astronomy, electromagnetic radiation, telescopes, the Earth-Moon system, the solar system, the sun, stars, stellar evolution, galaxies, quasars and cosmology. The laboratory portion of the course may include optics, visual astronomical observing techniques, use of the telescope, spectroscopy, and distance measurement. Credit not granted for both ASTR& 100 and ASTR& 101. Prerequisite: Math 099 or higher placement LS
(F, Sp)

ASTR 105 Observational Astronomy 3 (28/12)
A descriptive overview of astronomy with particular emphasis on observation. Lectures will cover the solar system, the Earth-Moon system, stellar systems, celestial motion, the history of visual astronomy, optical aids, and observing techniques. This course is not intended to be part of a physical science pre-major. SE

Automotive Technology

AUT 069 Chassis Component Repair 2 (11/22)
A laboratory class providing the opportunity to diagnose and repair various automotive chassis components. A hands-on approach is used to provide training in the repair of various automotive components.Prerequisite: AUT 115 or instructor permission.

AUT 081 Mechanical Diagnosis and Repair 2 (11/22)
A laboratory class providing the opportunity to diagnose and repair various mechanical systems of the modern automobile. Prerequisite/Corequisite: AUT 115 or instructor permission

AUT 105 Automotive Personal Computer Applications 2 (11/22)
An introductory course covering the operation of personal computers using automotive applications. Hardware components, Windows Operating System, word processing, spreadsheets, and student created presentations will be covered emphasizing "hands-on" experience. Prerequisite/Corequisite: Concurrent enrollment in automotive program classes. (Sp)

AUT 111 Automotive Engine Service 9 (66/66)
This course covers the theory of engine operation and the procedures necessary to perform automobile engine troubleshooting, repair and rebuilding. Topics covered include shop skills, engine operation, engine blocks, engine crankshafts, engine bearings, engine pistons, rings and valve system service. This course is designed to prepare the student for the ASE/NATEF Engine Repair Certification test, while instilling interpersonal and employability skills. There will be a heavy focus on customer service and quality control. Prerequisite: AUT 115 Automotive Shop Safety and Environmental Issues / Co-Requisite: AUT 190 Automotive Lab. (Sp)

AUT 115 Automotive Shop Safety and Environmental Issues 1 (10/2)

This course covers automotive shop safety rules, procedures, and shop equipment operation and is required before a student is allowed to work in the automotive laboratory. The proper handling, storage, and disposal of automotive related hazardous waste is also covered. Offered as regularly scheduled course during the fall quarter and offered by arrangement for students who enroll in the automotive program any other quarter. (F, W, Sp)

AUT 121 Automotive Electrical and Electronic Systems 15 (110/110)

This comprehensive course covers both theory and operation of the electrical systems in today's high-tech vehicles. Topics covered include D.C. electrical theory, D.C. circuitry, Ohms Law, solid state components, batteries, starting circuits, charging circuits, lighting circuits, vehicle wiring and ignition systems. Emphasis will be placed on using modern electrical test equipment and procedures to diagnose and repair complex electrical systems. This course is designed to prepare the student for the ASE/NATEF Electrical Systems Certification test, while instilling interpersonal and employability skills. There will be a heavy focus on customer service and quality control. PrerequisiteAUT 115 /Corequisite: AUT 190. (W)

AUT 124 Brake System Service 9 (66/66)

This course covers the theory, operation, diagnosis and repair of both conventional and anti-lock brake systems. Topics covered are hydraulic operating systems, drum brake systems, disc brake systems, emergency/parking brake systems and brake machining operations. This course is designed to prepare the student for the ASE/NATEF Brakes Certification test, while instilling interpersonal and employability skills. There will be a heavy focus on customer service and quality control. Prerequisite: AUT 115-Automotive Shop Safety and Environmental Issues ; Co-Requisite: AUT 190 Automotive Lab. (F)

AUT 125 Suspension, Steering and Alignment 9 (66/66)

This course covers the theory, operation and repair of various automotive suspension and steering systems used in today's vehicles. Topics covered include steering types, suspension types, shock/strut service, tires/wheels and suspension and steering component replacement. Students will use modern computerized alignment equipment to perform two wheel, four wheel and thrust type vehicle alignments. This course is designed to prepare the student for the ASE/NATEF Suspension and Steering Certification test. Prerequisite: AUT 115 Automotive Shop Safety and Environmental Issues. Co-Requisite :AUT 190 Automotive Lab. (F)

AUT 131 Manual Drive Train and Axles 8 (55/66)

This course covers the theory, operation, diagnosis and repair of automotive clutch systems, manual transmissions, manual transaxles, front and rear drive axle operation, various drive shaft configurations and the procedures necessary to perform power train troubleshooting and repair. This course is designed to prepare the student for the ASE/NATEF Manual Drive Train & Axles Certification test, while instilling interpersonal and employability skills. There will be a heavy focus on customer service and quality control. Prerequisite: AUT 115 Automotive Shop Safety and Environmental Issues. Co-Requisite :AUT 190 Automotive Lab. (Sp)

AUT 132 Hydraulic Systems 3 (22/22)

This course provides a student with the skills and knowledge necessary to maintain and service various hydraulic power transmission systems. Topics covered include hydraulic fundamentals, system operation, pump, valve and actuator service, as well as seals, lines and hydraulic system components. Prerequisite: AUT 115 Automotive Shop Safety and Environmental Issues. Co-Requisite : AUT 190 Automotive Lab. (W)

AUT 190 Skills Laboratory I 2 (0/44)

This course is for full-time automotive students who need extra project laboratory time to update or enhance their skills to meet program certification requirements. Students will be directed to complete ASE/NATEF tasks not completed in the day classes. (May be repeated for credit up to six credits for each course; graded on pass/fail basis). Prerequisite: Concurrent enrollment in first year automotive program classes. (F, W, Sp)

AUT 211 Automobile Convenience Systems 2 (11/22)

This course covers the operation and repair of automotive convenience systems. Classroom and laboratory lessons include power windows, power seats, air bag system testing and servicing, as well as minor door, hood, window, and trunk adjustments. The procedure to perform a proper Pre-delivery Inspection (PDI) will be covered and Washington State auto repair laws and how they effect the repair technician will be discussed. Prerequisite: AUT 121 - All First Year Certificate Auto Courses. (Sp)

AUT 212 Automatic Transmission Repair 9 (66/66)
This course covers the theory, operation, service, and repair of various automatic transmission and transaxle assemblies. Classroom and laboratory instruction provide in-depth training using modern test equipment in the diagnosis and repair of these complex systems. This course will prepare students for the ASE/NATEF Automatic Transmission Repair Specialists test. Prerequisite: All First Year Certificate Auto Courses plus AUT 132. (W)

AUT 213 Automotive Servicing I 6 (0/132)
Students, at the direction of the instructor, work on customer vehicles applying skills learned in previous automotive classes. Students will be required to complete ASE/NATEF tasks not completed in other courses. Customer relations, repair order preparation, scheduling, estimating, utilization of shop space and equipment, and hazardous waste management are covered to provide students with an understanding of repair shop operations. Prerequisite: Instructor permission or completion of first year automotive classes. (W)

AUT 220 Engine Performance 18 (132/132)
This comprehensive course covers the theory and operation of various ignition systems, fuel delivery systems, emission controls, computerized engine controls, and the use of diagnostic test equipment. Classroom and laboratory lessons provide in-depth training using modern test equipment to diagnose and repair these complex systems. This course is designed to prepare students for the ASE/NATEF Engine Performance test. Prerequisite: All First Year Certificate Auto Courses. (F)

AUT 223 Automotive Servicing II 6 (0/132)
Students, at the direction of the instructor, work on customer vehicles applying skills learned in previous automotive classes. Students will be required to complete ASE/NATEF tasks not completed in other courses. Customer relations, repair order preparation, scheduling, estimating, utilization of shop space and equipment, and hazardous waste management are covered to provide students with an understanding of repair shop operations. Prerequisite: Instructor permission or completion of first year automotive classes. (Sp)

AUT 231 Automotive Heating and Air Conditioning 6 (33/66)
This course covers the diagnosis, servicing, and repair of modern vehicle heating and air conditioning systems. Classroom and laboratory lessons provide training and experience using modern refrigeration servicing and recycling equipment necessary to meet environmental regulations. CFC-12 and HFC-134A systems and equipment are utilized and retrofitting following Environmental Protection Agency guidelines is discussed. This course is designed to prepare the student for the ASE/NATEF Heating and Air Conditioning test. Prerequisite: All First Year Certificate Auto Courses or Instructor Approval. (Sp)

AUT 290 Skills Laboratory II 2 (0/44)
This course is for full-time automotive students who need extra project laboratory time to update or enhance their skills to meet program certification requirements. Students will be directed to complete ASE/NATEF tasks not completed in the day classes. (May be repeated for credit up to six credits for each course; graded on pass/fail basis). Prerequisite: Concurrent enrollment in second year automotive program classes (F, W, Sp)

AUT 295 Workbased Learning 1-6 (33-198/0)
A supervised work experience in the automotive technology field to enhance the application of classroom instruction and skills and/or area of specialization approved by the program instructor. May be repeated up to twelve (12) credits. Prerequisite: AUT instructor permission required. Corequisite: Concurrent enrollment in AUT 297

AUT 297 Workbased Learning Seminar 1 (11/0)
Feedback and discussion to integrate and relate Work Based Learning and classroom based instruction. Work ethic, leadership, safety and occupational health, environmental issues, and other student generated topics are examined. May be repeated up to six (6) credits. Prerequisite: ICorequisite: Concurrent enrollment in AUT 295.

Aviation (Commercial Pilot/Flight)

AVF 111 Pre-Flight Ground School 1 (11/0)
This course introduces the student to the aircraft, its flight manual, the basic federal aviation regulations, elementary principles of flight, aircraft operation, and BBCC flight rules. This course starts the week prior to the normal class starting date. All students accepted and alternates must attend this course. Pre-program counseling is done at this time, and flight training is started. Prerequisite: Accepted flight student status. (F)

AVF 112 Private Pilot Ground School 5 (55/0)
This course prepares the student to take the FAA private pilot knowledge examination. It includes elementary navigation, weather, federal aviation regulations, NTSB reporting procedures, radio procedures, AIM, advisory circulars, operating limitations, aircraft performance, principles of aerodynamics, power plants and systems, stall and spin awareness, ADM and judgment, preflight action and planning. Prerequisite: AVF 111 or Chief Pilot approval. (F)

AVF 113 Meteorology 5 (55/0)
This course is designed for pilots but is helpful for the non-aviation major to understand the basics of meteorology. A study in the nature of the atmosphere, winds, temperature, moisture, air masses and frontal systems, weather forecasting utilizing charts and reports available from FAA FSS's; incorporates techniques for flying in various weather conditions. Prerequisite: AVF 112 or Chief Pilot approval. NS (W)

AVF 114 Theory of Flight 5 (55/0)
This course covers basic aerodynamic theory of flight, aircraft instruments, performance, stability, control, airframe stress, structural limits, constant speed propellers, and turbo charging. Prerequisite: AVF 112 (Sp)

AVF 117 Aviation Emergency Preparedness & Response 1 (11/0)
Aviation Emergency Preparedness and Response is intended for Private and Commercial pilots; introduces emergency preparedness, survival, and rescue procedures common to general aviation. (W)

AVF 141 Private Pilot Flight (Stage 1) 4 (44/0)
Scheduled flight time, ground critique, discussions, and observation time; both dual and solo flights. Instrument flight training is integrated with all phases of flying. Includes simulator time. (F)

AVF 142 Private Pilot Flight (Stage 2) 4 (44/0)
Scheduled flight time, ground critique, discussions and observation time; both dual and solo flights. Instrument flight training is integrated with all phases of flying. Includes simulator time. Prerequisite: AVF 141 (W)

AVF 143 Private Pilot Flight (Stage 3) 4 (44/0)
Scheduled flight time, ground critique, discussions and observation time; both dual and solo flights. Instrument flight training is integrated with all phases of flying. Includes simulator time. Prerequisite: AVF 142 (Sp)

AVF 190, 290 Flight (Alternate) 0-4 (5-44/0)
Provides additional aircraft flight time to allow the student additional time to increase his/her skill or complete a course of study. Includes flight time and follow-up critique. Prerequisite: AVF 141.(F, W, Sp, Su)

AVF 213 Advanced Meteorology 5 (55/0)
This course is designed for aviation majors but it is helpful for the non-aviation major to understand meteorology at a more advanced level. This course will cover the nature and utility of atmosphere, winds, temperature, moisture, air masses and frontal systems, weather forecasting utilizing charts and reports available from FAA and NWS. This course will incorporate techniques for flying in various weather conditions. Prerequisite: AVF 113 or Chief Pilot approval NS

AVF 221 Commercial Pilot Ground School 5 (55/0)
Preparation for the FAA commercial pilot knowledge test. Includes study of applicable FAR's, accident reporting requirements of the NTSB; basic aerodynamics and the principles of flight; meteorology and the use of weather reports and forecasts; safe and efficient operation of aircraft; weight and balance computations; use of performance charts, performance limitations; use of navigation facilities, ADM, judgment and CRM; principles and functions of aircraft systems; maneuvers, procedures and emergency operations; night and high-altitude operations; the National Airspace System. Prerequisite: AVF 113 & 114 (W)

AVF 223 Instrument Ground School 5 (55/0)
Preparation for FAA instrument knowledge examination, includes: FAR's that apply to IFR; appropriate sections of AIM; air traffic control system and procedures; IFR navigation systems and instruments; use of en route and instrument approach charts, aircraft operations under IFR; procurement and use of aviation weather reports and forecasts, recognition of critical weather situations and wind shear avoidance, ADM and judgment, and CRM. Prerequisite: AVF 113 and 114. (F)

AVF 225 Effective Communication in Flight Instruction 5 (55/0)
This course covers the required areas of instructor knowledge; and is designed to aid the student in passing the appropriate FAA knowledge tests. It includes the learning process and emphasizes elements of effective communication. Methods of teaching and communicating are studied and practiced, as well as how to evaluate and critique through written and oral processes. Includes practice in classroom, one-to-one, and team teaching. Prerequisite: AVF 221, 223 & 252, or Chief pilot approval. (Sp)

AVF 227 Aircraft Systems for Pilots 5 (55/0)
Introduces the systems of complex aircraft: fuel, hydraulic, brake, control, ignition, and electrical systems; covers nomenclature, preventive maintenance, engines, propellers, and related publications.

AVF 251 Commercial Pilot Flight (Stage 4) 4 (44/0)
Scheduled flight time, ground critique, discussion and observation time, dual, solo, cross-country, and instrument, and complex aircraft time. Includes simulator time. Prerequisite: AVF 143. (F)

AVF 252 Commercial Pilot Flight (Stage 5) 4 (44/0)
Scheduled flight time, ground critique, discussion and observation time; dual, solo, cross-country, instrument, and complex aircraft time. Includes simulator time. Prerequisite: AVF 251. (W)

AVF 253 Commercial Pilot Flight (Stage 7) 4 (44/0)
Scheduled flight time, ground critique, discussion and observation time; dual, solo, and cross-country time. Includes 28 hours simulator time upon program completion. Prerequisite: AVF 261. (Sp)

AVF 254 Night Flying 1 (14/0)
Provides an introduction to night flying and advanced instruction in night navigation, procedures, orientation, landings, takeoffs and techniques necessary for safe operation of airplanes at night. Prerequisite: AVF 142. (F, W, Sp)

AVF 261 Instrument Flight (Stage 6) 4 (44/0)
Provides training in instrument flight procedures in preparation for the airplane instrument rating; includes simulator training. Prerequisite: AVF 252. (Sp)

AVF 270 Flight Instructor 4 (44/0)
Preparation for the Certified Flight Instructor rating; includes flight time and critique. Prerequisite: Commercial license and instrument rating and Chief Pilot approval. (Su)

AVF 271 Flight Instructor Instrument-Airplane 2 (22/0)
Provides the Flight Instructor applicant with the knowledge, skill and experience necessary to become an Instrument Instructor; includes flight time and critique. Prerequisite: Commercial/instrument license, CFI single engine license and 10 hours as CFI with FII written passed and Chief Pilot approval. (F, W, Sp, Su)

AVF 272 Seaplane Flight 2 (22/0)
A dual flight lab course designed to develop flight skills in water operations and procedures, along with flight maneuvers in preparation for the FAA Seaplane Rating; includes flight time and critique. Prerequisite: Commercial Pilot Certificate or Chief Pilot approval. (F, Sp, Su)

AVF 275 Multi-Engine Flight 2 (22/0)
Preparation for the FAA Multi-Engine rating. Prerequisite: Commercial Pilot Certificate and Chief Pilot approval. (F, W, Sp, Su)

AVF 276 Simulator Training/Instrument Training 0.5-1 (5.5-11/0)
Designed to fit the individual and particular needs of each pilot in instrument training, refresher or FAA currency requirements. Prerequisite: Instructor approval. (F, W, Sp, Su)

AVF 291 Multi-Engine Instructor 2 (22/0)
Preparation for the FAA Multi-Engine Flight Instructor rating. Prerequisite: Commercial Airplane with instrument rating, multi-engine land ratings, flight instructor single engine. (F, W, Sp, Su)

AVF 292 A.T.P.: Multi-Engine 1 (11/0)
Prepares the student for FAA A.T.P. flight check. Prerequisite: Commercial/Instrument. M.E., 1500 hours, ATP knowledge test passed. (F, W, Sp, Su)

AVF 295 Work-Based Learning 1-6 (0/0/33-198)
A supervised work experience in the aviation industry to enhance the application of classroom instruction and/or flight skills. This is a paid or volunteer experience that is supervised by both the employer and the Aviation program. May be repeated up to 15 credits. Prerequisite: AVF 297, Work-Based Learning Seminar. Aviation program permission and any requirements of the contractual agreement, between BBCC and the employer. (F, W, Sp, Su)

AVF 297 Work-Based Learning Seminar 1 (11/0)
This course is taken in conjunction with AVF 295 (Work-Based Learning) and gives the student the opportunity and responsibility to report on their work experience and to analyze that experience for successes and for areas of improvement. May be repeated up to six (6) credits. Prerequisite: AVF 295 (Work-Based Learning) (F, W, Sp, Su)

Aviation Maintenance Technology

AMT 148 AMT General Electricity 2-7 (11-39/22-77)

This course covers the theory of basic electricity and applied Physics. This course is FAA approved under 14 CFR Part 147. Prerequisite: Instructor approval. (F, W)

AMT 149 AMT Airframe Electricity 3 (33/0)

Student will perform operation of AC and DC electrical systems used on large and small aircraft, generating and starting systems, AC and DC electric motors, wiring, controls, switches, indicators, and protective devices, and constant speed and integrated drive generators Prerequisite: Instructor approval. (F, W, Sp)

AMT 150 AMT General 4-16 (22-90/44-182)

This course will cover aviation applied physics, application of aircraft drawing, function of weight and balance control, operation and cleaning of aircraft, identification and application of aircraft materials. The use of maintenance forms and publications in the aviation industry. This course is approved under FAA Part 147. Prerequisite: Instructor approval. (F, W)

AMT 151 Airframe Mechanic I 4-22 (77-352/33-132)

This course will cover aircraft airframe structures, including wood, fabric and sheet metal, airframe inspection, application of finishes and assembly of fixed wing and rotary wing components and structures, balancing and rigging of airframe structures and components. This course is FAA approved under 14 CFR Part 147. Prerequisite: Instructor approval. (F, W, Sp, Su)

AMT 152 Airframe Mechanic II 4-21 (22-119/44-264)

This course will cover aircraft airframe systems and components. To provide the skills in checking, overhaul, repairs, installation, removal, servicing, inspection, and troubleshooting of landing gear systems, hydraulic and pneumatic power systems, cabin atmosphere control systems, aircraft instruments, communication and navigation system lab, aircraft fuel systems, aircraft electrical systems, position and warning systems, ice and rain control systems, and fire protection systems. This course is approved under FAA Part 147. Prerequisite: Instructor approval . (F, W, Sp, Su)

AMT 153 Airframe Mechanic III 4-24 (22-132/44-264)

As required by the Federal Aviation Administration, the airframe program is a minimum of 750 hr. of instruction with approximately 25% of the instruction in a class room environment and 75% of the instruction in a lab environment. AMT 153 is designed to allow students more time to achieve FAA required proficiency levels and to allow students to further their proficiency levels in aviation airframe related studies. This course will cover any area of the FAA required airframe curriculum that the student is deficient in, or if all required competencies have been met, the student may further their proficiency levels in any airframe related area of study. This course is FAA approved under 14 CFR Part 147. Prerequisite: AMT 150, 151, 152, MAP 100 and instructor approval. (F, W, Sp, Su)

AMT 249 AMT Powerplant Electricity 2 (22/0)

Students will develop an understanding of the operation of generators, alternators, DC motors, and AC motors, and their repair and overhaul. Students will also learn the special requirements of electrical components operating in high temperature areas and how to install wiring, controls, switches, and indicators and protect them from its effects. This course is FAA approved under, 14 CFR Part 147. Prerequisite: Instructor approval.(F, W, Sp)

AMT 251 Powerplant Mechanics I 4-16 (22-88/44-176)

AMT 252 Powerplant Mechanics II 4-14 (22-66/44-176)

AMT 253 Powerplant Mechanics III 4-16 (22-88/44-176)

As required by the Federal Aviation Administration, the Powerplant program is a minimum of 750 hr. of instruction with approximately 25% of the instruction in a class room environment and 75% of the instruction in a lab environment. There is approximately 30 hours of extra time at the end of the Powerplant program, which is to be used for make-up time or for further competency enhancement. This course is FAA approved under 14 CFR Part 147. This course will cover two areas: (1) Powerplant theory and maintenance, including the inspection, repair, overhaul, service, troubleshooting, removal, and installation of aircraft reciprocating and turbine engines. (2) Powerplant systems and components, including the inspection, repair, overhaul, service, troubleshooting, removal, and installation of aircraft reciprocating and turbine engine instrument, fire protection, electrical, lubrication, ignition, starting, fuel metering, induction, airflow, cooling, exhaust, propellers, unducted fans, and auxiliary power unit systems. Prerequisite: Instructor approval. (F, W, Sp, Su)

AMT 254 Powerplant Mechanic IV 4-16 (22-88/44-176)

As required by the Federal Aviation Administration, the Powerplant program is a minimum of 750 hr. of instruction with approximately 25% of the instruction in a classroom environment and 75% of the instruction in a lab environment. AMT 254 is designed to allow students more time to achieve FAA required proficiency levels and to allow students to further their proficiency levels in aviation. Powerplant related studies. This course will cover any area of the FAA required Powerplant curriculum that the student is deficient in, or if all required competencies have been met, the student may further their proficiency levels in any Powerplant related area of study. This course is FAA approved under 14 CFR Part 147. Prerequisite: AAMT 251, 252, 253 and Instructor approval. (F, W, Sp, Su)

Avionics

AVIO 101 Aircraft Electrical Fundamentals 8 (55/66)

Fundamentals, troubleshooting, and experiments of aircraft electrical circuits; safety practices; electrostatic devices; metric notation; voltage, current, resistors and measurements, switches, fuses, and circuit breakers; tools for troubleshooting, including multimeters and oscilloscopes; magnetism and electromagnetic principles and calculations; relays and meters; Ohm's and Kirchhoff's Laws; circuits; electrical generators, inductors, filters, and capacitors; resistance and reactance; transformers; batteries; motors.

AVIO& 102 Aircraft Electronic Fundamentals 8 (55/66)

Fundamentals, troubleshooting, and experiments with fundamental aircraft electronics; diodes; power supplies; rectifiers; voltage regulators; transistors; amplifiers; oscillators and multivibrator circuits; latches and flip-flops; transmitters; synchro systems; gyroscopes. Prerequisite: AVIO101 or AMT149

AVIO& 103 Aircraft Wiring Systems 2 (11/22)

Fundamentals, troubleshooting, and repair of aircraft wiring, including acceptable standards for visual, electrical, and mechanical quality. Prerequisite: AVIO 101 or AMT 149

Basic Education for Adults (BEdA)

Adult Basic Education (ABE) and English as a Second Language (ESL) courses are for learners who are sixteen years and older. Learners are encouraged to create learning plans and establish goals related to their roles as workers, citizens, and family members. Learners may enroll in courses anytime during the quarter. Dates and times for classes are available in the quarterly class schedule. For more information, call the Basic Skills Director at 793.2305.

DVS 011 Basic Skills Review

The main goal of this course is to assist students to improve their reading/writing, math, listening/speaking and employability skills in order to earn a high school diploma or pass the official GED tests. To enroll in the Basic Skills Program, students must be at least 16 years old. For the HS21 program, students must be 21 years old or older. Prerequisite: This course is designed for students with a CASAS score below 235 in reading and/or math. (Formerly: DVS 011, 012, 013, 014, 020, 021)

DVS 012 Adult Secondary Education I

The main goal of this course is to assist students to improve their reading/writing, math, listening and employability skills in order to earn a high school diploma or to pass the Official GED tests (to enroll in the Basic Skills Program, students must be at least 16 years old). For HS21 students, this course is designed for students studying for the second half of their HS21 diploma. Prerequisite: This course is designed for students who, at intake, have credits placing them at 11th or 12th grade (earned more than half their credits for graduation) and/or for second language students score 236-245 on CASAS Reading and Math tests. (Formerly: DVS 011, 012, 013, 014, 020, 021)

DVS 013 Adult Secondary Education II

The main goal of this course is to assist students to improve their reading/writing, math, listening and employability skills in order to earn a high school diploma or to pass the Official GED tests (to enroll in the Basic Skills Program, students must be at least 16 years old). For HS21 students, this course is designed for students studying for the second half of their HS21 diploma. Prerequisite: This course is designed for students who, at intake, have credits placing them at 11th or 12th grade (earned more than half their credits for graduation) and/or for second language students score 246-255 on CASAS Reading and Math tests. (Formerly: DVS 011, 012, 013, 014, 020, 021)

DVS 014 Adult Basic Skills

The main goal of this course is to assist students to improve their reading, writing, listening, employability skills, and math skills in order to advance to the next NRS Educational Functional level as determined by the CASAS Levels and to obtain knowledge and skills necessary for college and career readiness Prerequisite: This course is designed for students with a CASAS score below 246 in reading and/or math. (Formerly: DVS 011, 012, 013, 014, 020, 021)

DVS 015 Accelerated Learning Support
DVS 015 is designed to provide additional instruction and support for basic skills students in I-BEST or other college-level accelerated math and English classes. The course provides a review of core concepts and vocabulary introduced in the related college-level math and/or English courses and students engage in activities to help strengthen basic math and/or English skills. Prerequisite: Students must be concurrently enrolled in I-BEST or other college-level accelerated math and/or English classes

DVS 016 Accelerated Learning Support: English
DVS 016 is designed to provide additional instruction and support for basic skills students in I-BEST or other college-level accelerated English classes. The course provides a review of core concepts and vocabulary introduced in the related college-level English courses and students engage in activities to help strengthen basic English skills. Prerequisite: Placement in pre-college English; students must be concurrently enrolled in I-BEST or other college-level accelerated English classes.

DVS 017 Accelerated Learning Support: Math
DVS 017 is designed to provide additional instruction and support for basic skills students in I-BEST or other college-level accelerated Math classes. The course provides a review of core concepts and vocabulary introduced in the related college-level Math courses and students engage in activities to help strengthen basic Math skills. Prerequisite: Placement in pre-college Math; students must be concurrently enrolled in I-BEST or other college-level accelerated Math classes.

DVS 031 Beginning English Language Acquisition
This basic skills level course is for students whose first language is not English. Participants study speaking, listening, reading, writing, employability skills, and mathematics in English, so they may perform a variety of basic tasks requiring communication at work, at home, and in their community. Students must be at least sixteen years old to enroll in the Basic Skills Program or 21 years old or older to enroll in the HS21 program. Prerequisite: This course is designed for students with a CASAS score below 190 in reading and/or below 189 in listening (Formerly DVS 030,031,032,034,035,037)

DVS 032 Intermediate English Language Acquisition
This basic skills level course is for students whose first language is not English. Participants study speaking, listening, reading, writing, employability skills, and mathematics in English, so they may perform a variety of basic tasks requiring communication at work, at home, and in their community. Students must be at least sixteen years old to enroll in the Basic Skills Program or 21 years old or older to enroll in the HS21 program. Prerequisite: This course is designed for students with a CASAS score between 191-210 in reading and/or between 190-209 listening (Formerly DVS 030,031,032,034,035,037)

DVS 033 Advanced English Language Acquisition
This basic skills level course is for students whose first language is not English. Participants study speaking, listening, reading, writing, employability skills, and mathematics in English, so they may perform a variety of basic tasks requiring communication at work, at home, and in their community. Students must be at least sixteen years old to enroll in the Basic Skills Program or 21 years old or older to enroll in the HS21 program. Prerequisite: This course is designed for students with a CASAS score between 211-235 in reading and/or between 210-227 in listening(Formerly DVS 030,031,032,034,035,037)

DVS 036 English Language Acquisition/Citizenship
This basic skills level course is if for students whose first language is not English and who are preparing for the United States naturalization examination. Participants study speaking, listening, reading, writing and arithmetic in English using U. S. History, government and citizenship themes. Individuals may enroll in the course at any time during the quarter.

DVS 080 College Transitions Math
Review and instruction in whole numbers, decimals, fractions, geometry, and integers. Learn strategies to deal with math anxiety and test taking. Students should note this course does not count towards credit total for financial aid eligibility. Prerequisite: Placement exam or instructor permission. (Formerly: MATH 080)

DVS 090 Transition to College
This Transition to College course is designed to assist advanced ESL/ABE students in developing skills to transition into an academic or vocational program. Students will receive an orientation to the college culture and its services. Students will concentrate on the academic English speaking, reading, writing, presentation and the basic computer skills needed for a successful transition into a credit bearing college program. Prerequisite: CASAS Reading Level 230 and above

Biological Sciences

BIOL& 100 Survey of Biology 5 (44/22)
A study of basic biological principles common to living organisms, this course is intended for non-majors who desire a lab science requirement. Topics of study include: scientific thinking, basic chemistry, cell structure and membrane transport, energy and cell pathways, DNA and gene expression, chromosomes and cell division, genes and inheritance, and evolution and natural selection. Related investigations take place in a required two-hour lab period each week. There will be no required dissections in the laboratory. LS (F, W, Sp, Su)

BIOL 104 Core Concepts in Biology 2 (22/0)
A review of the biological principles common to living organisms, this course is intended for students planning to take BIOL& 211 who have some prior biology background but would like a review of the basic biology concepts. Topics of study include, macromolecules, cell structure, membrane transport, energy and metabolism, DNA replication, gene expression, cell division, and genetics. Prerequisite: Any prior biology course, high school or college-level, is highly recommended. SE

BIOL& 160 General Biology with Lab 5 (38.5/33)
This course is intended for students pursuing careers in Nursing or other Allied Health fields and satisfies the biology prerequisite for A&P 1 (BIOL& 241) and Microbiology (BIOL& 260). Course content includes the following topics: 1) cellular order and organization including cell chemistry, biological molecules, and cell structure and physiology; 2) energetics including enzymes and carbohydrate metabolism; 3) reproduction, growth and development including DNA replication, cell cycle and control, and cell division; 4) cellular regulation including membranes, transport, protein synthesis, gene regulation, cell signaling, and buffer systems. This course does not satisfy the prerequisite for BIOL& 222 or 223. Related investigations take place in a three-hour lab period each week. Prerequisite: A 2.0 or better in CHEM& 121 or CHEM& 161 on a college transcript within the last 3 years, or concurrent enrollment in CHEM& 121 or instructor permission. Prior introductory biology experience such as high school biology or BIOL&100 recommended. LS (F, W, Sp)

BIOL& 170 Human Biology 5 (55/00)
This course offers a broad overview of the human body for the non-science major. Topics of study include: unifying biological principles such as basic cell chemistry, cell biology, and metabolism, as well as the biology of selected human systems. Issues related to human biology will also be examined. This course does not include a lab. NS (F, W, Sp)

BIOL& 221 Majors Ecology/Evolution 5 (38.5/33)
The first quarter in a three-quarter general biology series, this series is designed for life-science majors, pre-professional students, and for students intending to take advanced courses in the biological sciences. Topics of study include: ecology including population, community, and ecosystem ecology; evolution including the origin and history of life, microevolution, macroevolution, and systematics; the diversity of life including bacteria, archaea, protists, plants, fungi, and animals. Related investigations take place in a three-hour lab period each week. NOTE: This majors' biology sequence may be taken in the following order: BIOL& 222, 223, and 221, with instructor's permission. Prerequisite: Successful completion of either CHEM& 121 or CHEM& 161 with a 2.0 or better or concurrent enrollment in CHEM& 121 or CHEM& 161, or instructor permission. Recent high school biology or BIOL&100 strongly recommended, and will be required for entry into BIOL& 222. LS (F)

BIOL& 222 Majors Cell/Molecular 5 (38.5/33)
The second quarter in a three-quarter general biology series, this series is designed for life-science majors, for pre-professional students, and for students intending to take advanced courses in the biological sciences. Topics of study include: cell chemistry and biological molecules, prokaryotic and eukaryotic cells, membrane transport, energetics and cell metabolism, cell communication, DNA replication, gene expression, and gene regulation, cell division, genetics, and developmental genetics. Related investigations take place in a three-hour lab period each week. **NOTE: This majors' biology sequence may be taken in the following order: BIOL& 222, 223, and 221, with instructor's permission.** Prerequisite: Successful completion of BIOL& 221 with a 2.0 or better and successful completion of either CHEM& 121 or CHEM& 161 with a 2.0 or better, or instructor's permission LS (W)

BIOL& 223 Majors Organismal Phys 5 (38.5/33)
The third quarter in a three-quarter general biology series, this series is designed for life-science majors, pre-professional students, and for students intending to take advanced courses in the biological sciences. Topics of study include: animal and plant anatomy, physiology, and development. Related investigations take place in a three-hour lab period each week. Prerequisite: Successful completion of BIOL& 222 with a 2.0 or better and successful completion of either CHEM& 121 or CHEM& 161 with a 2.0 or better, or instructor's permission LS (Sp)

BIOL& 241 Human Anatomy and Physiology I 5 (33/44)

An analysis of the structure and function of human skeletal, muscular, and nervous systems as well as the role of receptor-ligand interactions and introductory histology. Emphasis will be given to the homeostatic relationships between systems. Four hours of lab per week will be devoted to exploring these systems. Lab participation is required for credit. Prerequisite: A grade of 2.0 or better in BIOL& 160, BIOL& 211, or BIOL& 222, and in CHEM& 121 or above, or on a college transcript within the last 5 years, or instructor permission. LS (F, W)

BIOL& 242 Human Anatomy and Physiology II 5 (33/44)

The second quarter of a two-quarter sequence which includes the structure, function and pathology of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems. Emphasis will be given to the homeostatic relationships between systems. Four hours of lab per week will be devoted to exploring these systems. Lab participation is required for credit. Prerequisite: A minimum grade of 2.0 in BIOL& 241 or equivalent. LS (W, Sp)

BIOL& 260 Microbiology 5 (33/44)

An introduction to microbes and their activities. Emphasis will be given to the areas of bacteriology, immunology, virology and epidemiology. Four hours of lab per week is required for credit. Labs will deal with the culture and identification of organisms, as well as genetic transformation. Prerequisite: : A grade of 2.0 or better in BIOL& 160, BIOL& 211, or BIOL& 222, and in CHEM& 121 or above, or on a college transcript within the last 5 years, or instructor permission. LS (F, Sp)

Botany

BOT 130 Botany 5 (44/22)

A study of the basic principles of plant life. Topics include: plant cells, tissues, and organs; plant physiology, transport, and reproduction; plant diversity and genetics, as well as a look at how society uses and relies on plants. Related investigations take place during two hours of lab each week. Laboratory topics reinforce classroom learning and include a study of plant structures and plant diversity. A greenhouse is available for class use during student plant propagation projects. LS (W)

BOT 140 Field Botany 5 (33/44)

Field botany involves the identification and classification of local plants of the Columbia Basin area. Different biomes are studied with emphasis on the steppe and shrub-steppe vegetation common to this area. Students participate in seven field trips to collect native plants. Following field trips, students identify, press, dry, and mount collected plants in order to assemble a required plant collection. During laboratory sessions students learn to use a taxonomic key to identify and classify collected plants. NOTE: This is a field course with required field trips. Field trips often involve hiking over uneven terrain; students climb up slopes, both on and off trails to collect plant specimens. Any questions concerning these field trips may be directed to the instructor. LS (Sp)

Business

BUS& 101 Intro to Business 5 (55/0)

This course provides an overview of business, focusing on the world of business today within the context of a global society. Basic principles and concepts include; business models, entrepreneurship, functional areas of business, management, organizational structure, human resources, marketing, information systems, finance, ethics and social responsibility as well as emerging business topics. SE (F, W, Sp, Su)

BUS 102 Business Mathematics 5 (55/0)

Applications of quantitative reasoning and logic in business through a study of banking, discounts, commissions, markup, promissory notes, interest, taxes, insurance, payroll, and financial statements. Prerequisite: Successful completion of MATH 094 or MAP117 or placement score into MATH 098 or above. (F, Sp)

BUS 114 Business Ethics 5 (55/0)

This course studies and analyzes ethical issues facing the world of business and society today and identifies approaches available when dealing with or resolving complex ethical issues. (Sp)

BUS 120 Human Relations on the Job 4 (44/0)

Practical application oriented study of interpersonal skills and attitudes necessary to work with others. Topics included are: maintaining professionalism, adapting/coping with change and stress, work ethics, motivation, conflict resolution, team work, diversity, and customer relations. Prerequisite: Placement in ENGL 099 or above(F, W, Sp)

BUS 121 Business English 5 (55)

This Business English course is designed to prepare students for today's offices where clear and concise writing is based on a sound understanding of grammar and is considered to be an essential job skill. Prerequisite: BBCC English placement exam ENGL099 or successful completion of ENGL098 with a 2.0 or higher. (W, Sp)

BUS 122 Business Communications 5 (55/0)
This course promotes the development of business communication skills which include reading, writing, listening, speaking, and interacting within groups. Special emphasis is given to the creation of day-to-day business documents Prerequisite: BUS 121 or ENGL& 101. (F, Sp)

BUS 135 Fundamentals of Logistics, Transportation, and Supply Chain Management 1-3 (11-33/0)
This introductory course provides an overview of the fundamentals of commercial transportation, logistics, and supply chain management; an overview of the various operations and processes involved in efficient movement of cargo and impacts to the financial performance of business; and provides students with practical industry knowledge. Topics will include logistics and supply chain management, the physical side of materials management, inbound logistics and purchasing, physical distribution management, outbound logistics with regard to transportation, information technology systems, finance in logistics and supply chain management, and logistics and the supply chain in the global environment.

BUS 161 Business Calculators 2 (0/44)
Touch-control training on the ten-key electronic display/printing calculator. Basic functions, development of proficiency with proration, percentage, interest, discount, present value, and profit computations. Prerequisite: Successful completion of MATH 094 or placement score into MATH 098 or above.

BUS 170 Consumer Finance 5 (55/0)
This course offers and introduction to investigating, buying, and financing techniques for vehicles, consumer goods, insurance, and homes; consumer rights, responsibilities, and obligations; minimizing federal income tax; borrowing, saving, and investing. (Sp)

BUS 200 Supervision 5 (55/0)
The student will look at management in organizations and the information, tools, qualities, and skills needed to successfully manage others while fostering a positive work environment and contributing to organizational success. Prerequisite: BUS 120, or SOC&101, or PSYC&100 or Instructor Permission . (W)

BUS& 201 Business Law 5 (55/0)
This course provides an introduction to the nature and sources of law and overview of law typically relating to the operation of businesses from the point of view of owners, managers, employees, customers, and suppliers with an emphasis on contracts and sales.SE (F, W, Sp)

BUS 215 Customer Service 3 (33/0)
This course will provide the student with strategies and skills to effectively meet the needs of customers. The student will be introduced to internal and external customers, to customer satisfaction, to customer retention, and to customer service trends. Prerequisite: Basic computer skills strongly recommended. (F, Su)

BUS 295 Work-Based Learning 1-6 (0/0/33-198)
A supervised work experience in a community agency or business involving the application of classroom information and skills. One credit for each 33 hours of supervised work-based learning. May be repeated up to 8 credits. Prerequisite: BUS department advisor permission.Corequisite: BUS 297

BUS 289 Project Managment 5 (55/0)
This course focuses on exploring and exercising principles that are common to project management across multiple industries and disciplines. Students develop skills in project integration, scope, time, cost, quality, human resource, communications, risk, procurement, and stakeholder management. Students and instructors will select a final project that will allow them to focus on their area of specialization and learn about the perspectives of other industries while working as a team to accomplish common project goals. Students who have earned 45 or more college-level credits may register for this class. This class is intended for students in the second year of their degree program. Credit cannot be earned in both BUS 289 and CS 289. Prerequisite: 45 or more college-level credits.(Formerly: CS 289)

BUS 297 Work-Based Learning Seminar 1 (11/0)
A discussion/conference oriented course covering various topics related to business. The topic discussed during a particular quarter will be influenced by the needs and interests of the students. May be repeated up to six (6) credits. Prereuqisite: BUS department advisor permission

Business Information Management

(All BIM courses were formerly OFF)

BIM 101 Basic Keyboarding 1-2 (0/22-44)
This course gives emphasis to learning the keyboard; namely, the alphabet, numbers, and symbols. This course is designed for the individual who has never taken a keyboarding class, who may want to renew keyboarding skills, or who wants to change keyboarding habits.(F, W, Sp, Su)

BIM 102 Document Formatting 1-4 (0/22-88)
This course gives primary emphasis to the formatting of business documents using Microsoft Word 2019. Prerequisite: BIM 101 **or** Basic Keyboarding Skills (F,W,Sp,Su)

BIM 103 The Administrative Professional 2 (22/0)
This course is an introduction to the administrative professional career. (F, W)

BIM 104 Intermediate Keyboarding 1-3 (0/22-66)
This course gives emphasis to improving keyboarding speed and accuracy. Prerequisite: BIM 10 /Basic Keyboarding Skills. (F, W, Sp, Su)

BIM 106 Advance Keyboarding 1-3 (0/22-66)
This course gives emphasis to improving keyboarding speed and accuracy. Prerequisite: BIM 104 (F, W, Sp, Su)

BIM 109 Internet Communications 1-3 0/22-66)
This course will introduce the functions of Outlook 2019 and other online communications and the fundamental use and sharing of online documents and data.(F,W,Sp,Su)

BIM 110 Microsoft Office Essentials 3 (0/66)
This course is an introduction to Microsoft Office Suite 2019. This course is not intended for Business Information Management majors. Credit cannot be earned in both BIM110 and BIM108. (F, W, Sp, Su)

BIM 112 Proof & Edit 1-3 (0/22-66)
This course gives students the opportunity to learn different proofreading techniques and then emphasizes practice using those techniques. Prerequisite: BIM 102, BUS 121. (F, W, Sp)

BIM 113 The Medical Office 5 (44/22)
The course will cover the basic job skills and requirements needed to work in a medical office, making appointments, and referrals, HIPAA laws, retrieving billing and coding information, handling patient concerns and questions, proper telephone and collection techniques, managing health records and patient requirements for medical business office personnel. Additional topics include: the general flow of information, the role that computers play in a medical office, and how to use medical office software for activities such as entering data, billing, filing claims, scheduling, and printing reports. Prerequisite: HED 119 or instructor permission and basic computer knowledge. (F, W, Sp)

BIM 117 Medical Office Accounts Receivable 4 (44/0)
This is a basic class in managing the information required for billing medical insurance in clinic and hospital settings. This class will cover coding, specific form requirements, account aging, posting payments and adjustments to patient accounts, and medical coverage plans, including government plans. Issues related to overall medical business offices will also be part of the class, including correct patient billing and collection procedures. Prerequisite: BIM 113 (Formerly: BIM 107 & BIM 111). (Sp)

BIM 130 Filing 1-2 (0/22-44)
This course introduces basic filing rules for alphabetic, numeric, subject, and geographic filing. (F, W, Sp)

BIM 173 Word Processing I 1-5 (0/22-110)
This course is an in-depth introduction to Microsoft Word. The focus is to learn functions of Word 2019, to apply these functions to business situations, and begin preparing students for the (MOS) Microsoft Office Specialist exam. Prerequisite: BIM 102 or instructor permission. (F, W, Sp)

BIM 177 Business Information Management Lab 1-6 (0/22-132)
This course allows individual study in one of the business information management subject areas. Study and credit hours determined at the time of enrollment by the instructor. Prerequisite: Instructor permission.

BIM 180 Introduction to Microsoft Office 1-5 (0/22-110)
This course is an introduction to the basic functions of Microsoft Office 2019– Word, Excel, Access, PowerPoint, and Integration. This course is intended for Business Information Management and Accounting students. Prerequisite: BIM102 and successful completion of MATH 094 or MAP 117 or BBCC Placement Exam into MATH 098 or higher. (F, W, Sp,S u)

BIM 181 Introduction to Microsoft Word 1-3 (0/22-66)
This course provides an introduction to Microsoft Word 2019. It is not intended for Business Information Management Program students.(F, W, Sp, Su)

BIM 182 Introduction to Microsoft Excel 1-3 (0/22-66)
This course provides an introduction to Microsoft Excel 2019. It is not intended for Business Information Management Program students. Prerequisite: Successful completion of MATH 094 or MAP 117 or BBCC Placement Exam into MATH 098 or higher. (F, W, Sp, Su)

BIM 183 Introduction to Microsoft Access 1-3 (0/22-66)
This course provides an introduction to Microsoft Access 2019. It is not intended for Business Information Management Program students. (F, W, Sp)

BIM 184 Introduction to Microsoft PowerPoint 1-3 (0/22-66)
This course provides an introduction to Microsoft PowerPoint 2019. It is not intended for Business Information Management Program students (F, W, Sp)

BIM 190 Spreadsheets I 1-5 (0/22-110)
This course is an in-depth introduction to Microsoft Excel 2019. The focus is to learn functions of Excel, to apply this knowledge to business situations, and to begin preparing students for the MOS (Microsoft Office Specialist) Expert certification exam. Prerequisite: Successful completion of BUS102-Business Mathematics, or successful completion of MATH 094 or MAP 117 or BBCC Placement Exam into MATH 098 or higher. (F, W, Sp)

BIM 198 Special Topics 1-5 (0/22-110)
This course provides individual study in one of the business information management subject areas. Study and credit hours determined at the time of enrollment by the instructor. Prerequisite: Instructor permission

BIM 210 Internet 1-2 (0/22-44)
This course is an introduction to the Internet, web browsers, search engines, and search techniques. (F, W, Sp, Su)

BIM 262 Professional Preparation 3 (33/0)
This course covers job preparation components in which emphasis is given to job search and interviewing techniques Prerequisite: BUS 200 (Sp)

BIM 280 Advanced Microsoft Office 1-5 (0/22-110)
This course is a continuation from BIM180 and introduces the advanced features and integration capabilities of Microsoft Office 2019. This course consists of five modules--Word, Excel, Access, PowerPoint, and Integration. Prerequisite: BIM180 and successful completion of BUS102-Business Mathematics (F, W, Sp, Su)

BIM 285 Microsoft Office Specialist Prep and Certification 1-5 (0/22-110)
This course is intended for students taking the MOS (Microsoft Office Specialist) certification exams. This course consists of five modules--Word, Excel, Access, PowerPoint, and Outlook. Students will review Microsoft Office 2019 features and complete a certified MOS exam at the end of each module. Prerequisite: BIM 280 or instructor permission. (F, W, Sp, Su)

Chemistry

CHEM& 105 Chemical Concepts 5 (55/0)
This course is intended for non-science majors. The focus is on fundamental topics of chemistry such as; atoms and molecules, periodic table, organic chemistry, biochemistry, and radioactivity as they relate to current society. This class is intended to increase scientific literacy in non-science majors. This class can also provide some preparation for students with a limited chemistry background planning to continue on to CHEM& 121. This course is distinct from CHEM& 110 in both content and practice. Prerequisite: Passing grade in MATH 094 or placement in MATH 098 NS (F, W, Sp, Su)

CHEM& 110 Chemical Concepts w/Lab 5 (44/22)
This course is intended for non-science majors. It will provide a basic introduction to chemical principles as they apply to the structure and behavior of matter with an emphasis in examples and application from everyday life. This course can prepare students with limited chemistry background who are planning to pursue further chemistry courses. The course does not meet the chemistry requirement for pre-nursing or nursing degrees. This course is distinct in content and practice from CHEM& 105. Prerequisite: Math 094 or placement in Math 098 or higher. LS (F, W, Sp)

CHEM& 121 Intro to Chemistry 5 (44/22)
This course is designed primarily for the allied health student. In addition this class serves students wanting an introductory chemistry course prior to the full year CHEM& 161, 162, 163 sequence. Topics include basic chemical vocabulary, atomic structure, stoichiometry, periodic behavior of elements and compounds, gases, liquids, solids, solutions, water and equilibria. The course includes 22 hours of laboratory. Laboratory exercises are designed to reinforce classroom learning as well as providing hands on experience with chemical reactions. Relevance of course material to current practices in chemistry is a fundamental focus. Prerequisite: Passing grade in Math 098 or placement in Math 099 A passing grade in high school chemistry or completion of CHEM& 105 is recommended. LS (F, W, Sp, Su)

CHEM& 131 Intro to Organic/Biochem 5 (38.5/33)
This course is designed for Allied Health transfer students and for students wanting an introductory organic chemistry course in preparation for a complete organic chemistry sequence at a baccalaureate institution. Topics include an introduction to alkanes, alkenes and alkynes, an exploration of common functional groups, and organic nomenclature. The course also explores the relationship of organic compounds such as carbohydrates, lipids, proteins, and enzymes with the human body. CHEM& 131 includes 25-30 hours of laboratory. Laboratory exercises are designed to reinforce classroom learning as well as providing hands on experience with chemical reactions. Prerequisite: CHEM& 121 with a grade of 2.0 or above or instructor permission LS (W, Sp)

CHEM& 161 General Chem w/Lab I 5 (38.5/33)
The first in a three-quarter series examining the principles of General Chemistry with the primary emphasis on inorganic chemistry. This series is designed for physical science majors, pre-medical, pre-veterinary and pre-pharmacy students, and for students who are required to take one or more quarters of majors-level chemistry. Topics include: matter and measurements, atoms, molecules and ions, chemical formulas, chemical reactions and equations, electronic structure of atoms and periodic properties of elements. Prerequisite: Placement in MATH& 141 or completion of MATH 099. A passing grade in high school chemistry or completion of CHEM& 121 recommended LS (F)

CHEM& 162 General Chem w/Lab II 5 (38.5/33)
The second in a three-quarter series examining the principles of General Chemistry with the primary emphasis on inorganic chemistry. Topics include: Chemical equilibrium, gas laws, molecular geometry, introduction to solution chemistry (acids and bases, precipitation reactions, redox chemistry), reaction rates and states of matter. Relevance of course material to current practices in chemistry is a fundamental focus. Prerequisite: Successful completion of CHEM& 161 or instructor's permission LS (W)

CHEM& 163 General Chem w/Lab III 5 (38.5/33)
The final course in a three-quarter series examining the principles of General Chemistry with the primary emphasis on inorganic chemistry. Topics include acid-base chemistry, chemical equilibria, solubility, nuclear reactions, and electrochemistry. An introduction to organic chemistry and an introduction to inorganic qualitative analysis are included. A portion of the laboratory component is devoted to inorganic qualitative analysis.. Prerequisite: Successful completion of CHEM& 162 or instructor permission. LS (Sp)

College Success Skills

CSS 100 College Success Skills 3 (33/0)
CSS 100 helps students become more effective learners and achieve their goals at Big Bend. National studies show that students who take courses like CSS 100 are more likely to stay in college and graduate than students who do not. CSS 100 teaches students skills that research has identified as essential to college success. CSS 100 adds to or builds on the skills students already have as students debate the purpose of college, practice reading and studying techniques, engage in critical thinking, and explore the many resources Big Bend offers to help them succeed.

CSS 102 Focus on Success 3 (33/0)
Students will explore many of the non-academic factors that affect success in college. Students will study self-awareness and the practical application of research to the following areas: career and college course choices; relationships; diversity; values; stress management; substance use; sexual decisions; financial literacy, and diet and exercise. In addition, students will develop basic computer literacy as they explore the non-academic factors through computer use, word processing operations, email, and use of the Internet

CSS 105 Introduction to Healthcare Studies 3 (33/0)
This course provides the foundation for understanding the educational responsibilities of choosing a career in the healthcare field. Students will identify the scope of education and practice of various members of the healthcare profession in order to develop an educational and career plan. Additional key topics include test-taking preparation, critical thinking, leadership skills, communication styles, ethical decision making, note-taking and study tactics, and accessing reference sources.

CSS 106 College Reading Strategies 2 (22/0)
College Reading Strategies emphasizes the development of the critical reading and thinking skills (analysis, synthesis, and evaluation) needed for courses in the humanities, social sciences, and sciences. Presents active reading strategies, study reading techniques, and vocabulary building skills.

Commercial Driver's License

CDL 090 CDL Skill Improvement 1-10 (22/220)
Extra driving time and instruction to enhance student's driving skills and/or update their qualification for testing. This is an open enrollment course offered throughout each quarter. May be repeated for credit; graded on pass-fail basis. Prerequisite: Instructor permission

CDL 100 Commercial Driver's License (CDL) 17 (93-/187)
This course provides classroom study, driving instruction, and experience to prepare students for the State of Washington Commercial Driver's License (CDL) Class A exam and entry-level employment as a truck driver with no airbrake restrictions and endorsements for doubles and triples, tankers and hazardous material. Prerequisite: Completed Commercial Driver's License (CDL) Program Application with supporting documents. (F, W, Sp, Su)

Communications

CMST 100 Human Communications 4 (44/0)
This course will provide students with applied communication skills. Students will learn practical application of small group presentations, conflict resolution and increased confidence in personal communication skills. Exemplifying self-concept, perception, verbal and non-verbal attributes and attitudes experienced between family, friends, and employment relationships. (F, W)

CMST& 102 Introduction to Mass Communications 5 (55/0)
Provides an overview and survey of mass communications media, including history, organization, operation and control, theory, analysis, social functions, and new technology. Emphasis is on study of newspapers, radio, television, magazines, books, films, recording, and emerging mass media as to their function and role in today's world. HU (F, W, Sp)

CMST& 210 Interpersonal Communications 5 (55/0)
This course examines the theory and practice of interpersonal communication from a variety of perspectives, with the goal of improving personal and work relationships. Students learn awareness of the variety of choices they have available to them in communicating. They then develop strategies toward understanding and responding to any cultural or ideological barriers which impede effective communication. HU (F, W, Sp, Su)

CMST& 220 Public Speaking 5 (55/0)
Provides an introduction to the fundamental process of speaking to the public. It is designed to help students develop skills in communication and to acquire an understanding of oral communication as a vital human relations factor in society. HU (F, W, Sp, Su)

CMST 229 Advanced Public Speaking 5 (55/0)
Fundamentals of good speech as a primary means of communication, with emphasis on organization and delivery. Speeches are given and critiqued by the class. Prerequisite: CMST& 220 or instructor permission HU

CMST 234 Small Group Discussion 3 (33/0)
Principles of reflective thinking and effective extemporary speaking and the application of these principles in the various forms of group discussion such as conferences, round tables, panels, forums, and symposiums. SE (W, Su)

Composites

CPT 120 Composite Fabrication 4 (22/44)
Students will develop skills in print reading, project planning, layout, distortion control, fixturing and other fabrication techniques. Students will have the opportunity to apply knowledge to projects of personal interest and/or as assigned. Prerequisite: Completion of AMT 111, AMT 121, AMT 161, and AMT 201

CPT 125 Composite Assembly 4 (22/44)
Students will identify and utilize appropriate materials and processes to assemble structures made of composite material. The class includes utilizing the lay-up, vacuum bagging, and cure processing of wet laminating techniques and pre-impregnated material. Prerequisite: Completion of AMT 111, AMT 121, AMT 161, and AMT 201

CPT 130 Composite Repair 4 (22/44)
Students will inspect, test, and repair composite structures. This course explains how imperfections affect composite properties and provide hands on training for the repair of defects. Areas of emphasis include structural and non-structural evaluation, material handling, surface preparation, and repair procedures. Prerequisite: Completion of AMT 111, AMT 121, AMT 161, and AMT 201

CPT 145 Special Projects 3 (0/0/90)
Students will develop skills in print reading, project planning, layout, distortion control, fixturing, and other fabrication techniques. Students will have the opportunity to apply knowledge to projects of personal interest and/or as assigned. A culminating oral presentation helps students develop communication and research skills. Prerequisite: Completion of AMT 111, AMT 121, AMT 161, and AMT 201

Computer Science

CS 101 Intro to Computer Science 3 (33/0)
An introduction to computer science concepts and the role of computers in society. Topics include the history of computing, computer hardware, operating systems, the Internet, database management, an overview of programming languages, careers in computer technology, and the ethics of computing. This course is designed for Computer Science majors, and will emphasize principles and underlying computer technology concepts. SE (Sp)

CS 104 Intro to Computer Hardware 3 (22/22)
This course covers basic concepts of computing hardware and addresses the impact of hardware design on applications and systems software. Students will learn how computers work and be able to replace parts and upgrade components. Students completing CS 104 and CS 105 will have the knowledge and skills necessary for CompTIA A+ Certification exam preparation. (F, W)

CS 105 Intro to Computer Operating Systems 3 (33/0)
An introduction to operating systems (O/S) design, structure, and mechanisms. Topics include computer software systems performance, memory, kernel structure, input/output (I/O) devices, file system functions, virtualization, and securing the operating system. Students will install and configure major modern client operating systems Students completing CS 104 and CS 105 will have the knowledge and skills necessary for CompTIA A+ Certification exam preparation. (F, W)

CS 106 Intro to Virtualization 5 (44/22)
This introductory course is an overview and hands-on exploration of virtualization in desktop, server, and cloud environments. Concepts covered include an introduction to virtualization technologies and how to deploy and manage a virtual server environment. Course topics include virtualization concepts and terms, installing and deploying virtual machines using Hyper-V, VM Ware, and XenServer, and implementing a secure virtual environment. Prerequisite CS 105. (F)

CS 110 Networking Fundamentals 4 (33/22)
An introduction to the basic concepts of computer networking, including: the OSI model, working with network-related hardware, network configuration with TCP/IP, network operating system basics, fault tolerance issues, and troubleshooting network problems. The course prepares students for the CompTIA Network+ certification exam. Note: This course's learner outcomes align to the common IT course, IT 115: Introduction to Networking, and is accepted as a transfer course with participating Washington State community and technical colleges. Look for this notation if transferring to another IT program at a Washington State community or technical college. (F, W)

CS 111 Intro to Programing 5 (22/66)
An introductory computer programming course. Students learn to write and debug simple text based programs while exploring the fundamental principles of programming. Topics for study include input / output, statements, expressions, operations, variables, data types, control structures, program modularization, basic data structures and file input and output. Prerequisite MATH 098 or concurrent enrollment, (F, Sp)

CS 115 Intro to Database Design & Management 5 (22/66)
This course will examine the theory of database design and management, including how collections of data are organized, stored, and analyzed. Topics include the fundamentals of the relational model, Structured Query Language (SQL), data modeling, database design and administration, and web database processing. Introductory business and financial services applications will be used to illustrate course concepts through lectures and hands-on labs. (W)

CS 120 A+ Prep & Certification 1 (0/22)
This course is intended for students taking the CompTIA A+ certification exam. Students will have materials, support, and practice exams provided to facilitate their preparation. Prerequisite: CS 104 and CS 105 or instructor permission.
(F, W, Sp, Su)

CS 121 Network+ Prep & Certification 1 (0/22)
This course is intended for students taking the CompTIA Network+ certification exam. Students will have materials, support, and practice exams provided to facilitate their preparation. Prerequisite: CS 110 or instructor permission.
(F, W, Sp, Su)

CS 122 Server+ Prep & Certification 1 (0/22)
This course is intended for students taking the CompTIA Server+ certification exam. Students will have materials, support, and practice exams provided to facilitate their preparation. Prerequisite: CS 205 and CS 206 or instructor permission.

CS 123 Security+ Prep & Certification 1 (0/22)
This course is intended for students taking the CompTIA Security+ certification exam. Students will have materials, support, and practice exams provided to facilitate their preparation. Prerequisite: CS 207 or instructor permission

CS 124 Cloud+ Prep & Certification 1 (0/22)
This course is intended for students taking the CompTIA Cloud+ certification exam. Students will have materials, support, and practice exams provided to facilitate their preparation. Prerequisite: Instructor permission.

CS& 131 Computer Science I: C++ 5 (22/66)
An introduction to computer programming design and development with a primary focus on data structures and abstraction using the C++ object-oriented programming language. Topics include logical problem-solving, algorithm development, and programming basics, including an understanding of pointers, dynamic memory allocation, and data structures such as linked lists. Prerequisite: MATH& 141 or concurrent enrollment. SE (W)

CS 132 Advanced Programming with C++ 5 (22/66)

This course expands on the fundamentals covered in CS& 131. Students will develop intermediate C++ programs for both traditional data processing and object-oriented applications. Through the experience of creating these programs and methods the student will learn advanced features of C++ object-oriented programming to solve problems in various domains. Prerequisite: CS& 131 SE (F, W, Sp)

CS& 141 Computer Science I: Java 5 (22/66)

This course introduces students to the fundamental concepts of object-oriented programming with the Java programming language. The course will focus on the strengths of Java to create classes, objects and methods, algorithm development, program solving techniques, basic control structures, primitive types, and arrays. Students will master the basics of Java, developing solid programming skills that enable crossover programming skills for other essential languages. Prerequisites: MATH& 141 or concurrent enrollment SE

CS 142 Advanced Programming with Java 5 (22/66)

Advanced Java is a follow-up to the programming concepts introduced in the Java I course. This course explores Java's Distributed Applications features and covers inheritance, exceptions, graphical user interfaces, recursion, and data structures. Prerequisites: CS& 141 SE (F)

CS 156 Cisco Networking: Introduction to Networks 5 (33/44)

Introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced. Students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This is the first of two courses comprising the Cisco CCENT certification and covers the technical knowledge and skills required to take the Cisco ICND1 exam. Prerequisite: CS 104 and CS 105 (W, Sp)

CS 157 Cisco Networking : Routing & Switching Essentials 5 (33/44)

Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This is the second of two courses comprising the Cisco CCENT certification and covers the technical knowledge and skills required to take the Cisco ICND1 exam. Prerequisite: CS 156. (Sp, Su)

CS 158 Cisco Networking : Scaling Networks 5 (33/44)

Describes the architecture, components, and operations of routers and switches in a large and complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network Prerequisite CS 157. (W, Sp)

CS 159 Cisco Networking: Connecting Networks 5 (33/44)

Discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students also develop the knowledge and skills needed to implement IPSec and virtual private network (VPN) operations in a complex network. Prerequisite CS 158. (Sp)

CS 171 Cisco Networking: Intro to Networks 6 (44/44)

This course introduces the architectures, models, protocols, and networking elements that connect users, devices, applications and data through the Internet and across modern computer networks - including IP addressing and Ethernet fundamentals. This is the first of three courses comprising the Cisco CCNAv7 curricula and covers the technical knowledge and skills required to take the Cisco CCNA exam. Prerequisite: CS 104 and CS 105.

CS 172 Cisco Networking: Routing, Switching, & Wireless Essentials 6 (44/44)

This course focuses on switching technologies and router operations that support small-to-medium business networks and includes wireless local area networks (WLANs) and security concepts. Students learn key switching and routing concepts. By the end of this course, students will be able to perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN. This is the second of three courses comprising the Cisco CCNAv7 curricula and covers the technical knowledge and skills required to take the Cisco CCNA exam. Prerequisite: CS 171

CS 173 Cisco Networking: Enterprise Networking, Security, and Automation 6 (44/44)

This course helps students develop workforce readiness skills and build a foundation for success in networking-related careers and degree programs. Students learn, apply, and practice CCNA knowledge and skills through a series of in-depth hands-on experiences and simulated activities including comprehensive networking concepts and skills, from network applications to the protocols and services provided to those applications. Upon completion of CS 171, CS172, and CS 173, learners will be prepared to take the Cisco CCNA Unified certification exam.Prerequisite: CS 172

CS 195 Internship: Work Based Learnin g 1-4 (0/0/33-132)

Students will participate in a supervised internship with regional computer and information technology employers. Students will acquire industry work experience that validates employability skills. Course may be repeated up to a maximum of 4 credits. Prerequisite: Enrollment in Computer Science program, instructor permission, and concurrent enrollment in CS 197.

CS 197 Internship: Work Based Learning Seminar 1 (11/0)

Students participating in internships share feedback and discussion to integrate work-based learning experiences with classroom instruction. Students are expected to participate in class discussions and develop a computer science career-based employment resume. Prerequisite: Concurrent enrollment in CS 195

CS 205 Windows Server Administration 5 (44/22)

This course focuses on Windows Server Administration. Topics include the communication, design and implementation of the Active Directory, DNS, Group Policy Objects, disaster recovery, configuring the web server, security, and working knowledge of Microsoft Exchange. Prerequisites: CS 105 and CS 110, or instructor permission. (W, Sp)

CS 206 Linux Server Administration 5 (44/22)

In this course students will customize the BASH environment, build shell scripts in the Korn shell, control the Linux system, manage user accounts, manage system software in Linux, and manage file systems in Linux. Students will also troubleshoot the system, configure the client/server environment, apply security practices to Linux systems, and improve system performance. Prerequisite CS 105, CS 205 recommended (Formerly UNIX/Linus Server Administration) (Sp, Su)

CS 207 Introduction to Security Administration 5 (55/0)

This course builds on prior course work in computer hardware, operating systems, and networks. Students will acquire the specific skills required to implement basic security services on any type of computer network and be prepared to take the CompTIA Security+ exam. Prerequisite: CS 105 and CS 110, or instructor permission. (W)

CS 235 Data Structures and Algorithms 5 (55/0)

Basic data structures such as stacks, queues, linked lists, and trees are studied and applied to problems in data storage and manipulation. Applications include basic searching and sorting algorithms. Design, analysis and implementation techniques are discussed to illustrate and apply the concepts of the course. Prerequisites: CS 132 or CS 142, or instructor permission. (F, W, SP)

CS 260 Computer Programming Topics 5 (22/66)

This course highlights a new emerging software development, programming language, cloud computing, web application, or mobile application topic. In consultation with their Computer Science program advisor, students choose a specialized or in-depth programming related project and apply new and emerging computing and information technologies. Completed projects are presented and shared with fellow students. Prerequisite: CS 111 or instructor permission.

CS 295 Internship: Work Based Learning II 1-4 (0/0/33-132)

Students will participate in an advanced internship with regional computer and information technology employers. Course may be repeated up to 4 credits. Prerequisite CS 195, CS 197, and instructor permission

CS 297 Internship: Work Based Learning Seminar II 1 (11/0)

Continuation of internship work based learning seminar. Students will provide feedback and discussion to integrate and relate internship/work-based learning experience and classroom instruction. Prerequisite CS 197 and instructor permission

Criminal Justice

CJ& 101 Intro Criminal Justice 5 (55/0)
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 services SS (F, W, Sp, Su)

CJ & 105 Introduction to Corrections 5 (55/0)
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. Prerequisite: Completion of CJ& 101 or Instructor Permission (Formerly CJ 220) SE (Sp)

CJ& 106 Juvenile Justice 5 (55/0)
This course will cover the history and philosophy of juvenile justice in America and the impact of societal reforms on the juvenile justice system. Multiple theories of delinquency will be discussed, as well as how society's response to criminal behavior influenced the development, construction, and implementation of juvenile justice laws, policies, and programs. Prerequisite: CJ& 101 SE (W)

CJ& 110 Criminal Law 5 (55/0)
This course is designed as an introduction into the study of criminal law and will review the difference between crimes against property, crimes against 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. Prerequisite: Completion of CJ& 101 or Instructor Permission SE (W)

CJ 198 Special Topics 1-2 (11-22/0)
This course provides individual study in one of the criminal justice subject areas. Study and credit hours determined at the time of enrollment by the instructor. Prerequisite: Instructor Permission.

CJ 203 Police Administration and Leadership 5 (55/0)
This course covers an overview of police organization and administration. Principals of management and effective leadership will be covered in relation to line and staff positions and advancement within a law enforcement career.
Prerequisite: CJ& 101

CJ 209 Police Psychology 5 (55/0)
This course introduces theories of perception, emotion, motivation, personality and nonverbal communication used as tools by police officers in everyday contacts. Understanding behavior and predicting human behavior in common police situations are emphasized. Police family and personal mental health is also covered.Prerequisite: PSYC& 100

CJ 210 Introduction to American Policing 5 (55/0)
This course examines the role of policing in American society. Theories and practices are covered from historical and contemporary perspectives. This course identifies challenges in law enforcement including the political, social, organizational, and legal environments where the police perform their roles. Prerequisite: Completion of CJ& 101 or Instructor Permission SE (F)

CJ 215 Criminal Investigations 5 (55/0)
This course will review the role investigations play in the criminal justice system. Topics covered will include: investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparations. Investigation techniques will be practiced as part of the course. Prerequisite: CJ&101 or instructor permission

CJ 217 Advanced Report Writing 5 (55/0)
This course presents advanced technical writing content specific to the criminal justice system. Students review standard grammar, punctuation and compositions skills. The content includes, but not limited to the following: complicated police reports where information may be obtained from investigations, interrogations and collisions and involves a variety of forms and narratives related to law enforcement. Prerequisite: ENGL& 235 - Technical Writing. (Sp)

CJ 295 Work-Based Learning (CJ) 1-8 (0/0/33-264)
Supervised, non-paid, work experience in a government or municipal agency involving the application of classroom information and skills. This course may be repeated for up to 8 credits. Credits will be directly related to number of hours worked. Prerequisite: Instructor permission

CJ 297 Work-Based Learning Seminar 11 (11/0)
Feedback and discussion to integrate and relate work based learning and classroom based instruction. This course may be repeated for up to 8 credits. Corequisite: CJ 295 – Work Based Learning, **and** Instructor Permission

Early Childhood Education

ECED& 100 Child Care Basics 3 (33/0)
This course is designed to meet licensing requirements for early learning lead teachers and family home child care providers, STARS 30 hour basics course recognized in the MERIT system. Topics: child growth/development, cultural competency, community resources, guidance, health/safety/nutrition and professional practices. Course may include fieldwork. (Formerly: ECE 175)

ECED& 105 Intro Early Child Ed 5 (55/0)
Explore the foundations of early childhood education. Examine theories defining the field, issues, and trends, best practices, and program models. Observe children, professionals and programs in action. Course may include fieldwork. (Formerly: ECE 100) (F, W, Sp)

ECED& 107 Health/Safety/Nutrition 5 (55/0)
This course introduces basic concepts of equitable health, safety and nutrition standards for the growing child in group care and education programs. Requirements as outlined in Child Care Block Grant funding (CCDF) and state licensing standards for child care providers will be covered including the knowledge and skills to ensure appropriate health, nutritional, and safety practices. In addition, the course will emphasize the skills necessary to recognize signs of child maltreatment, the educator's role as a mandated reporter and the process of identifying and referring families to available community resources. Course may include fieldwork. (Formerly: ECE 105) (F, W, Sp)

ECED& 120 Practicum - Nurturing Rel 2 (11/0/33)
In an early learning setting, engage in establishing nurturing, supportive relationships with all children and professional peers. Focus on children's health & safety, promoting growth & development, and creating a culturally responsive environment. Course may include fieldwork. Prerequisite: ECED& 105 and instructor permission. **Prior to registering for this course, students must pass a Washington State Department of Children, Youth, and Families background check, provide results of a Tuberculin skin test, copy of immunization records, and obtain Washington Education Association liability insurance, if applicable.** (F, W, Sp)

ECED& 132 Infants/Toddlers Care 3 (33/0)
Examine the unique developmental needs of infants and toddlers. Study the role of the caregiver, relationships with families, developmentally appropriate practices, nurturing environments for infants and toddlers, and culturally relevant care. Course may include fieldwork. (Formerly: ECE 108) (W, Sp)

ECED& 134 Family Childcare Management 3 (33/0)
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. Course may include fieldwork. Prerequisite: Instructor permission. (Su)

ECED& 138 Home Visiting & Family Engagement 3 (33/0)
Plan and provide home visits and group activities that promote secure parent-child relationships and support families to provide high-quality early learning experiences that are embedded in everyday routines and experiences. Course may include fieldwork. Prerequisite: Instructor Permission. (Su)

ECED& 139 Admin of Early Lrng Prog. 3 (33/0)
Develop administrative skills required to develop, open, 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 NAEYC standards. Course may include fieldwork. (Formerly: ECE 160) (Su)

ECED& 160 Curriculum Development 5 (55/0)
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 practice. Course may include fieldwork. Corequisite: ECED& 190. (Formerly: ECE 230) (W)

ECED& 170 Environments-Young Child 3 (33/0)
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. Course may include fieldwork. .(Formerly: ECE 135) (F)

ECED& 180 Lang/Literacy Develop 3 (33/0)
Teaching strategies for language acquisition and literacy skill development are examined at each developmental stage (birth-age 8) through the four interrelated areas of speaking, listening, writing, and reading. Course may include fieldwork. (Formerly: ECE 250) (Sp)

ECED& 190 Observation /Assessment 3 (33/0)
Collect and record observation 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. Course may include fieldwork. Corequisite: ECED& 160. (W)

Economics

ECON 200 Introduction to Economics 5 (55/0)
Overview of the basic principles of the American economy to include supply and demand, money and banking, international trade, GDP, inflation, unemployment and analysis of the market system. Strongly recommend placement in Math 098 or higher and placement in ENGL 099 or higher. This class is not a substitute for ECON& 201 or 202. SS (F, W, Sp)

ECON& 201 Micro Economics 5 (55/0)
Study of the micro economy of an individual firm or industry. Output and price of a specific product, numbers of workers, revenue, and expenses of a business are the focus. Strongly recommend placement in Math 098 or higher and placement in ENGL 099 or higher. SS

ECON& 202 Macro Economics 5 (55/0)
Introduction to the principles of Macro Economics including: unemployment, inflation, aggregate demand/supply, Classical and Keynesian Theories, fiscal and monetary policy, money and banking, and current economic problems. Strongly recommend placement in Math 098 or higher and placement in ENGL 099 or higher. SS

Education

EDUC 106 Issues in Child Abuse 2 (22/0)
An overview of the dynamics and impact of abuse on the behavior and learning of children and adolescents. Includes the role of the educator in prevention and intervention, with an emphasis on strategies for working with children impacted by issues of abuse. Course may include fieldwork. (Sp)

EDUC& 115 Child Development 5 (55/0)
Build 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. Course may include fieldwork.SE (F, W, Sp, Su)

EDUC& 130 Guiding Behavior 3 (33/0)
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. Course may include fieldwork.
(Formerly: EDUC 102). (F, W, Sp, Su)

EDUC 132 Peer Mentoring 2 (11/0/33)
This course introduces students to the concepts and application of mentoring, tutoring, leadership, and team building to enhance their ability to competently and confidentially work with assigned mentees and classes.

EDUC 133 Tutor Training I 1-2 (13/0/25)
This course provides an overview of tutoring adults.

EDUC 134 Tutor Training II 1-2 (13/0/25)
This course provides additional techniques and methods for tutoring adults. Prerequisite: EDUC 130

EDUC& 136 School Age Care 3 (33/0)
Develop skills to provide developmentally appropriate and culturally relevant activities and care for children ages 5-12 in a variety of settings. Includes implementing curriculum, preparing environments, building relationships, guiding cognitive and social emotional development as well as community outreach. Course may include fieldwork. Prerequisite: Instructor permission. (Su)

EDUC& 150 Child/Family/Community 3 (33/0)
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. Course may include fieldwork(Formerly EDUC 150) (F)

EDUC 190 Classroom Experience 3 (11/66)
This course will provide students with the opportunity to gain practical, hands-on experience working with children infancy to age eight in a variety of educational settings and to reflect on the experiences. Students will be required to assist a classroom teacher for six hours per week throughout the quarter. Can be repeated up to nine credits. Prerequisites: ECED& 120 or EDUC& 202 or instructor permission. **(Prior to registering for this course, students must pass a Washington State Department of Children, Youth, and Families background check, provide results of a Tuberculin skin test, copy of immunization records, and obtain Washington Education Association liability insurance, if applicable.)** (F, W, Sp)

EDUC 198, 298 Special Topics 0-5 (2-55/0)
Covers current issues in the education field. Maybe repeated for credit with advisor's approval. Prerequisite: Instructor Permission

EDUC& 202 Intro to Education 5 (55/0)
Survey of history, philosophy, principles, issues and trends in American Education. Includes opportunities for observations of educational models and exploration of career paths. Credit cannot be earned in both EDUC& 201 and EDUC& 202. Course may include fieldwork. Prerequisite: Successful completion of ENGL 099 or placement in ENGL& 101..SE (Formerly EDUC& 201) (F, W)

EDUC& 204 Inclusive Education 5 (55/0)
Introductory course in recognition and identification of exceptionality in children from birth through high school. Includes policies and regulations concerning state and federal provisions of special education and related services, as well as adaptations for serving students with special needs in general education classrooms. Course may include fieldwork. SE (Sp)

Engineering

ENGR 110 Intro to Science and Engineering 3 (33/0)
Students in this course will investigate careers in science and engineering, and will research the educational pathways to those careers. In addition, students will learn techniques for becoming a successful student in science and engineering majors. (F, W)

ENGR& 111 Engineering Graphics I 5 (33/44)
This course studies the principles of mechanical drawings: geometric construction, orthographic projection, sectional views, auxiliary views, isometric and oblique drawings, dimensions, threads, fasteners, and lettering using AutoCad software. This software is used by engineers to communicate proposed designs and new ideas. (Formerly ENGR 160) SE (W, Sp)

ENGR& 112 Engineering Graphics II 5 (33/44)
This course uses computer software to draft parametric models in three dimensions using Solidworks software. This course covers file management methods, rapid prototyping, and 2D drawing development techniques. (Formerly ENGR 265) SE (W, Sp)

ENGR 201 Material Science 5 (55/0)
An introduction to Materials Science that includes the atomic, molecular, and crystalline structures of materials and their relationship to electrical, mechanical, thermal, and chemical properties, as well as an introduction to materials processing and fabrication techniques. Prerequisite: PHYS& 221, CHEM& 161 NS

ENGR 202 Design of Logic Circuits 6 (44/44)
This course introduces students to the methods, skills and theoretical knowledge needed to design, simulate, and build combinational logic and basic sequential logic circuits. Using industry relevant CAD tools and design technologies, students will learn through homework and projects to design and implement a collection of combinational and sequential logic circuits. Upon completion, students will apply the same tools prevalent in industry and their transferrable skills to many digital electronic applications today. Prerequisite: MATH& 141 with grades of 2.0 or higher **and** one of the following: CS 111 or CS& 131 or CS&141, or instructor permission SE

ENGR& 204 Electrical Circuits 5 (55/0)
This course introduces electrical circuit concepts and mathematical models to analyze electrical circuits and systems. The behaviors of circuit components including resistors, sources, capacitors, inductors and operational amplifiers will be examined. The analytic solutions of mathematical models will be calculated and presented in terms of voltage, current and electrical power. Fundamentals of electrical power generation, transmission, analysis and calculation will also be covered. Prerequisite: MATH& 152, PHYS& 223, or instructor permission. Co-requisites: Differential Equations, or instructor permission NS (Sp)

ENGR 205 Electric Circuits Lab 1 (0/22)
This course utilizes lab experiments to verify electrical circuit principles that are learned in ENGR& 204. Students will also perform measurements to confirm the analytical solutions from mathematical models. Some engineering programs including electrical engineering require this course. Please see your advisor. Prerequisite: NONE. Corequisite: ENGR& 204 NS (Sp)

ENGR& 214 Statics 5 (55/0)
Statics is the study of objects which are either at rest or moving with constant velocity. Students in this course will learn to apply mathematics and physical science to the analysis of the forces and moments acting on these objects, developing engineering problem-solving skills in the process. Topics studied will include the following: vector notation and operations; equilibrium of particles and rigid bodies; moments of forces; couples; trusses and frames; shear and moment diagrams; applications of friction; center of gravity, centroids, and moments of inertia. Prerequisite: MATH& 151, PHYS& 221 with grades of 2.0 or higher Corequisite: MATH& 152 (Formerly EGR 211) NS

ENGR& 215 Dynamics 5 (55/0)
Dynamics is the study of the accelerated motion of particles and rigid bodies. The study of the motion in this course will deal with kinematics (the mathematical description of the motion) and kinetics (the analysis of the forces causing the motion). Vector notation and operations will be used extensively in this course, and calculus will be used regularly. Prerequisite: ENGR& 214, PHYS& 221, and MATH& 152 with grades of 2.0 or higher. (Formerly EGR 212) NS

ENGR& 224 Thermodynamics 5 (55/0)
Thermodynamics is the science of energy. This course introduces the basic principles of thermodynamics from a macroscopic point of view and applies them to engineering systems such as heat pumps, engines, power plants, and refrigeration. Topics include property tables, equations of state, first and second laws of thermodynamics, analysis of closed and open systems, power and refrigeration cycles. Prerequisites: PHYS& 221, MATH& 152. Corequisite: CHEM& 162 NS

ENGR& 225 Mechanics of Materials 5 (55/0)
An introduction to the concepts of stress, strain, deformation, and failure theory in solid materials. Applies mechanics of materials concepts to structural and machine elements such as rods, shafts, and beams. These elements are analyzed in tension, compression, bending, torsion, and shear. Prerequisite: ENGR& 214, MATH& 152 with grades of 2.0 or higher (Formerly EGR 214). NS

ENGR 240 Applied Numerical Methods 5 (33/44)
This course includes application of the following methods: elements of error analysis, real roots of an equation, polynomial approximation by finite difference and least square methods, interpolation, quadrature, numerical solution of ordinary differential equations, and numerical solutions of systems of linear equations. The student should expect to program a computer in addition to using a graphing calculator. Prerequisite: MATH& 163 with grade of 2.0 or higher; or instructor permission NS (W)

English

ENGL 010 English Lab 0
Allows non-BBCC student access to tutors in the Writing Center.

ENGL 098 Basic English Skills 5 (55/0)
English 098 Basic English Skills provides instruction in basic writing skills, particularly sentence patterns and paragraph development. The course also introduces students to concepts of grammar, mechanics, punctuation, spelling, word usage, vocabulary development, reading comprehension, and reading fluency. See course notes: some sections of this course require co-enrollment in additional classes as part of a learning community. Prerequisite: English Placement exam

ENGL 099 English Skills 5 (55/0)
English 099 provides students a solid preparation for college-level reading and writing. This course includes a step-by-step review of grammatical relationships, sentence patterns, punctuation and usage with concentration on the writing of expository paragraphs and essays. Student writing will primarily be generated from the critical reading of texts taken from across the disciplines. Upon successful completion of the course, students may move directly into ENGL & 101. See course notes: some sections of this course require co-enrollment in additional classes as part of a learning community. Prerequisite: Successful completion of English 098 or direct placement through the English Placement Test.

ENGL& 101 English Composition I 5 (55/0)
This composition course provides instruction in academic written communication by having students compose formal essays, with the goal of teaching students to communicate effectively and engage with issues and ideas. Prerequisite: Placement exam or 2.0 in English 099 BS (F, W, Sp, Su)

ENGL& 102 Composition II 5 (55/0)
This advanced composition course provides instruction in academic writing through literary analysis and increases students' exposure to literature. Prerequisite: A grade of 2.0 or better in ENGL&101. BS/HU (F, W, Sp, Su)

ENGL 105 The Moral of the Story 5 (55/0)
This course examines different ways that we can find meaning and value in the stories that surround us. We will use our own values and experiences, as well as other perspectives, to gain a better understanding of cultural artifacts such as movies, written texts, songs, comics/graphic novels, and even physical objects, such as cars or clothing. This class has no prerequisite and focuses more on ideas than writing skills. This course is not a replacement or prerequisite for required English composition courses. It is recommended for students who are exploring degree options or considering a career related to the liberal arts. HU (F, W, Sp)

ENGL 109 Applied Technical Writing 3 (22/22)
The course prepares students for successful careers in their respective technical fields by developing skills in written communications commonly used in the workplace. Students will focus on reading, interpreting, planning, organizing, composing, and word processing technical writing as applied in business and industry. Prerequisite: ENGL 099 (W, Sp)

ENGL 198 Special Projects in English 1-3 (0/0/33-99)
Special Projects in English individual projects by special arrangement with instructor. Prerequisite: Instructor permission and completed Learning Contract. HU

ENGL 201 Advanced Academic Research Writing 5 (55/0)
This advanced writing course focuses on critical thought and composition within academic/professional communities. Published works regarding current affairs, pressing social matters and/or political issues will be critically read and then written about in a way that meets the expectations of an academic/professional community. Students will write a variety of papers, the last of which will be a researched argument. Prerequisite: ENGL& 101. BS/SE

ENGL 211 Creative Writing: Fiction 5 (55/0)
In this course students will develop the basic techniques that writers use to create imaginative and effective fiction, and use the writer's workshop as a method for improving their work. Although this class focuses on writing short stories, it can be useful for those interested in all forms of narrative writing, including novels, screenplays, and creative nonfiction. HU (F, Sp)

ENGL 212 Creative Writing: Poetry 5 (55/0)
This creative writing course focuses on writing poetry and critiquing your classmates' poems. Through close examination of modern and contemporary poetry, you will begin to recognize elements of craft and form and use those techniques in your own weekly poems. This course will also teach you the habits of using concrete, original, concise language as well as the etiquette of being an integral member of a workshop—skills transferable to any college course that involves writing or collaboration. HU

ENGL 216 The Art of Film 5 (55/0)
This class examines a series of films from different cultures, eras, and genres as a way to create an appreciation of filmmaking and to analyze different aspects of culture in cinema. On an introductory level, we will examine some of the tools in the filmmakers' arsenal and consider how they relate to the filmmaker's vision. Exposure to a variety of films—ranging from independent and foreign to studio blockbusters, and everything in between—is also fundamental to this class. HU (W, Sp)

ENGL& 220 Intro to Shakespeare 5 (55/0)
William Shakespeare has been the central author of the English-speaking world for centuries. His plays and poems are quoted more often than those of any other English-speaking writer. This introduction to Shakespearean Comedy, History and Tragedy will focus on Shakespeare's most popular works and their relevance in the modern world. Prerequisite: ENGL& 101 HU

ENGL 221 Creative Writing II: Fiction 5 (55/0)
This course is designed for students who have completed an introductory fiction writing class (such as ENGL 211) and who want to continue their creative writing in a lecture and workshop setting. Students will further develop the techniques that writers use to build effective fiction and use the writer's workshop as a method for improving their own work. Students will also read and analyze stories and/or novels with an eye toward improving their own craft. Prerequisite: ENGL 211 or instructor permission. HU

ENGL 225 Chicanx Literature 5 (55/0)
This class will explore the rhetorical and narrative strategies used by Chicanx writers to explore the themes of identity, culture, and discrimination in Chicanx novels, short stories, and essays. Engagement with these texts requires not necessarily agreement with, but openness to and respect for, perspectives different from our own. HU

ENGL 234 Science Fiction as Literature 5 (55/0)
This course provides instruction in the genre of science fiction as a literary type and will provide instruction in analysis of short stories, novels, and films from within the genre of science fiction. The course will range from the beginnings of science fiction through the present. Emphasis is placed on historical and current use of science fiction to address social, cultural, and political issues, and will focus on the ways in which the genre facilitates discussion of social problems and relevant social issues. HU (W)

ENGL& 235 Technical writing 5 (55/0)
This course is designed to improve students' written technical communication skills as are related to a range of professional applications. The goal of technical writing is to communicate a message clearly, concisely, and persuasively. This course emphasizes critical thinking skills as applied to technical writing, attention to research techniques, detail, professionalism, purpose, and audience. Students will learn to design, format, and produce documents common in business and industry. Prerequisite: A grade of 2.0 or better in ENGL&101. BS/HU (W, Sp)

ENGL 239 The Mystery Story as Literature 5 (55/0)
From *Sherlock Holmes* to *C.S.I.*, mystery stories have been popular and enduring forms of entertainment. In addition to exploring the world of crime, mysteries can offer insight into the nature of good and evil, raise questions about the human condition, and reveal truths about history and culture. This class will use mystery stories, novels, and films that range from the classic to the contemporary. HU

ENGL 240 World Literature 5 (55/0)
A course of world literature from the ancient world through the twentieth century. Prerequisite: ENGL& 101 with a grade of 2.0 or above HU

ENGL 243 The American Novel 5 (55/0)
An introduction to the major American novels of the 19th and 20th centuries. Novels will be chosen from the works of major writers such as Melville, Hawthorne, Crane, James, Hemingway, Fitzgerald, Salinger and Mailer. HU

ENGL& 244 American Literature I 5 (55/0)
This course explores the religious views, politics, and cultural beliefs of early America through its literature. Texts range from American literature's beginning to 1860, focusing on American authors and poets, beginning with Puritan and Separatist journals and pamphlets, captivity narratives, moving on to romance novels and to the short fiction of Poe, Melville, and Hawthorne, and ending with the works of Dickinson and Whitman. Students may take the American Literature courses at any time without regard to the I,II,III sequence. HU

ENGL& 245 American Literature II 5 (55/0)
An introduction to American Literature from 1860 to the 1960's. Explore the religious views, politics, and ideologies of late nineteenth century to the late twentieth century of America through its literature. This course studies American authors, poets, and playwrights beginning with realism through naturalism, continuing with the political themes of early twentieth century, through the writers of the Great Depression, post World-War II, up to the 1960's HU

ENGL& 246 American Literature III 5 (55/0)
This class explores American literature published in the decades since 1960. Themes studied may include terrorism and cold war anxiety, technology, gender roles, multiculturalism, alienation, rebellion, popular psychology, or others relevant to the literature of the time. Students will read contemporary novels, stories, and poems that reflect American trends and culture during this period. Students do NOT need to have taken American Literature I or American Literature II to do well in this course. HU (W)

ENGL& 256 World Literature III 5 (55/0)
A survey of world literature, ranging from the industrial revolution to the present. HU

ENGL 261 Women's Literature 5 (55/0)
This course aims to study women's unique literary voice as a reflection of their history, their place in society, and their role in a changing world. In this survey literature course we will read fiction, memoirs, and poetry written by prominent women authors that take on topics of women's health care, reproductive rights, motherhood, women in the workplace, domestic violence, body image, gender performativity, and sexuality / gender identity. Emphasis is on the development of critical thinking skills through a series of papers and projects that draw into question the development of differences between the sexes, the acquisition of gender roles, and the maintenance of gender stereotypes. HU (W)

ENGL 272 Graphic Novel as Literature 5 (55/0)
Though once condemned as "low brow" literature and "badly drawn, badly written, and badly printed…pulp-paper nightmares" certain to turn young readers into juvenile delinquents, comics have forever been on the cutting edge of counterculture and alternative movements. Only in recent years have comics and their book-length counterparts, graphic novels, started receiving serious attention from adult audiences in the U.S. This course traces the comic tradition from comic book superheroes to Japanese manga to poignant autobiographies, examining the literary merit and legitimacy of the graphic novel along the way. HU

Environmental Science

ENVS& 100 Survey of Env Science 5 (55/0)
An introduction to the fundamental principles of environmental science, topics of study include some of the following topics: environmental, science, and information literacy, human population growth, environmental health, ecological economics and consumption, solid waste, ecosystems and nutrient cycling, population and community ecology, evolution and extinction, biodiversity and preserving biodiversity, freshwater resources and water pollution, food resources and sustainable agriculture, coal and petroleum, air pollution and climate change, nuclear power, alternative energy sources, environmental policy, and urbanization and sustainable communities. NS (F, W, Sp, Su)

First Aid/EMT

FAD 150 Industrial First Aid and Cardio Pulmonary Resuscitation Plus Bloodborne Pathogens 2 (19/5)
An advanced industrial first aid course and bloodborne pathogen course designed to meet the Department of Labor and Industry, OSHA and WISHA requirements. Intended for supervisory personnel, employees, pre-nursing, Pre-Emergency Medical Technicians, and those interested in having first aid and C.P.R. training. This course is recognized in the U.S. and several foreign countries by federal and state agencies and company employers.(F, W, Sp, Su)

Foreign Lanugage (See World Lanugage)

Geology

GEOL& 101 Intro Physical Geology 5 (44/22)
This course provides a study of the structure and composition of the earth's crust. Emphasis is placed on mountain building forces, weathering, natural hazards, rocks and minerals, and structural change. Upon completion, students should be able to explain the structure, composition, and formation of the earth's crust. There will be a required field trip that will take the time of a lecture and lab. Prerequisite: MATH 098 completion. LS (W, Sp)

Geographic Information Systems

GIS 110 Geographic Information Systems (GIS) I 4 (38.5/11)
Using basic capabilities of ArcGIS software tools, students are introduced to geographic information systems (GIS) concepts, including coordinate systems, spatial data analysis, data editing, data queries, database development, map creation, and report generation. Prerequisite: MAP 119 (Applied Mathematics for Workforce Programs II) or Instructor Permission

GIS 210 Geographic Information Systems (GIS) II 3 (33/0)
This second course in geographic information systems (GIS) focuses on spatial data analysis, including the use of interpolation, contours, data intersections, and overlay analysis. Students will make extensive use of ArcGIS software tools. Prerequisite: GIS 110 (GIS I) or instructor permission

GIS 220 Remote Sensing 3 (33/0)
This course addresses key aspects of remote sensing. Topics include the electromagnetic spectrum, satellites and remote sensing systems, manned/unmanned aircraft and remote sensing systems, basic image interpretation and analysis concepts, and remote sensing applications (i.e., agriculture, forestry, geology, etc.). Prerequisite: GIS 110 or instructor permission

Health Education

HED 119 Medical Terminology 5 (55/0)
This course offers a broad overview of the fundamentals of medical terminology. Topics covered include: prefixes, suffixes, combining forms, word roots, abbreviations and basic human anatomy and physiology as they pertain to all major body structures and functions. (F, W, Sp)

HED 121 The Human Body and Disease I 5 (55/0)
The first course of a three-part course sequence examining body structure, function and disease. This includes an introduction to the organization of the body, mechanism of disease, and discussion of the anatomy and physiology of skeletal system, muscular system, and the integumentary system. Common diagnostic tests/treatments, pharmacological agents, and possible prognoses for common disease processes are included. There is no lab component. Prerequisite: HED 119 with minimum grade of 2.0 or HED 119 as a co-requisite. (F)

HED 122 The Human Body and Disease II 5 (55/0)
The second of a three-part course sequence examining body structure, function and disease. This includes the analysis and discussion of the nervous system, endocrine system, the senses, cardiovascular system, and respiratory system. Common diagnostic tests/treatments, pharmacological agents, and possible prognoses for common disease processes are included. There is no lab component Prerequisite: Completion of HED 121 with a minimum grade of 2.0, completion of HED 119 with a minimum grade of 2.0 (W)

HED 123 The Human Body and Disease III 5 (55/0)
The third of a three-part course sequence examining body structure, function and disease. This includes the analysis and discussion of the lymphatic system, gastrointestinal system, the urinary system, reproductive system, and basic diagnostic tests. Common diagnostic tests/treatments, pharmacological agents, and possible prognoses for common disease processes are included. There is no lab component. Prerequisite: Completion of HED 121 and HED 122 with a minimum grade of 2.0, completion of HED 119 with a minimum grade of 2.0. (Sp)

HED 160 Pharmacology for Allied Health 3 (33/0)
This basic pharmacology course provides instruction on therapeutic action and major side effects of common drugs, principles of medication and dosage calculations for allied health pathways. Prerequisite: MAP 119 OR MATH 098 (Formerly MA 150) (Sp)

HED 239 Medical Ethics 2 (22/0)
This course introduces ethical and legal issues facing medical professionals. (F, W)

High School 21 Completion

(Credits awarded are High School ***NOT*** College)

(Open Doors is an Alternative High School Diploma Program with local school districts for students ages 16-21.)

HSC 010 Reading/Writing/Communication
This course will help students develop critical thinking, reading, and writing skills at the high school level. Students will demonstrate their reading for comprehension and writing skills through reflective essays.
High school completion credit only. May be repeated as necessary. Prerequisite: Students must be registered in a Basic Skills class.

HSC 015 Career and Technical HS Mathematics
The course provides math instruction in applied math concepts to include whole numbers, fractions, decimals, geometrical concepts and shapes, interpreting graphs and charts, statistical information and probability along with algebraic expressions and equations to meet the math skills required for high school graduation. High school completion credit only. May be repeated as needed. Prerequisite: Students must be enrolled in a Basic Skills class.

HSC 016 Algebra I HS Mathematics
The course provides math instruction in interpreting graphs and charts with algebraic expressions and equations to meet the math skills required for high school graduation. For high school completion credit only. May be repeated as needed. Prerequisite : Students must be enrolled in a Basic Skills class

HSC 017 HS Geometry
The course provides math instruction in applied math concepts to geometrical concepts and shapes and interpreting graphs and charts to meet the math skills required for high school graduation. For high school completion credit only. Prerequisite : Students must be enrolled in a Basic Skills class

HSC 020 General Lab-Science
This lab course provides basic instruction of physical, life and earth science skills necessary for high school graduation. High school completion credit only. Prerequisite:
Students must be enrolled in a Basic Skills class

HSC 021 Non-Lab Science
This non-lab course provides basic instruction in physical, life and earth science, necessary for high school graduation. High school completion credit only. Prerequisite: Students must be enrolled in a Basic Skills class

HSC 025 Health and Fitness
This course is designed for students to develop physical and mental health fitness skills as required for high school graduation. High school completion credit only. May be repeated as needed. Prerequisite: Students must be enrolled in a Basic Skills class

HSC 030 United State Constitution and Government
A brief survey of United States Constitution and Government. The content will examine the pathway to the US Constitution and the development of the federal government. High School completion credit only.
Prerequisite: Students must be enrolled in a Basic Skills class

HSC 031 Washington State Government and History
This survey course will include Washington State government and history, meeting high school graduation requirements. High school completion credit only.
Prerequisite: Students must be enrolled in a Basic Skills class

HSC 032 Contemporary World Events
This survey course provides a brief overview of current events and world geography. High School completion credit only.
Prerequisite: Students must be enrolled in a Basic Skills class

HSC 035 Fine Arts
This course will feature content related to visual or performing arts and design as necessary for high school graduation. High school completion credit only. Prerequisite: Students must be enrolled in a Basic Skills class

HSC 040 Occupational Education
This course is designed to assist students in determining their personal, educational and occupational goals by identifying marketable skills and exploring the current labor market. High school completion credit only. Prerequisite: Students must be enrolled in a Basic Skills class

HSC 045 Electives
The course is designed to enable students to earn high school elective credits through independent study.
High school completion credit only. May be repeated as needed. Prerequisite: Students must be enrolled in a Basic Skills class

HSC 049 Portfolio
This course is the final capstone project for the HS21+ high school diploma. Students will create a portfolio that demonstrates their cumulative learning, community service project, college readiness, and career readiness. Prerequisite: Students must be enrolled in a Basic Skills class

History

HIST 110 The American Experience 5 (55/0)
A brief history of the United States, this course combines a chronological and thematic approach to answer a few essential questions—the most important of which being, what does it mean to be an American? Critical periods in American History are examined with an eye toward their lasting impact upon American culture and politics. These periods include the colonial and revolutionary era, the age of reform (1830s/40s), the Civil War and Reconstruction, the Age of Industrialization, and world wars, and the Cold War. Essential questions will examine such things as democracy, opportunity, justice and equality.
Please note: This course includes information also covered in greater detail in HIST&136 and HIST&137. SS (W, Sp)

HIST& 116 Western Civilization I 5 (55/0)
From the origins of civilization to the dawn of the modern world in the 1500's, this course surveys the classical world of Greece and Rome, Western Christendom, Byzantium and Islam, the Middle Ages, and the early Renaissance. SS (F)

HIST& 117 Western Civilization II 5 (55/0)
From early modern Europe to the Napoleonic Wars in the nineteenth century, this course examines Western civilization in transition: The Renaissance and Reformation, commercial expansion into the Americas, Africa and Asia, absolutism, science, the enlightenment, and French Revolution. SS (W)

HIST& 118 Western Civilization III 5 (55/0)
This course stresses the international transition from European dominance to the rise of superpowers and third world nations. World Wars, depression, Democracy, Nazism, Communism, and the European Community are major themes. (1800 - 1990). SS (Sp)

HIST 121 History of Mexico 5 (55/0)
This course will explore the social, cultural and otherwise varied history of Mexico from prehistoric times to the present. Lectures, discussion and readings will provide additional insights into the ethnic, economic and political realities of Mexico in our time. SS (Sp)

HIST& 126 World Civilization I 5 (55/0)
From the emergence of Buddhism in India to the fall of the Roman Empire, this course provides a general overview of major developments in ancient world history. Students investigate major historical developments as exemplified by the traditional cultures of Africa, Southwest Asia (Middle East), China, Japan, India, Oceania, the Americas, and Europe. Employing the same thinking skills and methods used by historians, students draw on a variety of disciplines and sources to piece together an informed and coherent view of the past and think critically about essential questions including How do humans interact with their environments? and How do belief systems reveal how major groups in society view themselves and others? SS (F)

HIST& 127 World Civilization II 5 (55/0)
World Civilizations II is a systematic study of the major patterns of global history in the modern period, from 1000 C.E. to 1850 C.E. This course analyzes the distinguishing characteristics of the world's major civilizations, and the gradual integration of the diverse cultures of the world into an interconnected system. Students will examine the major political, social, cultural, and economic developments, including the spread of Islam and European exploration in Africa, Asia, and the Americas. We will pay particular attention to colonialism, slavery, revolution, nationalism, globalization, democracy, and human rights. This course develops critical thinking, writing, and analytical skills by employing the same skills and methods used by historians to piece together an informed and coherent view of the past. SS (W)

HIST& 128 World Civilization III 5 (55/0)
World Civilizations III introduces students to the history of the modern world from 1850 to the present day. Particular emphasis will be placed upon the global impacts of the industrial revolution, new ideologies such as liberalism and socialism, revolutionary movements like those in Russia and China, colonization and decolonization, legacies of WWI and WWII, the Cold War's global impact, comparative study of genocide, and the transformation of the Middle East in modern times. The course focuses on a theme of connections among world societies to give students the "big picture" of world history. SS (Sp)

HIST& 136 US History 1 5 (55/0)
Covering the first half of American history, this course takes students on a journey from the European foundations for colonization in the New World to the conclusion of the American Civil War. Along the way students are exposed to the philosophic, cultural, and political underpinnings of the American story, and personalities and events which bring that story to life. SS (F, W, Sp, Su)

HIST& 137 US History 2 5 (55/0)
From the end of the Civil War to the end of the twentieth century, this course examines the development of the modern United States and its transformation from an isolationist agriculturally based society to global superpower. Along the way students are exposed to the philosophic, cultural, and political underpinnings of the American story, and personalities and events which bring that story to life. SS (F, W, Sp, Su)

HIST 201 American History to 1840 5 (55/0)
This course explores the diversity of Native American cultures from the period before European contact, into the era of conquest and colonization through the creation of the United States and the challenges that followed for these groups SS

HIST 210 Tudor England 5 (55/0)
Meet the Tudors—history's most famous royal family and soap opera. Beloved by Hollywood, Henry VIII and his children (Edward VI, Mary I, and Elizabeth I) did more than behead spouses and burn heretics. Together they changed the face of the Western World by shepherding the transition from the Middle Ages to the modern world—sometimes willingly too! Exploring the political and religious reformation in England and the nature of the personalities at play, this course seeks to open sixteenth century England and see the great dynasty as it was seen through the eyes of those who lived in terror of it, as well as through the more scholarly—but no less fascinated—eyes of modern historians. SS

HIST& 215 Women in American History 5 (55/0)
A survey of women and U.S. history from pre-colonial times to the present. This course explores women's place in American History, including historical attitudes about women's place in society and the realities of life and work for women. This course also covers the women's rights movements from the mid-1800's to the present. Topics include cultural, ethnic, political, social, and economic history. SS

HIST& 219 Native American History 5 (55/0)
A survey of Native American history in the United States, this course explores Native American life before and after European contact, U.S Native American policy from 1789 to the present, and how the Native American nations maintained aspects of their culture in a changing and hostile environment. Students will examine the diverse Native American cultures prior to European contact, examine conflicts nations faced after contact, and study how the nations impacted and contributed to United States history. SS.

HIST 230 Ancient Near East 5 (55/0)
The course will study the growth and development of the Ancient Near East from its origin in Ancient Sumer in the bronze age to the rise of the Persians. Attention will also be given to Egypt and Israel and their contributions to the milieu of culture and society in the ancient Near East. The course will look at, in varying degrees, the culture, art, architecture, and religion of these societies. SS (W)

HIST 245 American Civil War & Reconstruction 5 (55/0)
This course examines the institutions, events, and personalities that made the Civil War an "irrepressible conflict," and the difficult reconstruction period that followed. The onset of the Civil War was rooted in the national controversy over slavery. For this reason a detailed look at southern slavery, northern industrialism and sectional politics and secession will precede study of the military history of the war itself and the political reconstruction. SS

HIST 250 Ancient Greece 5 (55/0)
A survey course of Greek history, beginning with the first identifiably Greek peoples of the Bronze Age and continuing down through the Dark Ages, the Classical period in Greece, the rise of Macedonia and Alexander the Great and the Hellenistic Age. In addition to the historical developments, we will look at Greek myth and religion, art, philosophy, science and other aspects of Greek culture. SS (F)

HIST 270 The Roman World 5 (55/0)
This course is a survey of Roman history from the founding of the city in the 8th century BC to the collapse of the Empire in the west in the 5th century AD. The content is organized chronologically, but we will also take time to look at Roman culture including literature, art, architecture and drama. SS (Sp)

Homeland Security

HSEM 102 Introduction to Homeland Security and Emergency Management 5 (55/0)
Provides groundwork on which emergency services can build a strong foundation for disaster and emergency management for homeland security in the 21st century. Addresses issues, policies, questions, best practices, and lessons learned through recent years; requirements of NFPA® 1600, Standard on Emergency Management and exposure to new and developing theories, practices, and technology in emergency management.

HSEM 110 Incident Command System/National Incident Management System 2 (22/0)

This course introduces the Incident Command System (ICS) and provides the foundation for higher-level ICS training. This course describes the history, features, and principles and organization structure of the Incident Command System. It also explains the relationship between ICS and the National Incident Management System (NIMS). (Course will meet ICS 100/200/700/800 requirements). Prerequisite: Completion of or concurrent enrollment in HSEM 102

HSEM 120 All Hazards Emergency Planning 3 (33/0)

This course is designed to introduce students to developing an effective emergency planning system. This course offers training in the fundamentals of the emergency planning process, including the rationale behind planning. Emphasis will be placed on hazard/risk analysis and planning team development. Other topics, such as Continuity of Operations (COOP), Emergency Support Functions, National Response Plan, Washington State Comprehensive Emergency Management Plan and contingency planning for areas such as Special Needs (Vulnerable Populations) or Animal Sheltering are included. Prerequisite: HSEM 102

HSEM 130 Technology in Emergency Management 3 (33/0)

This class provides a detailed overview of the technology used, and also clearly explains how the technology is applied in the field of emergency management. Students will learn how to utilize technology in emergency planning, response, recovery and mitigation efforts and they'll uncover the key elements that must be in place for technology to enhance the emergency management process. Course overviews include: Web Emergency Operations Center (EOC), using technology with training and exercises, reverse 911 notification systems, video conferencing/downlinks and Geographic Information System (GIS)/ Global Positioning System (GPS) capabilities. Prerequisite: HSEM 102 Introduction to Emergency Management

HSEM 157 Public Information Officer 2 (22/0)

The course is designed to train participants for coordinating and disseminating information released during emergency operations and for assisting in the scheduling and coordination of news conferences and similar media events. After completing this course the student will have met the sections required for Public Information Officer as outlined by NFPA 1035 Prerequisite: HSEM 102 Introduction to Emergency Management

HSEM 160 Emergency Response Awareness to Terrorism 3 (33/0)

Provides current and relevant information about terrorism, terrorist behavior, homeland security policies and dilemmas, and how to deal effectively with threats and the consequences of attacks. Student will gain insight into the key players involved in emergency management, local and state issues, particularly as they need to interact and work with FEMA and other federal agencies. Course components include identifying terrorism, causes of terrorism, preventing terrorist attacks, responding to terrorism attacks and avoidance in communication and leadership collapse. Prerequisite: HSEM 102 - Intro to Emergency Management

HSEM 180 Public Administration 3 (33/0)

This course provides an overview in the structure and issues of public service. Course participants will examine the context of public administration: the political system, the role of federalism, bureaucratic politics and power, and the various theories of administration that guide public managers today. Course components include public administration, personnel, budgeting, decision-making, organizational behavior, leadership, and policy implementation. Lessons will be drawn from the most current applications of public administration today, such as Hurricane Katrina efforts and Homeland Security. Prerequisite: HSEM 102 Introduction to Emergency Management

HSEM 190 Homeland Security Emergency Management Special Topics 5 (11-55/0)

Special topics will be developed for areas outside the usual course offerings in Homeland Security Emergency Management degree. Topics developed will focus on a specific current issue or concept in the areas of homeland security or emergency management. NOTE: A maximum of five (5) credit hours of HSEM 190 may be used as elective credit toward the HSEM degree. Prerequisite: HSEM 102 Introduction to Emergency Management and 12 additional HSEM credits or HSEM Program Coordinator approval

HSEM 200 Emergency Operations Center 2 (22/0)

This course provides the student with skills and knowledge to manage an Emergency Operations Center (EOC), acquire and control resources, and interface with on-scene responders within Incident Management Systems. Topics include EOC design, preparing, staffing and operating, jurisdictional setting, and the critical link between Incident Management Systems and emergency management operations. Prerequisite: HSEM 110 Basic ICS/NIMS. Prerequisite: HSEM 110 Basic ICS/NIMS & HSEM 102 Introduction to Emergency Management

HSEM 210 Exercise Design and Evaluation 3 (33/0)

This course provides participants with the knowledge and skills to develop, conduct, evaluate and report effective exercises that test a community's operations plan and operational response capability. Throughout the course, participants will learn about topics including exercise program management, design and development, evaluation, and improvement planning. It also builds a foundation for subsequent exercise courses, which provide the specifics of the Homeland Security Exercise and Evaluation Program (HSEEP) and the National Standard Exercise Curriculum (NSEC). Prerequisite: HSEM 102 Introduction to Emergency Management and HSEM 120 All Hazards Emergency Planning or Program Coordinator approval

HSEM 220 Developing and Managing Volunteer Resources 2 (22/0)

This course will focus on methods and procedures for involving private-sector organizations and volunteers in emergency management programs in ways which benefit both parties. The focus of the course is on maximizing the effectiveness of volunteer resources by implementing a people-oriented system that addresses defining volunteer roles, designing a plan of action, recruiting volunteers, training individuals who volunteer and motivation and maintenance of a successful program. Participants will acquire skills and knowledge to make appropriate volunteer assignments that enhance the effectiveness of an integrated emergency management system. Prerequisite: HSEM 102 Introduction to Emergency Management

HSEM 230 Disaster Recovery and Response 2 (22/0)

The purpose of this course is to enable students to understand and think critically about response and recovery operations in the profession of emergency management. Students will utilize problem based learning by analyzing actual disaster events and applying the theories, principals, and practice of response and recovery. In addition, students will learn about the issues faced by special populations and how to address these special needs in natural disaster response and recovery. Prerequisite: Completion of HSEM 102 and Completion of HSEM 120

HSEM 240 Homeland Security Emergency Management Work-based Learning 5 (55/0)

Provides students "real world experiences" in homeland security and emergency management. Students learn to work within time constraints and are exposed to appropriate workplace behaviors. Students will have opportunities to refine the core skills they have learned from the courses or curriculum. Prerequisite: HSEM 102 Introduction to Emergency Management and HSEM Program Coordinator approval

HSEM 250 Homeland Security Law and Ethics 3 (33/0)

This course is designed to give the student an overview of various statutes, regulations, constitutional law, and common law associated with Homeland Security. This course examines emergency response, weapons of mass destruction, local government powers, Federal Emergency Management Agency (FEMA), Department of Homeland Security, civil rights, international anti-terrorism efforts, Homeland Security Act of 2002, and the Patriot Act. Students will be introduced to the legalities and ethics relevant to organizing for counterterrorism, investigating terrorism and other national security threats, crisis and consequence management. Prerequisite: HSEM 102 Introduction to Emergency Management

Humanities

HUM 108 Introduction to Gender Studies 5 (55/0)

This course introduces students to major issues, concepts, and basic tenns central to the field of Gender
Studies. Throughout the quarter, we will critically engage with social, cultural and historical ideas about what it means to be female and male, how these ideas shape everyday life experiences, and what consequences this has on relationships, work, and the strncturing of a society. Emphasis will include the multiple ways that sex and gender interact with race, class, sexuality, nationality, and other social identities. HU (F)

HUM 110 Greek Mythology 5 (55/00)

Greek Mythology is the basis for understanding Western literature, art, history and even some symbolism on U.S. currency. More than just entertainment, the ancient myths discuss our relationship to the divine, the nature of power, and the importance of heroics. This course will cover the pantheon of Greek gods and the literary styles of the epic, tragedy, and comedy. HU (F, W, Su)

HUM 214 Diversity Issues: Race, Class and Gender 5 (55/0)

This cultural diversity studies course examines and investigates culture, behavior, values, identity, stereotypes, person and societal perceptions, and the cultural construction of reality using a literature-based and experientially based cognitive curriculum. This class will explore multicultural society with a mind toward improving students' understanding of their own cultures and the cultures that surround them. Prerequisite: ENGL& 101 or instructor permission HU (F, W, Sp)

Industrial Systems Technology

IST 100 Introduction to Industrial Safety and Health 3 (33/0)

Introduction to basic industrial safety and health incorporating OSHA/WISHA rules and regulations, personal protective equipment, chemical safety, tool safety, material handling safety, machine safety, electrical safety, fire protection, health protection and safe working practices.

IST 102 Technical Drawing Interpretation 3 (22/22)

Fundamental technical drawing, reading and sketching principles, concepts and standards as applied to industry. CTE Dual Credit available.

IST 105 Basic Electricity – DC Circuit Analysis 5 (33/44)

Fundamentals of DC electricity as applied to series, parallel, and series-parallel circuits. Use of test equipment and troubleshooting simple circuits. Prerequisite: MAP 103 (may be taken concurrently) or instructor permission

IST 106 Basic Electricity – AC Circuit Analysis 5 (33/44)

Teaches alternating current theory, waveform quantities and characteristics, including network analysis with reactive components. Proper use of test equipment and troubleshooting simple circuits. Prerequisite: IST 105, MAP 103, or instructor permission

IST 107 Industrial Electricity I 5 (33/44)

Electrical theory and application, electrical blueprints, power sources, panels, control devices, motors, etc. Use of test equipment and troubleshooting. Note: For Maintenance Mechanics Prerequisite: IST 102, 106, MAP 103 or instructor permission

IST 110 Introduction to the National Electric Code 2 (22/0)

Introduction to Washington State electrical law and the National Electric Code as they pertain to the working electrical technician. Prerequisite: IST 107 or instructor permission

IST 111 National Electric Code II 2 (22/0)

Application of the Washington State electrical laws (WAC codes) and the National Electric Code as they pertain to the working electrical technician. Prerequisite: IST 110 or instructor permission

IST 112 National Electric Code III 2 (22/0)

Washington State electrical laws (WAC Codes 296-46, RCW 19.28) and National Electrical Code (NFPA 70) are applied to the working electrician. Prerequisite: IST 111 or instructor permission

IST 113 Industrial Electrical Installation Techniques 5 (33/44)

Fundamentals of raceway, wire and utilization equipment installations for plant safety, efficiency and long economic life. Prerequisite: IST 107 or instructor permission

IST 120 Introduction to Preventive/Predictive Maintenance 3 (22/22)

Theory and practice of preventive and predictive maintenance concepts. Performing routine preventative maintenance and scheduling predictive maintenance outages. Prerequisite: IST 102, MAP 103, or instructor permission

IST 130 Introduction to Refrigeration and Air Conditioning 5 (33/44)

Fundamental physical, chemical, engineering, and mechanical aspects of the refrigeration process. IST 100, 102, 106, MAP 103, or instructor permission

IST 136 Intro to Industrial Boiler Technology 5 (33/44)

This course involves the fundamental principles of steam generation, boiler designs, components, operation, water treatment, safety procedures and related steam generation equipment. Prerequisite: IST 107 or instructor permission

IST 141 Intro to Mechanized Irrigation Applications I 5 (27/55)

This class will introduce the history and development of mechanized irrigation. It will distinguish the basic irrigation systems: pivot, swing arm corner, and lateral move systems. Course work will examine the various propulsion systems, electrical/electronic/digital logic controls and irrigation hydraulic principles. It will focus on technical service and operation aspects in a "real-life" lab environment under actual conditions. Prerequisites: IST 101 and IST 102

IST 142 Mechanized Irrigation Applications II 5 (27/55)

This class will reinforce the concepts of mechanized irrigation systems acquired from the intro class. Course work will provide an in-depth and practical view of the various propulsion systems, electrical/electronic/digital logic controls and irrigation hydraulic principles. It will focus on technical service and operation aspects irrigation service technicians experience in the field. Instruction using "real-life" lab equipment under authentic conditions provides "hands on" experience similar to actual field work. Prerequisites: IST 141; Intro to Mechanized Irrigation Applications I

IST 150 Introduction to Programmable Logic Controllers 5 (33/44)
Introduction to programmable logic controller principles, hardware, and operation. Includes ladder logic, instruction, maintenance and troubleshooting. Prerequisite: IST 107, MAP 103, or instructor permission (Formerly ELC 150)

IST 152 Programmable Automation Control 5 (33/44)
Programmable Logic Controllers have become the backbone of modern industrial automation. This course explores PLC principles, networking, hardware and operation, with emphasis on ladder logic instruction sets, maintenance and troubleshooting using the Allen-Bradley Compact Logix™ platform and Control Logix™ programming software. Prerequisite: IST 150 or instructor permission.

IST 170 Introduction to Instrumentation 5 (33/44)
Fundamentals of process control as it applies to process variables, measurement dynamics, & automatic corrective measures in the industrial environment. Prerequisite: IST 107 or instructor permission

IST 180 Machining I 5 (33/44)
Layout and fabrication techniques with the use of semi-precision and precision measurement tools. Introduction to drill press, engine lathe and vertical mill operations. Prerequisite: IST 102, MAP 103, or instructor permission

IST 182 Machining II 5 (33/44)
Fundamentals of machining processes on lathes and vertical mills. Precision measurement with micrometers, vernier calipers, and dial indicators. Prerequisite: IST 180 or instructor permission

IST 184 Machining-Skill Enhancement 4 (11/66)
Extra hands on time and instruction to supplement the students machining skill level using fundamental machining processes on lathes, vertical milling machines and other machine shop equipment. Prerequisite: IST 182 or instructor permission

IST 207 Industrial Electricity II 5 (33/44)
Electrical theory and function as it applies to various control schemes with a practical understanding of the logic and safety considerations required for efficient control of stand alone machinery and or a complex system. Prerequisite: IST 107 or instructor permission

IST 208 Industrial Electricity III 5 (33/44)
Electrical theory, operation and set-up of variable frequency drives (VFD's), soft start devices, 4-20 ma. control loops and grounding issues associated with electronic devices. Prerequisite: IST 207 or instructor permission

IST 221 Electronics I (Principles) 5 (33/44)
Introduction to principles and applications of analog and digital electronic devices, circuits, and systems. Prerequisite: IST 106 or instructor permission

IST 222 Electronics II (Applications) 5 (33/44)
Construct and analyze operation of analog and digital electronic devices, circuits, and systems using schematic diagrams, test equipment, and logical trouble shooting procedures. Prerequisite: IST 221 or instructor permission

IST 223 Electronics III (Industrial) 5 (33/44)
Instruction and training in troubleshooting, testing and repairing industrial control devices. Electrical motor drives, instrumentation, and programmable controllers will be covered. Prerequisite: IST 222 or instructor permission

IST 270 Instrumentation II & Control Actuators 5 (33/44)
Maintenance procedures and troubleshooting techniques for control/measurement loops in the industrial environment along with fundamentals of control valves, actuators, their applications, techniques of safe trouble shooting, testing, repairing, and calibrating final control elements. Prerequisite: IST 170, 223, or instructor permission.

IST 280 Mechanical Power Transmission 5 (33/44)
Fundamentals of industrial mechanical power transmission. Includes lubrication, bearings, speed reducers, gears, couplings, drive components, brakes, clutches, and adjustable speed drives. Prerequisite: IST 100, 102, MAP 103, or instructor permission

IST 282 Fluid Power Transmission 5 (33/44)
Fundamentals of industrial hydraulic, pneumatic, and vacuum systems. Includes pumps, piping, compressors, check valves, cylinders, motors, control valves and flow controls. Prerequisite: IST 100, 102, MAP 103, or instructor permission

IST 284 Pumping Hydraulics & Mechanics 5 (33/44)
This course explores the fundamentals of pump system characteristics, hydraulic principles, and pumping technology; including various designs, pump seals, lubrication, & mechanical maintenance. Prerequisite: IST 280 or instructor permission

IST 295 Work Based Learning 1-6 (0/0/33-198)
A supervised work experience in industrial systems enhancing the application of classroom instruction and skills and/or area of specialization approved by the program advisor. May be repeated up to twelve (12) credits. Prerequisite: Instructor permission; Corequisite: IST 297

IST 297 Work Based Learning Seminar 1 (11/0)
Feedback and discussion to integrate and relate work based learning and classroom based instruction. Work ethic, leadership, safety and occupational health, environmental issues, and other student generated topics are examined. May be repeated up to six (6) credits. Prerequisite: instructor permission Corequisite: IST 295

Industrial Manufacturing Technician (AJAC) Apprenticeship Program

MT 101 Industrial Manufacturing Safety 5 (55/0)
Apprentices will be oriented to the occupation and will learn about foundational safety requirements specific to manufacturing and production. Course content will include basic shop safety and CPR/First Aid. The course will introduce the concepts of working in a safe and productive manufacturing workplace, safety, and environmental assessments, emergency drills and emergency teams, unsafe conditions and corrective action, equipment safety training, processes and procedures that support a safe work environment, safety and health requirements for maintenance, installation and repair, monitoring safe equipment and operator performance, and effective safety enhancing workplace practices. Prerequisite: Instructor Permission

MT 102 Industrial Manufacturing Basics 5 (55/0)
Apprentices will apply quality and continuous improvement practices to manufacturing and production. The course will introduce quality assurance, inspection, blueprint reading, interpreting manufacturing documents, precision measurement, and basic tools/equipment use and knowledge. Apprentices will learn the process of periodic or statistically based internal quality audit activities, check and document calibration of gauges and other data collection equipment, suggest continuous improvements, inspect materials and product/process at all stages to ensure they meet specifications, document the results of quality tests, communicate quality problems, take corrective actions to restore or maintain quality, use common measurement systems and precision measurement tools. Prerequisite: MT 101

MT 103 Industrial Manufacturing Production Processes 5 (55/0)
Apprentices will learn to identify customer needs and required resources for production. They will learn about production, communication, lean manufacturing, problem solving and front line leadership techniques. The course will introduce the set up and operation of machines including tooling and equipment. Apprentices will learn to identify customer needs, determine resources available for the production process, set up equipment for the production process, set team production goals, make job assignments, coordinate work flow with team members and other work groups, communicate production and material requirements and product specifications, perform and monitor the process to make the product, document product and process compliance with customer requirements, and prepare final product for shipping or distribution. Additionally, students will examine emerging industrial technologies and trends in green manufacturing. Prerequisite: MT 101, MT 102

MT 104 Industrial Manufacturing Machine Maintenance 5 (55/0)
Apprentices will learn the foundational principles and skills relating to machine maintenance awareness. They will learn to apply principals of welding, basic electricity, and fluid power systems to manufacturing equipment. Apprentices will examine common applications for lubricants, coolants, bearings, couplings, belt drives and chain drives. The course will apply machine control and automation concepts to awareness of machine maintenance. Apprentices will learn how to perform preventive maintenance and routine repair, monitor indicators to ensure correct operations, perform all housekeeping to maintain production schedule, recognize potential maintenance issues with basic production systems, including knowledge of when to inform maintenance personnel about problems with electrical, pneumatic, hydraulic and other systems. Prerequisite: MT 101, MT 102, MT 103

MT 201 Industrial Manufacturing Shop Math 5 (55/0)
Application of mathematics to industrial manufacturing environment. Perform standard shop computations and conversions between measurement systems. Relevant mathematical concepts are taken from algebra, geometry, right angle trigonometry, and oblique angle trigonometry to help students apply formulas and common technical application problems. Basic math skills will be reviewed including decimals, fractions and conversions between them. This course also includes the use and application of formulas required in industry. Students will learn properties of angles and common geometric shapes and relevant trigonometric functions, and they will be introduced to graphs and statistics. Prerequisite: Instructor Permission

MT 202 Industrial Manufacturing Communications 5 (55/0)

In this course, apprentices are introduced to basic communication concepts relating to the workplace. Students will explore effective skills relating to interpersonal, intercultural, and team communications; giving clear instruction; writing and interpreting technical processes; group facilitation; mediation/negotiation; conflict resolution; and professional communication practices..Prerequisite: Instructor Permission

Journalism

JOU 140 Digital Photojournalism 3 (22/22)

For persons interested in using digital cameras and computer techniques to produce images for newspapers, magazines, and other print media, and for Internet transmission and web sites. Students will be required to produce images showing specific examples of photojournalism. HP

Library

LIB 101 Academic Research Skills 2 (22/0)

This course is designed to prepare students with academic level research skills necessary to create search strategies, locate resources, identify formats, evaluate search results, understand APA and other citation styles, and avoid plagiarism. Prerequisite: Placement into ENGL 099 or successful completion of ENGL 098 with a 2.0 or higher.

Math (Applied)

All students, regardless of background, must take a math placement assessment before enrolling in any math course.

MAP 100 Applied Mathematics (AMT) Approved by FAA. 2 (22/0)

Must be enrolled in the Aviation Maintenance Technology Program. This course will cover aircraft technical mathematics and is designed for the Aviation Maintenance Technology student. It will cover the fundamental mathematical principles required for successful completion of the Aviation Maintenance Technology program. This course is FAA approved under 14 CFR Part 147. Prerequisite: DVS 080 or placement in MATH 094 or above. Must be enrolled in the Aviation Maintenance Technology program.

MAP 101 Applied Mathematics (AUT/WLD) 3-5 (33-55/0)

This class provides review and instruction in whole numbers, decimals, fractions, measurement, ration proportion, percents, introduction to algebra, and introduction to geometry. This basic instruction and review is followed by vocational program specific mathematics instruction. Students will study mathematics for welding or automotive repair. The emphasis is on providing work in relevant work-specific problems and situations. Prerequisite: DVS 080 or placement in MATH 094 or above.

MAP 103 Applied Mathematics (IST) 5 (55/0)

This class provides review and instruction in whole numbers, decimals, fractions, ratio, proportions, percents, introduction to algebra, introduction to geometry, introduction to right-angle trigonometry, and number systems in vocational program specific applications. The students will study mathematics for electricity/electronics and maintenance applications for industrial facilities. The emphasis is on providing a solid mathematics base to facilitate assimilation of more complex mathematics as well as providing course work in relevant work-specific problems and situations. Prerequisite: Successful completion of DVS 080 or BBCC Math placement score of Math 094 or above or instructor permission.

MAP 116 Transitional Applied Math 1-4 (11-44/0)

This course includes the study of basic arithmetic and algebraic concepts and operations including operations with integers, fractions, decimals and percents, order of operations, measurement, the metric system, algebraic expressions, formulas and simple linear equations. Students will complete exercises and problems providing practice in workforce program-specific applications. Students may not earn credit for both MAP 116 and MATH 090. Prerequisite: Instructor permission required.

MAP 117 Applied Math for Workforce Programs I 5 (55/0)

This course includes the study of basic arithmetic and algebraic concepts and operations including operations with integers, fractions, decimals and percents, order of operations, measurement, the metric system, algebraic expressions, formulas and simple linear equations. Students will complete exercises and problems providing practice in workforce program-specific applications. Credit cannot be earned in both MAP 117 and MATH 094. Prerequisite: DVS 080 or placement

MAP 118 Transitional Applied Math 1-4 (11-44/0)
This course is offered as an option to students to give variable credit on the modules successfully completed in MAP 119. This course includes the study of intermediate algebraic operations/concepts and the structure/use of algebra. This includes solving, graphing, and solving applications of linear equations and systems of equations; simplifying, factoring, and solving quadratic functions, introduction to functions and models; and exponential and logarithmic functions. Students will complete exercises and problems providing practice in STEM specific applications. Credit cannot be earned in both MAP 118 and MATH 097. Prerequisite: Instructor permission required

MAP 119 Applied Math for Workforce Programs II 1-5 (11-55/0)
This course includes the study of intermediate algebraic operations/concepts and the structure/use of algebra. This includes solving, graphing, and solving applications of linear equations and systems of equations; simplifying, factoring, and solving quadratic functions, introduction to functions and models; and exponential and logarithmic functions. Students will complete exercises and problems providing practice in workforce program-specific applications. Students cannot earn credit for both MAP 119 and Math 098. Prerequisite: MATH 094 or placement

MAP 121 Applied Math for Workforce Programs III 1-5 (11-55/0)
This course is designed to prepare students for precalculus and finite math. It includes the study of inequalities, applications of systems, rational expressions, functions, radicals, rational exponents, radical equations, complex numbers, quadratic equations and their application. Students will complete exercises and problems providing practice in workforce program-specific applications. Credit cannot be earned in both MAP 121 and MATH 099. Prerequisite: MATH 098, MAP 119 or placement

Mathematics

All students, regardless of background, must take a math placement assessment before being allowed to enroll in any math course.

MATH 090 Pre-algebra 5 (55/0)
This course includes the study of basic arithmetic and pre-algebraic concepts and operations including operations with integers, fractions, decimals and percents; order of operations, measurement and simple linear equations. This course is offered as an option to students who have successfully shown sufficient progress in MATH 094 but have not completed the final exam. Prerequisite: Instructor Permission Required

MATH 094 Introduction to Algebra 5 (55/0)
This course includes the study of basic arithmetic and algebraic concepts and operations including operations with integers, fractions, decimals, percents, order of operations, measurement, the metric system, algebraic expressions, formulas and simple linear equations. Credit cannot be earned in both MAP 117 and MATH 094. (Formerly MPC 090, Math 090) Prerequisite: DVS 080 or appropriate placement on the BBCC math placement exam. (F, W. Sp, Su)

MATH 097 Elementary Algebra II 5 (55/0)
This course includes the study of basic and intermediate algebraic operations and concepts, and the structure and use of algebra. This includes factoring algebraic expressions, working with rational expressions, systems of equations and applications Prerequisite: one of the following: BBCC math placement exam or successful completion of at least five units in MATH 098. (will start after Proficiency Exam #2)

MATH 098 Intermediate Algebra I 5 (55/0)
This course includes the study of intermediate algebraic operations and concepts, and the structure and use of algebra. This includes solving, graphing, and solving applications of linear equations and systems of equations; simplifying, factoring, and solving quadratic functions, introduction to functions and models; and exponential and logarithmic functions along with applications. Students cannot earn credit for both MAP 119 and Math 098. (Formerly Math 095, 096) Prerequisite: MATH 094 or placement. (F, W, Sp, Su)

MATH 099 Intermediate Algebra II 5 (55/0)
This course is designed to prepare students for precalculus and finite math. It includes the study of inequalities, applications of systems, rational expressions, functions, radicals, rational exponents, radical equations, complex numbers, quadratic equations and their application. Credit cannot be earned in both MAP 121 and MATH 099.(Formerly Math 098) Prerequisite: Math 098 or placement. (F, W, Sp, Su)

MATH& 107 Math in Society 5 (55/0)
This course will introduce the non-math/science major to mathematical applications in a variety of disciplines. Prerequisite: Appropriate scores in the BBCC Mathematics Assessment or successful completion of MATH 098 or placement into MATH 099/107/146. (F,W,S) SQR MS (F, W, Sp, Su)

MATH& 141 Precalculus I 5 (55/0)
This course will present the following concepts: college level algebra, introduction to functions and graphing, the graphs and properties of polynomial, rational, radical, exponential and logarithmic functions. Prerequisite: MATH 099 SQR MS (F, W, Sp, Su)

MATH& 142 Precalculus II 5 (55/0)
In preparation for calculus this is a comprehensive study of trigonometry, circular functions, right triangle trigonometry, analytical trigonometry. Sequences, series and induction are also covered. Prerequisite: MATH& 141 or Concurrent enrollment in MATH& 141. SQR MS (F, W, Sp)

MATH& 146 Introduction to Statistics 5 (55/0)
An introduction to descriptive statistics, probability and its applications, statistical inference and hypothesis testing, predictive statistics, and linear regression. Prerequisite: Appropriate scores in the BBCC Mathematics Assessment or successful completion of MATH 098 or placement into MATH 099/107/146. SQR MS (F, W, Sp, Su)

MATH 147 Finite Mathematics 5 (55/0)
This course introduces the student to applications of linear functions in business; applications of matrices to systems of equations, linear programming and optimization, game theory, Markov chains, Leontiff input/output models, etc; introduction to probability and decision analysis. Prerequisite: Appropriate scores in the BBCC Mathematics Assessment or successful completion of MATH 099. SQR MS

MATH& 148 Business Calculus 5 (55/0)
This is an introductory calculus course for business and economics students. It includes an introduction to rates of change, differentiation, integration, areas, and appropriate calculus techniques. There are also applications to marginal analysis in economics, optimization and other relevant applications.. Prerequisite: MATH& 141, placement in the class or instructor permission. SQR MS (W, Sp)

MATH& 151 Calculus I 5 (55/0)
This course will introduce the student to the basic concepts of the calculus. It will give the student an appreciation of the calculus and its applications in the real world and will prepare the student for future work in mathematics and the sciences. Course includes functions, limits, continuity, derivatives and their applications, and integration and its applications. Prerequisite: MATH& 141 & MATH& 142, or BBCC placement exam, or instructor permission (Formerly Math 171) SQR MS (F, W, Sp)

MATH& 152 Calculus II 5 (55/0)
This course will expand on the applications and techniques of differentiation learned in the first quarter and give a depth study of integration including the fundamental methods of integrating elementary algebraic and transcendental functions. It will include the applications of the calculus to transcendental functions, analytical geometry and other relevant topics. Prerequisite: MATH& 151 or instructor permission SQR MS (F, W, Sp)

MATH& 163 Calculus 3 5 (55/0)
This course will expand on the applications and techniques of differentiation learned in the first and second quarters. It will introduce the student to the calculus of sequences and series and the use of the MacLauren and Taylor series to approximate functions. It will introduce the student to the calculus of curvilinear functions and the concept of the vector and vector functions. It will also introduce the concept of a partial derivative and the maximization of functions given in more than one independent variable. Prerequisite: MATH& 152 or instructor permission SQR MS (W, Sp)

MATH 220 Linear Algebra 5 (55/0)
A study of matrix algebra and systems of equations, abstract vector spaces including basis and dimension, linear transformations, eigenvalues and eigenvectors. Some applications of linear algebra to illustrate the above concepts. Prerequisite: MATH& 152 or instructor permission SQR MS (W)

MATH 230 Differential Equations 5 (55/0)
This course will introduce the student to the solution elementary differential equations and standard applications of differential equations in science. It will include the solution of first order linear differential equations with applications to exponential growth and decay problems, mixture problems, orthogonal trajectories, etc., solutions to second order differential equations with applications to harmonic motion, and the LaPlace transform. Prerequisite: MATH& 163 or instructor permission SQR MS (Sp)

MATH& 254 Calculus IV 5 (55/0)
This course is an introduction to multivariable calculus. It includes the study of three dimensional space curves, vector-valued functions, partial derivatives, differentials, directional derivatives, multiple integration, vector fields, line integrals, Green's and Stoke's theorems, surface integrals, and the divergence theorem. Prerequisite: MATH& 163 or permission of instructor. SQR MS (F)

Mechatronics

MCT 100 Introduction to Modern Technology 2-5 (11-28/22-55)

This course is an introduction to technology studies, core mechatronics, and physical computing: the integration of electrical, mechanical, microcontrollers, computers, electronics, input/output, programmable logic controller (PLC), sensors and controls. This course will introduce students to the fundamentals of electrical, electronics, communications, firmware, software, sensors and computational theory, which form the foundation for future studies in mechatronics, simulations, robotics and industrial control systems through an introductory focus on microcontrollers, microcomputers and PLC software and devices. This is a variable credit course where students can choose to enroll in 2 to 5 credits depending on their needs. Prerequisite: None

MCT 101 Mechatronics I 2-5 (11-28/22-55)

This course is an introduction to the multidisciplinary field of mechatronics - the integration of systems design, electronic, mechanical, electrical, computers, PLC, and control sciences/ engineering. This course will introduce students to the fundamental electrical, electronics, communications, networks and computational theory that forms the foundation for future studies in the field of mechatronics. Students will build and demonstrate electronic projects using the Elegoo Uno R3 Project Kit. This is a variable credit course where students can choose to enroll in 2 to 5 credits depending on their needs. Prerequisite: None

MCT 102 Mechatronics II 2-5 (11-28/22-55)

This course is the second in the mechatronics series. It will address microcontroller programming, data acquisition, sensors, actuators, computer-aided design (CAD), automated manufacturing, and 3D printing. In this course, students will build (and keep) their own Creality Ender 3 Printer as well as design, print and build a variety of projects using open-source software and their own 3D printer. This is a variable credit course where students can choose to enroll in 2 to 5 credits depending on their needs. Prerequisite: None

MCT 103 Mechatronics III 5 (44/22)

This (third) course in mechatronics will address the use of microcontrollers and microprocessors functioning with sensors and control systems. Students learn how to use and interface with a variety of physical world sensors. Using this knowledge, students will build several sensor projects and demonstrate a UAS, Rover, or other device as part of a team project. Prerequisite: MCT 102 and MCT 120 (or concurrent enrollment).

MCT 110 Introduction to Mechatronic Applications 3 (22/22)

An exploratory, hands-on course in mechatronics (the merger of mechanical engineering, electrical engineering, computer control and information technology), as related to the disciplines of computer science, medical simulation, and unmanned systems. This course addresses the skills required for effective career research and educational planning, as well as academic techniques for becoming a successful student in mechatronics related courses, certificates and majors

MCT 120 Robotics I 5 (44/22)

Students are introduced to the world of robotics, including the mechanisms, dynamics, control systems, sensors, vision, and basic programming and file management used in modern robotic systems. Students will build, program and test a robotic system as part of a group project. Prerequisite: Completion of MCT 102 or instructor permission

MCT 129 Independent Project 2-5 (0/22-110)

MCT 129 is an independent study course allowing students to research, design and complete a mechatronics project incorporating the use of Global Position Systems (GPS) as a primary control component. Projects must be approved and supervised by a faculty member.

MCT 220 Robotics II 5 (44/22)

This second course in robotics addresses challenges and trends in the engineering, manufacturing, and programming of automated mechatronics systems. Students will build, program and test a robotic system using open-source technologies, as well as apply course activities to real-world applications. Prerequisite: Completion of MCT 102 or instructor permission

Medical Assistant

MA 111 Clinical Procedures I 3 (11/22)

This course is an introduction to medical assisting. It introduces basic clinical skills and medical front office skills as well as the importance of work ethics and interpersonal communications. Prerequisite: Instructor permission required. (F)

MA 112 Clinical Procedures II 4 (22/44)

This course builds upon knowledge and skills acquired during Clinical Procedures I. Students will further their understanding of the medical front office by learning diagnosis and procedural coding, office management, scheduling and written communication. The students will also build upon previously learned clinical skills by understanding infection control, sterile field protocol, physical therapy and rehabilitation and administration of medication. During this class students will also learn and practice injection techniques. Prerequisite: Minimum final grade of 2.0 in MA 111 or instructor permission required (W)

MA 113 Clinical Procedures III 4 (22/44)
This course builds upon knowledge and skills acquired during Clinical Procedures I and II. Students will further their understanding of the medical front office by learning about electronic medical records, as well as insurance and billing. The students will also investigate different specialty practices such as ENT, Ophthalmology, Pediatrics, Radiology, Cardiology, Pulmonology, Geriatrics, Urology, OB/GYN, Phlebotomy and the clinical laboratory. Prerequisite: Minimum final grade of 2.0 in MA 112 or instructor permission required. (Sp)

MA 195 Externship/Practicum for the Medical Assistant 6 (0/0/198)
The course will focus students on real life work in a medical office assisting physicians and office personnel by performing assigned duties in both administrative and clinical procedures. The work experience is supported by instructor site visits and classroom seminars where students and faculty can review on-the-job experiences. Prerequisite: : Passing score for the American Medical Technologist national certification examination and instructor permission. Must be taken concurrently with MA 197. (Su)

MA 197 Externship/Practicum Seminar 1 (11/0)
This class enhances students' abilities and work based learning at the externship site. Students will review important topics by applying the concepts acquired in the clinical area. Students will share information, procedures and experiences in different medical settings with other students. Visitations to other medical facilities will be a component of this course. Prerequisite: MA 113 and 150 with grades of 2.0 or higher; Corequisite: MA 195. (Su)

Music

MUSC 100 Introduction to Music 5 (55/0)
A survey course for non-majors. Introduction to the materials of music and world music literature, with a special emphasis on the literature, composers and history of the Western European Art Music tradition. HU

MUSC 101 Ukulele Orchestra (Ukestra) 1 (0/22)
The ukulele is an extremely popular instrument for good reason. It is inexpensive, portable, and approachable by everyone. This course covers everything you need to know about the ukulele. This includes uke anatomy, tuning, types, reading chord diagrams, and strumming patterns. Students will learn a wide variety of popular and classic songs they can play anywhere. This course is suitable for absolute beginners through intermediate players. HP

MUSC& 105 Music Appreciation 5 (55/0)
This course is designed to acquaint students with the elements of music and enhance the student's experience in listening to music from a global perspective. By drawing attention to the wide variety of music and the place/role of music in different cultures, students will develop an awareness of the diverse musical styles and cultures in the United States and throughout the world. HU (F, W, Sp, Su)

MUSC 110 College Chorus 1 (0/22)
This traditional ensemble made up of mixed voices rehearses a wide variety of choral literature for study and performance. This ensemble will perform quarterly for campus and community events. This course may be repeated for up to six credits. HP (W)

MUSC 114 Mariachi Workshop 3 (11/44)
Through a variety of learning experiences students will be introduced to traditional Mexican Mariachi music. Through reading, listening, singing and playing, students will experience, discover, explore and create music from this rich musical heritage. Students will work as a group in a supervised workshop environment to develop vocal and instrumental performing skills. May be repeated for credit. HP

MUSC 115 Group Piano I 2 (22/11)
This course presents the basic concepts and skills to develop performing proficiency at the piano. Musical activities and projects will build growth in technical skills such as major and minor scale patterns, musical skills such as sight reading and improvisation, theoretical concepts such as notation, rhythm patterns, melodic shapes and forms, and creative skills such as completing melodic phrases and inventing melodic variations. Repertoire will reflect the development of increasingly advanced solo and ensemble pieces. HP (F, W, Sp)

MUSC 116 Group Piano II 2 (22/11)
This course presents the basic to intermediate concepts and skills to develop performing proficiency at the piano. Musical activities and projects will build growth in technical skills such as major and minor scale patterns, musical skills such as sight reading and improvisation, theoretical concepts such as notation, rhythm patterns, melodic shapes and forms, and creative skills such as completing melodic phrases and inventing melodic variations. Repertoire will reflect the development of increasingly advanced solo and ensemble pieces. HP (F, W, Sp)

MUSC 117 Group Piano III 2 (11/22)
This course presents the intermediate concepts and skills to develop performing proficiency at the piano. Musical activities and projects will build growth in technical skills such as major and minor scale patterns, musical skills such as sight reading and improvisation, theoretical concepts such as notation, rhythm patterns, melodic shapes and forms, and creative skills such as completing melodic phrases and inventing melodic variations. Repertoire will reflect the development of increasingly advanced solo and ensemble pieces. HP (F, W, Sp)

MUSC 120 College Band 1 (0/22)
This traditional ensemble made up of woodwind, brass, and percussion instruments rehearses a wide variety of concert band literature for study and performance. This ensemble will perform quarterly for campus and community events. This course may be repeated for up to six credits. HP (Sp)

MUSC 124, 224 Orchestra I, II 2 (11/22)
A community and college orchestra that plays for community musicals and graduation as well as other functions throughout the year. May be repeated for credit. Prerequisite: Performance ability on an orchestral instrument. HP

MUSC 134 Group Guitar 2 (11/22)
This course provides students with an interactive approach to the fundamentals of playing the guitar. Each student's playing aptitude will be accommodated with different options within a unified set of goals. It will include reading tablature and standard notation, introducing chords and solo pieces using a variety of techniques, and provide an overview of basic guitar care and maintenance. This course may be repeated for up to six credits. HP (F, W, Sp)

MUSC 170 History of Jazz 5 (55/0)
This course covers the history and origin of Jazz and its stylistic development from the various periods of pre-jazz to today. The class will include an extensive study of important musicians, composers, arrangers, and styles which evolved the genre. The class will include detailed listening assignments and an introduction to jazz musical vocabulary and concepts. HU (W)

MUSC 174 History of Rock and Roll 5 (55/0)
This course presents the history of rock music from its origins to the present day. Students will study all major genres, as well as the social, political, technological, and economic forces that shaped the music. The class will include detailed listening assignments and an introduction to rock music vocabulary and concepts. HU (Sp)

MUSC 175 Music of the World 5 (55/0)
This course introduces world music tradition, including both sound and socio-cultural dimensions of music. Students will study the musical styles of major non-Western cultures, including Africa, India, Asia, Indonesia, and Eastern Europe. Topic will include instrumentation, rhythmic structure, melodic structure, song forms, composition, improvisation, family and community participation, political/economic connection, and religious involvement. HU (F)

MUSC 204 Music Technology Workshop 3 (22/22)
This course introduces concepts in modern electronic music production. It will include acoustics, notation, MIDI, loops, sampling, audio recording, editing, and mixing through class instruction and hands-on learning. Student projects will culminate in the preparation of student compositions and arrangements. Students can repeat this course for up to 6 credits. HU (Sp)

MUSC 215 Group Piano IV 2 (0/44)
This course presents the intermediate concepts and skills to develop performing proficiency at the piano. Musical activities and projects will build growth in technical skills such as major and minor scale patterns, musical skills such as sight reading and improvisation, theoretical concepts such as notation, rhythm patterns, melodic shapes and forms, and creative skills such as completing melodic phrases and inventing melodic variations. Repertoire will reflect the development of increasingly advanced solo and ensemble pieces. HP (F, W, Sp)

MUSC 216 Group Piano V 2 (0/44)
This course presents the intermediate and advanced concepts and skills to develop performing proficiency at the piano. Musical activities and projects will build growth in technical skills such as major and minor scale patterns, musical skills such as sight reading and improvisation, theoretical concepts such as notation, rhythm patterns, melodic shapes and forms, and creative skills such as completing melodic phrases and inventing melodic variations. Repertoire will reflect the development of increasingly advanced solo and ensemble pieces. HP (F, W, Sp)

MUSC 217 Group Piano VI 2 (0/44)
This course presents the advanced concepts and skills to develop performing proficiency at the piano. Musical activities and projects will build growth in technical skills such as major and minor scale patterns, musical skills such as sight reading and improvisation, theoretical concepts such as notation, rhythm patterns, melodic shapes and forms, and creative skills such as completing melodic phrases and inventing melodic variations. Repertoire will reflect the development of increasingly advanced solo and ensemble pieces. HP (F, W, Sp)

MUSC 270 Musical Theatre Workshop 1 (0/22)
This class explores Musical Theatre in a studio workshop setting. Students will study the work of the actor/singer/dancer and use their gained knowledge to develop as performers. Also, students will prepare and present as soloists as well as members of small groups and larger ensembles. Since this is a workshop course, students will prepare material for class presentation and critique. The class will also focus on the audition process, musical theatre history, and repertoire selection. Finally, the entire class will participate in a culminating showcase performance at the end of the quarter. This course may be repeated for up to six credits. Some performances may be held at off-campus venues. HP

Nursing

NUR 100 Nursing Assistant 9 (44/110)
This course prepares students to take the Nursing Assistant examination as outlined by federal and state guidelines. Training will include classroom, skills lab, and clinical experience. Prerequisite: Read, write, speak and understand English at the level necessary for performing duties of the nursing assistant. (Placement in ENGL 099 or above) CTE Dual Credit available. (F, W, Sp)

NUR 103 HIV/AIDS Education 1 (4/14)
An HIV/AIDS education course designed to meet the Washington State mandatory requirements for healthcare and childcare providers. Successful completion includes HIV/AIDS education certificate. (F)

NUR 110 Fundamentals of Nursing 4 (44/0)
Focus is on fundamental nursing theory for the practice of nursing upon which the Level I ADN Nursing student may apply the nursing process to identify and meet the cultural, physical, psychological, social, and spiritual needs of the adult and geriatric client. Prerequisite: Admission into the Level I AD Nursing Program. (F)

NUR 111 Fundamentals of Nursing Practicum 3 (0/66)
Practical application in the clinical setting of nursing theory and skills taught in NUR 110 and NUR 135. Practicum focuses on nursing care to a variety of adult and geriatric patients. Prerequisite: Admission into the Level I ADN nursing program. (F)

NUR 114 Pharmacology 2 (22/0)
An introduction to nursing principles of medication administration. Explores the therapeutic actions, major side effects, and nursing implications of common drugs in major classifications. Principles of medication administration and dosage calculation are included. Prerequisite: Completion of MATH 098 with a grade of 2.0 or higher or placement in MATH 099. Corequisite: NUR 110 or instructor permission. (F)

NUR 120 Beginning Nursing Concepts I 5 (55/0)
Focus is on nursing theory as it relates to the adult patient with commonly occurring health conditions, and includes an introduction to the care of the patient in the perioperative and maternal/newborn setting. Professional roles and progression are incorporated in this course. Prerequisite: BIOL& 260, with a 2.0 G.P.A. or above (W)

NUR 121 Beginning Nursing Practicum I 4 (0/88)
Practical application in the clinical setting of nursing theory and skills taught in previous nursing courses and introduced in NUR 120 and NUR 136. Practicum focuses on nursing care to a variety of patients in the medical/surgical, perioperative, and maternal newborn setting. Prerequisite: BIOL& 260 with a 2.0 G.P.A or above. (W)

NUR 130 Beginning Nursing Concepts II 5 (55/0)
This course continues to focus on nursing theory as it relates to basic needs throughout the lifespan, including care of the pediatric patient. Bioethical dilemmas and ethical decision making processes are incorporated.Prerequisite: Admission into the nursing program and NUTR& 101 with a 2.0 G.P.A or above. (Sp)

NUR 131 Beginning Nursing Practicum II 5 (0/110)
Practical application in the clinical setting of nursing theory and skills taught in previous nursing courses and introduced in NUR 130 and NUR 137. Practicum focuses on nursing care to a variety of patients across the lifespan, and will include experience in the inpatient mental health environment. Prerequisite: NUTR& 101 with a 2.0 G.P.A or above. (Sp)

NUR 135 Nursing Skills Laboratory 1 (0/22)
This course provides for the practice of nursing skills in a controlled setting in order to gain proficiency for delivery of nursing care in the clinical setting (NUR 111). The content is based on theoretical nursing knowledge taught in NUR 110. Prerequisite: Admission into the Level I ADN Program. (F)

NUR 136 Nursing Skills Laboratory 1 (0/22)
This course provides for the practice of nursing skills in a controlled setting in order to gain proficiency for delivery of nursing care in the clinical setting (NUR 121). The content is based on theoretical nursing knowledge taught in NUR 120. Prerequisite: BIOl& 260 with a 2.0 G.P.A or above. (W)

NUR 137 Nursing Skills Laboratory 1 (0/22)
This course provides for the practice of nursing skills in a controlled setting in order to gain proficiency for delivery of nursing care in the clinical setting (NUR 131). The content is based on theoretical nursing knowledge taught in NUR 130. Prerequisite: NUTR&101 with a 2.0 G.P.A or above. (Sp)

NUR 195 Work-Based Learning Practicum 1-3 (0/33-99)
A supervised work experience in the allied healthcare field designed to enhance the application of learned nursing theory and lab skills. Prerequisite: Instructor permission; Corequisite: NUR 197

NUR 197 Work-Based Learning Seminar 1 (11/0)
A small group seminar setting in which students can discuss their Work-Based Learning Practicum (NUR 195) experience with a nursing instructor and other students. Prerequisite: Instructor permission; Corequisite: NUR 195

NUR 210 Advanced Nursing Concepts I 4 (44/0)
Focus is on advanced nursing theory as it relates to complicated health deviations in patients throughout the lifespan. Current professional issues and role development are incorporated in this course. Prerequisite: PSYC& 100 with a 2.0 G.P.A. or above, or current LPN Licensure and permission of program director. (F)

NUR 211 Advanced Nursing Practicum I 5 (0/110)
Practical application in the clinical setting of nursing theory and skills taught in previous nursing courses and introduced in NUR 210 and NUR 235. Practicum focuses on advanced nursing care to a variety of patients, in various settings, and throughout all stages of the lifespan. Prerequisite: Admission to the Level II ADN Program. (F)

NUR 220 Advanced Nursing Concepts II 4 (44/0)
This course continues to focus on expansion of theoretical nursing knowledge related to complex disease states. Delegation and leadership concepts are incorporated in this course. Prerequisite: PSYC& 200, with a 2.0 G.P.A or above (W)

NUR 221 Advanced Nursing Practicum II 5 (0/110)
Clinical focus is on application of principles and skills taught in previous nursing courses and introduced NUR 220 and NUR 236. Practicum focuses on advanced nursing care to less stable patients in a variety of setting throughout the lifespan. Prerequisite: PSYC& 200 with a minimum 2.0 G.P.A or above (W)

NUR 230 Advanced Nursing Concepts III 5 (55/0)
Focus on advanced theoretical knowledge as it relates to complex/multiple disease entities and emergency situations. A transition to employment component is incorporated to prepare the student for post graduation employment. Prerequisite: CMST& 220 with a minimum 2.0 G.P.A or above. (Sp)

NUR 231 Advanced Nursing Practicum III 4 (0/0/132)
This course focuses on increasing independence and skill in the performance and management of patient care in the clinical setting under the guidance of a registered nurse, based on nursing theory and skills taught in previous nursing courses. Prerequisite: CMST& 220 with a minimum 2.0 or above. (Sp)

NUR 235 Nursing Skills Laboratory 1 (0/22)
This course provides for the practice of nursing skills in a controlled setting in order to gain proficiency for delivery of nursing care in the clinical setting (NUR 211). The content is based on theoretical nursing knowledge taught in NUR 210. Prerequisite: Admission into the Level II ADN Program (F)

NUR 236 Nursing Skills Laboratory 1 (0/22)
This course provides for the practice of nursing skills in a controlled setting in order to gain proficiency for delivery of patient care in the clinical setting (NUR 221). The content is based on theoretical nursing knowledge taught in NUR 220 and previous courses. Prerequisite: PSYC& 200, with a 2.0 G.P.A or above. (W)

NUR 240 Professional Issues 1-4 (0-44/0-88)
This course is designed to assist students in making the transition from the academic setting to a healthcare work environment. It provides preparation for the NCLEX examination, and information about the professional role of the nurse and the legal and ethical responsibilities related to the practice of nursing in the State of Washington. Prerequisite: Instructor permission. (Sp)

NUR 295 Work-Based Learning Practicum 1-3 (0/33-99)
A supervised work experience in the allied healthcare field designed to enhance the application of learned nursing theory and lab skills. Area of learning must be approved by instructor. Prerequisite: Instructor permission; Co-requisite: NUR 297

NUR 297 Work-Based Learning Seminar 1 (11/0)
A small group seminar setting in which students can discuss their Work-Based Learning Practicum (NUR 295) experience with a nursing instructor and other students. Prerequisite: Instructor permission; Co-requisite: NUR 295

Nutrition

NUTR& 101 Nutrition 5 (55/0)
This introductory course in nutrition will focus on current ideas in nutrition and areas of research. This class will present information on the chemistry and the biological function of nutrients in the body. Diseases associated with an excess or deficit in nutrients will also be explored. Students will acquire a better understanding of some impacts of food choices on a personal level. Prerequisite: Completion of ENGL 099 or placement in ENGL&101 recommended NS (F, W, Sp, Su)

Philosophy

PHIL& 101 Intro to Philosophy 5 (55/0)
This course is an introduction to philosophy for students who have no previous background in the subject. The course presents a broad overview of philosophical topics of interest and importance such as the nature of knowledge and the contents of reality. HU (W, Sp)

PHIL 102 Ethics and Policy in Healthcare I 1 (11/0)
This is the first in a series of five courses exploring values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. Co-Requisite: NUR 110 or instructor permission. Prerequisite: **Admission into the Level I ADN Nursing Program or instructor permission.** HU (F)

PHIL 103 Ethics and Policy in Healthcare II 1 (11/0)
This is the second in a series of five courses exploring values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. Corequisite: NUR 120 or instructor permission.. Prerequisite: PHIL 102 or instructor permission HU (W)

PHIL& 120 Symbolic Logic 5 (55/0)
This course is a study of the methods and principles used to distinguish correct from incorrect reasoning. Students are expected to prove their understanding of formal deductive symbolic logic by completing logic proofs in categorical, propositional, and predicate logic. Prerequisite: MATH 098 or above. SQR HU (Formerly PHIL 106) (W, Sp)

PHIL 201 Ethics and Policy in Healthcare III 1 (11/0)
This is the third in a series of five course exploring values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. Corequisite: NUR 210 or instructor permission.Prerequisite: PHIL 103 or instructor permission HU (F)

PHIL 202 Ethics and Policy in Healthcare IV 1 (11/0)
This is the fourth in a series of five courses exploring values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. Corequisite: NUR 220 or instructor permission.Prerequisite: PHIL 201 or instructor permission HU (W)

PHIL 203 Ethics and Policy in Healthcare V 1 (11/0)
This is the fifth in a series of five courses exploring values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. Corequisite: NUR 230 or instructor permission..Prerequisite: PHIL 202 or instructor permission. HU (Sp)

PHIL 210 Ethics 5 (55/0)
An introduction to ethical theories and some of today's main moral problems such as abortion, euthanasia, war, and capital punishment. Topics vary. HU (F, W, Sp)

PHIL 211 Ethics for Criminal Justice 5 (55/0)
A study of the principal ethical theories and their application to individual and social morality tied to the field of Criminal Justice. Prerequisite: CJ& 101 HU

PHIL 230 East Indian Philosophy 5 (55/0)
This course will provide an introduction to the classical philosophical schools of India. It will discuss the problems and methods of these schools and their relationships with some of the major schools of Western Philosophy. HU

PHIL 240 Philosophy of Religion 5 (55/0)
Philosophy of religion is an attempt to think critically and rationally about religious issues. This course will use classic and contemporary texts to explore several interesting issues such as the problem of evil: if God is all knowing, all powerful, and all good, then why do the innocent suffer? Many philosophers have tried to answer that question and more. HU

PHIL 250 Asian Philosophy 5 (55/0)
This course introduces to students the major intellectual currents in East Asia, with the focus on Confucianism, Taoism, and Buddhism. Student will follow the unfolding of the intellectual history chronologically, and discuss the teachings of most influential thinkers in East Asia. HU

Physical Education and Health

PEH 100 Lifetime Wellness 3 (33/0)
Lifetime Wellness is designed to promote the student's understanding of their physical, emotional, and social health needs, and to develop strategies to meet these needs and improve overall health and well-being. SE (F, W, Sp, Su)

PEH 102 Theory of Basketball 3 (22/22)
Designed for students to learn the basic skills required to teach or coach basketball. Emphasis is placed on analyzing fundamentals, gaining knowledge of offensive and defensive strategy and becoming familiar with the responsibilities of a basketball program. SE (W)

PEH 103 Theory of Wrestling 3 (22/22)
A practical course relating to the coaching aspect of wrestling, emphasis is placed on rule familiarization, technique development of takedowns, escapes, reversals, and pinning combinations. Content also includes preparation of teams for contests and reviews of various philosophical approaches. SE

PEH 105 Theory of Baseball 3 (22/22)
A practical course relating to the coaching aspect of baseball. Emphasis is placed on teaching/coaching strategies, the body mechanics of the athlete, evaluation methods, and the organization of a baseball program. SE (Sp)

PEH 106 Theory of Fast Pitch Softball 3 (22/22)
A practical course relating to the coaching aspect of softball. Emphasis is placed on teaching/coaching strategies, the body mechanics of the athlete, evaluation methods, and the organization of a softball program. SE (Sp)

PEH 107 Theory of Volleyball 3 (22/22)
A practical course relating to the coaching aspect of volleyball. Emphasis is placed on teaching/coaching strategies, the body mechanics of the athlete, evaluation methods, and the organization of a softball program. SE (F)

PEH 112 Running or Walking for Fitness 1 (0/22)
Running or Walking for Fitness will give students an overview of the basics of designing and implementing a personal running or walking fitness plan to achieve their specific goals. All ability levels are welcome, whether a student is hoping to complete a 5k or is an experienced runner looking to improve. The course will culminate with a timed 5k run/walk. May be repeated for up to three (3) credits. AC

PEH 114 Basketball 1 (0/22)
Basketball is designed to improve the student's basketball skills/knowledge and to provide an awareness of the sport as a lifetime activity offering fun and fitness. May be repeated for up to three (3) credits. AC (Sp)

PEH 119 Fast Pitch 1 (0/22)
Fast Pitch is designed to improve the student's softball skills/knowledge so to participate successfully and enjoyably in the team activity of softball. May be repeated for up to three (3) credits. AC

PEH 122 Volleyball 1 (0/22)
Volleyball is designed to improve the student's volleyball skills/knowledge so to participate successfully and enjoyably in the team activity of volleyball. Emphasis will be on executing proper fundamentals of the game. May be repeated for up to three (3) credits. AC

PEH 125 Conditioning 1 (0/22)
Conditioning is designed to introduce the student to the basic principles and training methods for body conditioning so they can establish an exercise program to enhance overall wellbeing. May be repeated for up to three (3) credits. AC (F, W, Sp)

PEH 128 Social Dance 1 (0/22)
Social dance teaches students basic steps and techniques for partner dances such as swing, fox trot, waltz and cha cha. The course will cover fundamentals of footwork, music rhythms and dancing with a partner. Students do not need a dance partner to register for the class. May be repeated for up to three (3) credits. AC

PEH 130 Indoor Cycling/Spinning 1 (0/22)
Indoor cycling, often also called spinning, as an organized activity, is a form of exercise with classes focusing on endurance, strength, intervals, high intensity and recovery, and involves using a special stationary exercise bicycle with a weighted flywheel in a classroom setting. AC

PEH 131 Circuit Weight Training 1 (0/22)
Circuit weight training is designed to introduce the student to the basic principles and training methods for weight training so to establish a program to enhance build and maintain muscular strength and endurance. May be repeated for up to three (3) credits. AC

PEH 132 Fitness 1 (0/22)
An overall conditioning program with emphasis on developing strength, endurance, flexibility, and cardiovascular conditioning that lead to the development of a fitness attitude. May be repeated for up to three (3) credits AC

PEH 133 Weight Training 1 (0/22)
Weight training is designed to enhance the student's knowledge and practices regarding the basic techniques of weight training using weight machines and free weights. May be repeated for up to three (3) credits. AC (F, W, Sp)

PEH 135 Beginning Yoga 1 (0/22)
Introductory and intermediate yoga postures will be introduced to promote balance, strength, flexibility, and joint stability. Students will also be introduced to basic breath work and meditation practices to enhance stress relief and focus. Students will be exposed to the relationship between the mind and body and the role yoga can play in promoting lifelong health. AC (F, W, Sp, Su)

PEH 137 Beginning Brazilian Jiu-Jitsu 1 (0/22)
Designed to teach students the art and sport of Brazilian Jiu-Jitsu (BJJ). The purpose of this class shall be to provide a structured and safe environment for learning and practicing the grappling art of Brazilian Jiu-Jitsu, along with some techniques from Judo, Sambo and wrestling.
This class will focus on providing opportunities for students to gain effective self-defense and grappling experience, increase physical health, provide stress relief and promote a positive lifestyle of continual improvement.
*Emphasizes self-control and situational awareness in grappling-based self-defense using non-violent neutralization positions and techniques for life-threatening situations. AC (F, W, Sp)

PEH 153 Lifeguard Training 2 (11/24)
Instruction leading to qualification for American Red Cross Lifeguard/First Aid/CPR/AED training certification. Prerequisite: Persons are eligible who have passed their fifteenth birthday, are in sound physical condition, and have completed the following prerequisites:

1. Fifteen years of age on or before the beginning of the course
2. Swim 300 yards continuously demonstrating breath control and rhythmic breath. Candidates may swim using the front crawl, breaststroke or a combination of both but swimming on the back or side is not allowed.
3. Tread water for 2 minutes using only the legs. Candidates should place their hands under the armpits.
4. Complete a timed event within 1 minute, 40 seconds.
   - Starting in the water, swim 20 yards.
   - Surface dive, feet-first or head-first, to a depth of 7 to 10 feet to retrieve a 10-pound object.
   - Return to the surface and swim 20 yards on the back to return to the starting point with both hands holding the object and keeping the face at or near the surface so they are able to get a breath. Candidates should not swim the distance under water.
   - Exit the water without using a ladder or steps. AC (Sp)

PEH 155 Body Toning 1 (0/22)
This course involves special exercise and calisthenics which enhance total fitness, figure improvement, body toning, weight control, and posture. Students will use balance/fitness balls and light to medium dumbbells to improve overall core strength and balance of the body. May be repeated for up to three (3) credits. AC (F, W, Sp)

PEH 158 Racquetball 1 (0/22)
Racquetball is designed to introduce the student to the knowledge and basic skills of badminton and to develop those skills to a level that enables the student to participate in the sport at a beginning level. May be repeated for up to three (3) credits. AC (Sp)

PEH 160 Baseball Skills 1 (0/22)
A practical course involved in the coaching aspects of baseball, both defensively and offensively. Explains catching, throwing, running techniques, abilities for the player in each position, hitting, bunting, base running techniques and game strategies. May be repeated for up to three (3) credits. AC

PEH 178 Principles of Fitness 3 (22/22)
Principles of Fitness is designed to introduce the student to the components, administration, and assessment of fitness programs. Lab component will include the building and execution of the student's own fitness program. SE

Physics

PHYS& 110 Physics for Non-Science Majors with Lab 5 (44/22)
This course is a general survey course for the non-science major. The course helps develop an awareness of the physical concepts which govern our everyday experiences. Topics will include most of the following, depending on class preparation and interest: describing motion, Newton's laws of motion and gravitation, energy and conservation laws, states of matter and its behavior, thermodynamics, waves, electricity and magnetism, optics, atomic and nuclear physics, special relativity. Conceptual reasoning is stressed, and mathematics is kept to the level of elementary algebra. Laboratories emphasize concepts learned in lecture, and graphing and data handling techniques are learned. This course is offered primarily to meet the Associate in Arts and Science laboratory science requirement. Prerequisites: MATH 098 or placement into a higher level mathematics course. LS (formerly PHYS& 100 and 101) (W)

PHYS& 114 General Physics I with Lab 5 (44/22)
The first course in a three-quarter algebra-based sequence for students pursuing degrees in biology, pre-dentistry, pre-medicine, pre-veterinary medicine, engineering technology, zoology, and other fields. This course is also strongly recommended for students who will be taking Engineering Physics but who have not had a prior physics class. Students should check with the requirements of their intended baccalaureate institution when considering this sequence. A balance of conceptual understanding and problem-solving ability is emphasized; This first course will begin with an introduction to units and unit conversion, scalars and vectors, and using right-angle trigonometry for analyzing two-dimensional motion, then continue to the study of mechanics: describing motion, with speed, velocity, and acceleration; application of Newton's laws in one and two dimensions; impulse and momentum conservation; work and energy conservation; rotational motion and torque. Prerequisites: Successful completion of MATH 099, placement in a higher-level mathematics course, or instructor permission. LS (Sp)

PHYS& 115 General Physics II with Lab 5 (44/22)
The second course in an three-quarter algebra-based sequence. A balance of conceptual understanding and problem-solving ability is emphasized; laboratory and lecture are integrated in the sequence. In this second quarter the topics studied will include fluids, oscillations, waves and sound, thermodynamics, geometric and physical optics. Biological applications of physics will be studied whenever possible. Prerequisites: Completion of PHYS& 114 with 2.0 or higher. LS

PHYS& 116 General Physics III with Lab 5 (44/22)
The third course in an three-quarter algebra-based sequence. A balance of conceptual understanding and problem-solving ability is emphasized; laboratory and lecture are integrated in the sequence. In this third quarter the topics studied will include electricity, magnetism, electromagnetic induction and waves, quantum physics, atomic physics, and nuclear physics. Biological applications of physics will be studied whenever possible. Prerequisites: Completion of PHYS& 115 with 2.0 or higher. LS

PHYS& 221 Engineering Physics I w/Lab 5 (44/22)
The course is an introductory physics course intended for students majoring in science or engineering. This course is the first of a three-quarter sequence. Course content includes the laws of motion, energy, momentum, and static equilibrium. Prerequisite: Calculus I (Math&151) or concurrent enrollment LS (F)

PHYS& 222 Engineering Physics II w/Lab 5 (44/22)
The second in a three-quarter calculus-based sequence in introductory physics intended for students majoring in science or engineering. Course content includes waves, optics, thermodynamics, and may include a unit on gravitation. Prerequisite: Successful completion of Engineering Physics I (PHYS& 221) LS (W)

PHYS& 223 Engineering Physics III w/Lab 5 (44/22)
The third in a three-quarter calculus-based sequence in introductory physics intended for students majoring in science or engineering. Course content includes static electricity, current electricity, magnetism, and special relativity. Prerequisite: Successful completion of PHYS& 221 and PHYS& 222 LS (Sp)

Political Science

POLS& 101 Introduction to Political Science 5 (55/0)
In order to make politics relevant to the people, one must go where the people are. Many Americans find politics to be distant and irrelevant to their daily experience without ever realizing that politics are all around them in many different formats. This class brings students face-to-face with such realities while emphasizing an understanding of the nature, purpose, and practice of American politics within a global context. Topics covered include the American Constitution, the elections process, bureaucracies, the role of the media, and modern political culture in America. SS (F, W)

POLS& 202 American Government 5 (55/0)
This course focuses upon the institutions which form the governmental structures of the United States. Students participate in activities and discussions intended to broaden their understanding of what it means to serve in government and the importance of the role government plays in the functioning of the country. SS (W, Sp, Su)

POLS& 203 International Relations 5 (55/0)
This course serves as an introduction to global relations, focusing on historical backgrounds, current struggles, and the struggle to define the post-cold-war world. Students taking this course are encouraged to adopt a global outlook and will participate in a mock international conference designed to provide direct experience in the world of diplomacy. SS (F)

Psychology

PSYC& 100 General Psychology 5 (55/0)
A broad survey course designed to study human behavior with reference to biology, learning, motivation, emotion, perception, intelligence, human development, mental processes, personality, abnormal behavior, and research. SS (F, W, Sp, Su)

PSYC 101 Psychosocial Issues in Healthcare I 1 (11/0)
This is the first in a series of five courses exploring concepts fundamental to psychosocial healthcare management. Examines some determinants of health and illness across the lifespan, including social, psychosocial, environmental, spiritual and cultural dimensions. Corequisite: NUR 110 or instructor permission. Prerequisite: **Admission into the Level I ADN Nursing Program or instructor permission.** SS (F)

PSYC 102 Psychosocial Issues in Healthcare II 1 (11/0)
This is the second in a series of five courses exploring fundamental concepts of psychosocial healthcare management. Examines some determinants of health and illness across the lifespan, including social, psychosocial, environmental, spiritual and cultural dimensions. Corequisite: NUR 120 or instructor permission. Prerequisite: PSYC 101. SS (W)

PSYC 103 Psychosocial Issues in Healthcare III 1 (11/0)
This is the third in a series of five courses exploring fundamental concepts of psychosocial healthcare management. Examines some determinants of health and illness across the lifespan, including social, psychosocial, environmental, spiritual and cultural dimensions. Corequisite: NUR 130 or instructor permission. Prerequisite: PSYC 102 or instructor permission. SS (Sp)

PSYC 105 Mental Health First Aid - Adult 1 (11/0)
Mental Health First Aid is a course where students develop key skills to help someone who is developing a mental health problem or experiencing a mental health crisis. This course will provide knowledge of the most prevalent mental health problems people may encounter in our communities. Students will learn symptoms and criteria needed to recognize someone in mental health crisis. Students will also discuss the stigma associated with mental health in the United States and ways to promote positive mental health. This course will use the Mental Health First Aid internationally-focused and evidence-based curriculum to certify students as Mental Health First Aiders. SS (W)

PSYC& 200 Lifespan Psychology 5 (55/0)
This course examines the physical, intellectual, emotional, and social growth and development that occurs throughout the human life-span. Prerequisite: Completion of PSYC& 100 SS (F, W, Su)

PSYC 201 Psychosocial Issues in Healthcare IV 1 (11/0)
This is the fourth in a series of five courses exploring fundamental concepts of psychosocial healthcare management. Examines some determinants of health and illness across the lifespan, including social, psychosocial, environmental, spiritual and cultural dimensions. Co-requisite: NUR 210 or instructor permission.Prerequisite: PSYC 103 or instructor permission. SS (F)

PSYC 202 Psychosocial Issues in Healthcare V 1 (11/0)
This is the fifth in a five course series exploring fundamental concepts of psychosocial healthcare management. Examines some determinants of health and illness across the lifespan, including social, psychosocial, environmental, spiritual and cultural dimensions. Corequisite: NUR 230 or instructor permission. Prerequisite: PSYC 201 or instructor permission. SS (Sp)

PSYC 225 Psychology and the Legal System 5 (55/0)

As the study of human behavior, psychology must also include the study of law, which is a primary instrument used by society to control human behavior. Psychology and law is a vibrant area of research interest within the discipline of psychology. This course is a survey of the major topics represented in the field of psychology and law. This course focuses on how psychological research (across sub-disciplines such as clinical, social, cognitive, and community psychology) can contribute to a better understanding of issues related to law or legal process, how the legal system can be informated by the results of psychological research, and how psychological research can be more reactive to legal issues. Prerequisite/corequisite: PSYC& 100 or CJ& 101 SS

Religious Studies

REL 201 World Religions 5 (55/0)

A survey of the origin, development, and present beliefs and practices of the world's major religions: Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.HU (F, Sp, Su)

REL 211 Religion in America 5 (55/0)

A study of American religious groups, principally Christian denominations, including selected sects and cults. Various beliefs and practices will be examined in light of historical and social influences. HU

Science

SCI 101 Survey of Science 5 (55/0)

An introduction to and survey of the natural sciences of astronomy, biology, chemistry, geology, and physics. NS

SCI 104 Math for Science and Engineering 2 (22/0)

Math concepts heavily used by science and engineering coursework are covered. Topics will include (but not limited to): unit conversions, scientific notation, right angle trigonometry, logarithms and exponents, applications of linear graphs, vectors, and significant figures. All topics will be covered with an emphasis on applications within the sciences. Prerequisite: Math 098. SE

Simulation Technician

SIM 110 Introduction to SIM Programing 4 (33/22)

This course covers basic concepts of simulation hardware and software in order to address the impact of hardware design on applications and systems software. Additionally, this course will strengthen an understanding of basic programming and maintenance for high and low fidelity manikins while concurrently developing team dynamics, problem solving, and critical thinking skills. Student must pass this course with a minimum 2.0 grade in order to be applied to degree completion. (Previous Title Fundamentals of SIM Programming)(Formerly: SIM 110 & 130) (F, W, Sp)

SIM 120 Medical Equipment Research 2 (22/0)

This course will help students develop an understanding of human body systems in relation to equipment utilized in the healthcare profession in order to apply it to the medical simulation environment. Specifically, by researching common healthcare content areas such as general head-to-toe assessment equipment, IV therapy and medication administration equipment, and emergency resuscitation equipment, students will be able to exhibit critical thinking and problem solving skills to locate, analyze and apply medical equipment information. Student must pass this course with a minimum 2.0 grade in order to be applied to degree completion.

SIM 130 Fundamentals of Simulation Theory 4 (44/0)

Medical simulation is a complex integration of technology that requires the use of online support materials. It is the Simulation Technician's role to organize and present this support material. This course is designed to train students how to develop and implement instructional support materials for high and low fidelity simulations. A strong focus will be placed on accessibility, instructional strategies, and assessment. Students will also focus on simulation theory and history. Student must pass this course with a minimum 2.0 grade in order to be applied to degree completion.(Previous Title Introduction to Medical Simulation) (Formerly SIM 130 & 230) (F, W, Sp)

SIM 140 Basic Simulation Diagnostics 3 (33/0)

This course addresses the functionality of simulation equipment while focusing on equipment management and error prevention. Course topics include resource management, utility testing, and targeted assessment strategies. Student must pass this course with a minimum 2.0 grade in order to be applied to degree completion. (Formerly-Basic Simulation Maintenance) (F, W, Sp)

SIM 161 SIM Pharmacology Lab 1 (0/22)
This course is designed to build on the content learned in Pharmacology Essentials. It provides students with an opportunity to apply pharmacology principles to simulated manikins in order to record the effects of medication administration to simulated patients with varying disease conditions. Student must pass this course with a minimum 2.0 grade in order to be applied to degree completion. Prerequisite: Math 098. Corequisite: HED 160

SIM 211 Advanced Life Support & Pediatric Scenarios 8 (44/88)
This course focuses on designing and running simulation case-based scenarios for emergencies involving infants, children & adults. Students will direct the management of simulation case-based scenarios in relation to cardiopulmonary arrest and other emergencies as related to ACLS & PALS training scenarios for nursing instruction, hospital and medical providers, and emergency response teams. Student must pass this course with a minimum 2.0 grade in order to be applied to degree completion. Prerequisite: SIM 110, SIM 120, SIM 130, and SIM 140. (Formerly SIM 211 and 221) (F, Sp)

SIM 221 Pediatric Scenarios 5 (33/44)
This course focuses on designing and running simulation case-based scenarios for emergencies involving infants and children. Students will be required to develop and implement PALS scenarios that can be used for emergency response, emergency medicine, intensive care, and critical response healthcare teams. Additional emphasis will be given to debriefing strategies and techniques. Student must pass this course with a minimum 2.0 grade in order to be applied to degree completion Prerequisite: SIM 161 or Instructor permission. Corequisite: SIM 211

SIM 222 Clinical Focused Simulation 5 (11/88)
This course will focus on the practical application of skills taught in previous simulation courses as applied to the Allied Healthcare setting. Comprehension, application, and leadership are all key skills that are required for students to begin to demonstrate as they engage in the process of running their own simulations for Allied Health end users. Prerequisite: SIM 161 and SIM 211 or Instructor permission

SIM 230 Learning Management Systems 5 (55//0)
Medical simulation is a complex integration of technology that requires the use of online support materials. It is the Simulation Technician's role to organize and present this support material electronically with the use of a Learning Management System. This course is designed to train students how to develop and implement instructional support materials for high and low fidelity simulations by using Learning Management Systems. A strong focus will be placed on accessibility, instructional strategies, and assessment. Prerequisite: SIM 221 or Instructor permission

SIM 232 SIM by Design 3 (33/0)
By using principles of instructional design and high fidelity simulation standards, students will develop, pilot, revise, and implement new simulation scenarios. These scenarios will be employed in the students' practicum site and be evaluated using a 360 degree feedback process. Prerequisite: SIM 221 and SIM 222 or Instructor permission. Corequisite: SIM 295

SIM 235 Principles of Debriefing 4 (44/0)
Briefing and debriefing practices are key to effective healthcare simulation practice. This course will prepare participants to apply essential principles of briefing and debriefing in the simulation environment. Students enrolled in this course should have experience working with medical simulation and access to medical simulation equipment. Student must pass this course with a minimum 2.0 grade in order to be applied to degree completion. (Su)

SIM 245 Basic Simulation Operations 2 (0/44)
By engaging in hands-on training, students will learn to prepare, rehearse, and implement simulated training scenarios. This course also addresses preventative maintenance and basic maintenance for high fidelity and low fidelity patient simulators and task trainers. Student must pass this course with a minimum 2.0 grade in order to be applied to degree completion. Corequisite: SIM 110 and SIM 140. (F, W, Sp)

SIM 295 Practicum in Community Simulation 1 (0/0/33)
In this capstone course, students work on simulation projects in a healthcare setting, under the direct supervision of a healthcare professional, to practice the application of learned medical simulation theory and lab skills. Prerequisite: SIM 221 and SIM 222 or Instructor permission..Corequisite: SIM 297 and SIM 232 or Instructor permission.. (F, W, Sp Su)

SIM 297 SIM Seminar 1 (11/0)
This class enhances students' abilities and work-based learning at the practicum site. Students will review important topics by applying the concepts acquired in the clinical and community areas. Students will share information, procedures and experiences in different medical settings with other students. Prerequisite: SIM 221 and SIM 222 or Instructor permission.. Corequisite: SIM 232 and SIM 295

Sociology

SOC& 101 Intro to Sociology 5 (55/0)
Sociology is the scientific study of human groups and their social systems. Sociologists study how groups are organized and structured, their character and interaction, how groups change, and their impact on individuals. The course focuses on applying the "sociological imagination" which in turn helps students understand and appreciate different societies and cultures both contemporary and historical. Prerequisites: There are no prerequisites. Strongly recommended placement in MATH 098 or higher and placement in English 099 of higher SS (F, W, Sp, Su)

SOC& 201 Social Problems 5 (55/0)
A sociological analysis of the major social problems facing both the United States and the world today. Among the topics analyzed are: Family and disorganization, social deviance, poverty, crime, over population, and environmental degradation. Strongly recommend placement in Math 098 or higher and placement in ENGL 099 or higher. SS (F, Sp)

SOC 204 Gender and Power 5 (55/0)
This course is an introduction to the discipline of Women's Studies, surveying numerous academic areas and exploring concepts basic to the field. Students will critically examine the social understandings of gender, and the powerful role it plays in American culture. Areas of consideration will include the role of gender in education, labor, economics, and privacy issues. Prerequisite: ENGL& 101 completion recommended SS

SOC 220 Marriage and the Family 5 (55/0)
A sociological inquiry into the American institution of marriage and family life. The course includes an analysis of dating, the single life, sexuality, marriage, parenthood, communication, divorce, and many other topics relevant to marriage, mating, and family life today. Strongly recommend placement in Math 098 or higher and placement in ENGL 099 or higher. SS

Social Work

SOCW 110 Introduction to Social Work 5 (55/0)
This course is a general introduction to the history of social work, the issues social workers encounter, the systems in which social workers work, the theories and practices social workers utilize, as well as the services they provide across the varying field of practice.

Unmanned Systems

UMS 101 Introduction to Unmanned Systems (UMS) 5 (44/22)
This course will introduce students to the world of unmanned systems, including air, ground, maritime, and space-based platforms. Unmanned systems interoperability, propulsion, communications, sensors, and autonomous systems will be addressed, along with various types of unmanned system simulator operations

UMS 107 Commercial UAS Remote Pilot (Part 107) 2 (16.5/11)
Students will receive an in-depth introduction to FAA Part 107 rules and regulations, associated theory, procedures, requirements and operating concepts, as well as actual hands-on flight training in the BBCC enclosed UAS Flight Lab, with an emphasis on safety of flight. This course provides students with the knowledge base required to effectively prepare for FAA Part 107 Commercial Unmanned Aircraft System (UAS) Remote Pilot certification. Note: The Part 107 UAS Remote Pilot testing fee is not included in the tuition for this course. (F. Sp)

UMS 112 Unmanned Aerial Systems (UAS) Ground School I 5 (44/22)
This unmanned aerial system (UAS) ground school course addresses UAS performance, principles of flight/aerodynamics, power plants and systems, the National Airspace System, navigation, weather, rules and regulations, incident reporting procedures, communications procedures, advisory circulars, operating limitations, aeronautical decision making and judgment, documentation/logbook requirements, runaway UAS/emergency flight procedures, and preflight planning/flight approval processes. Prerequisite: MAP 119 (Applied Mathematics for Workforce Programs) or Instructor Permission. (F)

UMS 142 Unmanned Aerial Systems (UAS) Flight Lab 6 (11/110)
This course provides students with extensive hands-on flight experience of both rotary wing and fixed wing UAS. Focus in on safety of flight, preflight/post-flight inspection, pilot-in-command (PIC) and observer communications requirements, flight control techniques, precision flight maneuvers, runaway/emergency flight procedures, and execution of flight profiles for successful sensor/data collection Prerequisite: Any UMS Course or Instructor Permission.(Sp)

UMS 208 Unmanned Aerial Systems (UAS) Mission Planning 5 (33/44)
Using mission planning software, students will plan a variety of UAS missions in support of simulated operations. This will include (but not limited to) operations in support of agriculture, real estate marketing, search and rescue (SAR), law enforcement, construction, avalanche control, natural disaster response, power line and transportation infrastructure inspection.(W)

UMS 210 Unmanned Aerial Systems (UAS) Laws & Policies 5 (55/0)
This course addresses local, state and federal unmanned aerial system (UAS) laws, regulations, policy statements, orders and guidance, as well as civil rights, liberties, ethics, and aircraft/pilot certification. (W)

UMS 220 Beyond Line of Sight (BLOS) Operations 3 (33/0)
This course addresses the challenges of command and control, communications, autopilot, navigation, and aviation safety in successfully performing beyond line of sight (BLOS) unmanned aerial systems (UAS) operations. Prerequisite: Completion of UMS 101 or instructor permission.

UMS 295 Independent Project 2-5 (6/33-99)
UMS 295 is an independent study course for students to research, design and complete an unmanned systems related project. Projects must be approved and supervised by a faculty member. Prerequisite: Instructor permission. Prerequisite: Instructor Permission.

Welding

WLD 101 Oxy-Acetylene Welding for Auto Mechanics 2 (11/22)
Fundamentals of oxy-acetylene welding and cutting. Lessons include carbon-steel welding and brazing, aluminum and cast-iron welding and cast-iron welding and oxy-acetylene, plasma arc cutting. Practical knowledge of safety in the use and handling of equipment and compressed gases will be stressed throughout the quarter. Prerequisite: Enrollment in automotive technology program. (W)

WLD 102 ARC/GMAW Welding for Automotive Technicians 2 (11/22)
This course covers the fundamentals of the GMAW process for welding carbon steel, stainless steel and aluminum. Using these materials, the student will learn to run stringer beads, butt, lap and 'T' joints, in all positions with various modes of metal deposition and using different gasses. Prerequisite: Enrollment in automotive technology program. (W)

WLD 103 Beginning AMT Welding 2 (11/22)**
Fundamentals of oxy-acetylene welding with carbon steel and aluminum, as well as brazing and braze welding with carbon steel; soldering with stainless steel, and carbon steel; Gas Tungsten Arc Welding (GTAW) with aluminum, stainless steel, and carbon steel. Practical knowledge of safety in the use and handling of the equipment and compressed gases will be stressed throughout the quarter. This course is FAA approved under 14 CFR Part 147. Prerequisite(s): Enrollment in AMT 151 or AMT 152. (W)

WLD 110 Welding Theory I 5 (55/0)
General introduction to industrial welding and cutting. Safety rules of oxy-fuel, electric and other welding processes, principles, and electrodes.(F)

WLD 111 Welding Process I* 3-6 (0/66-132)
An introduction to the Shielded Metal Arc Welding process. Students will perform beads, fillets and Plate tests in all position with E6010 and E7018 Electrodes. Students must complete all 6 credits of WLD 111 prior to enrolling in WLD 121. (F, W, Sp, Su)

WLD 112 Thermal Cutting and Welding* 3 (0/66)
Various techniques of steel cutting with oxy-fuel, air carbon arc, plasma arc processes and oxy-acetylene welding and brazing with various metals. (F, W, Sp, Su)

WLD 120 Welding Theory II 5 (55/0)
Fundamentals of G.M.A.W. and F.C.A.W. processes with their related equipment. Basics of electrical theory and welding machines. Shielding gasses, filler materials, and general welding procedures including carbon steel, stainless steel, and aluminum. Prerequisite: WLD 110 or instructors permission

WLD 121 Welding Process II* 3-6 (0/66-132)
An introduction to welding open root joints. Students use E6010 to complete open root corner joints out of position and open root plate tests out of position. Students must complete all 6 credits of WLD 121 prior to enrolling in WLD 131. Prerequisite: 6 credits of WLD 111. (F, W, Sp, Su)

WLD 122 Gas Metal Arc Welding I 3 (0/66)
Students will learn to apply the Gas Metal Arc Welding (MIG) process on steel in all positions using the short circuit transfer mode and the spray transfer mode in the flat and horizontal positions. Prerequisite: WLD 112. (F, W, Sp, Su)

WLD 130 Welding Theory III 5 (55/0)
Basic welding blueprint reading and interpretations of conventional drafting, symbology, and specialized welding symbols: basic lines and views, dimensions, welding symbols, abbreviations, pipe welding symbols, NDT symbols and ISO welding symbols. Prerequisite: WLD 120 or Instructors permission

WLD 131 Welding Process III* 3-6 (0/66-132)
Using E-7018 electrodes, students weld corner joints, groove plates in all positions and ASME and WABO performance certification tests. Students must complete all 6 credits of WLD 131 prior to enrolling in more advanced welding classes. Prerequisite: 6 credits of WLD 121. (F, W, Sp, Su)

WLD 132 Gas Tungsten Arc Welding I (T.I.G.)* 3 (0/66)
Students will learn to apply the Gas Tungstenl Arc Welding (TIG) process on steel and aluminum. short circuit transfer mode . Prerequisite: WLD 122. (F, W, Sp, Su)

WLD 151 Technical Drawings Interpretation 3 (22/22)
Basic technical drawings interpretation skills for welding engineering to develop abilities in reading and understanding technical drawings; emphasis on visualization and sketching of multi-view, isometric, schematic, and pictorial drawings. CTE Dual Credit available. Prerequisite: MAP 101 or instructors permission.

WLD 152 Welding Layout I 3 (22/22)
Specialized weldment drafting techniques; intersections and developments, patterns for geometric shapes used in cardboard, sheet metal and structural shapes: fabrication and model construction. Prerequisite: WLD 151 or instructors permission.

WLD 153 Welding Layout II 3 (22/22)
Basic technical pipe drawing interpretations and developments. Patterns for geometric shape used in pipe component fabrication and model construction. Prerequisite: WLD 152 or instructors permission.

WLD 190, 290 Skill Improvement 2-6 (0/44-132)
Extra welding time and instruction to enhance student's welding skills and/or update their qualifications for testing. This is an open enrollment course offered throughout each quarter. (May be repeated for credit; graded on pass-fail basis.) Prerequisite: Instructor permission. (F, W, Sp, Su)

WLD 205 Weld Testing Methods 4 (33/22)
Upon successful completion of the course the student will understand the various methods used to test welds. Students will be capable of applying a variety of destructive tests to asses the soundness, ductility, and strength of various weldments. Students will also have a working knowledge of the common methods used in industry to non-destructively examine weldments for acceptability.
Prerequisite: WLD 130 or instructors permission.

WLD 206 Welding Codes and Standards 4 (33/22)
Upon successful completion of the course the student will be able to follow codes to interpret their workmanship. Use procedure qualifications and performance qualifications. Use DT and NDT methods to inspect the students own weldments. Use visual inspection of welded structures. Prerequisite: WLD 205 or instructors permission.

WLD 207 Welding Metallurgy 4 (33/22)
An introduction to metallurgy. Ferrous and nonferrous metals, alloys and their groupings will be covered. Prerequisite: WLD 206 or instructors permission

WLD 212 Gas Metal Arc Welding II* 3 (0/66)
Students will learn to apply both types of Flux core arc welding process on steel and perform Gas Metal Arc Welding on aluminum and stainless steel. Prerequisite: WLD 132. (F, W, Sp, Su)

WLD 241 Structural Weld Process I 6 (0/132)
This course focuses on student learning of structural connection mockups applying the Shielded Metal Arc and Flux Cored Arc Welding processes. Prerequisite: WLD 131 or instructor permission. (F, W, Sp, Su)

WLD 242 Structural Welding I 3 (0/66)
An introductory course focusing on fabrication of structural weldments utilizing shielded metal arc welding and flux cored arc welding on structural connections. Prerequisite: WLD 212. (F, W, Sp, Su)

WLD 243 Structural Weld Process II 6 (0/132)
A structural welding course focusing on student application of Shielded Metal and Flux Cored Arc Welding processes on large outdoor structural weldments in accordance with drawings. Prerequisite: WLD 241 or instructor permission. (F, W, Sp, Su)

WLD 244 Submerged Arc Welding 3 (0/66)
This course focuses on student learning of submerged arc welding process which entails an arc that takes place beneath a bed of granular flux. This is a high deposition industrial orientated welding process that is used to manufacture light to heavy weldments. Prerequisite: WLD 242 or instructor permission (F, W, Sp, Su)

WLD 245 Structural Weld Process III 6 (0/132)
A structural welding course focusing on student application of Shielded Metal and Flux Cored Arc Welding processes on tubular structural weldments in accordance with drawings. Prerequisite: WLD 243 and WLD 152 or instructor permission. (F, W, Sp, Su)

WLD 261 Production Weld Process I 6 (0/132)
An introductory course focusing on student learning of production welding techniques by applying the Gas Metal Arc, Flux Cored Arc, and Gas Tungsten Arc Welding processes. Prerequisite: WLD 131 or instructor permission. (F, W, Sp, Su)

WLD 262 Production Welding I 3 (0/66)
This course focuses on student learning of production welding within a shop setting. Prerequisite: WLD 212 or instructors permission. (F, W, Sp, Su)

WLD 263 Production Weld II 6 (0/132)
An intermediate course that focuses on student learning of production welding techniques by applying the Gas Metal Arc, Flux Cored Arc, and Gas Tungsten Arc Welding processes on large parts in accordance with drawings. Prerequisite: WLD 261 or instructor permission (F, W, Sp, Su)

WLD 264 Advanced Weld Process 3 (0/66)
An advanced course focusing on student learning of welding processes such as pulsed gas metal arc, pulsed gas tungsten arc, and welding on advanced materials i.e., titanium and inconel. Prerequisite: WLD 262 or instructors permission.(F, W, Sp, Su)

WLD 265 Production Welding Process III 6 (0/132)
An advanced production welding course focusing on application of Gas Metal Arc, Flux Cored Arc, and Gas Tungsten Arc Welding processes on small parts in accordance with drawings. Parts will be welded in student manufactured fixtures. Prerequisite: WLD 263 or instructor permission (F, W, Sp, Su)

WLD 281 Pipe Welding I * 3-6 (0/66-132)
Students will be introduced to pipe welding in the 1G, 2G, 5G, and 6G positions using E-6010 electrodes with schedule 60, 80, 100, 120 and various size pipes. May be repeated for credit up to six credits. Prerequisite: WLD 131. (F, W, Sp, Su)

WLD 282 Gas Tungsten Arc Welding II (TIG)* 3 (0/66)
This course introduces students to carbon steel pipe welding in the 1G, 2G, 5G, and 6G positions using cup walk methods with 1/8" electrodes on various sizes of pipes. Prerequisite: WLD 212 or instructors permission. (F, W, Sp, Su)

WLD 283 Pipe Welding II 3-6 (0/33-132)
Students will enhance carbon steel pipe welding in 1G, 2G, 5G, and 6G positions using E-6010 and E-7018 electrodes with schedule 60, 80, 100 and 120 pipes and various other sizes of pipes. May be repeated for credit up to six credits. Prerequisite: WLD 281. (F, W, Sp, Su)

WLD 284 Gas Tungsten Arc Welding III (T.I.G.)* 3 (0/66)
Students will gain advanced skills on carbon steel pipe in the 2G, 5G, 6G positions, carbon steel pipe with stainless steel rods, and stainless steel pipe in the 2G, 5G, and 6G positions. Prerequisite: WLD 282 or instructors permission. (F, W, Sp, Su)

WLD 285 Pipe Welding III +3-6 (0/33-132)
This course focuses on pipe welding 1G, 2G, 5G, and 6G positions using E-6010 and E-7018 rods and a combination of G.T.A.W. and S.M.A.W. process with schedule 40, 60, 80, 100, 120, and various other sizes of pipes. Prerequisite: WLD 283. (F, W, Sp, Su)

WLD 295 Work Based Learning 1-6 (0/0/33-198)
A supervised work experience in the welding technology field to enhance the application of classroom instruction and skills and/or area of specialization approved by the program instructor. May be repeated up to twelve (12) credits. WLD Instructor permission and concurrent enrollment in WLD 297. (F, W, Sp)

WLD 297 Work Based Learning Seminar 1 (11/0)
Feedback and discussion to integrate and relate Work Based Learning and classroom based instruction. Work ethic, leadership, safety and occupational health, environmental issues, and other student generated topics are examined. May be repeated up to six (6) credits. Corequisite: WLD 295 . (F, W. Sp)

WABO TESTING 0

Washington Association of Building Officials (WABO) testing is available. Contact the welding department at 762.6252 for more information.

*Flexibility is maintained to allow students to advance at their own learning rates; additional laboratory time is available through enrollment in WLD 190 or WLD 290.

**Approved by the FAA

Workforce Education

WKED 101 Professional Preparation - Occupation Specific I 1 (7/11)

An introduction to work related and job search components specific to each occupation (or similar) including direct contact with peers, advisors, mentors, employers, and others directly related to the industry.

WKED 102 Professional Preparation - Occupation Specific II 1 (7/11)

A continued exploration of work-related components specific to each occupation/industry (or similar) including direct contact with peers, advisors, mentors, employers, and others directly related to the industry. Creation of a job search portfolio. The job shadow is a required element for this course Prerequisite: WKED 101 or instructor permission

WKED 103 Professional Preparation - Occupation Specific III 1 (7/11)

Continued contact with peers, advisors, mentors, employers, and others directly related to the industry. This course covers job preparation components in which emphasis is given to job search and interviewing techniques. The mock interview is a required element of this course. Prerequisite: WKED 102 or instructor permission

WKED 110 Mission Critical Operations Management I 3 (33/0)

Introduction to the technical operations management of systems, facilities, equipment, and processes critical to the production of goods and services. Students may explore this topic within a related industry of their choice.

WKED 111 Mission Critical Operations Management II 4 (33/22)

Exploration and practical application of technical systems management and the related data required to maintain operationally sound facilities, equipment, and processes critical to the production of goods and services. Students may explore this topic within a related industry of their choice. Prerequisite: Computer Science students are strongly encouraged to take WKED 110 prior to taking this course.

World Languages

ASL& 121 Am Sign Language I 5 (55/0)

Basic manual communication skills, including the American manual alphabet—approximately 550 basic signs developing minimum vocabulary and skills for communicating with severely hearing impaired individuals who are dependent of this form of communication; incorporation of body language and facial expression into the use of the sign language; and development of an understanding of the conceptual aspects of the language. This course is not meant to prepare students as interpreters for the deaf. HU

ASL& 122 Am Sign Language II 5 (55/0)

Conversational manual communication and implementation of basic vocabulary, introduction of broader vocabulary and development of conversational skills; vocabulary is presented and practice given. This course is not meant to prepare students as interpreters for the deaf. Prerequisite: ASL& 121 or demonstrated competency HU

ASL& 123 Am Sign Language III 5 (55/0)

Introduction to meta-and para-language areas of manual communication to more esoteric ideographic signs reflecting usage among different regional dialects. Difficulties of communication with more severely language-deprived individuals are discussed. Understanding of deaf culture explored and developed. This course is not meant to prepare students as interpreters for the deaf. Prerequisite: ASL& 122 or demonstrated competency HU

FRCH& 121 French I 5 (55/0)

Beginning French language and culture taught using a communicative approach. Through the use of drama and themes, this course focuses on listening, speaking, reading and writing skills and the culture of the French-speaking world. HU (F, W, Sp)

FRCH& 122 French II 5 (55/0)

Beginning French language and culture taught using a communicative approach. Through the use of drama and themes, this course focuses on listening, speaking, reading and writing skills and the culture of the French-speaking world. Prerequisite: FRCH& 121 HU (F, W, Sp)

FRCH& 123 French III 5 (55/0)

Beginning French language and culture taught using a communicative approach. Through the use of drama and themes, this course focuses on listening, speaking, reading and writing skills and the culture of the French-speaking world. Prerequisite: FRCH& 122 HU (F, W, Sp)

GERM& 121 German I 5 (55/0)
Beginning German language and culture taught using a communicative approach. Through the use of drama and themes, this course focuses on listening, speaking, reading and writing skills and the culture of the German-speaking world. HU (F, W, Sp)

GERM& 122 German II 5 (55/0)
Beginning German language and culture taught using a communicative approach. Through the use of drama and themes, this course focuses on listening, speaking, reading and writing skills and the culture of the German-speaking world. Prerequisite: GERM& 121 HU (F, W, Sp)

GERM& 123 German III 5 (55/0)
Beginning German language and culture taught using a communicative approach. Through the use of drama and themes, this course focuses on listening, speaking, reading and writing skills and the culture of the German-speaking world. Prerequisite: GERM& 122 HU (F, W, Sp)

SPAN& 121 Spanish I 5 (55/0)
Beginning Spanish language and culture taught using a communicative approach. Through the use of drama and themes, this course focuses on listening, speaking, reading and writing skills and the culture of the Spanish-speaking world. HU (F, W, Sp)

SPAN& 122 Spanish II 5 (55/0)
Beginning Spanish language and culture taught using a communicative approach. Through the use of drama and themes, this course focuses on listening, speaking, reading and writing skills and the culture of the Spanish-speaking world. Prerequisite: SPAN& 121 HU (F, W, Sp)

SPAN& 123 Spanish III 5 (55/0)
Beginning Spanish language and culture taught using a communicative approach. Through the use of drama and themes, this course focuses on listening, speaking, reading and writing skills and the culture of the Spanish-speaking world. Prerequisite: SPAN& 122 HU (F, W, Sp)

SPAN 211, 212, 213 Spanish for Spanish Speakers I, II, III 5 (55/0)
Written and oral communication skills are developed further, focusing on the specific needs of native speakers educated in the U.S. Cultural awareness is broadened through the study of other Spanish-speaking countries and literature. Prerequisite: SPAN 211 for 212; SPAN 212 for 213; or departmental placement HU

SPAN& 221, 222, 223 Spanish IV, V, VI 5 (55/0)
Intermediate study of the language and culture of the Spanish-Speaking world. Further development of oral and written skills taught in first year Spanish plus an introduction to literature. Prerequisite: SPAN& 123 for 221; 221 for 222; 222 for 223; or departmental placement HU

Accounting	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
ACCT 105 Intro to Accounting	5		DAY	DAY	530-635		DAY	DAY	530-635	
ACCT& 201 Principles of Accounting I	5		2 sections: DAY OL	DAY			2 sections: DAY OL	DAY		
ACCT& 202 Principles of Accounting II	5			2 sections: DAY OL	DAY			2 sections: DAY OL	DAY	
ACCT& 203 Principles of Accounting III	5	OL			DAY	OL			DAY	OL
ACCT 233 Intro to Payroll Taxes	2				DAY				DAY	
ACCT 260 Computer Accounting	3				DAY				DAY	
ACCT 262 Introduction QuickBooks®	2		DAY				DAY			

Agriculture	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
AGR 101 Orientation to Agricultural Industries & Careers	2		DAY				DAY			
AGR 110 Water Management in Agriculture	3			DAY					DAY	
AGR 120 Intro to Precision Agriculture	5		DAY				DAY			
AGR 211 Agriculture Weeds Identification and Control	5				DAY				DAY	
AGR 212 Ag Safety and Pesticides	5				DAY			DAY		
AGR 241 Farm and Ranch Management	5		DAY				DAY			
AGR 251 Integrated Pest Management	5				DAY				DAY	
AGR 261 Plant Science	5		DAY				DAY			
AGR 263 Soils	5			DAY				DAY		
AGR 265 Crop Production	5		DAY				DAY			
AGR 271 Agriculture Sales and Marketing	5				OL				DAY	
AGR 272 Food Sustainability and Safety	5			DAY				DAY		
AGR 295 Work-based Learning (Internship)	1-6	ARR				ARR				ARR
AGR 297 Work-based Learning Seminar	1	ARR				ARR				ARR

Anthropology	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
ANTH& 100 Survey of Anthropology SS	5		X	X	X		X	X	X	

Art	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
ART& 100 Art Appreciation HU	5	X	X	X	X	X	X	X	X	X
ART 101 Design I HP	5		X				X			
ART 102 Design II HP	5			X				X		
ART 103 Design III HP	5				X				X	
ART 104 Drawing I HP	5		X		X		X		X	
ART 105 Drawing II HP	5			X				X		
ART 106 Drawing III HP	5									
ART 121 Ceramics I HP	2-5		X	X	X		X	X	X	
ART 122 Ceramics II HP	2-5		X	X	X		X	X	X	
ART 123 Ceramics III HP	2-5		X	X	X		X	X	X	
ART 140 Introduction to Digital Art HP	5			X	X			X	X	
ART 198 Special Projects HP	1-5									
ART 212 American Art HU	5									
ART 216 Prehistoric-Medieval Art History HU	5				X				X	
ART 217 Renaissance –Mid-nineteenth Century HU	5			X				X		
ART 218 Western Art: Impressionism to Art after 1945 HU	5		X				X			
ART 221 Watercolor I HP	1-5	X			X	X			X	X
ART 222 Watercolor II HP	1-5	X			X	X			X	X
ART 223 Watercolor III HP	1-5	X			X	X			X	X
ART 230 Painting/Drawing Workshop HP	5									
ART 231 Oil Painting I HP	5		X	X	X		X	X	X	
ART 232 Oil Painting II HP	5		X	X	X		X	X	X	
ART 233 Oil Painting III HP	5		X	X	X		X	X	X	

Astronomy	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
ASTR& 100 Survey of Astronomy NS	5									
ASTR& 101 Intro to Astronomy LS	5		X		X		X		X	
ASTR 105 Observational Astronomy SE	3									

Automoive Technology	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
AUT 069 Chassis Component Repair	2									
AUT 081 Mechanical Diagnosis & Repair	2									
AUT 105 Automotive Personal Computer Applications	2				Day				Day	
AUT 111 Automotive Engine Service	9				Day				Day	
AUT 115 Automotive Shop Safety & Environmental Issues	1		Day	ARR	ARR		Day	ARR	ARR	
AUT 121 Automotive Electrical & Electronic Systems	15			Day				Day		
AUT 124 Brake System Service	9		Day				Day			
AUT 125 suspension, Steering, & Alignment	9		Day				Day			
AUT 131 Manual Drive Train & Axles	8				Day				Day	
AUT 132 Hydraulic Systems	3			Day				Day		
AUT 190 Skills Laboratory I	2		EVE	EVE	EVE		EVE	EVE	EVE	
AUT 211 Automobile Convenience Systems	2				Day				Day	
AUT 212 Automatic Transmission Repair	9			Day				Day		
AUT 213 Automotive Services I	6			Day				Day		
AUT 220 Engine Performance	18		Day				Day			
AUT 223 Automotive Servicing II	6				Day				Day	
AUT 231 Automotive Heating & AC	6				Day				Day	
AUT 290 Skills Laboratory II	2		EVE	EVE	EVE		EVE	EVE	EVE	
AUT 295 Workbased Learning *available with instructor/advisor approval	1-6									
AUT 297 Workbased Learning Seminar *available with instructor/advisor approval	1									
MAP 101 Applied Math (AUT/WLD)			Day				Day			

Aviation Maintenance Technology	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
AMT 148 General Electricity	2-7		DAY	DAY			DAY	DAY		
AMT 149 Airframe Electricity	3		DAY	DAY	DAY		DAY	DAY	DAY	
AMT 150 General	4-16		DAY	DAY			DAY	DAY		
AMT 151 Airframe Mechanic I	4-22	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
AMT 152 Airframe Mechanic II	4-21	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
AMT 153 Airframe Mechanic III	4-24	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
AMT 249 Powerplant Electricity	2	DAY	DAY	DAY			DAY	DAY		
AMT 251 Powerplant Mechanic I	4-16	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
AMT 252 Powerplant Mechanic II	4-14	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
AMT 253 Powerplant Mechanic III	4-16	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
AMT 254 Powerplant Mechanic IV	4-16	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
MAP 100 Applied Math (AMT)	2		DAY				DAY			

Avionics	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
AVIO 100 Aircraft Electrical Fundamentals	8									
AVIO& 102 Aircraft Electronic Fundamentals	8									
AVIO& 103 Aircraft Wiring Systems	2									

Biology		Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
BIOL& 100 Survey of Biology	**LS**	5	x	x	x	x	x	x	x	x	x
BIOL 104 Core Concepts in Biology	**SE**	5									
BIOL& 160 General Biology with Lab * required for Nursing DTA	**LS**	5		x	x	x		x	x	x	
BIOL& 170 Human Biology	**NS**	5		x	x	x		x	x	x	
BIOL& 221 Majors Ecology/Evolution * required for AS-T 1: BIOL Pre-major	**LS**	5		x				x			
BIOL& 222 Majors Cell/Molecular * required for AS-T 1: BIOL Pre-major	**LS**	5			x				x		
BIOL& 223 Majors Organismal Phys * required for AS-T 1: BIOL Pre-major	**LS**	2-5				x				x	
BIOL& 241 Human A & P 1 * required for Nursing DTA	**LS**	2-5		x	x			x	x		
BIOL& 242 Human A & P 2 * required for Nursing DTA	**LS**	2-5			x	x			x	x	
BIOL& 260 Microbiology * required for Nursing DTA	**LS**	5		x		x		x		x	

Botany		Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
BOT 130 Botany	**LS**	5			x				x		
BOT 140 Field Botany	**LS**	5				x				x	

Business	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
BUS& 101 Introduction to Business	5	OL	DAY	DAY	DAY	OL	DAY	DAY	DAY	OL
BUS 102 Business Mathematics	5		DAY		DAY		DAY		DAY	
BUS 120 Human Relations on the Job	4		2 sections: DAY OL	2 sections: DAY OL	DAY		2 sections: DAY OL	2 sections: DAY OL	DAY	
BUS 161 Business calculators	2			DAY				DAY		
BUS 170 Consumer Finance	5				DAY				DAY	
BUS& 201 Business Law	5		DAY	DAY	DAY		DAY	DAY	DAY	
BUS 295 Work-based Learning *available all quarters with instructor/advisor approval	1-6									
BUS 297 Work-based Learning Seminar *available all quarters with instructor/advisor approval	1									

Business Information Management	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
BIM 101 Basic Keyboarding	1-2	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 102 Document Formatting	1-4	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 103 The Administrative Professional	2		DAY	DAY			DAY	DAY		
BIM 104 Intermediate Keyboarding	1-3	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 106 Advanced Keyboarding	1-3	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 109 Internet Communications	1-3	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 110 Microsoft Office Essentials	3		DAY	DAY	DAY		DAY	DAY	DAY	
BIM 112 Proof & Edit	1-3		DAY	DAY	DAY		DAY	DAY	DAY	
BIM 113 The Medical Office	5			EVE				EVE		
BIM 117 Medical Office Accounts Receivable	4				EVE				EVE	
BIM 130 Filing	1-2		DAY	DAY	DAY		DAY	DAY	DAY	
BIM 173 Word Processing I	1-5		DAY	DAY	DAY		DAY	DAY	DAY	
BIM 177 BIM Lab *arranged with instructor permission only	1-6									
BIM 180 Introduction to Microsoft Office	1-5	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 181 Introduction to Microsoft Word	1-3	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 182 Introduction to Microsoft Excel	1-3	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 183 Introduction to Microsoft Access	1-3		DAY	DAY	DAY		DAY	DAY	DAY	
BIM 184 Introduction to Microsoft PowerPoint	1-3		DAY	DAY	DAY		DAY	DAY	DAY	
BIM 190 Spreadsheets I	1-5		DAY	DAY	DAY		DAY	DAY	DAY	
BIM 198 Special Topics *arranged with instructor permission only	1-5									
BIM 210 Internet	1-2	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY

Business Information Management-continued	Credits	Sum-mer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
BIM 262 Professional Preparation	3				DAY				DAY	
BIM 280 Advanced Microsoft Office	1-5	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 285 Microsoft Office Specialist Prep & Certification	1-5	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BUS 114 Business Ethics	5				DAY				DAY	
BUS 121 Business English	5			DAY	DAY			DAY	DAY	
BUS 122 Business Communications	5		OL		DAY				DAY	
BUS 200 Supervision	5			DAY				DAY		
BUS 215 Customer Service	3	OL	DAY			OL	DAY			

Chemistry	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
CHEM& 105 Chemical Concepts NS	5	X	X	X	X	X	X	X	X	X
CHEM& 110 Chemical Concepts w/Lab LS	5		X	X	X		X	X	X	
CHEM& 121 Intro to Chemistry LS * required for Nursing DTA	5	X	X	X	X	X	X	X	X	X
CHEM& 131 Intro to Organic/Biochem LS * required for BSN	5			X	X			X	X	
CHEM& 161 General Chem w/Lab I LS * required for AS-T 1: Chemistry Pre-major	5		X				X			
CHEM& 162 General Chem w/Lab II LS * required for AS-T 1: Chemistry Pre-major	5			X				X		
CHEM& 163 General Chem w/Lab III LS * required for AS-T 1: Chemistry Pre-major	5				X				X	

College Success Skills	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
CSS 100	3	X	X	X	X	X	X	X	X	X
CSS 102	3			X	X			X	X	
CSS 105	3		X		X		X		X	
CSS 106	2	X	X	X	X	X	X	X	X	x

Commercial Driver's Licensing	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
CDL 100 Commercial Driver's License *Class is 5 weeks scheduled throughout the year.	17	Day	Day	Day	Day	Day	Day	Day	Day	Day

Commercial Pilot	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
AVF 111 Pre-Flight Ground School	1		Day							
AVF 112 Private Pilot Ground School	5		Day							
AVF 113 Meteorology	5			Day						
AVF 114 Theory Of Flight	5				Day					
AVF 117 Aviation Emergency Preparedness & Response	1			Day				Day		
AVF 141 Private Pilot Flight (Stage 1)	4		ARR							
AVF 142 Private Pilot Flight (Stage 2)	4			ARR						
AVF 143 Private Pilot Flight (Stage 3)	4				ARR					
AVF 190, 290 Flight (Alternate)	0-4	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 213 Advanced Meteorology (not currently offered)	5									
AVF 221 Commercial Pilot Ground School	5							Day		
AVF 223 Instrument Ground School	5						Day			
AVF 225 Effective Communication in Flight Instruction	5								Day	
AVF 227 Aircraft Systems for Pilots (not currently offered)	5									
AVF 251 Commercial Pilot Flight (Stage 4)	4						ARR			
AVF 252 Commercial Pilot Flight (Stage 5)	4							ARR		
AVF 253 Commercial Pilot Flight (Stage 7)	4								ARR	
AVF 254 Night Flying	1		ARR	ARR	ARR		ARR	ARR	ARR	
AVF 261 Instrument Flight (Stage 6)	4								ARR	
AVF 270 Flight Instructor	4									ARR
AVF 271 Flight Instructor Instrument-Airplane	2	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR

Commercial Pilot - Continued	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
AVF 272 Seaplane Flight	2	ARR	ARR		ARR	ARR	ARR		ARR	ARR
AVF 275 Multi-Engine Flight	2	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 276 Simulator Training/Instrument Training	0.5-1	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 291 Multi-Engine Instructor	2	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 292 ATP Multi-Engine	1	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 295 Work-based Learning	1-6	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 297 Work-based Learning Seminar	1	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR

Communications	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
CMST 100 Human Communications	4		X	X			X	X		
CMST& 102 Introduction to Mass Communications HU	5		X	X	X		X	X	X	
CMST& 210 Interpersonal Communications HU	5	X	X	X	X	X	X	X	X	X
CMST& 220 Public Speaking HU	5	X	X	X	X	X	X	X	X	X
CMST 229 Advanced Public Speaking HU	5									
CMST 234 Small Group Discussion HU	3	X		X		X		X		X

Composites	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
CPT 120 Composite Fabrication	4									
CPT 125 Composite Assembly	4									
CPT 130 Composite Repair	4									
CPT 145 Special Projects	3									

Computer Science	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
CS 101 Intro to Computer Science (articulation only)	3									
CS 104 Intro to Computer Hardware	3		EVE	EVE			EVE	EVE		
CS 105 Intro to Computer Operating Systems	3		EVE	EVE			EVE	EVE		
CS 106 Intro to Virtualization	5		EVE				EVE			
CS 110 Networking Fundamentals	4		EVE	EVE			EVE	EVE		
CS 111 Intro to Programming	5		EVE		EVE		EVE		EVE	
CS 115 Intro to Database Design & Mgmt	5			EVE				EVE		
CS 120 A+ Certification Prep	1		EVE	EVE	EVE	EVE	EVE	EVE	EVE	EVE
CS 121 Network+ Certification Prep	1		EVE	EVE	EVE	EVE	EVE	EVE	EVE	EVE
CS& 131 Computer Science I: C++	5		EVE	EVE	EVE		EVE	EVE	EVE	
CS 132 Advanced Programming with C++	5		EVE	EVE	EVE		EVE	EVE	EVE	
CS& 141 Computer Science I: Java	5		EVE	EVE	EVE		EVE	EVE	EVE	
CS 142 Advanced Programming with Java	5		EVE	EVE	EVE		EVE	EVE	EVE	
CS 156 Cisco Networking: Intro to Networks	5									
CS 157 Cisco Networking: Routing & Switching Essentials	5	EVE	ARR							
CS 158 Cisco Networking: Scaling Networks	5		ARR	ARR						
CS 159 Cisco Networking: Connecting Networks	5		ARR	ARR	ARR					
CS 171 Cisco Networking: Intro to Networks	6				EVE	EVE			EVE	EVE
CS 172 Cisco Networking: Routing & Switching	6							EVE		
CS 173 Cisco Networking: Enterprise Networking	6								EVE	
CS 195 Internship: Work-based Learning *arranged with instructor permission	1-4		ARR	ARR	ARR		ARR	ARR	ARR	

Computer Science – continued	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
CS 197 Internship: Work-based learning Seminar *arranged with instructor permission	1		ARR	ARR	ARR		ARR	ARR	ARR	
CS 205 Windows Server Administration	5			EVE	EVE			EVE	EVE	
CS 206 Linux Server Administration	5	EVE			EVE	EVE			EVE	EVE
CS 207 Introduction to Security Administration	5			EVE				EVE		
CS 235 Data Structures & Algorithms	5		EVE	EVE	EVE		EVE	EVE	EVE	
CS 260 Computer Programming Topics	5		ARR	ARR	ARR		ARR	ARR	ARR	
CS 295 Internship: Work-based Learning II *Arranged with instructor permission	1-4		ARR	ARR	ARR		ARR	ARR	ARR	
CS 297 Internship: Work-based Learning Seminar II *arranged with instructor permission	1		ARR	ARR	ARR		ARR	ARR	ARR	
BUS 289 Project Management	5				EVE				EVE	

Criminal Justice	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
CJ& 101 Intro Criminal Justice	5	X	X	X	X	X	X	X	X	X
CJ& 105 Introduction to Corrections	5				X					
CJ& 106 Juvenile Justice	5			X						
CJ& 110 Criminal Law	5							X		
CJ 198 Special Topics *scheduled with instructor permission only	1-2									
CJ 203 Police Administration & Leadership	5									
CJ 209 Police Psychology	5									
CJ 210 Introduction to American Policing	5		X				X			
CJ 215 Criminal Investigations	5									
CJ 217 Advanced Report Writing	5				X				X	
CJ 295 Work-based Learning (CJ) *scheduled with instructor permission only	1-8									
CJ 295 Work-based Learning Seminar (CJ) *scheduled with instructor permission only	1									

ECED/EDUC Requirements:	**Credits**	**Summer 2020**	**Fall 2020**	**Winter 2021**	**Spring 2021**	**Summer 2021**	**Fall 2021**	**Winter 2022**	**Spring 2022**	**Summer 2022**
ECED& 105: Intro Early Child Ed *required for Initial, General, Infant Toddler, and State Certificates and AA in ECE	5		hybrid-evening	online	hybrid-evening		hybrid-evening	online	hybrid-evening	
ECED& 107: Health/Safety/Nutrition * required for Initial, General, Infant Toddler, and State Certificates and AA in ECE	5		online	hybrid-evening	online		online	hybrid-evening	online	
ECED& 120: Practicum (prerequisite: ECED& 105)* required for Initial, General, Infant Toddler, and State Certificates and AA in ECE **(students are required to complete 33 hours of child observation in an early learning environment)**	2		hybrid-evening	hybrid-evening	hybrid-evening		hybrid-evening	hybrid-evening	hybrid-evening	
ECED& 132: Infants/Toddlers Care *required for Infant Toddler Certificate and AA in ECE	3			online				online	online	
ECED& 134: Family Child Care *required for Family Child Care Certificate **only**	3					online				online
ECED& 138: Home Visitor/Family Engagement *required for Home Visitor Certificate **only**	3					online				online
ECED& 139: Administration of Early Learning Programs *required for Administration Certificate **only**	3					online				online
ECED& 160: Curriculum Development (concurrent enrollment in ECED& 190 required) *required for State Certificate and AA in ECE	5			hybrid-evening				hybrid-evening		
ECED& 170: Environments-Young Child *required for State Certificate and AA in ECE	3		hybrid-evening				hybrid-evening			
ECED& 180: Lang/Literacy Develop *required for State Certificate and AA in ECE	3				**online**				**online**	
ECED& 190: Observation/Assessment (concurrent enrollment in ECED& 160 required) *required for State Certificate and AA in ECE	3			online				online		
EDUC 106: Issues in Child Abuse *required for AA in ECE **(course can be substituted with Child Abuse training certificate)**	2				face to face-evening				face to face-evening	

ECED/EDUC Requirements - continued	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
EDUC& 115: Child Development *required for General, Infant Toddler, and State Certificates and AA in ECE This course is suggested for students who plan to transfer into an elementary or secondary education program at a 4-year institution.	5	**online**	online & hybrid-evening	**online & hybrid-day**	**online & face to face-days**	**online (two sections)**	online & hybrid-evening	**online & face to face-days**	**online & face to face-days**	**online (two sections)**
EDUC& 130: Guiding Behavior *required for General and State Certificates and AA in ECE This course is suggested for students who plan to transfer into an elementary or secondary education program at a 4-year institution.	3	**online**	online	online	online	**online**	online	online	online	**online**
EDUC& 136: School Age Care *required for School Age Care Certificate **only**	3	online				online				online
EDUC& 150: Child/Family/Community *required for State Certificate and AA in ECE This course is suggested for students who plan to transfer into an elementary or secondary education program at a 4-year institution.	3		online				online			
EDUC 190 : Classroom Experience (prerequisite: ECED& 120 or EDUC & 201) *required for AA in ECE **Students must pass either a WSP background check or DCYF background check, complete a Tuberculin skin test and obtain WEA liability insurance, prior to enrollment.** Students are required to complete 66 hours of volunteer work in an infant, toddler, preschool, or school-age environment. This course is also suggested for students who plan to transfer into an elementary or secondary education program at a 4-year institution.	3		hybrid-evening	hybrid-evening	hybrid-evening		hybrid-evening	hybrid-evening	hybrid-evening	
EDUC& 202: Intro to Education **(prerequisite: successful completion of ENGL 99 or placement in ENGL &101)** This course is suggested for students who plan to transfer into an elementary or secondary education program at a 4-year institution. It is **NOT** required for the AAS in ECE degree. **(Formerly EDUC& 201-3 credits)**	5		**online**	**face to face-day**			**online**	**face to face-day**		
EDUC& 204: Inclusion Education (formerly Exceptional Child) ***required for AA in ECE**	5				hybrid-evening				hybrid-evening	

Economics	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
ECON 200 Introduction to Economics	5		OL	OL	OL			OL	OL	
ECON& 201 Micro Economics	5		X OL	OL	X		X OL	OL	X	
ECON& 202 Macro Economics	5	OL		X OL	OL	OL		X OL	OL	OL

Engineering	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
ENGR 110 Intro to Science and Engineering	3		X	X			X	X		
ENGR& 111 Engineering Graphics I SE * elective for AS-T 2 MRP Mech/Civ/Aero/MatSci	5			X	X			X	X	
ENGR& 112 Engineering Graphics II SE * elective for AS-T 2 MRP Mech/Civ/Aero/MatSci	5			X	X			X	X	
ENGR 201 Material Science NS	5									
ENGR 202 Design of Logic Circuits SE * elective for AS-T 2 MRP Ele/Comp	6									
ENGR& 204 Electrical Circuits NS * required for AS-T 2 MRP Ele/Comp	5				X				X	
ENGR 205 Electrical Circuits Lab NS	2				X				X	
ENGR& 212 Engineering Graphics II SE	5									
ENGR& 214 Statics NS * required for AS-T 2 MRP Mech/Civ/Aero/MatSci	5									
ENGR& 215 Dynamics NS * required for AS-T 2 MRP Mech/Civ/Aero/MatSci	5									
ENGR& 224 Thermodynamics NS	5									
ENGR& 225 Mechanics of Materials NS * required for AS-T 2 MRP Mech/Civ/Aero/MatSci	5									
ENGR 240 Applied Numerical Methods NS * elective for AS-T 2 MRP	5			X				X		

English	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
ENGL 098 Basic English Skills	5	x	x	x	x	x	x	x	x	x
ENGL 098 English Skills	5		x	x	x	x	x	x	x	x
ENGL& 101 English Composition I BS * required in AA&S DTA	5	x	x	x	x	x	x	x	x	x
ENGL& 102 Composition II BS/HU	5	x	x	x	x	x	x	x	x	x
ENGL 105 Moral of the Story HU	5		x	x	x		x	x	x	
ENGL 109 Applied Technical Writing	3			x	x			x	x	
ENGL 198 Special Projects in EnglishHU	1-3									
ENGL 201 Advanced Academic Research Writing BS/SE	5									
ENGL 211 Creative Writing: Fiction HU	5		x		x		x		x	
ENGL 212 Creative Writing: Poetry HU	5									
ENGL 216 The Art of Film HU	5			x	x			x	x	
ENGL& 220 Intro to Shakespeare HU	5									
ENGL 221 Creative Writing II: Fiction HU	5									
ENGL 225 Chicanx Literature HU	5									
ENGL 234 Science Fiction as LiteratureHU	5			x				x		
ENGL& 235 Technical Writing BS/HU	5			x	x			x	x	
ENGL 239 The Mystery Story as Literature HU	5									
ENGL 240 World Literature HU	5									
ENGL 243 The American Novel HU	5									

English – continued	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
ENGL& 244 American Literature I HU	5									
ENGL& 245 American Literature II HU	5									
ENGL& 246 American Literature III HU	5			x				x		
ENGL& 256 World Literature III HU	5									
ENGL 261 Women's Literature HU	5			x				x		
ENGL 272 Graphic Novel as LiteratureHU	5									

Environmental Science	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
ENVS& 100 Survey of Environmental Science NS	5	x	x	x	x	x	x	x	x	x

Geology	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
GEOL& 101 Intro Physical Geology LS	5			x	x			x	x	

Health Education	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
HED 119 Medical Terminology	5		x	x	x		x	x	x	
HED 121 The Human Body & Disease I	5		x				x			
HED 122 The Human Body & Disease II	5			x				x		
HED 123 The Human Body & Disease III	5				x				x	
HED 160 Pharmacology for Allied Health	3				x				x	
HED 239 Medical Ethics	2		x	x			x	x		

History		Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
HIST 110 The American Experience	SS	5			X	X			X	X	
HIST& 116 Western Civilization I	SS	5						X			
HIST& 117 Western Civilization II	SS	5							X		
HIST& 118 Western Civilization III	SS	5								X	
HIST 121 History of Mexico	SS	5								X	
HIST& 126 World Civilization I	SS	5		X							
HIST& 127 World Civilizations II	SS	5			X						
HIST& 128 World Civilizations III	SS	5				X					
HIST& 136 U.S. History 1	SS	5	X	X	X	X	X	X	X	X	
HIST& 137 U.S. History 2	SS	5	X	X	X	X		X	X	X	X
HIST 201 American History to 1840	SS	5									
HIST 210 Tudor England	SS	5									
HIST 215 Women in American History	SS	5									
HIST 219 Native American History	SS	5									
HIST 230 Ancient Near East	SS	5			X						
HIST 245 The American Civil War & Reconstruction	SS	5							X		
HIST 250 Ancient Greece	SS	5		X				X			
HIST 270 The Roman World	SS	5				X				X	

Humanities	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
HUM 108 Introduction to Gender Studies HU	5		X		X		X		X	
HUM 110 Greek Mythology HU	5	X	X	X		X	X	X		
HUM 214 Diversity Issues: Race, Class and Gender HU	5		X	X	X		X	X	X	

Industrial Systems Technology	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
IST 100 Intro. to Industrial Safety and Health	3		X				X			
IST 102 Technical Drawing Interpretation	3		X				X			
IST 105 Basic Electricity: DC Circuit Analysis	5		X				X			
IST 106 Basic Electricity: AC Circuit Analysis	5			X				X		
IST 107 Industrial Electricity I	5		X				X			
IST 110 Intro. to National Electrical Code	2				X				X	
IST 111 National Electrical Code II	2		X				X			
IST 112 National Electrical Code III	2			X				X		
IST 113 Ind. Elec. Installation Techniques	5				X Friday				X Friday	
IST 120 Intro. to Preventive/Predictive Maintenance	3			X				X		
IST 130 Intro. to Refrigeration and AC	5		X				X			
IST 136 Intro. to Industrial Boilers	5			X				X		
IST 150 Intro. to Programmable Logic Controls I	5		X				X			
IST 152 Programmable Automation Control	5			X						
IST 170 Intro. to Instrumentation	5			X						
IST 180 Machining I	5			EVE	EVE			EVE	EVE	
IST 182 Machining II	5			EVE	EVE			EVE	EVE	

Industrial Systems Technology - continuted	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
IST 207 Industrial Electricity II	5		X				X			
IST 208 Industrial Electricity III	5				X				X	
IST 221 Electronics I (Principles)	5				X				X	
IST 222 Electronics II (Applications)	5		X				X			
IST 223 Electronics III (Industrial)	5			X				X		
IST 270 Instrumentation II & Control Actuators	5				X				X	
IST 280 Mechanical Power Transmission	5		X				X			
IST 282 Fluid Power Transmission	5				X				X	
IST 284 Pump Hydraulics/Mechanics	5				X				X	
MAP 103 Applied Mathematics	5		X				X			

Library	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
LIB 101	**1**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**

Manufacturing and Process Technology	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
All classes are from other programs; none are specific to only this degree.										

Mathematics	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
MATH 094 Introduction to Algebra	5	x	x	x	x	x	x	x	x	x
MATH 098 Intermediate Algebra I	5	x	x	x	x	x	x	x	x	x
MATH 099 Intermediate Algebra II	5	x	x	x	x	x	x	x	x	x
MATH& 107 Math in Society SQR/MS	5	x	x	x	x	x	x	x	x	x
MATH& 141 Precalculus I SQR/MS	5	x	x	x	x	x	x	x	x	x
MATH& 142 Precalculus II SQR/MS	5		x	x	x		x	x	x	
MATH& 146 Introduction to Statistics SQR/MS	5	x	x	x	x	x	x	x	x	x
MATH& 147 Finite Mathematics SQR/MS	5									
MATH& 148 Business Calculus SQR/MS	5			x	x			x	x	
MATH& 151 Calculus I SQR/MS	5		x	x	x		x	x	x	
MATH& 152 Calculus II SQR/MS	5		x	x	x		x	x	x	
MATH& 163 Calculus III SQR/MS	5			x	x			x	x	
MATH 220 Linear Algebra SQR/MS	5			x				x		
MATH 230 Differential Equations SQR/MS	5				x				x	
MATH& 254 Calculus IV SQR/MS	5		x				x			

Medical Assistant	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
MA 111 Clinical Procedures I	3	1- TTh 2:15-3:20 2-Online	X				X			
MA 112 Clinical Procedures II	4			X				X		
MA 113 Clinical Procedures III	4				X				X	
MA 195 Externship/Practicum for MA	6					X				X
MA 197 Externship/Practicum Seminar	1					X				X

Music	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
MUSC 100 Introduction to Music HU	5									
MUSC 101 Ukulele Orchestra (Ukestra) HP	1									
MUSC& 105 Music Appreciation HU	5	X	X	X	X	X	X	X	X	X
MUSC 110 College Chorus HP	1			X				X		
MUSC 114 Mariachi Workshop HP	3									
MUSC 115 Group Piano I HP	2						X	X	X	
MUSC 116 Group Piano II HP	2						X	X	X	
MUSC 117 Group Piano III HP	2						X	X	X	
MUSC 120 College Band HP	1				X				X	
MUSC 124 Orchestra I HP	2									
MUSC 134 Group Guitar HP	2		X	X	X					
MUSC 170 History of Jazz HU	5			X				X		
MUSC 174 History of Rock and Roll HU	5				X				X	
MUSC 175 Music of the World HU	5		X				X			
MUSC 204 Music Technology Workshop HU	3				X				X	
MUSC 215 Group Piano IV HP	2						X	X	X	
MUSC 216 Group Piano V HP	2						X	X	X	
MUSC 217 Group Piano VI HP	2						X	X	X	
MUSC 270 Musical Theatre WorkshopHP	1									

Nursing	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
NUR 101 Survival Skills for the Nursing Student	1									
NUR 110 Fundamentals of Nursing	4		X				X			
NUR 111 Fundamentals of Nursing Practicum	3		X				X			
NUR 114 Pharmacology	2		X				X			
NUR 115 Beginning Pharmacology Concepts I	1									
NUR 120 Beginning Nursing Concepts I	5			X				X		
NUR 121 Beginning Nursing Practicum I	4			X				X		
NUR 130 Beginning Nursing Concepts II	5				X				X	
NUR 131 Beginning Nursing Practicum II	5				X				X	
NUR 135 Nursing Skills Laboratory	1		X				X			
NUR 136 Nursing Skills Laboratory	1			X				X		
NUR 137 Nursing Skills Laboratory	1				X				X	
NUR 189 Writing for Nursing Education	1									
NUR 195 Work-Based Learning Practicum	1-3									
NUR 197 Work-Based Learning Seminar	1									
NUR 210 Advanced Nursing Concepts I	5		X				X			
NUR 211 Advanced Nursing Practicum I	5		X				X			
NUR 215 Advanced Pharmacology Concepts	1									

Nursing-continued	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
NUR 220 Advanced Nursing Concepts II	5			X				X		
NUR 221 Advanced Nursing Practicum II	5			X				X		
NUR 230 Advanced Nursing Concepts III	5				X				X	
NUR 231 Advanced Nursing Practicum III	4				X				X	
NUR 232 EKG Interpretation I	1									
NUR 235 Nursing Skills Laboratory	1		X				X			
NUR 236 Nursing Skills Laboratory	1			X				X		
NUR 240 Professional Issues	1-4				X				X	
NUR 264 Cardiac Arrest Management	1									
NUR 276 Perioperative Nursing I	6									
NUR 277 Perioperative Nursing II	6									
NUR 295 Work-Based Learning Practicum	1-3									
NUR 297 Work-Based Learning Seminar	1									

Nutrition	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
NUTR& 101 Nutrition NS	5	X	X	X	X	X	X	X	X	X

Philosophy	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
PHIL& 101 Introduction to Philosophy HU	5			X				X	X	
PHIL 102 Ethics and Policy in Healthcare I HU	1		X				X			
PHIL 103 Ethics and Policy in Healthcare II HU	1			X				X		
PHIL& 120 Symbolic Logic SQR/HU	5			X	X			X	X	
PHIL 201 Ethics and Policy in Healthcare III HU	1		X				X			
PHIL 202 Ethics and Policy in Healthcare IV HU	1			X				X		
PHIL 203 Ethics and Policy in Healthcare V HU	1				X				X	
PHIL 210 Ethics HU	5	X	X			X	X			X
PHIL 211 Ethics for Criminal Justice HU	5									
PHIL 230 East Indian Philosophy HU	5									
PHIL 240 Philosophy of Religion HU	5									
PHIL 250 Asian Philosophy HU	5									

Physical Education		Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
PEH 100 Lifetime Wellness	SE	3	X	X	X	X	X	X	X	X	X
PEH 102 Theory of Basketball	SE	3			X				X		
PEH 103 Theory of Wrestling	SE	3									
PEH 105 Theory of Baseball	SE	3				X				X	
PEH 106 Theory of Fast Pitch Softball	SE	3				X				X	
PEH 107 Theory of Volleyball	SE	3		X				X			
PEH 112 Running or Walking for Fitness	AC	1									
PEH 114 Basketball	AC	1				X				X	
PEH 119 Fast Pitch	AC	1									
PEH 122 Volleyball	AC	1									
PEH 125 Conditioning	AC	1		X	X	X		X	X	X	
PEH 128 Social Dance	AC	1									
PEH 131 Circuit Weight Training	AC	1									
PEH 132 Fitness	AC	1									
PEH 133 Weight Training	AC	1		X	X	X		X	X	X	
PEH 135 Beginning Yoga	AC	1	X	X	X	X	X	X	X	X	X
PEH 137 Beginning Brazilian Jiu-Jitsu	AC	1		X	X	X		X	X	X	
PEH 149 Jogging for Health	AC	1									
PEH 153 Lifeguard Training	AC	1				X				X	
PEH 155 Body Toning	AC	1		X	X	X		X	X	X	
PEH 158 Racquetball	AC	1				X				X	
PEH 160 Baseball Skills	AC	1									
PEH 178 Principles of Fitness	SE	3									

Physics	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
PHYS& 110 Physics for Non-Science Majors with Lab LS	5			X				X		
PHYS& 114 General Physics I with Lab LS	5				X				X	
PHYS& 115 General Physics II with Lab LS	5									
PHYS& 116 General Physics III with Lab LS	5									
PHYS& 221 Engineering Physics I w/Lab LS * required for AS-T 2: Physics/CompSci Pre-major	5		X				X			
PHYS& 222 Engineering Physics II w/ Lab LS * required for AS-T 2: Physics/CompSci Pre-major	5			X				X		
PHYS& 223 Engineering Physics III w/ Lab LS * required for AS-T 2: Physics/CompSci Pre-major	5				X				X	

Political Science	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
POLS& 101 Introduction to Political Science SS	5		X	X			X	X		
POLS& 202 American Government SS	5	X		X	X	X		X	X	X
POLS& 203 International Relations SS	5		X				X			

Psychology	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
PSYC& 100 General Psychology SS	5	X	X	X	X	X	X	X	X	X
PSYC 101 Psychosocial Issues in Healthcare I SS	1		X				X			
PSYC 102 Psychosocial Issues in Healthcare II SS	1			X				X		
PSYC 103 Psychosocial Issues in Healthcare III SS	1				X				X	
PSYC 105 Mental Health First Aid	1			X				X	X	
PSYC 201 Psychosocial Issues in Healthcare IV SS	1		X				X			
PSYC 202 Psychosocial Issues in Healthcare V SS	1				X				X	
PSYC& 200 Lifespan Psychology SS	5	X	X	X		X	X	X		X
PSYC 225 Psychology and the Legal System SS	5									

Religious Studies	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
REL 201 World Religions HU	5	X	X		X	X	X		X	X
REL 211 Religion in America HU	5									

Simulation Technology	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
SIM 110 Intro to SIM Programming	4		Online	Online	Online		Online	Online	Online	
SIM 130 Fundamentals of Simulation Theory	4		Online	Online	Online		Online	Online	Online	
SIM 140 Basic Simulation Diagnostics	3		Online	Online	Online		Online	Online	Online	
SIM 211 Adv Life Support & Peds Scenarios	8		Hybrid		Hybrid		Hybrid		Hybrid	
SIM 235 Principles of Debriefing	4	Online				Online				Online
SIM 245 Basic Simulation Operations	2		Hybrid	Hybrid	Hybrid		Hybrid	Hybrid	Hybrid	
SIM 295 Practicum in Community Simulation	1	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid

SkillSource Contract Training	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
ALL classes and times listed below are for the SKILLSOURCE Contract Training Program only.										
BIM 101 Basic Keyboarding	2	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 102 Document Formatting	4	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 104 Intermediate Keyboarding	3	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 106 Advanced Keyboarding	3	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 109 Internet Communications	1	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 130 Filing	1-2	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 180 Introduction to Microsoft Office	1-5	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BIM 182 Introduction to Microsoft Excel	1-3	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BUS 102 Business Math	5	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BUS 120 Human Relations on the Job	4	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BUS 121 Business English	5	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
BUS 135 Fundamentals of Logistics, Transportation, & Supply Chain Mgmt	3	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
CSS 100 College Success Skills	3	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
CMST 100 Human Communications	4	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY
IST 100 Intro to Industrial Health & Safety	3	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY	DAY

SOCIOLOGY		Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
SOC& 101 Intro to Sociology	SS	5	X	X	X	X	X	X	X	X	X
SOC& 201 Social Problems	SS	5		X		X		X		X	
SOC 204 Gender and Power	SS	5									
SOC 220 Marriage and the Family	SS	5									

SOCIAL WORK	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
SOCW 110 Introduction to Social Work										

Transitional Studies-High School Completion/OPD/ DVS	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
DVS 011 Basic Skills Review		X	X	X	X	X	X	X	X	X
DVS 012 Adult Secondary Education I		X	X	X	X	X	X	X	X	X
DVS 013 Adult Secondary Education II		X	X	X	X	X	X	X	X	X
DVS 014 Adult Basic Skills		X	X	X	X	X	X	X	X	X
DVS 015 Accelerated Learning Support		X	X	X	X	X	X	X	X	X
DVS 016 Accelerated Learning Support: English		X	X	X	X	X	X	X	X	X
DVS 017 Accelerated Learning Support: Math		X	X	X	X	X	X	X	X	X

Transitional Studies-High School Completion/OPD/ DVS- Continued	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
DVS 031 Beginning English Language Acquisition		X	X	X	X	X	X	X	x	X
DVS 032 Intermediate English Language Acquisition		X	X	X	X	X	X	X	X	X
DVS 033 Advanced English Language Acquisition		X	X	X	X	X	X	X	X	X
DVS 036 English Language Acquisition/ Citizenship				X				X		
DVS 080 College Transitions Math		X	X	X	X	X	X	X	X	X
DVS 090 Transition to College		X	X	X	X	X	X	X	X	X

Unmanned Systems (UMS)	Credits	Summer 2019	Fall 2019	Winter 2020	Spring 2020	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021
UMS 107 Commercial UAS Remote Pilot (Part 107)	2		OL		OL		OL		OL	
UMS 112 Unmanned Aerial Systems (UAS) Ground School I	5		OL				OL			
UMS 142 Unmanned Aerial Systems (UAS) Flight Lab	5				OL				OL	
UMS 208 Unmanned Aerial Systems (UAS) Mission Planning	5			OL				OL		
UMS 210 Unmanned Aerial Systems (UAS) Laws & Policies	5			OL				OL		
UMS 295 Independent Project (to be arranged with instructor)	3									

Welding	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
WLD 101 Oxy-Acetylene Welding for Auto Mechanics	2			X				X		
WLD 102 ARC/GMAW Welding for Automotive Technicians	2			X				X		
WLD 103 Beginning AMT Welding	2			X				X		
WLD 110 Welding Theory I	5		X				X			
WLD 111 Welding Process I	3/6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 112 Thermal Cutting and Welding	3		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 120 Welding Theory II	5			X				X		
WLD 121 Welding Process II	3/6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 122 Gas Metal Arc Welding I	3		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 130 Welding Theory III	5				X				X	
WLD 131 Welding Process III	3/6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 132 Gas Tungsten Arc Welding I (T.I.G.)	3		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 151 Technical Drawings Interpretation	3		X				X			
WLD 152 Welding Layout I	3			X				X		
WLD 153 Welding Layout II	3				X				X	
WLD 190 Skill Improvement	2-6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 205 Weld Testing Methods	4		X				X			
WLD 206 Welding Codes and Standards	4			X				X		
WLD 207 Welding Metallurgy	4				X				X	
WLD 212 Gas Metal Arc Welding II	3		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X

Welding - continued	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
WLD 241 Structural Weld Process I	3/6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 242 Structural Welding I	3		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 243 Structural Weld Process II	3/6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 244 Submerged Arc Welding	3		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 245 Structural Weld Process III	3/6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 261 Production Weld Process I	3/6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 262 Production Welding I	3		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 263 Production Weld II	3/6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 264 Advanced Weld Process	3		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 265 Production Welding Process III	6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 281 Pipe Welding I	3/6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 282 Gas Tungsten Arc Welding II (TIG	3		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 283 Pipe Welding II	3/6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 284 Gas Tungsten Arc Welding III (T.I.G.)	3		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 285 Pipe Welding III	3/6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 290 Skill Improvement	2-6		DAYS EVE	DAYS EVE	DAYS EVE	X	DAYS EVE	DAYS EVE	DAYS EVE	X
WLD 295 Work Based Learning	1-6		Arranged	Arranged	Arranged		Arranged	Arranged	Arranged	
WLD 297 Work Based Learning Seminar	1		Arranged	Arranged	Arranged		Arranged	Arranged	Arranged	

World Languages		Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
ASL& 121 Am Sign Language I	HU	5									
ASL& 122 Am Sign Language II	HU	5									
ASL& 123 Am Sign Language III	HU	5									
FREN& 121 French I	HU	5		x	x	x					
FREN& 122 French II	HU	5		x	x	x					
FREN& 123 French III	HU	5		x	x	x					
FREN& 221 French IV	HU	5									
FREN& 222 French V	HU	5									
FREN& 223 French VI	HU	5									
GERM& 121 German I	HU	5						x	x	x	
GERM& 122 German II	HU	5	x					x	x	x	
GERM& 123 German III	HU	5	x					x	x	x	
SPAN& 121 Spanish I	HU	5		x	x	x		x	x	x	
SPAN& 122 Spanish II	HU	5		x	x	x		x	x	x	
SPAN& 123 Spanish III	HU	5		x	x	x		x	x	x	
SPAN& 211 Spanish for Spanish Speakers I	HU	5									
SPAN& 212 Spanish for Spanish Speakers II	HU	5									
SPAN& 213 Spanish for Spanish Speakers III	HU	5									
SPAN& 221 Spanish IV	HU	5									
SPAN& 222 Spanish V	HU	5									
SPAN& 223 Spanish VI	HU	5									

Salah Abed (2007).....**Math**
B.S., M.S., Western Washington University

Brendan Abonyi (2016) ..... **Custodial Services Supervisor**
B.S., University of Ife, Nigeria; M.S., Washington State University

Benjamin Altrogge (2014) .....**Aviation/Commercial Pilot**
B.S., Walla Walla University; FAA certificates include Airplane Single and Multi-Engine Land; Instrument Airplane; Commercial Pilot; Flight Instructor

Luis Alvarez (2011) .....**Director of Residence Halls & Residential Life**
A.A.S., Big Bend Community College; B.A., B.S., Washington State University

Erika Armengol (2020).....**Educational Planner-Open Doors**
A.A., Big Bend Community College; B.A., University of Washington

Joe Auvil (2015) .....**Director of Purchasing**
A.A., Spokane Community College; B.B.A., Gonzaga University

James Ayers, Jr. (2013)..... **Industrial Systems Technology**
WA State Certified (01) Master Electrician

Gary Baker (2016).....**Manufacturing Technology Specialist**
B.S., University of Washington

Faviola Barbosa (2017) .....**Dean of Transitional Studies**
B.A., Washington State University; M.S., Nova Southeastern University

Sarah Bauer (2016).....**Chemistry**
B.S., Central Washington University; M.S., Montana State University

Starr Bernhardt (2006).....**Director of Enrollment Services & Registrar**
B.S., University of Washington; M.S., Western Governors University

Daneen Berry-Guerin (2005)..**Dean of Workforce Education**
A.A., Spokane Community College; B.A., Eastern Washington University; M.B.A., American Intercontinental University .....

Erik Borg (2000).....**Aviation Maintenance Technology**
A.A.S., Big Bend Community College; B.S., Central Washington University; FAA certificates include Commercial Pilot, Airplane Single and Multi-Engine Land, A&P Mechanic, Inspection Authorization, Designated Maintenance Examiner

Jody Bortz (2013).....**Career Services Coordinator**
B.A., B.A.Ed., Central Washington University

Barbara Bush (2020)..... **Communications**
B.F.A., University of Illinois at Champaign-Urbana; M.A., California State University, San Diego; Ph.D., University of California, San Diego

Theresa Calip (2019).....**Chemistry**
B.A., University of Washington; M.A., University of California at Santa Barbara; M.A., (ABD), Ohio State University

Jennifer Castro-Velazquez (2011).....**Educational Planner-Open Doors**
B.A., University of Washington

CarlaLouise Christian (2012) Japanese Agriculture Training Program (JATP) Director
A.A., Big Bend Community College; B.S, M.B.A., Western Governors University; TESOL Certificate

Katherine Christian (2004)..... **Director of Health Education Programs**
B.A., University of Southern California; B.S.N., University of New York; M.S.N./Ed, University of Phoenix

Steve Close (2004)..... **English**
A.A., Contra Costa Community College; B.A., San Francisco State University; M.A., Ph.D., University of Oregon

Caren Courtright (2007) ..... **Director of Bookstore**
A.A., Big Bend Community College

Michael De Hoog (2001) ..... **Activity Center Coordinator/ Head Women's Volleyball Coach**
B.A., Whitworth College; M.A., Concordia University

Anita De Leon (1999)..... **TRiO Upward Bound Director**
B.A., M.S.W., University of Washington

Jennifer de Leon (2007) .....**Activity Coordinator**
B.A., B.Ed., Central Washington University

Johanna Doty-Fleming (2019) .....**Math**
B.S., M.S., Oregon State University

Kathleen Duvall (2005).....**Dean of Arts & Sciences**
A.S., Yuba College; B.S., University of California at Davis; M.S., Brigham Young University

Ryan Duvall (2016).....**Business Information Management**
A.A., Big Bend Community College; B.S. Brigham Young University Idaho

Dawnne Ernette (2015).....**Developmental English**
B.A., M.A.Ed., University of Nevada-Reno

Wendy Farr (2020) .....**Assistant Director of Health Education Programs**
B.S.N., Macon State College; M.S.N./Ed, Walden University

Eric Fleming (2019).....**Math**
B.S., M.S., Oregon State University

Tiffany Fondren (2018) .....**Communications Coordinator**
B.A., Eastern Oregon University

Kyle Foreman (2012) ..... **Director of Campus Safety, Security, & Emergency Management**
FEMA Emergency Management Professional Development Certificate; FEMA All Hazards Public Information Officer; WA State Certified Incident Command System/National Incident Management System Instructor

Cassandra Fry (2012) .....**Financial Aid Advisor**
A.A.S., Big Bend Community College

Tim Fuhrman (1998) .....**Director of Library Resources & eLearning**
A.A.S., Big Bend Community College; B.A., Central Washington University; M.A., University of Arizona

Angela Garza (2016) .....**Assistant Director of Business Services**
A.A., Big Bend Community College; B.A., University of Phoenix

Guillermo Garza (2007) .....**Commercial Driver's License**
Class A CDL License; Endorsements P1, T, N; Instructor Certifications

Jaime Garza (2015).....**Counselor**
B.A., Central Washington University; M.Ed., Heritage University

Kim Garza (2012) .....**Vice President of Human Resources & Labor**
B.A., Eastern Washington University; M.S., Western Governors University

Heidi Gephart (2014).....**Counselor**
A.A.S., Big Bend Community College; B.A., Western Washington University; M.A.Ed., Washington State University

Anne Ghinazzi (2017) ..... **STEM Advising Specialist**
B.A., Augustana College; M.A., University of Iowa

John Gillespie (1995).....**Aviation/Commercial Pilot**
A.A., A.A.S., Big Bend Community College; B.A., Gonzaga University; FAA certificates include Airplane Single and Multi-Engine Land, Airplane Single Engine Sea; Commercial Privileges, Instrument Airplane/Gold Seal Flight Instructor, Airplane Single and Multi-Engine Instrument/Ground Instructor, Advanced Instrument

David Gillett (2015) ..... **Systems Engineer Network Administrator**
A.A.S., Big Bend Community College; B.S., Western Governors University

Mercedes Gonzalez-Aller (2009).....**Nursing**
B.S.N., University of New Mexico; M.N., Whitworth University

Lindsay Groce (2013) .....**Chemistry**
B.A, B.A., M.S., Central Washington University

Veronica Guadarrama (2017)..... **Director of TRiO Student Support Services**
B.A., Central Washington University; M.A., The University of Arizona

Wade Guidry (2016) ..... **Library Consortium Services**
B.A., Rice University

Octaviano Gutierrez (2016)..... **English**
B.A., University of Washington; M.A., Central Washington University

Andre Guzman (2019).....**Dean of Student Services**
A.A., Big Bend Community College; B.A., Eastern Washington University; M.P.A., Indiana University

Azucena Halmsteiner (2019).....**Interim Disability Support Services Coordinator**
A.A., Big Bend Community College; B.S.W., M.S.W., Eastern Washington University

James Hamm (1993)..... **Physics/Science**
B.S., Eastern Washington University; Ph.D., University of Minnesota

Terry Haws (2016).....**Aviation Program Support Specialist**
A.A.S., Big Bend Community College; FAA Certificates include Airplane Single Engine Land; Commercial; Instrument; Flight Instructor Single Engine with Instrument; Instrument Ground Instructor and Advanced Ground Instructor; Airframe and Power plant.

Carina Hernandez (2017).....**TRiO Student Support Services Academic Advisor**
B.A., Washington State University

David Holliway (2011).....**Psychology/Sociology**
B.A., M.A., University of New Mexico; Ph.D., University of Washington

Bryce Humpherys (2016) ..... **Vice President for Learning & Student Success**
B.A., M.S., Utah State University; Ed.D., Washington State University

Yolanda Ibarra (20) ..... **Director of Workforce Education Services**
B.A., University of Durango

Brett Iksic (2020).....**Agriculture Mechanics Specialist**
A.A.S., Big Bend Community College

Kim Jackson (2000) ..... **Director of Student Programs**
B.A., Brigham Young University; M.Ed., Heritage University

Jeremy Kelley (2015) ..... **Systems Engineer**
A.A.S., Pierce College

Matthew Killebrew (2016) ..... **Director of Communications**
B.S., Austin Peay State University

Rhonda Kitchens (2019) ..... **Librarian**
B.A., M.L.I.S., University of South Florida

Dennis Knepp (2000) ..... **Philosophy**
B.A., Wichita State University; M.A., Ph.D., Washington University in St. Louis

Christina Kunkel (2019) ..... **STEM Center-Emporium Lab Coordinator**
B.S., Oregon State University; M.S. John Carroll University

Jameson Lange (2013) ..... **Assistant Activity Center Coordinator/Head Baseball Coach**

Beth Laszlo (2012) ..... **Director for the Center for Business & Industry Services**
B.A., M.Ed., Central Washington University

Sara Thompson Tweedy (2020) ..... **President**
B.A., Hollins University; M.Div, Yale University Divinity School; D.M., University of Maryland

Angela Leavitt (2001) ..... **Foreign Language**
A.A., Big Bend Community College; B.S., Brigham Young University; B.A., M.A., Washington State University

Aaron Linthicum (2015) ..... **Aviation/Commercial Pilot**
A.A.S., Big Bend Community College; B.A., Liberty University; FAA certificates include Airplane Single and Multi-Engine Land; Commercial Privileges, Instrument Airplane/Flight Instructor, Airplane Single and Multi-Engine Instrument/Ground Instructor, Advanced

John Martin (2014) ..... **Automotive Technology**
ASE Master Automobile Technician, Service Consultant, Advanced Level Specialist; Toyota Certifications; State of Washington Career and Technical Education Initial Teacher Endorsements Automotive Technology, Worksite Learning Coordinator

Jasmine Martinez (2018) ..... **TRiO Student Support Services Academic Advisor**
A.A., Big Bend Community College; B.S., Central Washington University

David Mayhugh (2016) ..... **Math**
B.A.E., Eastern Washington University; M.S., Montana State University

Shawn McDaniel (2004) ..... **Welding Technology**
A.A.S., Electronic Engineering; American Welding Society: CWI (Certified Welding Inspector) 01110781, CWE (Certified Welding Educator) 0111009E

Edgar Montoya (2019) ..... **Dual Enrollment Coordinator**
B.A., Eastern Washington University

Dan Moore (1992) ..... **Aviation Maintenance Technology**
FAA certificates include Airframe and Powerplant, Inspection Authorization, Designated Mechanic Examiner, Private Pilot

Jenny Nighswonger (2004) ..... **Early Childhood Education Coordinator**
B.A., Eastern Washington University; M.A., Grand Canyon University

MacKenzie Noyola (2018) ..... **Workforce Education Services Coordinator**
B.S., Washington State University

Mattias Olshausen (2019) ..... **eLearning Coordinator**
B.A., Willamette University; M.A., Portland State University; M.L.I.S., The University of British Columbia

Zach Olson (2017) ..... **Developmental English**
B.F.A., M.A., Bemidji State University

Nick Pak (2019) ..... **Science Lab Coordinator**
B.S., University of Oregon

John Owens (2020) ..... **Music**
B.A., California State University, San Bernardino; M.Mus., Ph.D., Kent State University

Rie Palkovic (1998) ..... **Art**
B.A., California State University; M.F.A., New Mexico State University

Allison Palumbo (2016) ..... **English**
B.A., Weber State University; M.A., Florida State University; Ph.D., University of Kentucky

Anna Parton (2017) ..... **Curriculum Development Specialist**
B.S., Azusa Pacific University

LeAnne Parton (2011) ..... **Director of Development/Executive Director of the BBCC Foundation**
A.A., Big Bend Community College; B.A., Eastern Washington University

Valerie Parton (1993) ..... **Dean of Institutional Research and Planning**
B.A., Eastern Washington University; M.Ed., Heritage University

Mark Poth (1987)..... Athletic Director
B.S., Brigham Young University; M.A., University of Hawaii

Elsa Pruneda (2014) ..... TRiO Upward Bound Academic Advisor
A.A.S., Big Bend Community College; B.A., Heritage University

Vanessa Pruneda (2018) .....Outreach Coordinator
A.A., Big Bend Community College; B.A., Eastern Washington University

Terry Pyle (2011) .....Agriculture/Economics
B.S., Brigham Young University; M.B.A., Pacific Lutheran University

Jody Quitadamo (2016).....History/Political Science
B.A., M.A., Central Washington University

Carmen Ramirez (2016)..... ABAWD Navigator
A.A., Big Bend Community College

Rita Ramirez (2013) .....Director of Financial Aid
B.A., University of Washington; M.P.A., Eastern Washington University

Jennifer Reames-Zilliox (2006).....Nursing
B.S.N., University of South Australia; M.C.Ed., Flinders University

Christopher Riley (2001) .....History/Political Science
B.A., Pacific University; M.A., Pepperdine University

Suzanne Reilly (2020).....Sociology/Social Science
B.A., Shippensburg University; M.A., The Pennsylvania State University; Ph.D., University of Illinois at Urbana-Champaign

Michele Reeves (2016) ..... Education/Early Childhood
B.A., Central Washington University; M.A., Grand Canyon University

Charlene Rios (1997)..... Executive Director of Business Services & Interim Director of Facilities
A.A., Big Bend Community College; B.A., University of San Diego; M.Ed., Capella University

Jeff Robnett (2009) .....Building & Grounds Supervisor
A.A.S., Spokane Community College

Trudie Roy (2015).....Professional Studies Lab Coordinator
B.S., Central Washington University

Linda Schoonmaker (2015).....Vice President for Finance & Administration
B.S., University of North Carolina at Pembroke; M.B.A., University of Washington; Certified Public Accountant

Reza Sharifi (2020)..... Industrial Systems
M.S., M.S., Missouri University of Science and Technology

Kate Shuttleworth (1999) .....Writing Center Coordinator
B.A., San Francisco State University

Patrick Steele (2019)..... Director of Information Technology
B.S., Mayville State University; M.S., Minot State University

Jessica Strickland (2019).....ABE/GED HS21+
B.A.E., Washington State University; M.A.T., USC Rossier

John Marc Swedburg II (2010).....Aviation/Commercial Pilot
A.A.S., Big Bend Community College; B.S., Aviation, M.B.A., Embry-Riddle Aeronautical University; FAA Certificates: Single and Multi-Engine Airline Transport Pilot; Single and Multi-Engine Flight Instructor; Instrument Instructor

David Timofeyev (2020)....Educational Planner-Open Doors
A.A., Big Bend Community College; B.S.W., Eastern Washington University

Ethan Tonnemaker (2019) Agriculture Program Coordinator
A.A., Big Bend Community College; B.A., University of Washington

Sean Twohy (2015) ..... English
B.A., Western Washington University; M.A., University of South Dakota

Diana Villafana (2003).....Student Success Center Coordinator
A.A.S., Big Bend Community College; B.A., Heritage University

Rafael Villalobos, Jr. (2012) .....Director of Title III HSI-Transforming STEM Pathways Grant
B.A., Central Washington University; M.Ed., Heritage University

Tyler Wallace (2008).....Math
A.S., Blue Mountain Community College; B.A., B.S., M.A.T., George Fox University; M.A., University of Houston; Ed.D., Liberty University

Arthur Wanner, Jr. (2014) .....Computer Science
A.A.S., Big Bend Community College; B.S., Washington State University; A+ Certified Professional; Network+ Certified Professional

Christy Welch (2016) ..... Biology
B.S., M.S., Washington State University

Deena Westerman (2008) ..... Event & Conference Representative
A.A.S., Big Bend Community College; B.A., University of Washington

Mariah Whitney (2003)..... Biology
A.A., Big Bend Community College; B.S., Washington State University; M.S., Central Washington University

Preston Wilks (1996) ..... Accounting and Business/ Head Women's Basketball Coach
A.A., Big Bend Community College; B.S., M.S., Brigham Young University; Certified Public Accountant

Tom Willingham (2004).....STEM Computer Science Specialist

Sue Workman (2001) ..... TRiO Upward Bound Academic Coordinator
A.A., Lower Columbia College; B.A., Washington State University

Richard Wynder (2009).....Automotive Technology
Automotive Service Technology Diploma, Southern Alberta Institute of Technology; Block Competency, Central Washington University; Washington Career/Technical Teaching Certificate; Alberta Journeyman; Canada Inter-Provincial Journeyman; ASE Master Technician

Kristin Young (2018)..... Testing Center & Tutor Services Coordinator
B.A.Ed., Eastern Washington University; M.A.T., Grand Canyon University

MariaAnita Zavala-Lopez (2000).....Counselor
B.A., University of Washington; Ed.M., Washington State University

On occasion, retired staff, faculty and administrators are recognized for extraordinary service with the college. The title of "Emeritus" is bestowed by the BBCC Trustees upon the recommendation of the President, to gratefully acknowledge those unique individuals whose efforts throughout their careers on behalf of the college were far beyond the expectations of their positions.

Alice Milholland (1962-1981) ...Instructor Emeritus
Dr. Peter D. DeVries (1978-1987)President Emeritus
Dr. Robert Mason (1962-1991) ..... Dean Emeritus
Leroy Ledeboer (1965-1991)..... Professor Emeritus
Dr. Leroy Johnson (1980-1990) .. Professor Emeritus
Ron Graff (1967-1993)..... Professor Emeritus
Don Wright (1966-1988)..... Professor Emeritus
Fred Huston (1964-1984) ..... Dean Emeritus
Larry Petersen (1968-1993)..... Professor Emeritus
Wayne Freeman (1973-1992)..... Professor Emeritus
Stephen Tse (1966-1996) ..... Professor Emeritus
Rex Wilks (1966-1995) ..... Professor Emeritus
Dr. Robert J. Wallenstien (1966-1977)
..... President Emeritus
Roger Glaese (1969-1998) .. Vice President Emeritus
Fred Buche (1966-1996) .....Faculty Emeritus
David R. Wolff (1970-2000) .....Faculty Emeritus
Dr. Harrell Guard (1986-1994).....Vice President Emeritus
Cynthia Calbick (1973-2001).....Faculty Emeritus
Barbara Guilland (1982-2001).....Faculty Emeritus
Brenda Teals (1971-2001).....Faculty Emeritus
Bill Looney (1970-2002).....Faculty Emeritus
Patricia Schrom (1992-2003).....Trustee Emeritus
Makoto Enokizono (1974-2004) ....Faculty Emeritus
Vic Gilliland (1967- 2004).....Faculty Emeritus
Erika Hennings (1996-2004).....Trustee Emeritus
Patricia Nobach (1985-2005).....Faculty Emeritus
Joe Rogers (1970-2005).....Faculty Emeritus
Linda Wrynn (1981-2006) .....Faculty Emeritus
Anita Hughes (1985-2007).....Faculty Emeritus
Pat Palmerton (1978 to 2007) .....Director Emeritus
Ken Turner (1980 - 2008)... Vice President Emeritus
Kathy Tracy Mason (1989 - 2008)..Faculty Emeritus
Maryanne Allard (1975 - 2008) ..... Athletic Director Emeritus
Steve Matern (1980 - 2009) .....Faculty Emeritus
Van Jorgensen (1984 - 2009).....Faculty Emeritus
Pete Hammer (1976 - 2009).....Faculty Emeritus
Chuck Cox (1980 - 2009) .....Faculty Emeritus
Kim Helvey (1984-2009) .....Staff Emeritus
Mike Lang (1976 - 2010) .... Vice President Emeritus
Felix Ramon (1994- 2010).....Trustee Emeritus
Patricia Teitzel (1989-2011) .....Faculty Emeritus
Eugene "Gene" Donat (1975-2011) Faculty Emeritus
Katherine Kenison (1999-2011) .....Trustee Emeritus
Holly Moos (1973-2012)..... Vice President Emeritus
William C. Bonaudi (1995-2012)President Emeritus
Donna Brown (1995-2012) .....Staff Emeritus
Marsha Asay (1983-2013) .....Faculty Emertius
Lance Wyman (1983-2013).....Faculty Emertius
Mike O'Konek (1985-2013) .....Faculty Emeritus
Irene Osumi (1988-2013) .....Staff Emeritus
Max Heinzmann (1981-2014) .....Faculty Emeritus
John Swedburg (1982-2014).....Faculty Emeritus

Marsha Nelson (1973-1975, 1978-1982, 1984-1990, 1995-2015).....Faculty Emeritus
Hope Strnad (1984-2015).....Staff Emeritus
Mike Blakely (2004-2014) .....Trustee Emeritus
Gail Erickson (1983-2014) .....Faculty Emeritus
Pat Patterson (1992-2015) .....Faculty Emeritus
Mary Shannon (1993-2015) Administrator Emeritus
Gail Hamburg (1999 - 2015).....Vice President Emeritus
Kathy Arita (1999-2015).....Director Emeritus
Doug Sly (1985-2016) ..... Administrator Emeritus
Candis Lacher (1989-2016). Administrator Emeritus
John Carpenter (1994-2016).....Faculty Emeritus
Garry Helvy (1998-2016) .....Staff Emeritus
David Hammond (2001-2017) .....Faculty Emeritus
Rita Jordan (1999-2017) .....Staff Emeritus
Stephen Lane (1987-2017).....Faculty Emeritus
John Peterson (2002-2017).....Faculty Emeritus
Terry Kinzel-Troutman (1999-2017) ..... Administrator Emeritus
Kara Garrett (1987-2017).... Administrator Emeritus
Petr Radchishin (2002-2017) .....Staff Emeritus
Margie Lane (1988-2018) .....Staff Emeritus
Barbara Whitney (1990-2018).....Faculty Emeritus
Randy Fish (1986-2018) .....Staff Emeritus
Willliam "Bill" Autry (1995-2019) ...Faculty Emeritus
Barbara Jacobs (1972-2019) .....Faculty Emeritus
Nancy Theis (1974-2019) .....Staff Emeritus
Leslie "Les" Michie (2001-2019).....Faculty Emeritus
Kathy Aldrich (1974-2019) .....Staff Emeritus

(In accordance with Board Policy 1005, Adopted REV 5/15)

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INDUSTRIAL SYSTEMS TECHNOLOGY

James Ayers 509.793.2265 jamesa@bigbend.edu

Electrical and control system technologies are increasingly sophisticated and complex. Electrical/Electronic technologies have changed the fabric of our existence. We are truly living the electronic age. New innovations seem to be routine, daily occurrences. Today's competitive business climate pushes Industry to grasp new technology to maintain tighter control of their processes, knowing better control – better bottom line! Today's industrial electrician is a multi-faceted technician. Modern industrial plants require technician level individuals who, maintain, calibrate, repair, troubleshoot, and wish to grow with new innovation.

Industrial Electrical Technology AAS (100+ credits)

The Industrial Electrical Technology program provides comprehensive two-year curriculum designed to prepare students for career opportunities as industrial electrical technicians. Students receive instruction in safety, electrical and electronic theory, process control, instrumentation, and Programmable Logic Controllers.

Our mission is to prepare students for entry in the world of industrial electricity, with a thorough understanding of electrical safety, and safe practices. We wish to instill the enthusiasm to learn, think, and grow, now and into the future! Favorable opportunities, now and into the foreseeable future, make Industrial Electricity an interesting, outstanding career choice.

Program Learning Outcomes:

IO1 ***Communication***
Students will be able to communicate clearly and effectively within a workplace context

IO2 ***Quantitative Reasoning***
Students will be able to reason mathematically using methods appropriate to the profession

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations

PO4 Students will be able to apply electronic principals to electro-maintenance activities

PO5 Students will be able to install electrical/electronic apparatus using appropriate techniques

PO6 Students will be able to access controls automation logic equipment for monitoring and troubleshooting purposes

PO7 Students will be able to demonstrate proper mechanical techniques to assembly/disassembly activities

PO8 Students will be able to fabricate simple fixtures as situations generally require

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

<u>First Year</u>

Fall Quarter

IST 100 Intro. to Industrial Safety and Health 3
IST 102 Technical Drawing Interpretation..... 3
IST 105 Basic Electricity: DC Circuit Analysis 5
MAP 103 Applied Mathematics 5
OR MAP 117 Applied Math for Workforce Ed

Winter Quarter
BUS 120 Human Relations on the Job 4
CMST 100 Human Communications..... 4
FAD 150 Industrial First Aid & CPR 2
IST 106 Basic Electricity: AC Circuit Analysis 5
IST 120 Intro. to Preventive/Predictive Maintenance 3

Spring Quarter
ENGL 109 Applied Technical Writing..... 3
IST 107 Industrial Electricity I 5
IST 110 Intro. to National Electrical Code 2
IST 113 Ind. Elec. Installation Techniques 5
IST 221 Electronics I (Principles)..... 5

Second Year
Fall Quarter
IST 111 National Electrical Code II..... 2
IST 150 Intro. to Programmable Logic Controls I 5
IST 207 Industrial Electricity II 5
IST 222 Electronics II (Applications) 5

Winter Quarter
IST 112 National Electrical Code III..... 2
IST 152 Programmable Automation Control..... 5
IST 170 Intro. to Instrumentation 5
IST 223 Electronics III (Industrial)..... 5

Spring Quarter
IST 208 Industrial Electricity III 5
IST 270 Instrumentation II & Control Actuators 5
IST Approved Electives ..... 2+

Certificate of Achievement
The Certificate of Achievement is designed for students who wish to take specialized courses in a particular field and desire certification acknowledging completion of specific program modules. These modules contain the mathematics, written and oral communications, and human relations related instruction requirements and accepted course requirements for certification.

Electronics Technology Certificate of Achievement (48 credits)
Program Learning Outcomes:

IO1 ***Communication***
Students will be able to communicate clearly and effectively within a workplace context.

IO2 ***Quantitative Reasoning***
Students will be able to reason mathematically using methods appropriate to the profession

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.

PO4 Students will be able to apply electronic principals to electro-maintenance activities

PO5 Students will be able to install electrical/electronic apparatus using appropriate techniques

The following is a suggested sequence of courses. Interested students must work out courses and schedules with the IST program advisor.

BUS 120 Human Relations on the Job 4
CMST 100 Human Communications 4
ENGL 109 Applied Technical Writing 3
FAD 150 Industrial First Aid & CPR 2
IST 105 Basic Electricity: DC Circuit Analysis 5
IST 106 Basic Electricity: AC Circuit Analysis 5
IST 221 Electronics I (Principles) 5
IST 222 Electronics II (Applications) 5
IST 223 Electronics III (Industrial) 5
IST Approved Electives 5
MAP 103 Applied Mathematics 5
OR MAP 117 Applied Math for Workforce Ed

Industrial Electrical Certificate of Achievement (50 credits)

Program Learning Outcomes:

IO1 ***Communication***
Students will be able to communicate clearly and effectively within a workplace context.

IO2 ***Quantitative Reasoning***
Students will be able to reason mathematically using methods appropriate to the profession

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.

PO4 Students will be able to apply electronic principals to electro-maintenance activities

PO5 Students will be able to install electrical/electronic apparatus using appropriate techniques

The following is a suggested sequence of courses. Interested students must work out courses and schedules with the IST program advisor.

BUS 120 Human Relations on the Job 4
CMST 100 Human Communications 4
ENGL 109 Applied Technical Writing 3
FAD 150 Industrial First Aid & CPR 2
IST 105 Basic Electricity: DC Circuit Analysis 5
IST 106 Basic Electricity: AC Circuit Analysis 5
IST 107 Industrial Electricity I 5
IST 207 Industrial Electricity II 5
IST 208 Industrial Electricity III 5
IST 221 Electronics I (Principles) 5
IST Approved Electives ..... 2+
MAP 103 Applied Mathematics 5
OR MAP 117 Applied Math for Workforce Ed

Programmable Logic Controllers Certificate of Achievement (48 credits)
Program Learning Outcomes:

IO1 ***Communication***
Students will be able to communicate clearly and effectively within a workplace context.

IO2 ***Quantitative Reasoning***
Students will be able to reason mathematically using methods appropriate to the profession

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.

PO4 Students will be able to apply electronic principals to electro-maintenance activities

PO5 Students will be able to install electrical/electronic apparatus using appropriate techniques

PO6 Students will be able to access controls automation logic equipment for monitoring and troubleshooting purposes

The following is a suggested sequence of courses. Interested students must work out courses and schedules with the IST program advisor.

BUS 120 Human Relations on the Job 4
CMST 100 Human Communications..... 4
ENGL 109 Applied Technical Writing..... 3
FAD 150 Industrial First Aid & CPR 2
IST 105 Basic Electricity: DC Circuit Analysis 5
IST 106 Basic Electricity: AC Circuit Analysis 5
IST 107 Industrial Electricity I 5
IST 150 Intro. to Programmable Logic Controls I 5
IST 152 Programmable Automation Control..... 5
IST 207 Industrial Electricity II 5
MAP 103 Applied Mathematics 5
OR MAP 117 Applied Math for Workforce Ed

Boiler/Refrigeration Certificate of Achievement (51 credits)
Program Learning Outcomes:

IO1 ***Communication***
Students will be able to communicate clearly and effectively within a workplace context.

IO2 ***Quantitative Reasoning***
Students will be able to reason mathematically using methods appropriate to the profession

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.

PO5 Students will be able to demonstrate proper mechanical techniques to assembly/disassembly activities

The following is a suggested sequence of courses. Interested students must develop schedules with the program advisor.

BUS 120 Human Relations on the Job 4
CMST 100 Human Communications..... 4
ENGL 109 Applied Technical Writing..... 3

FAD 150 Industrial First Aid & CPR 2
IST 105 Basic Electricity: DC Circuit Analysis 5
IST 106 Basic Electricity: AC Circuit Analysis 5
IST 107 Industrial Electricity I 5
IST 120 Intro. to Preventive/Predictive Maintenance 3
IST 130 Intro. to Refrigeration and AC 5
IST 136 Intro. to Industrial Boilers 5
IST 170 Intro. to Instrumentation 5
MAP 103 Applied Mathematics 5
OR MAP 117 Applied Math for Workforce Ed

Industrial Fabrication Certificate of Achievement (50 credits)
Program Learning Outcomes:

IO1 ***Communication***
Students will be able to communicate clearly and effectively within a workplace context.

IO2 ***Quantitative Reasoning***
Students will be able to reason mathematically using methods appropriate to the profession

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.

PO6 Students will be able to fabricate simple fixtures as situations generally require.

The following is a suggested sequence of courses. Interested students must develop schedules with the program advisor.

BUS 120 Human Relations on the Job 4
CMST 100 Human Communications 4
ENGL 109 Applied Technical Writing 3
FAD 150 Industrial First Aid & CPR 2
IST 102 Technical Drawing Interpretation 3
IST 180 Machining I 5
IST 182 Machining II 5
IST 184 Machining Skill Enhancement 4
MAP 103 Applied Mathematics 5
OR MAP 117 Applied Math for Workforce Ed

WLD 111 Welding Process I 6
WLD 112 Thermal Cutting and Welding 3
WLD 122 Gas Metal Arc Welding I 3
WLD 132 Gas Tungsten Arc Welding I (TIG) 3

Maintenance Mechanics Certificate of Achievement (51 credits)
Program Learning Outcomes:

IO1 ***Communication***
Students will be able to communicate clearly and effectively within a workplace context.

IO2 ***Quantitative Reasoning***
Students will be able to reason mathematically using methods appropriate to the profession

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork and/or workplace specific skills related to human relations.

PO5 Students will be able to demonstrate proper mechanical techniques to assembly/disassembly activities

PO6 Students will be able to fabricate simple fixtures as situations generally require.

The following is a suggested sequence of courses. Interested students must develop schedules with the program advisor.

BUS 120 Human Relations on the Job 4
CMST 100 Human Communications..... 4
ENGL 109 Applied Technical Writing..... 3
FAD 150 Industrial First Aid & CPR..... 2
IST 120 Intro. to Preventive/Predictive Maintenance 3
IST 180 Machining I 5
IST 130 Intro. to Refrigeration and AC 5
IST 280 Mechanical Power Transmission 5
IST 136 Intro. to Industrial Boilers 5
IST 282 Fluid Power Transmission 5
IST 284 Pump Hydraulics/Mechanics 5
MAP 103 Applied Mathematics 5
OR MAP 117 Applied Math for Workforce Ed

Certificate of Accomplishment
The Certificate of Accomplishment is designed to provide recognition of completion of certain approved courses or small modules of courses offered through particular technical program. This certification is designed for the occasional and or part-time student that does not plan to complete an Associate in Applied Science degree or Certificate of Achievement.

Big Bend Community College upon request by application, may issue Certificates of Accomplishment upon successful completion of the following approved modules with an earned minimum grade of 2.0 for each course.

Basic Electricity Certificate of Accomplishment (15 credits)
Program Learning Outcomes

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 105 Basic Electricity: DC Circuit Analysis 5
IST 106 Basic Electricity: AC Circuit Analysis 5
IST 221 Electronics I (Principles)..... 5

Electronics Certificate of Accomplishment (15 credits)

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 221 Electronics I (Principles)..... 5
IST 222 Electronics II (Applications) 5
IST 223 Electronics III (Industrial)..... 5

Industrial Electricity Certificate of Accomplishment (20 credits)

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 107 Industrial Electricity I..... 5
IST 113 Ind. Elec. Installation Techniques 5
IST 207 Industrial Electricity II..... 5
IST 208 Industrial Electricity III..... 5

Instrumentation Certificate of Accomplishment (15 credits)

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 150 Intro. to Programmable Logic Controls I 5
IST 170 Intro. to Instrumentation 5
IST 270 Instrumentation II & Control Actuators 5

National Electric Code Certificate of Accomplishment (20 credits)

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 107 Industrial Electricity I..... 5
IST 113 Ind. Elec. Installation Techniques 5
IST 207 Industrial Electricity II..... 5
IST 208 Industrial Electricity III..... 5

Programmable Logic Controllers Certificate of Accomplishment (15 credits)

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 150 Intro. to Programmable Logic Controls I 5
IST 207 Industrial Electricity II..... 5
IST 152 Programmable Automation Control..... 5

Boiler/Refrigeration Certificate of Accomplishment (13 credits)

Program Learning Outcomes:

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

IST 120 Intro. to Preventive/Predictive Maintenance 3
IST 130 Intro. to Refrigeration and AC 5
IST 136 Intro. to Industrial Boilers 5

Machining Certificate of Accomplishment (14 credits)

Program Learning Outcomes

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

IST 180 Machining I 5
IST 182 Machining II 5
IST 184 Machining Skill Enhancement 4

Mechanical Certificate of Accomplishment (18 credits)

Program Learning Outcomes

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

IST 120 Intro. to Preventive/Predictive Maintenance 3
IST 280 Mechanical Power Transmission 5
IST 282 Fluid Power Transmission 5
IST 284 Pump Hydraulics/Mechanics 5

INDUSTRIAL SYSTEMS TECHNOLOGY	**Credits**	**Summer 2019**	**Fall 2019**	**Winter 2020**	**Spring 2020**	**Summer 2020**	**Fall 2020**	**Winter 2021**	**Spring 2021**	**Summer 2021**
IST 100 Intro. to Industrial Safety and Health	3		X				X			
IST 102 Technical Drawing Interpretation	3		X				X			
IST 105 Basic Electricity: DC Circuit Analysis	5		X				X			
IST 106 Basic Electricity: AC Circuit Analysis	5			X				X		
IST 107 Industrial Electricity I	5		X				X			
IST 110 Intro. to National Electrical Code	2				X				X	
IST 111 National Electrical Code II	**2**		X				X			
IST 112 National Electrical Code III	2			X				X		
IST 113 Ind. Elec. Installation Techniques	5				X Friday				X Friday	
IST 120 Intro. to Preventive/Predictive Maintenance	3			X				X		
IST 130 Intro. to Refrigeration and AC	5		X				X			
IST 136 Intro. to Industrial Boilers	5			X				X		
IST 150 Intro. to Programmable Logic Controls I	5		X				X			
IST 152 Programmable Automation Control	5			X						
IST 170 Intro. to Instrumentation	5			X						
IST 180 Machining I	5			EVE	EVE			EVE	EVE	
IST 182 Machining II	5			EVE	EVE			EVE	EVE	
IST 184 Machining Skill Enhancement	4			EVE	EVE			EVE	EVE	
IST 207 Industrial Electricity II	5		X				X			
IST 208 Industrial Electricity III	5				X				X	
IST 221 Electronics I (Principles)	5				X				X	
IST 222 Electronics II (Applications)	5		X				X			
IST 223 Electronics III (Industrial)	5			X				X		

IST 270 Instrumentation II & Control Actuators	5				x				x	
IST 280 Mechanical Power Transmission	5		x				x			
IST 282 Fluid Power Transmission	5				x				x	
IST 284 Pump Hydraulics/Mechanics	5				x				x	
MAP 103 Applied Mathematics	5		x				x			

SIMULATION TECHNOLOGY
simulation@bigbend.edu

Simulation specialists replicate situations or environments, through the use of programming and robotics that allow healthcare professionals to experience simulated reality for the purpose of training. This program is designed to provide the programming, robotics, and healthcare basics needed to gain employment in a simulation center or lab. This course of study is intended for individuals who have an interest in working with robotics in the healthcare setting as well as individuals already working in simulation settings.

Program prerequisites:

- Complete BBCC admissions process.
- Complete English and math placement tests.
- Meet with the Medical Simulation program advisor to develop a professional development plan.
- Have a satisfactory criminal background check prior to SIM 295.

Physical and Psychosocial Requirements for the Medical Simulation program:

- Demonstrate good body mechanics, lift/carry a minimum of 25 lbs independently and 50 lbs with assistance.
- Demonstrate ability to tolerate intermittent sitting, standing, stooping and walking. Full range of motion is required.
- Demonstrate ability to work in high-paced facilities in various stressful circumstances while promoting positive professionalism with staff, community partners, and visitors.

The certificate of accomplishment is designed to provide recognition for the students that have completed the core dynamics of the Simulation Technology program. This certificate will provide foundational skills in basic programming, maintenance, and instructional strategies that the student can use to implement high fidelity medical simulation activities.

Medical Simulation Operations Certificate of Accomplishment (14+)
Program Learning Outcomes

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

Prerequisites:
HED 119 Medical Terminology.....5
OR prior medical terminology course or experience
SIM 211 ADV. Life Support and Pediatric Scenarios 8
OR HED 121, 122, and 123 The Human Body and Disease I, II, and III.....15
OR prior anatomy/physiology coursework, medical training, or experience

Required Certificate Courses:
SIM 110 Intro to SIM Programming 4
SIM 130 Fundamentals of SIM Theory 4
SIM 140 Basic SIM Diagnostics 3
SIM 245 Basic Simulation Operations (Lab) 2
SIM 295 Practicum in the Community 1

Medical Simulation Educator Certificate of Accomplishment (18 credits)

Program Learning Outcomes

IO3 ***Human Relations/Workplace Skills***

Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

SIM 110 Intro to SIM Programming 4
SIM 130 Fundamentals of SIM Theory 4
SIM 140 Basic SIM Diagnostics 3
SIM 235 Principles of Debriefing 4
SIM 245 Basic Simulation Operations (Lab) 2
SIM 295 Practicum in the Community 1

SIMULATION TECHNOLOGY	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
SIM 110 Intro to SIM Programming	4		Online	Online			Online			
SIM 120 Medical Equipment Research (Winter 2022 only)	2							Online		
SIM 130 Fundamentals of Simulation Theory	4		Online	Online				Online		
SIM 140 Basic Simulation Diagnostics	3				Online				Online	
SIM 161 SIM Pharmacology Lab (Spring 2021 only)	1				Hybrid					
SIM 211 Adv Life Support & Peds Scenarios (Fall 2021 only)	8						Hybrid			
SIM 235 Principles of Debriefing	4	Online				Online				Online
SIM 221 Pediatric Scenarios (Fall 2021 only)	5						Hybrid			
SIM 222 Clinical Focused Simulation (Winter 2022 only)	5							Hybrid		
SIM 230 Learning Management Systems (Winter 2022 only)	5							Hybrid		
SIM 232 SIM by Design (Spring 2022 only)	3								Hybrid	
SIM 245 Basic Simulation Operations	2				Hybrid				Hybrid	
SIM 295 Practicum in Community Simulation	1				Hybrid				Hybrid	
SIM 297 SIM Seminar (Spring 2022 only)	1								Hybrid	

MEDICAL ASSISTANT
509.793.2137

The Medical Assistant Program at BBCC prepares students to successfully work side by side with a doctor and other health care professionals in a clinic or hospital setting. Students will maintain the highest quality of patient care, learn to room patients for examination, draw blood for basic lab studies, administer some medications, do ECG's, assist with minor surgical procedures, and perform front office skills related to medical records and billing. Medical Assistants will be prepared for diverse front and back office medical positions by learned theory, lab and clinical skills combined with an extern experience in a physician's office.

Successful completion of the Medical Assistant Program prepares the student to take the National Certification Examination offered through American Medical Technologists. Successful completion of the examination and subsequent licensure allows the student to enter the workforce as a Medical Assistant – Certified

The program provides a two year Associate in Applied Science Degree and a Certificate of Achievement in Medical Assisting. **Prerequisite and corequisite courses must be completed with a minimum of 2.0 in each course.**

Physical and Psychosocial Requirements for the Medical Assistant Program:
Students planning on entering the Medical Assistant Program need to be aware of the fact that the physical requirements listed below are expected by employers. Therefore, students will be expected to meet the same criteria during clinical/lab instruction in the Medical Assistant program.

- Demonstrate good body mechanics, lift/carry a minimum of 25 lbs. independently and 50 lbs. with assistance.
- Have normal/corrected vision and hearing within normal range.
- Demonstrate ability to tolerate intermittent sitting, standing, stooping and walking. Full range of motion is required.
- Demonstrate good manual and finger dexterity.
- Demonstrate competency in computer documentation
- Demonstrate communication skills: Must be able to read and write in English. Must be able to communicate verbally in English both in person and on the phone.
- Demonstrate ability to stand on carpeting, linoleum, or be seated at a standard desk using an office chair for a varying amount of time.
- Demonstrate ability to work in high-paced facilities that include dealing with stress.
- Demonstrate emotional stability and maturity in various circumstances through interpersonal relationships with staff, patients, and visitors.
- Demonstrate ability to deliver care across the age spectrum with cultural and ethnic sensitivity.
- Demonstrate a consistent ability to deliver safe and competent patient care.

Clinical Series (MA 111, 112, 113, 195)
In order to be considered for placement in the clinical series starting in the Fall, students must submit a "Letter of Intent" by the specified due date. The letter of intent can be found on BBCC's Medical Assistant webpage.

Requirements for the Medical Assistant Program

- Letter of intent must be submitted by due date if student wishes to be considered for the fall clinical cohort (MA 111, MA 112, MA 113)
- Provide evidence of a satisfactory physical examination before the beginning of MA 112
- Provide evidence of a current Healthcare Provider CPR card prior to MA 112 (BBCC's Medical Assistant Program requires CPR cards to be updated annually)
- Provide evidence of up-to-date immunizations and have initiated the Hepatitis B series prior to MA 112

- Have a satisfactory criminal background check prior to MA 195
- Provide evidence of negative drug testing prior to the start of MA 195

Medical Assisting AAS (90 credits)

The MA program prepares students with the knowledge, skills, and abilities to obtain an entry level position as a national and state certified Medical Assistant. Completion of this program leads to roles in clinics, urgent care facilities and some larger hospitals. The certificate as well as the AAS degree will prepare students to use administrative and clinical skills in a healthcare setting that often includes multitasking, problem solving and the ability to work as a team with other healthcare professionals. Medical Assisting will prepare students to obtain adult and pediatric vital signs, perform clinic based laboratory testing, assist with minor surgeries and perform injections as well phlebotomy.

Program Learning Outcomes:

IO1 ***Communication***
Demonstrate clear, effective communications with patients members of the healthcare team in a variety of structured settings

IO2 ***Quantitative Reasoning***
Students will be able to reason mathematically using methods appropriate to the profession

IO3 ***Human Relations/Workplace Skills***
Demonstrate professional attitude and behavior when caring for patients and collaborating with other health care professionals at all times.

PO4 Demonstrate cultural competency when caring for patients.

PO5 Prioritize, organize, and complete assignments efficiently and as directed by the delegator.

PO6 Demonstrate delegated skills and procedures effectively.

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

<u>First Year</u>

Fall Quarter
CSS 105 Intro to Healthcare Studies 3
HED 119 Medical Terminology 5
HED 121 Human Body and Disease I 5

Winter Quarter
FAD 150 Industrial First Aid 2
HED 122 Human Body and Disease II 5
HED 239 Medical Ethics 2
MAP 117 Applied Mathematics 5

Spring Quarter
ENGL& 101 English Composition 1 5
HED 123 Human Body and Disease III 5
HED 160 Pharmacology for Allied Health 3

<u>Second Year</u>

Fall Quarter
MA 111 Clinical Procedures I 3

PSYC& 100 General Psychology 5
MA Program Approved Elective 6

Winter Quarter
BIM 113 The Medical Office 5
MA 112 Clinical Procedures II 4
NUTR& 101 Nutrition 5

Spring Quarter
CMST& 220 Public Speaking 5
MA 113 Clinical Procedures III 4
MA Program Approved Elective 1
PSYC& 200 Lifespan Psychology 5

Summer Quarter
MA 195 Externship/Practicum 6
MA 197 Externship/Practicum Seminar 1

MA Certificate of Achievement (62+ credits)

The Certificate of Achievement is designed for students who wish to take specialized courses in a particular field and desire certification acknowledging completion of specific program modules. These modules contain the mathematics, written and oral communications, and human relations related instruction requirements and accepted course requirements for certification.

Program Learning Outcomes

IO1 ***Communication***
Demonstrate clear, effective communications with patients members of the healthcare team in a variety of structured settings

IO2 ***Quantitative Reasoning***
Students will be able to reason mathematically using methods appropriate to the profession

IO3 ***Human Relations/Workplace Skills***
Demonstrate professional attitude and behavior when caring for patients and collaborating with other health care professionals at all times.

PO4 Demonstrate cultural competency when caring for patients.

PO5 Prioritize, organize, and complete assignments efficiently and as directed by the delegator.

PO6 Demonstrate delegated skills and procedures effectively.

The following is a suggested sequence of courses. Interested students must work out courses and schedules with the MA program advisor.

BUS 120 Human Relations on the Job 4
OR PSYC& 100 General Psychology (5 credits)
CMST 100 Human Communications..... 4
OR CMST& 220 Public Speaking (5 credits)
ENGL 109 Applied Technical Writing..... 3
OR ENGL& 101 English Composition 1 (5 credits)
FAD 150 Industrial First Aid 2

HED 119 Medical Terminology 5
HED 121 Human Body and Disease I 5
HED 122 Human Body and Disease II 5
HED 123 Human Body and Disease III 5
HED 160 Pharmacology for Allied Health 3
HED 239 Medical Ethics 2
MA 111 Clinical Procedures I 3
MA 112 Clinical Procedures II 4
MA 113 Clinical Procedures III 4
MA 195 Externship/Practicum 6
MA 197 Externship/Practicum Seminar 1
MAP 117 Applied Mathematics 5

MEDICAL ASSISTANT	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
MA 111 Clinical Procedures I	3		x				x			
MA 112 Clinical Procedures II	4			x				x		
MA 113 Clinical Procedures III	4				x				x	
MA 195 Externship/Practicum for MA	6					x				x
MA 197 Externship/Practicum Seminar	1					x				x

Health Education	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
HED 105 Intro to Healthcare Studies	3		x		x		x		x	
HED 119 Medical Terminology	5		x	x	x		x	x	x	
HED 121 The Human Body & Disease I	5		x				x			
HED 122 The Human Body & Disease II	5			x				x		
HED 123 The Human Body & Disease III	5				x				x	
HED 160 Pharmacology for Allied Health	3				x				x	
HED 239 Medical Ethics	2		x	x			x	x		

AVIATION - COMMERCIAL PILOT
Email: aviation@bigbend.edu

John Marc Swedburg II	509.793.2247	Chief Flight Instructor
Benjamin Altrogge	509.793.2250	
John Gillespie	509.793.2246	
Aaron Linthicum	509.793.2246	

The Commercial Pilot Training program combines course work in flight training along with other ground school courses to prepare students for obtaining a commercial pilot certificate with instrument rating. To meet these requirements, most students require more than six quarters to complete the training. Because of this need, classes are scheduled each summer quarter. Additional ratings for flight instructor, instrument flight instructor, multi-engine, and seaplane may be earned through special arrangements. Special departmental rules and procedures stated in the BBCC Professional Pilot Course Handbook apply to this program.

Students desiring admission into the Commercial Pilot Training Program must meet appropriate admission requirements stated in section 1.1 of the BBCC Professional Pilot Course Handbook. Contact the Aviation Department 509.793.2241 or aviation@bigbend.edu for specific admission requirements. If some of the basic education requirements have pre-approved substitutions, and all course requirements are met, it is possible for the commercial pilot student to receive both the AA&S and the AAS degrees during the two-year program.

Commercial Pilot AAS (90 credits)
BBCC offers a two-year Workforce program in aviation for students who wish to prepare for a career as a commercial pilot and not transfer to a four-year college.

Students are required to take all the courses listed below plus any electives necessary to meet quarterly and program credit totals. See the Associate in Applied Science section under Degrees and Certificates for substitutions if you desire both the AA&S and the AAS degrees.

The following schedule of courses is the recommended program for completing this degree. See a program advisor for substitute courses.

Program Learning Outcomes:

IO1 ***Communication***
Students will be able to communicate clearly and effectively.

IO2 ***Quantitative Reasoning***
Students will be able to reason mathematically.

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

PO4 Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.

PO5 Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.

PO6 The students will be able to demonstrate the technical aspects of aircraft control and operation of related systems at the FAA commercially certificated and instrument rated pilot level

PO7 The students will be able to interpret regulatory and legal issues which impact the industry at the FAA commercially certificated pilot level.

PO8 The student will be able to evaluate effective aeronautical decision making skills at the FAA commercially certificated pilot level.

First Year
Fall Quarter
BUS 120 Human Relations on the Job 4
OR PSYC& 100 General Psychology
OR SOC& 101 Introduction to Sociology
FAD 150 Industrial First Aid 2
AVF 111 Preflight Ground School 1
AVF 112 Private Pilot Ground School 5
AVF 141 Private Pilot Flight (Stage 1) 4

Winter Quarter
ENGL 109 Applied Technical Writing 3
OR ENGL&101 English Composition I
MAP 103 Applied Math (AVF) 3
OR MAP 117 Applied Math for Workforce Programs I
OR MATH& Any college-level SQR course
AVF 113 Meteorology 5
AVF 142 Private Pilot Flight (Stage 2) 4
AVF 117 Aviation Emergency Preparedness 1

Spring Quarter
AVF 114 Theory of Flight 5
AVF 143 Private Pilot Flight (Stage 3) 4
CMST 100 Human Communications 4
OR AVF 225 Effective Communications in Flight Instruction
OR CMST& 220 Public Speaking

Second Year
Fall Quarter
AVF 223 Instrument Ground School 5
AVF 251 Commercial Pilot Flight (Stage 4) 4
Advisor approved electives/transfer courses*

Winter Quarter
AVF 221 Commercial Pilot Ground School 5
AVF 252 Commercial Pilot Flight (Stage 5) 4
Advisor approved electives/transfer courses*

Spring Quarter
AVF 253 Commercial Pilot Flight (Stage 7) 4
AVF 254 Night Flying 1
AVF 261 Instrument Flight (Stage 6) 4
Advisor approved electives/transfer courses/FAA rating courses*

*Electives needed to meet 90 total credits for the AAS. To meet AA&S degree requirements, see advisor for substitute courses.

NOTE: AVF 141, 142, 143, 251, 252, 253, 254, and 261 must be taken to complete the associated stage flight laboratory portion of the program.

Commercial Pilot Certificate of Achievement (67 credits)
The Certificate of Achievement is designed to provide recognition for the student who does not plan to complete an Associate in Applied Science degree program.

Program Learning Outcomes:

IO1 ***Communication***
Students will be able to communicate clearly and effectively.

IO2 ***Quantitative Reasoning***
Students will be able to reason mathematically.

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

PO4 Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.

PO5 Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.

AVF 111 – AVF 261 51
BUS 120 Human Relations on the Job 4
OR PSYC& 100 General Psychology
OR SOC& 101 Introduction to Sociology
CMST 100 Human Communications 4
OR AVF 225 Effective Communications in Flight Instruction
OR CMST& 220 Public Speaking
ENGL 109 Applied Technical Writing 3
OR ENGL&101 English Composition I
MAP 103 Applied Math (AVF) 3
OR MAP 117 Applied Math for Workforce Programs I .....
OR MATH& Any college-level SQR course .....
FAD 150 Industrial First Aid 2

Certificate of Accomplishment
Students who are interested in training in specialized areas of flight will be awarded Certificates of Accomplishment from BBCC as follows:

Aircraft Solo Certificate of Accomplishment (5 credits)
Program Learning Outcomes:

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 111 Preflight Ground School 1
AVF 141 Private Pilot Flight (Stage 1) 4

Private Pilot Certificate Certificate of Accomplishment (18 credits)
Program Learning Outcomes:

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 112 Private Pilot Ground School 5
AVF 113 Meteorology 5
AVF 142 Private Pilot Flight (Stage 2) 4
AVF 143 Private Pilot Flight (Stage 3) 4

Commercial Pilot Certificate of Accomplishment (23 credits)
Program Learning Outcomes:

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 114 Theory of Flight 5
AVF 221 Commercial Pilot Ground School 5
AVF 251 Commercial Pilot Flight (Stage 4) 4
AVF 252 Commercial Pilot Flight (Stage 5) 4
AVF 253 Commercial Pilot Flight (Stage 7) 4
AVF 254 Night Flying 1

Instrument Pilot Certificate of Accomplishment (19 credits/2 quarters)
Program Learning Outcomes:

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 223 Instrument Ground School 5
AVF 261 Instrument Flight Instruction (Stage 6) 4

Flight Instructor (CFI) Certificate of Accomplishment (9 credits)
Program Learning Outcomes:

IO1 ***Communication***
Students will be able to communicate clearly and effectively.

AVF 225 Effective Communication in Flight Instruction 5
AVF 270 Flight Instructor 4

Flight Instructor Instrument (CFII) Certificate of Accomplishment (2 credits)
Program Learning Outcomes:

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 271 Flight Instructor Instrument Airplane 2

Sea Plane Certificate of Accomplishment (2 credits)

Program and Certificate Learning Outcomes:

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 272 Sea Plane Flight 2

Multi-Engine Certificate of Accomplishment (2 credits)
Program Learning Outcomes:

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 275 Multi-Engine Flight 2

Simulator Training Certificate of Accomplishment (1 credit)
Program Learning Outcomes:

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 276 Simulator Training/Instrument Training 1

Multi-Engine Instructor (MEI) Certificate of Accomplishment (2 credits)
Program Learning Outcomes:

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 291 Multi-Engine Instructor 2

ATP: Multi-Engine Certificate of Accomplishment (1 credit)
Program Learning Outcomes:

IO3 ***Human Relations/Workplace Skills***
Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

AVF 292 ATP: Multi-Engine 1

COMMERCIAL PILOT	Credits	Summer 2020	Fall 2020	Winter 2021	Spring 2021	Summer 2021	Fall 2021	Winter 2022	Spring 2022	Summer 2022
AVF 111 Pre-Flight Ground School	1		Day							
AVF 112 Private Pilot Ground School	5		Day							
AVF 113 Meteorology	5			Day						
AVF 114 Theory Of Flight	5				Day					
AVF 117 Aviation Emergency Preparedness & Response	1			Day				Day		
AVF 141 Private Pilot Flight (Stage 1)	4		ARR							
AVF 142 Private Pilot Flight (Stage 2)	4			ARR						
AVF 143 Private Pilot Flight (Stage 3)	4				ARR					
AVF 190, 290 Flight (Alternate)	0-4	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 213 Advanced Meteorology (not currently offered)	5									
AVF 221 Commercial Pilot Ground School	5							Day		
AVF 223 Instrument Ground School	5						Day			
AVF 225 Effective Communication in Flight Instruction	5								Day	
AVF 227 Aircraft Systems for Pilots (not currently offered)	5									
AVF 251 Commercial Pilot Flight (Stage 4)	4						ARR			
AVF 252 Commercial Pilot Flight (Stage 5)	4							ARR		
AVF 253 Commercial Pilot Flight (Stage 7)	4								ARR	
AVF 254 Night Flying	1		ARR	ARR	ARR		ARR	ARR	ARR	
AVF 261 Instrument Flight (Stage 6)	4								ARR	
AVF 270 Flight Instructor	4									ARR
AVF 271 Flight Instructor Instrument-Airplane	2	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR

AVF 272 Seaplane Flight	2	ARR	ARR		ARR	ARR	ARR		ARR	ARR
AVF 275 Multi-Engine Flight	2	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 276 Simulator Training/Instrument Training	0.5-1	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 291 Multi-Engine Instructor	2	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 292 ATP Multi-Engine	1	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 295 Work-based Learning	1-6	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR
AVF 297 Work-based Learning Seminar	1	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR