#### Winter Quarter 2014

### Accounting

# ACCT 105 Introduction to Accounting 5

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. Tech Prep credit available.

1002 01 MTWTh 01:00PM-02:05PM 1610 STAFF

#### ACCT&201 Prin of Accounting I 5

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 highly recommended. SE

1012 01 MTWTh 09:15AM-10:20AM 1610 MICHIE L

### ACCT&202 Prin of Accounting II 5

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

1016 01 MTWTh 10:30AM-11:35AM 1610 MICHIE L

1018 OL1 ARR ARR WILKS P

Online fee is \$10.

# Agriculture

#### AGR 263 Soils 5

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, soils minerals, soil chemistry, soil fertility, soil microorganisms, soil ecology, fertilizers, plant, soil and water relationships and irrigation management.

1136 01 DAILY 10:00AM-11:00AM 1508 BAIR K

## AGR 272 Sustainable Agriculture and Food Systems 5

Examination of social, economical and ecological consequences of the modern, industrial agriculture paradigm. Topics include history of agriculture, world views, the sustainability concept, alternative agriculture systems, world food systems, agroecology, ecological economics, biotechnology, local food systems and the geography of hunger.

1146 01 MW 12:00PM-02:30PM 1508 STAFF

#### Art

### ART 090 Pottery 0

Community Ed Fee: \$82.00

Experiments and design in clay applied to pottery and sculpture. Work in various hand construction methods and in pottery wheel, glazing and kiln firing.

1200 21 W 06:30PM-08:30PM 1908 JOHANSEN B

Start & end date: 01/08/14 to 03/12/14

### ART& 100 Art Appreciation 5

Lab Fee: \$10.00

A survey of the visual arts designed to develop appreciation and understanding for daily living and for discussing architecture, painting, sculpture, and other arts. Lectures, slides, movies, and experiments with Art media. Open to all students. HU

1208 OL1 ARR ARR PALKOVIC F

Online fee is \$10.

#### ART 102 Design II 5

Lab Fee: \$8.00

An introduction to the study of color theory explored through projects. HP

1218 01 MTWTh 09:00AM-10:20AM 1911 HAGEL S

# ART 105 Drawing II 5

Lab Fee: \$8.00

A continuation in the exploration of drawing with emphasis on technique and interpretation of ideas using various media. HP

1232 01 MTW 10:30AM-12:30PM 1906 HAGEL S

## ART 230 Painting/Drawing Workshop 5

Lab Fee: \$8.00

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

1286 01 MTW 01:00PM-03:00PM 1906 HAGEL S

## Automotive Technology

#### AUT 115 Automotive Shop Safety and Environmental Issues 1

Lab Fee: \$5.25

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.

1348 01 ARR ARR 3308 WYNDER D

### AUT 121 Automotive Electrical and Electronic Systems 15

Lab Fee: \$78.75

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. Prerequisite: AUT 115

1352 01 MTWTh 09:00AM-03:00PM 3308 WYNDER D

### AUT 132 Hydraulic Systems 3

Lab Fee: \$15.75

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

1366 01 MTWTh 08:00AM-09:00AM 3308 WYNDER D

# AUT 190 Projects Laboratory 2

Lab Fee: \$10.50

This course is for full-time automotive students who need extra project laboratory time to update or enhance their skills to meet program or 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 or second year automotive program classes.

1370 21 M 05:30PM-09:15PM 3307 WYNDER D

## AUT 212 Automatic Transmission Repair 9

Lab Fee: \$47.25

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: AUT 115, AUT 121, AUT 131, AUT 132 or instructor approval.

1378 01 MTWTh 09:00AM-12:00PM 4103 COX C

### AUT 213 Automotive Servicing I

Lab Fee: \$31.50

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.

1382 01 MTWTh 01:00PM-04:00PM 3307 COX C

### AUT 290 Projects Laboratory 2

Lab Fee: \$10.50

This course is for full-time automotive students who need extra project laboratory time to update or enhance their skills to meet program or 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 or second year automotive program classes.

1398 21 T 05:30PM-09:15PM 3307 COX C

### Aviation Commercial Pilot

## AVF 111 Pre-Flight Ground School

This course introduces the student to the aircraft, its flight manual, the basic federal aviation regulations, elementary principles of flight, aircraft operations, 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.

1400 01 ARR ARR 3024 SWEDBURG J

### AVF 112 Private Pilot Ground School 5

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.

1405 01 ARR ARR 3024 SWEDBURG J

## AVF 113 Meteorology 5

This course is designed for pilots but it is helpful for the non-aviation major to understand the basics of meteorology. A study in the nature of 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

1412 22 TTh 04:00PM-06:30PM 3015 MACDOUGALL J

# AVF 131 Private Pilot Helicopter (Stage I) 4

The student will be instructed in the basic flying procedures and skills necessary for the first solo flight in a helicopter. Prerequisite: possess a valid student Pilot Certificate and hold a current medical certificate originally issued as a Class I or II.

1422 01 MTWTh ARR 3001 STAFF

### AVF 132 Private Pilot Helicopter Stage 2 4

The student will continue development of flying skills to include solo flight, confined area operations, slope operations, night flying, and cross country navigation in a helicopter. Prerequisite: AVF 131

1423 01 MTWTh ARR 3001 STAFF

#### AVF 133 Private Pilot Helicopter Stage 3 4

The student shall gain proficiency and skill in maneuvers and navigation to the level of the Private Pilot Helicopter Practical Test standards, and will complete certification requirements of the Private Pilot Certificate - Helicopter. Prerequisite: AVF 132

1424 01 MTWTh ARR 3001 STAFF

### AVF 141 Private Pilot Flight (Stage 1) 4

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.

1426 01 MTWTh ARR 3001 SWEDBURG J

## AVF 142 Private Pilot Flight (Stage 2) 4

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

1430 01 MTWTh ARR 3001 SWEDBURG J

# AVF 143 Private Pilot Flight (Stage 3) 4

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

1434 01 MTWTh ARR 3001 SWEDBURG J

#### AVF 190 Flight (Alternate) 4

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

1438 01 MTWTh ARR 3001 SWEDBURG J

#### AVF 221 Commercial Pilot Ground School 5

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 & AVF 114

1450 21 TTh 04:00PM-06:30PM 3016 CRANE G

# AVF 231 Commercial Pilot Helicopter (Stage 4) 4

The student shall gain proficiency and skill in commercial pilot scenarios and build additional cross country flight experience in a helicopter Prerequisite(s): Concurrent enrollment in instrument and commercial course required. Students enrolling in this flight course must possess a valid private pilot certificate rotorcraft-helicopter and hold a current medical certificate originally issued as a class I or II.

1468 01 MTWTh ARR 3001 STAFF

# AVF 232 Commercial Pilot Helicopter (Stage 5) 4

The student will continue to develop the aeronautical skill and experience necessary to meet the requirements for the Commercial Pilot Certificate with a Rotorcraft category rating. Prerequisite: AVF 231

1469 01 MTWTh ARR 3001 STAFF

### AVF 251 Commercial Pilot Flight (Stage 4) 4

Scheduled flight time, ground critique, discussion and observation time, dual, solo, cross-country, and instrument. Includes simulator time. Prerequisite: AVF 143

1470 01 MTWTh ARR 3001 SWEDBURG J

## AVF 252 Commercial Pilot Flight (Stage 5) 4

Scheduled flight time, ground critique, discussion and observation time; dual, solo, cross-country, instrument, and complex aircraft time. Includes simulator time. Prerequisite: AVF 251

1474 01 MTWTh ARR 3001 SWEDBURG J

# AVF 253 Commercial Pilot Flight (Stage 7) 4

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

1478 01 MTWTh ARR 3001 SWEDBURG J

## AVF 254 Night Flying 1

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

1482 21 MTWTh ARR

3001 SWEDBURG J

# AVF 261 Instrument Flight (Stage 6) 4

Provides training in instrument flight procedures in preparation for the airplane instrument rating; includes simulator training. Prerequisite: AVF 252

1488 01 MTWTh ARR

3001 SWEDBURG J

#### AVF 270 Flight Instructor

4

Preparation for the Certified Flight Instructor rating; includes flight time and critique. Prerequisite: Commercial license and instrument rating and Chief Pilot approval.

1492 01 ARR ARR

3001 SWEDBURG J

## AVF 271 Flight Instructor Instrument - Airplane 2

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.

1496 01 MTWTh ARR

3001 SWEDBURG J

## AVF 275 Multi-Engine Flight Lab

2

Preparation for the FAA Multi-Engine rating. Prerequisite: Commercial Pilot Certificate and Chief Pilot approval.

1504 01 MTWTh ARR

3001 SWEDBURG J

### AVF 276 Simulator Training/Instrument Training .5-1

Designed to fit the individual and particular needs of each pilot in Instrument Training, refresher or FAA currency requirements. Prerequisite: Instructor approval.

1508 01 MTWTh ARR

3002 SWEDBURG J

### AVF 290 Flight (Alternate) 4

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.

1512 01 MTWTh ARR

3001 SWEDBURG J

# AVF 291 Multi-Engine - Instructor

2

Preparation for the FAA Multi-Engine Flight Instructor rating. Prerequisite: Commercial Airplane with Instrument rating, Multi-Engine Land ratings, Flight Instructor Single Engine.

1517 01 MTWTh ARR

3001 SWEDBURG J

#### Aviation Maintenance

# AMT 148 AMT General Electricity 2-7

This course covers the theory of basic electricity and applied Physics. This course is FAA approved under 14 CFR Part 147. Prerequisite: instructor approval.

1548 01 ARR ARR 3200 DANNENBERG K

### AMT 149 AMT Airframe Electricity

This course covers aircraft electrical systems, electrical generators motors and regulators, aircraft communication and navigation systems. This course is FAA approved under 14 CFR Part 147. Prerequisite: instructor approval

1554 01 ARR ARR 3200 BORG C

AMT 150 AMT General 4-16

Lab Fee: \$184.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

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.

1558 01 MTWTh ARR 3200 DANNENBERG K

#### AMT 151 Airframe Mechanic I 4-22

Lab Fee: \$253.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

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.

1564 01 MTWTh ARR 3200 BORG C

### AMT 152 Airframe Mechanic II 4-21

Lab Fee: \$241.50

\*Variable Credit Lab Fees are calculated at the highest rate\*

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 FAA approved under 14 CFR Part 147. Prerequisite: instructor approval.

1568 01 MTWTh ARR 3200 BORG C

### AMT 153 Airframe Mechanic III 4-24

Lab Fee: \$276.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

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.

1574 01 MTWTh ARR 3200 BORG C

## AMT 249 AMT Powerplant Electricity

This course covers the theory of engine electrical systems, electrical generators, alternators, motors and regulators. This course is FAA approved under 14 CFR Part 147. Prerequisite: instructor approval.

2

1578 01 ARR ARR 3200 MOORE D

# AMT 251 Powerplant Mechanics I 4-16

Lab Fee: \$184.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

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 permission

1584 01 MTWTh ARR 3200 MOORE D

### AMT 252 Powerplant Mechanics II 4-14

Lab Fee: \$161.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

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,

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 permission

service, troubleshooting, removal, and installation of aircraft reciprocating and

1588 01 MTWTh ARR 3200 MOORE D

## AMT 253 Powerplant Mechanics III 4-16

Lab Fee: \$184.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

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 permission

1594 01 MTWTh ARR 3200 MOORE D

### AMT 254 Powerplant Mechanic IV 4-16

Lab Fee: \$184.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

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. 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: AMT 251, 252, 253 and instructor permission.

1598 01 MTWTh ARR 3200 MOORE D

#### **Biology**

## BIOL&100 Survey of Biology 5

Lab Fee: \$18.00

A study of basic biological principles common to all organisms. This course is intended for non-majors who desire a lab science requirement. Topics of study include: basic chemistry of cells, cell structure and function, membrane transport, cell metabolism and division, genetics and gene function, evolution, and ecology. Related investigations take place in a required two-hour lab period each week. There will be no required dissections in the laboratory. LS

1600 01 TWTh 10:30AM-11:35AM 1910 RAZO C

Lab M 10:30AM-12:30PM 1211 RAZO E

1602 02 TWTh 01:00PM-02:05PM 1910 WHITNEY M

Lab M 01:00PM-03:00PM 1211 WHITNEY M

## BIOL&170 Human Biology 5

Lab Fee: \$10.00

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

1605 OL1 ARR ARR HALEY G

Online fee is \$10.

# BIOL&222 Majors Cell/Molecular 5

Lab Fee: \$18.00

The second 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: structure and function of biological molecules, structure and function of prokaryotic and eukaryotic cells, membrane transport, cell communication, cell metabolism and energetics, cell division, and classical genetics, human genetics, molecular genetics, gene expression, and biotechnology. Math/Science distribution requirement may not include more than 5 credits from BIOL& 211 and BIOL& 222, although graduation credit can be awarded for both. 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(s): 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. NOTE: Students taking only BIOL& 222 as an alternative to BIOL& 211 must have instructor permission and may satisfy the CHEM& 121 prerequisite with recent high school chemistry with a B or better. LS

1620 01 MTWTh 09:15AM-10:05AM 1219 DUVALL K

Lab Th 02:15PM-05:15PM 1211 DUVALL K

#### BIOL&241 Human A & P 1 5

Lab Fee: \$18.00

An analysis of the structure and function of human skeletal, muscular, nervous and endocrine 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 hands-on experience with required cat dissection as well as computer analysis of muscle physiology. Tissue slides, models and skeletons will be utilized. Lab is required for credit. Prerequisite(s): Students may qualify for BIOL& 241 in any one of the following ways: 1) a grade of 2.0 or better in BIOL& 211 or BIOL& 222 and in CHEM& 121 or above, or a transcript from another college for those classes 2) a year of high school Anatomy and Physiology and Chemistry within the last 2 years with a grade of B or better. 3) a score of 3 or better in Advanced Placement Biology AND a year of high school Chemistry within the last 2 years with a B or better OR INSTRUCTORS PERMISSION

1630 01 MW 01:00PM-02:15PM 1250 JACOBS B

Lab MW 02:30PM-04:30PM 1209 JACOBS B

Cat dissection not required winter quarter.

1632 02 MW 01:00PM-02:15PM 1250 JACOBS B

Lab TTh 01:00PM-03:00PM 1209 JACOBS B

Cat dissection not required winter quarter.

1634 03H ARR ARR JACOBS B

Lab MW 02:30PM-04:30PM 1209 JACOBS B

Section 03H incorporates both traditional class time and a distance education component. Students attend weekly laboratory sessions and take tests on campus; class lectures and assignments are accessed online. Cat dissection not required winter quarter. Online fee is \$10.

1635 04H ARR ARR JACOBS B

Lab TTh 01:00PM-03:00PM 1209 JACOBS B

Section 04H incorporates both traditional class time and a distance education component. Students attend weekly laboratory sessions and take tests on campus; class lectures and assignments are accessed online. Cat dissection not required winter quarter. Online fee is \$10

## BIOL&242 Human A & P 2 5

Lab Fee: \$18.00

The second quarter of a two-quarter sequence. Includes the structure, function and pathology of the 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 human autopsy slides, required hands-on experience with cat and organ dissection and experimental procedures in cardiovascular function as well as computer analysis of renal function. Lab is required for credit. Prerequisite(s): A minimum grade of 2.0 in BIOL&241 or equivalent. LS

1636 01 MW 09:15AM-10:30AM 1250 JACOBS B

Lab TTh 09:15AM-11:15AM 1209 JACOBS B

Cat dissection not required winter quarter.

1638 O2H ARR ARR JACOBS B

Lab TTh 09:15AM-11:15AM 1209 JACOBS B

Section 02H incorporates both traditional class time and a distance education component. Students attend weekly laboratory sessions and take tests on campus; class lectures and assignments are accessed online. Cat dissection not required winter quarter. Online fee is \$10.

## Botany

### BOT 130 Botany 5

Lab Fee: \$18.00

A study of the basic principles of plant life. Topics of study include: structures and functions of flowering plants and their cells, tissues, roots, stems, leaves, flowers, fruits, and seeds, cell metabolism emphasizing photosynthesis, transport of water and nutrients, growth and development of plants from seed to maturity, cell division, and plant genetics. Related investigations take place during two hours of lab each week. Laboratory topics include: a microscopic study of tissues, roots, stems, leaves and flower structures. Additionally, lab periods study the diversity of plants and their relatives and investigate vegetative propagation of common plant species. A greenhouse is available for class use. LS

1660 01 MTWTh 11:45AM-12:35PM 1250 DUVALL K

Lab T 01:00PM-03:00PM 1211 DUVALL K

# Business

#### BUS& 101 Intro to Business 5

An introductory analysis of the business world including aspects of finance, industrial stocks and bonds, commodities and foreign exchange, unions and the labor movement, managerial control, decision making and personnel relations. SE

1702 01 MTWTh 08:00AM-09:05AM 1610 MICHIE L

### BUS 120 Human Relations on the Job 4

Practical application oriented study of interpersonal skills and attitudes necessary to work with others. Topics included are: maintaining professionalism, dapting/coping with change and stress, work ethics, motivation, conflict resolution, team work and customer relations. Prerequisite: Placement in ENGL 099 or above.

1722 01 MTWTh 08:00AM-08:50AM 1608 AUVIL J

1723 21 MTW 04:30PM-05:35PM 1604 RUFFIN

1724 OL1 ARR ARR SIEVERKROPP

Online fee is \$10.

#### BUS 121 Business English 5

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: Successful completion of ENGL 098 or placement into ENGL 099.

1728 01 MTWTh 10:30AM-11:35AM 1609 BERRY-GUERIN

## BUS 161 Business Calculators 2

Lab Fee: \$9.00

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: Math placement of MATH 090 or above.

1750 01 MTWTh 11:45AM-12:35PM 1602 WILKS P

### BUS 200 Supervision 5

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

1768 01 TTh 01:00PM-03:10PM 1612 WILLINGHAM T

#### BUS& 201 Business Law 5

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

1772 01 MTWTh 02:15PM-03:20PM 1610 MICHIE L

### Business Information Management

# BIM 101 Basic Keyboarding 2

Lab Fee: \$17.20

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.

1795 01 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/06/14 to 02/20/14

This is not an online course; it is a self-paced, scheduled class with specific deadlines. You are required to attend the first week of the course for orientation and the third and seventh weeks of the course for evaluation. The BIM classroom hours are Monday-Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

1796 02 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/28/14 to 03/14/14

This is not an online course; it is a self-paced, scheduled class with specific deadlines. You are required to attend the first week of the course for orientation and the third and seventh weeks of the course for evaluation. The BIM classroom hours are Monday-Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

# BIM 102 Document Formatting 1-4

Lab Fee: \$34.40

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course gives primary emphasis to the formatting of business documents using Microsoft Word. Prerequisite: Keyboarding skills.

1802 01 MTWTh ARR 1613 BERRY-GUERIN

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

#### BIM 103 The Administrative Professional 2

Lab Fee: \$17.20

This course is an introduction to the administrative professional career.

1806 01 MTWTh ARR 1613 BERRY-GUERIN

This is not an online course; it is a scheduled class with specific deadlines. You are required to attend by January 8 for orientation. The BIM classroom hours are Monday-Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

# BIM 104 Intermediate Keyboarding 1- 3

Lab Fee: \$25.80

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course focuses on the improvement of speed and accuracy. Prerequisite: BIM 101 or keyboarding skills.

1814 01 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/06/14 to 02/20/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

1815 02 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/28/14 to 03/14/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

# BIM 106 Advanced Keyboarding 1-3

Lab Fee: \$25.80

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course gives emphasis to improving keyboarding speed and accuracy. Prerequisite(s): BIM 104

1817 01 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/06/14 to 02/20/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

1818 02 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/28/14 to 03/14/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

### BIM 109 Internet Communications 1

Lab Fee: \$8.60

This course will teach the functions of email communications and the fundamental use and sharing of Web Applications.

1823 01 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/06/14 to 02/20/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

1824 02 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/28/14 to 03/14/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

### BIM 110 Microsoft Office Essentials 1-3

Lab Fee: \$10.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course is an introduction to Microsoft Office Suite 2013. This course is not intended for Business Information Management majors. Credit cannot be earned in both BIM 110 and BIM 108.

1825 OL1 MTWTh ARR BERRY-GUERIN

Start & end date: 01/06/14 to 02/20/14

This is an online course and all coursework is completed online. Please check your Big Bend Email and Canvas before classes begin for Getting Started instructions. Online fee is \$10.

1827 02 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/28/14 to 03/14/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

### BIM 111 Introduction to Computers in the Medical Office 1-3

Lab Fee: \$25.80

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course covers the general flow of information in a medical office and the role that computers play. Students will learn how to use medical office software for activities such as entering data, billing, filing claims, scheduling, and printing reports. Prerequisite: basic computer skills.

1828 01 MTWTh ARR 1613 BERRY-GUERIN

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

#### BIM 112 Proof & Edit 1-3

Lab Fee: \$25.80

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course gives students the opportunity to learn different proofreading techniques and then emphasizes practice using those techniques. Prerequisite: BUS 121, BIM 102.

1830 01 MTWTh ARR 1613 BERRY-GUERIN

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

# BIM 130 Filing 1- 2

Lab Fee: \$17.20

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course introduces basic filing rules for alphabetic, numeric, subject, and geographic filing.

1850 01 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/06/14 to 02/20/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

1852 02 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/28/14 to 03/14/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

### BIM 173 Word Processing I 1-5

Lab Fee: \$43.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course is an in-depth introduction to Microsoft Word 2010. The focus is to learn functions of Word, to apply these functions to business situations, and begin preparing students for the Microsoft Application Specialist exam. Tech Prep credit available. Prerequisite: BIM 102 or instructor approval.

1860 01 MTWTh ARR 1613 BERRY-GUERIN

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

### BIM 177 Office Information Management Lab 1-6

Lab Fee: \$51.60

\*Variable Credit Lab Fees are calculated at the highest rate\*

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 approval.

1866 01 MTWTh ARR 1613 BERRY-GUERIN

The BIM classroom hours are Monday-Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

### BIM 180 Introduction to Microsoft Office 1-5

Lab Fee: \$43.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course is an introduction to the basic functions of Microsoft Office 2013 - Word, Excel, Access, PowerPoint, and Integration. This course is intended for Business Information Management and Accounting students. Prerequisite: BIM102/OFF102

and successful completion of MPC090/MATH090/MATH094 or BBCC Placement Exam into MATH095 or higher.

1870 01 MTWTh ARR 1613 BERRY-GUERIN

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

#### BIM 181 Introduction to Microsoft Office: Word 1-3

Lab Fee: \$25.80

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course provides a brief introduction to Microsoft Word. It is not intended for Business Information Management Program students.

1875 OL1 ARR ARR BERRY-GUERIN

Start & end date: 01/06/14 to 02/20/14

This is an online course and all coursework is completed online. Please check your Big Bend Email and Canvas before classes begin for Getting Started instructions. Online fee is \$10.

1876 02 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/28/14 to 03/14/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

### BIM 182 Introduction to Microsoft Office: Excel 1-3

Lab Fee: \$25.80

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course provides an introduction to Microsoft Excel 2010. It is not intended for Business Information Management Program students. Prerequisite: Successful completion of MATH 090 or BBCC placement exam into MATH 095 or higher.

1880 OL1 MTWTh ARR BERRY-GUERIN

Start & end date: 01/06/14 to 02/20/14

This is an online course and all coursework is completed online. Please check your Big Bend Email and Canvas before classes begin for Getting Started instructions. Online fee is \$10.

1881 02 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/28/14 to 03/14/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

#### BIM 183 Introduction to Microsoft Office: Access 1-3

Lab Fee: \$25.80

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course provides a brief introduction to Microsoft Access. It is intended for students not majoring in the Business Information Management Program

1885 OL1 MTWTh ARR BERRY-GUERIN

Start & end date: 01/06/14 to 02/20/14

This is an online course and all coursework is completed online. Please check your Big Bend Email and Canvas before classes begin for Getting Started instructions. Online fee is \$10.

1886 02 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/28/14 to 03/14/28

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

#### BIM 184 Introduction to Microsoft Office: PowerPoint 1-3

Lab Fee: \$25.80

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course gives a brief introduction to Microsoft Access. It is intended for students not majoring in the Business Information Management Program

1890 OL1 MTWTh ARR BERRY-GUERIN

Start & end date: 01/06/14 to 02/20/14

This is an online course and all coursework is completed online. Please check your Big Bend Email and Canvas before classes begin for Getting Started instructions. Online fee is \$10.

1891 02 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/28/14 to 03/14/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

### BIM 190 Spreadsheets I 1-5

Lab Fee: \$43.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course is an in-depth introduction to Microsoft Excel 2010. The focus is to learn functions of Excel, to apply this knowledge to business situations, and to

begin preparing students for the Microsoft Office Specialist exams. Prerequisite: Successful completion of BUS102-Business Mathematics, BBCC placement exam into MATH 099 or higher or successful completion of MATH 095.

1900 01 MTWTh ARR 1613 BERRY-GUERIN

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

#### BIM 194 Presentations 1-5

Lab Fee: \$43.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

This is an in-depth Microsoft PowerPoint 2010 course. The focus of this course is to learn presentation functions, to apply this material to business situations, and to prepare students for the Microsoft Application Specialist exam.

1906 01 MTWTh ARR 1613 BERRY-GUERIN

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

### BIM 195 Database Management 1-5

Lab Fee: \$43.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

This is an introduction to database concepts and to the integration of Access with other data.

1910 01 MTWTh ARR 1613 BERRY-GUERIN

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

## BIM 198 Special Topics 1-5

Lab Fee: \$43.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course provides individual study in one of the office information technology subject areas. Study and credit hours determined at the time of enrollment by the instructor. Prerequisite: instructor approval.

1916 01 MTWTh ARR 1613 BERRY-GUERIN

The BIM classroom hours are Monday-Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

# BIM 210 Internet 1-2

Lab Fee: \$17.20

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course will teach the functions of accessing Internet.

1920 01 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/06/14 to 02/20/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

1921 02 MTWTh ARR 1613 BERRY-GUERIN

Start & end date: 01/28/14 to 03/14/14

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

#### BIM 280 Advanced Microsoft Office 1-5

Lab Fee: \$43.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

This course is a continuation of BIM180 and introduces the advanced features and integration capabilities of Microsoft Office 2010. This course consists of five modules--Word, Excel, Access, PowerPoint, and completion of an Integrated Project.Prerequisite:OFF180 or BIM180 and successful completion of BUS102-Business Mathematics, BBCC placement exam into MATH 099 or higher, or successful completion of MATH 095

1942 01 MTWTh ARR 1613 BERRY-GUERIN

This is not an online course; it is a self-paced course that requires regular attendance. The BIM classroom hours are Monday - Thursday 8:30-11:35 a.m. and 1:00-4:30 p.m.

5

### Chemistry

## CHEM&105 Chemical Concepts

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. Prerequisite: Passing grade in MATH 090/094 or placement in MATH 095/096. MS

1950 01 MTWTh 11:45AM-12:50PM 1203 GROCE L

### CHEM&121 Intro to Chemistry 5

Lab Fee: \$18.00

This course is designed for the allied health students. 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(s): Passing grade in MATH095 or placement in MATH099. A passing grade in high school chemistry or completion of CHEM& 105 or CHEM& 110 is recommended. LS

1967 01 MWTh 09:15AM-10:20AM 1203 GROCE L
Lab T 01:00PM-03:00PM 1216 GROCE L
1969 02 MWTh 10:30AM-11:35AM 1218 GROCE L
Lab T 03:30PM-05:30PM 1216 GROCE L

### CHEM&131 Intro to Organic/Biochem 5

Lab Fee: \$18.00

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: A grade of 2.0 or above in CHEM& 121 or instructor permission. LS

1975 01 TWTh 09:15AM-10:20AM 1218 PETERSON J
Lab M 02:15PM-05:15PM 1216 PETERSON J

# CHEM&162 General Chem w/Lab II 5

Lab Fee: \$18.00

The second quarter in a three quarter general chemistry 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 o matter. Relevance of course material to current practices in chemistry is a fundamental focus. Prerequisite: CHEM& 161 or instructor permission. LS

1991 01 MTTh 11:45AM-12:50PM 1218 PETERSON J
Lab W 11:45AM-02:45PM 1216 PETERSON J
1993 02 MTTh 01:00PM-02:05PM 1218 PETERSON J
Lab W 03:00PM-06:00PM 1216 PETERSON J

# College Success Skills

## CSS 100 College Survival Skills

A participant in this class will learn to be a more efficient, productive learner. The participant's individual learning style and personality type are identified. Areas of consideration and study include: time management; stress management; listening skills; note taking; memory; mnemonics; reading retention and comprehension; test-taking; test anxiety; math anxiety; the writing process; critical thinking, active learning, and values clarification.

2016 01 MTW 09:15AM-10:05AM 1722 WORKMAN J
2018 02 MTW 10:30AM-11:20AM 1722 WORKMAN J
2020 03 MTW 01:00PM-01:50PM 1855B WADE V
2022 OL1 ARR ARR DELEON J

Online fee is \$10.

### CSS 102 Focus on Success

Lab Fee: \$10.00

In this class, students will explore many of the non-academic factors that impact success in college. Increased awareness and practical application will be the logical outgrowth of work in the following areas: career and college course choices; relationships; diversity; values; stress management; substance abuse; sexual decisions; and diet and exercise. In addition, students will develop basic computer literacy as they explore the non-academic factors through a basic understanding of personal computers, word processing operations, email, and use of the internet.

3

2056 OL1 ARR ARR HAMMOND D

Online fee is \$10.

### CSS 104 Introduction to Computer Literacy

Lab Fee: \$10.00

This course will provide the student with an introduction to computer operations, file management, e-mail, applications, the Internet, and BBCC technology. The course will provide an overview of skills a student should possess before taking an online class. The course is not intended to teach keyboarding or computer applications such as Microsoft Office.

3

2064 01H W 06:00PM-07:00PM 1802 DELEON J

Orientation January 8 from 6:00-8:00 p.m. This class combines online and on ground instruction. For every hour of in class instruction students are expected to complete two additional hours of instruction online. Online fee is \$10.

# CSS 105 Introduction to Healthcare Studies 3

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.

2065 01H W 08:00AM-09:00AM 1721 ELLIOTT A

Students need to have access to a reliable computer and Internet connection as this is a hybrid (online and face-to-face) course.

#### Commmercial Driver's License

#### CDL 100 Commercial Driver's License (CDL) 17

Lab Fee: \$2918.44

This course provides classroom study, driving instruction and experience. The course prepares students for the CDL driving examination and entry level employment. Prerequisite: Completed Commercial Driver's License (CDL) Program Application with supporting documents.

2070 01 DAILY 07:30AM-04:00PM 1534 MILLER R

Start & end date: 01/21/14 to 03/03/14

For application contact Randy Miller at 793.2295, Guillermo Garza at 509.793.2221 or Julia Gamboa at 793.2045.

## Computer Science

## CS 101 Intro to Computer Science 3

Lab Fee: \$32.20

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 and logic, 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. Prerequisite: none. SE

2105 01H T 03:30PM-04:35PM 1509 BETZING P

Mandatory orientation 1/7/14, in room 1509 at 3:30 p.m. This is a hybrid class that incorporates traditional class time & a distance education component. Students must have access to a reliable internet connection. Online fee is \$10.

## CS 115 Intro to Database Design & Management 5

Lab Fee: \$37.00

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. Prerequisites: None

2135 21 MW 07:00PM-09:20PM 1509 BETZING P

### CS 142 Advanced Programming with Java 5

Lab Fee: \$10.00

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

2156 OL1 ARR ARR LULOFS E

Online fee is \$10.

# CS 157 Cisco Networking 1:Part II 5

Lab Fee: \$37.00

This is the second of two courses comprising the Cisco ICND1 Part 1 training and continues the concepts learned from CS 156. The course focuses on providing the skills and knowledge necessary to install, operate, and troubleshoot a small branch office enterprise network including configuring a switch, a router, connecting to a WAN, and implementing network security. The purpose of the course is to prepare students to take the Cisco CCNA Exam 640-802 and ICND1 Exam 640-822. Prerequisite: CS 156

2161 21 TTh 05:00PM-08:00PM 1511 GUZMAN NOE

#### CS 159 Cisco Networking 2: Part II 5

Lab Fee: \$37.00

This course is a continuation of CS 158 and focuses on providing the skills and knowledge necessary to install, operate, and troubleshoot a small to medium-size branch office enterprise network, including configuring several switches and routers, connecting to a WAN and implementing network security. The course's purpose is to cover the technical knowledge and skills in order for students to take the Cisco CCNA exam 640-802 and ICND2 exam 640-816. Prerequisite(s): CS 158

2164 21 TTh 05:00PM-08:00PM 1511 GUZMAN NOE

# CS 161 Intro to Website Design and Publishing 5

Lab Fee: \$37.00

This course covers the technical knowledge and skills needed to design and publish a web site. Students create web pages with the latest standards of XHTML, HTML5, and Cascading Style Sheets (CSS) with an emphasis on coding web pages that work in both current and future browsers. Topics include web design principles, website development, web authoring standards, configuring images and multimedia on web pages, and website publishing.

2167 21H M 04:30PM-06:50PM 1508 KIMBALL T

Students need to have access to a reliable computer and Internet connection as this is a hybrid (online and face-to-face) course. Check your Big Bend email the week before classes for log-in information and further course instructions.

#### CS 195 Internship: Work Based Learning 1-4

Students will participate in a supervised internship with regional computer and information technology employers. Students are expected to develop a computer science career-based portfolio and employment resume. Prerequisites: Enrollment in Computer Science program, instructor permission, and concurrent enrollment in CS 197.

2171 01 ARR ARR SHANNON M

# CS 197 Internship: Work Based Learning Seminar 1

Students participating in internships share feedback and discussion to integrate work-based learning experiences with classroom instruction. Students are expected to submit weekly work journals and develop a computer science career-based portfolio and employment resume. Prerequisites: Concurrent enrollment in CS 195.

2172 01 ARR ARR SHANNON M

### CS 205 Windows Server Admin 5

Lab Fee: \$37.00

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 110

2175 21 MW 04:30PM-06:50PM 1509 BETZING P

### CS 207 Introduction to Security Administration 5

Lab Fee: \$37.00

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(s): CS 205

2176 21 TTh 05:00PM-07:20PM 1509 BETZING P

## CS 265 Web Applications Design & Development 5

Lab Fee: \$37.00

Students acquire the knowledge and skills to design and develop dynamic web applications. Using ASP.NET and Ajax, students design, create, and test web pages, create a web interface to a database, and build applications for the web and mobile devices. Prerequisite: CS 111 or CS 251 and CS 161

2179 21 TTh 04:30PM-06:50PM 1508 STAFF

Class times & days may change depending on instructor availability.

## Communications

### CMST 100 Human Communications 4

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.

2180 01 MTWTh 08:00AM-08:50AM 2032 POTH MITCH

2182 21H ARR 04:30PM-06:30PM 1910 STAFF

Most of this class is online with three required on campus meeting dates. Online fee is \$10.

#### CMST&102 Intro to Mass Media 5

Lab Fee: \$10.00

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 and their function and role in today's world. HU

2184 OL1 ARR ARR VALDEZ R

Online fee is \$10.

## CMST&220 Public Speaking 5

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

2188	01	MTWTh	09:15AM-10:20AM	2032	POTH M
2190	02	MTWTh	09:15AM-10:20AM	1608	JACKSON K
2191	03	MTWTh	10:30AM-11:35AM	2032	POTH M
2192	04	MTWTh	10:30AM-11:35AM	2031	POTH MITCH
2195	05	MTWTh	11:45AM-12:50PM	1606	CLOSE S
2196	06	MTWTh	11:45AM-12:50PM	2032	POTH MITCH
2197	07W	Sa	08:30AM-01:00PM	1855A	JACKSON K

### Criminal Justice

# CJ& 101 Intro Criminal Justice 5

This course provides an overview of crime and the criminal justice system including the historical development of the system and a discussion of sociological theory. The course examines the extent and character of crime by examining current and past philosophies that our society uses to deal with crime and criminals. Emphasis is placed on how the various systems interrelate and interact to attain the goal of an orderly and non-discriminatory delivery of crime related public services. SS

2205 21 TTh 07:00PM-09:20PM 1609 POPLOWSKI

2206 OL1 ARR ARR LEONARD R

For section OL1, all coursework for this class will be completed online. Students need to have access to a reliable Internet connection. Check your Big Bend email the week before classes for further course instructions. Online fee is \$10.

5

### CJ& 110 Criminal Law

This course is an introduction to the criminal law system of the United States. Issues covered include: the historical evolution of the law, applications of criminal law, legal concepts underlying the law and the procedures under which criminal law violators are processed. Prerequisite: CJ& 101 or Instructor Permission.SE

#### 2216 01 MTWTh 10:30AM-11:35AM 1611 LEONARD R

Section 01 incorporates traditional class time and a distance education component. Students need to have access to a reliable internet connection. Check your Big Bend email the week before classes & attend the first day of scheduled class for further instructions.

#### Early Childhood Education

# ECED&107 Health/Safety/Nutrition 5

Lab Fee: \$10.00

Develop knowledge and skills to ensure good health, nutrition, and safety of children in group care and education programs. Recognize the signs of abuse and neglect, responsibilities for mandated reporting, and available community resources.

#### 2273 21H M 06:00PM-08:00PM 1611 NIGHSWONGER

Students in ECED& 107 will be taught using the I-BEST model of instruction. Two faculty will be co-teaching the class. One faculty member focuses on professional technical skills while the other focuses on basic & study skills. Pre and post CASAS testing required. Students need to have access to a reliable computer and Internet connection as this is a hybrid (online and face-to-face) course. Check your Big Bend email the week before classes for log-in information and further course instructions.

### ECED&120 Practicum-Nurturing Rel 2

Lab Fee: \$12.00

This course will provide students an opportunity to apply best practice for engaging in nurturing relationships with children in an early learning setting. Focus on keeping children healthy and safe while promoting growth and development. Prerequisites: ECED& 105 and instructor permission.

## 2278 21H T 04:00PM-06:00PM 1611 REDMOND S

Permission required. Contact Jenny Nighswonger at 793.2216. Students are required to pass a WSP background check, obtain liability insurance & provide results of a negative Tuberculin skin test prior to registering for this course. Students need to have access to a reliable computer and Internet connection as this is a hybrid (online and face-to-face) course. Check your Big Bend email the week before classes for log-in information and further course instructions.

#### ECED&132 Infant/Toddlers Care 3

Lab Fee: \$10.00

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.

2282 OL1 ARR ARR

Students need to have access to a reliable computer and Internet connection as this is an online course. Check your Big Bend email the week before classes for log-in information and further course instructions. Online fee is \$10.

#### ECED&160 Curriculum Development 5

Lab Fee: \$10.00

Investigate learning theory, program planning, and tools for curriculum development promoting language, fine/gross motor, social-emotional, cognitive and creative skills and growth in young children (birth-age 8).

2290 21H Th 04:00PM-06:30PM 1611 GILES A

Students need to have access to a reliable computer and Internet connection as this is a hybrid (online and face-to-face) course. Check your Big Bend email the week before classes for log-in information and further course instructions.

#### ECED&190 Observation/Assessment 3

Lab Fee: \$10.00

Collect and record observation of and assessment data on young children in order to plan for and support the child, the family, the group and the community. Practice reflection techniques, summarizing conclusions and communicating findings

2304 21H Th 06:30PM-08:30PM 1611 GILES A

### **Economics**

#### ECON 200 Introduction to Economics 5

Lab Fee: \$10.00

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 MATH095 or higher and placement in ENGL 099 or higher. THIS IS NOT A SUBSTITUTE FOR ECON& 201 OR 202. SS

2316 OL1 ARR ARR DONAT G

Section OL1: All course work for this class will be completed online through Canvas. Students need to have access to a reliable internet connection. Check your Big Bend email the week before classes for log-in information and further course instructions. Online fee is \$10

## ECON&202 Macro Economics 5

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 MATH095 or higher and placement in ENGL 099 or higher.

2326 01 MTWTh 08:00AM-09:05AM 1609 PYLE T

### Education

### EDUC 106 Issues in Child Abuse 2

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.

2355 01W Sa 09:00AM-03:00PM 1611 ZAVALA LOPEZ

Class meets 1/25, 2/1, 2/8, and 2/15.

### EDUC 190 Classroom Experience 3

Lab Fee: \$22.50

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 nine hours per week throughout the quarter. Can be repeated up to nine credits. Prerequisites: ECED& 120 or EDUC& 201 or instructor permission

2414 21H M 04:00PM-06:00PM 1611 NIGHSWONGER

Permission required. Contact Jenny Nighswonger at 793.2216. Students are required to pass a WSP background check, obtain liability insurance & provide results of a negative Tuberculin skin test prior to registering for this course. Students need to have access to a reliable computer and Internet connection as this is a hybrid (online and face-to-face) course. Check your Big Bend email the week before classes for log-in information and further course instructions.

### EDUC&201 Intro to Education 3

Lab Fee: \$10.00

Teaching as a career and essential features of preparation for it. Includes a study of the teachers role and function in the school; preparation for professional competencies and certification; the American public school system; and the responsibilities of schools in a democratic society. Prerequisite: Successful completion of ENGL 99 or placement in ENGL& 101. SE

2422 21H T 06:00PM-08:00PM 1611 KIMBALL T

Students need to have access to a reliable computer and Internet connection as this is a hybrid (online and face-to-face) course. Check your Big Bend email the week before classes for log-in information and further course instructions.

#### English

## ENGL 065 Spelling Improvement 2

Lab Fee: \$7.20

With a self-paced approach, the student will practice commonly misspelled words that account for 97% of spelling errors by a combination of the whole-word method and learning the rules and exceptions of the English spelling system.

2502 01 MTWTh 08:00AM-09:05AM 1817 SHUTTL'TH K

2503 02 MTWTh 11:45AM-12:50PM 1817 SHUTTL'TH K

2504 03 MTWTh 02:15PM-03:20PM 1817 SHUTTL'TH K

## ENGL 087 Reading Improvement 3

Lab Fee: \$10.80

Reading improvement for adults with emphasis on increasing and improving vocabulary and comprehension to college level. Prerequisite: English placement exam.

2508 01 MTWTh 08:00AM-09:05AM 1817 SHUTTL'TH K
2509 02 MTWTh 11:45AM-12:50PM 1817 SHUTTL'TH K

2510 03 MTWTh 02:15PM-03:20PM 1817 SHUTTL'TH K

# ENGL 093 Basic Writing 3

Lab Fee: \$10.80

This class is designed for adult students who have little or no experience writing beyond elementary school. During the class, students will choose a topic and develop the main idea and its support thus gaining practice in proofreading, punctuation and using correct grammar to develop paragraphs. Prerequisite: placement exam.

2512 01 MTWTh 08:00AM-09:05AM 1817 SHUTTL'TH K
2513 02 MTWTh 11:45AM-12:50PM 1817 SHUTTL'TH K

2514 03 MTWTh 02:15PM-03:20PM 1817 SHUTTL'TH K

## ENGL 095 Writing Improvement 3

Lab Fee: \$10.80

Through individual writing experiences and the practice of assigned exercises, the student will develop a procedure for writing and revising papers using word processing. Students may submit papers written during the quarter to portfolio assessment of preparedness for ENGL& 101. Prerequisite: ENGL 093 or placement.

2518 01 MTWTh 08:00AM-09:05AM 1817 SHUTTL'TH K

2519 02 MTWTh 11:45AM-12:50PM 1817 SHUTTL'TH K

2520 03 MTWTh 02:15PM-03:20PM 1817 SHUTTL'TH K

### ENGL 098 Basic English Skills 5

Lab Fee: \$18.00

This course covers techniques for improving basic writing skills at the sentence, paragraph and essay level. Additional work will be done on improving reading comprehension, enriching vocabulary, and refining computer skills. Prerequisite: placement exam.

2524 01 MTWTh 09:15AM-10:20AM 1855B HAMMOND D

2525 02 MTWTh 10:30AM-11:35AM 1856 ERICKSON G

# ENGL 099 English Skills (Pre-101) 5

Lab Fee: \$18.00

This class is a composition course designed to prepare students for college reading and writing using word processing. Students write personal and academic essays and prepare a writing portfolio. The course includes the study of sentence sense and mechanics, grammar, punctuation, paragraph and essay structure as well as activities that improve reading and vocabulary. Prerequisite: Satisfactory completion of ENGL 098 or placement in ENGL 099 through the English placement exam.

2530	01	MTWTh	08:00AM-09:05AM	1856	ERICKSON G
2532	02	MTWTh	09:15AM-10:20AM	1856	ERICKSON G
2534	03	MTWTh	10:30AM-11:35AM	1855B	HAMMOND D
2536	04	MTWTh	11:45AM-12:50PM	1855B	HAMMOND D
2538	05	MTWTh	01:00PM-02:05PM	1607	ANDERSON J
2540	OL1	ARR	ARR		VAN BLARICOM

Online fee is \$10.

## ENGL&101 English Composition I 5

Lab Fee: \$18.00

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 passing grade in ENGL 099.

2546	01	MTWTh	08:00AM-09:05AM	1606	CLOSE S	
2549	02	MTWTh	09:15AM-10:20AM	1609	GUTIERREZ	0
2550	03	MTWTh	09:15AM-10:20AM	1855A	ROBERTSON	D
2552	04	MTWTh	11:45AM-12:50PM	1855A	STODDARD C	
2554	05	MTWTh	01:00PM-02:05PM	1855A	STODDARD C	
2555	06	TTh	01:15PM-03:45PM	1911	MARTINSON	Μ
2556	OL1	ARR	ARR		RASMUSSEN	Ρ
Online fee is \$10.						
2558	OL2	ARR	ARR		RAMM J	

### ENGL&102 Composition II 5

Lab Fee: \$18.00

Online fee is \$10.

This advanced composition course provides instruction in academic writing through literary analysis and increases students' exposure to literature. Prerequisite: 2.0 or higher score in ENGL& 101.

2560	01	MTWTh	08:00AM-09:05AM	1607	CARPENTER J
2562	02	MTWTh	09:15AM-10:20AM	1607	CARPENTER J
2563	03	MTWTh	09:15AM-10:20AM	1909	SULLIVAN M
2565	04	MTWTh	10:30AM-11:35AM	1909	SULLIVAN M
2566	05	MTWTh	10:30AM-11:35AM	1855A	STODDARD C
2568	06	MTWTh	11:45AM-12:50PM	1610	GUTIERREZ O
2570	07	MTWTh	11:45AM-12:50PM	1856	ROBERTSON D
2572	21	MW	06:00PM-08:30PM	1855B	MURRAY A
2573	OL1	ARR	ARR		RAMM J

Online fee is \$10.

## ENGL 109 Applied Technical Writing

Lab Fee: \$22.20

The course will prepare technical/vocational students, and others for successful careers in their respective fields by developing skills in written communications commonly used in the workplace. Teaching strategies will address reading, interpreting, planning, organizing, composing, and word-processing technical writing as applied in business and industry. Prerequisite: ENGL 098 or placement in ENGL 099.

2576 01 MTWTh 08:00AM-08:50AM 1511 ANDERSON J

# ENGL 201 Academic Composition 5

Lab Fee: \$18.00

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. 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 and Heritage University). Prerequisite: ENGL& 101. SE(If not used as part of the English composition requirement)

2580 01 MTWTh 09:15AM-10:20AM 1606 CLOSE S

### ENGL 211 Creative Writing: Fiction 5

A course that allows students to express themselves in story form and to learn the basic techniques of writing fiction. Prerequisite: ENGL&~101 or instructor permission. HU

2590 01 MTWTh 11:45AM-12:50PM 1909 SULLIVAN M

### ENGL 216 Film Study 3

Viewing of a variety of films on a chosen theme. Discussion and analysis of themes and techniques that have made these films popular and of critical value. May be repeated once. HU

2600 01 T 02:20PM-05:20PM 1601 SULLIVAN M

### ENGL 234 Science Fiction 5

Lab Fee: \$10.00

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 developing a definition of science fiction that helps to identify it as a unique literary type that is comprehensive enough in its concerns to be considered a legitimate and valuable type of literature. (Formerly ENG 234) HU

2609 OL1 ARR ARR CLOSE S

Online fee is \$10.

#### ENGL&245 American Literature II 5

An introduction to American Literature from 1860 to the present. HU

2624 01 MTWTh 10:30AM-11:35AM 1607 CARPENTER J

#### Environmental Science

# ENVS&100 Survey of Env Science 5

An introduction to the fundamental principles of environmental science. Topics include environmental policy, environmental systems, population and community ecology, biomes, human population growth, soil, food and agriculture, biodiversity and conservation, land use and resource management, air and water quality issues, global climate, renewable and nonrenewable energy sources, waste management, and sustainability. NS

2670 01 MTWTh 08:00AM-09:05AM 1252 DUVALL K

2672 OL1 ARR ARR COBB S

Section OL1: Students submit assignments, participate in discussion forums, and view recorded lectures online; exams are taken at arranged times on campus. Online fee is \$10.

#### First Aid

### FAD 150 Industrial First Aid and C.P.R. Plus Bloodborne

Lab Fee: \$8.60

An 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.

2680 01 F 09:00AM-05:00PM 1702 BENKO A

Books are required. Class meets 1/10, 1/17, 1/24

2681 02W Sa 09:00AM-05:00PM 1702 BENKO A

Books are required. Class meets 1/11, 1/18, 1/25

2682 03 F 09:00AM-05:00PM 1702 BENKO A

Books are required. Class meets 1/31, 2/7, 2/14

2683 04 F 09:00AM-05:00PM 1702 BENKO A

Books are required. Class meets 2/21, 2/28, 3/7

### Geology

## GEOL&101 Intro Physical Geology 5

Lab Fee: \$18.00

Introduction to geology for majors and non-majors; physical applications of geology. Topics include minerals, rock types plate tectonics and deformation, rock and mineral formation, dynamic processes within the earth and the resulting structures and rock types, geologic time, earthquakes and volcanoes, erosion by wind, water and glaciers, and subsequent re-building. Labs will deal with identification of common rocks and minerals, the reading and interpretation of topographic, contour and stratigraphic maps and an over view of the local land form. Prerequisite: MATH095 or instructor permission. LS

2772 01 MW 02:15PM-03:35PM 1252 MELIN J

Lab TTh 02:15PM-04:15PM 1252 MELIN J

#### German

## GERM&121 German I 5

Introduction to the language and culture of the German-speaking world. Skill development in listening, speaking, reading and writing. HU

2780 01 MTWTh 08:00AM-09:05AM 1604 MCCARTHY J

## GERM&122 German II 5

Introduction to the language and culture of the German-speaking world. Skill development in listening, speaking, reading and writing. Prerequisite: GERM& 121 HU

2785 01 MTWTh 08:00AM-09:05AM 1604 MCCARTHY J

### GERM&123 German III 5

Introduction to the language and culture of the German-speaking world. Skill development in listening, speaking, reading and writing. Prerequisite: GERM& 122 or placement in 123. HU

2790 01 MTWTh 08:00AM-09:05AM 1604 MCCARTHY J

#### Health Education

### HED 121 The Human Body and Disease I 5

Lab Fee: \$10.00

This is the first of a three-part course sequence in which students examine body structure and functions as well as diseases. This includes the analysis and discussion of the anatomy and physiology of the endocrine system, hemodynamic fluid shift, the heart, urinary system, and reproductive system. Common diagnostic tests/treatments, pharmacological agents, and possible prognoses for common disease processes are included. There is no lab segment.

2802 OL1 ARR ARR SPENCER S

Section OL1: Log into Canvas for all class information. Online fee is \$10.

### HED 122 The Human Body and Disease II 5

This is the second of a three-part course sequence. This includes the analysis and discussion of the anatomy and physiology of the immune system, the lymphatic system, respiratory system, reproductive system, and musculoskeletal system. Sensory, digestive, vascular and skeletal systems will also be covered. Common diagnostic tests/treatments, pharmacological agents, and possible prognoses for common disease processes are included. Prerequisite: Completion of HED 121 with a minimum grade of 2.0.

2810 01 MTWTh 08:00AM-09:05AM 1910 STAFF

2812 OL1 ARR ARR DE HOOG J

Section OL1: Log into Canvas for all class information. Online fee is \$10.

## HED 150 Medical Terminology I 3

This is the first of a two part course to prepare students to correctly use medical vocabulary. Prerequisite: None

2830 01 MTW 09:15AM-10:05AM 1721 STAFF

2832 OL1 ARR ARR DE HOOG J

Section OL1: Log into Canvas for all class information. Online fee is \$10.

## HED 151 Medical Terminology II 3

Lab Fee: \$10.00

This is the second of a two part course to prepare students to correctly use medical vocabulary. Prerequisite:  $\text{HED}\ 150$ 

2842 OL1 ARR ARR STAFF

Section OL1: Log into Canvas for all class information. Online fee is \$10.

#### HED 239 Medical Ethics 2

This course introduces ethical and legal issues facing medical professionals.

2850 21 M 05:30PM-07:30PM 1722 MOTZKUS P

#### History

#### HIST&117 Western Civilization II 5

From early modern Europe to the Napoleonic wars in the 19th 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 the French Revolution. SS

2905 01 MTWTh 10:30AM-11:35AM 1606 WAITES W

### HIST&136 US History 1 5

From the Reformation in Europe to the end of the Civil War, this course includes colonization, the introduction of slavery, the Revolutionary and Early National Period, the development of political parties, nationalism and sectionalism, and the Civil War. Prerequisites: Placement in ENGL& 101 or completion of ENGL 099. SS

2931 01 MTWTh 01:00PM-02:05PM 1601 RILEY C

Section 01 incorporates traditional class time and a distance education component. Students need to have access to a reliable internet connection. Check your Big Bend email the week before classes & attend the first day of scheduled class for further instructions.

2932 OL1 ARR ARR RILEY C

All course work for this class will be completed online through Canvas. Students need to have access to a reliable internet connection. Check your Big Bend email the week before classes for log-in information and further course instructions. Online fee is \$10.

### HIST&137 US History 2 5

From the end of the Civil War to present day, this course examines Reconstruction, the Gilded Age, America's rise to a world power, World War I, the triumph of Modernism, the Depression and New Deal, World War II, the Cold War, the turbulent 1960s, disillusioned '70s and the Reagan Revolution. More recent events are examined as ongoing and current events.Prerequisites: Placement in ENGL& 101 or completion of ENGL 099. Prior completion of HIST& 136: United States History I, is not required in order to take this class. SS

2935 01 MTWTh 09:15AM-10:20AM 1601 RILEY C

Section 01 incorporates traditional class time and a distance education component. Students need to have access to a reliable internet connection. Check your Big Bend email the week before classes & attend the first day of scheduled class for further instructions.

2937 OL1 ARR ARR RILEY C

All course work for this class will be completed online through Canvas. Students need to have access to a reliable internet connection. Check your Big Bend email the week before classes for log-in information and further course instructions. Online fee is \$10.

#### HIST 250 Ancient Greece 5

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

2990 01 MTWTh 09:15AM-10:20AM 1605 WAITES W

## Industrial Systems

## IST 105 Basic Electricity--DC Circuit Analysis 5

Lab Fee: \$37.00

Fundamentals of DC electricity as applied to series, parallel, and series-parallel circuits. Use of test equipment and troubleshooting simple circuits. Correquisite/Prerequisite: MAP 103 or instructor permission.

3052 01 MW 12:30PM-03:30PM 3607 AYERS J

## IST 106 Basic Electricity--AC Circuit Analysis 5

Lab Fee: \$37.00

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-Basic Electricity-DC; MAP 103-Technical Mathematics; or Instructor Permission

3058 01 TTh 12:30PM-03:30PM 3607 AYERS J

#### IST 112 National Electric Code III 2

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.

3084 01 MW 02:30PM-03:20PM 3606 AUTRY B

### IST 120 Introduction Preventive/Predictive Maintenance 3

Lab Fee: \$22.20

Theory and practice of preventive and predictive maintenance concepts. Performing routine preventative maintenance and scheduling predictive maintenance outages. Prerequisite: IST 102-Technical Drawing Interpretation, MAP 103 Applied Mathematics, or instructor permission.

3096 01 TTh 10:20AM-12:00PM 3500 AUTRY B

3098 02 MW 12:30PM-02:10PM 3606 AUTRY B

5

#### IST 136 Introduction to Industrial Boiler Technology

Lab Fee: \$37.00

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.

3108 01 MW 09:00AM-12:00PM 3500 AUTRY B

#### IST 141 Intro to Mechanized Irrigation Applications I 5

Lab Fee: \$37.00

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. (Formerly IST 140)

3112 01 MW 09:00AM-12:15PM 3602 BESHERSE L

#### IST 170 Introduction to Instrumentation 5

Lab Fee: \$37.00

Fundamentals of process control as it applies to process variables, measurement dynamics, & automatic corrective measures in the industrial environment. Prerequisite: IST 107- Industrial Electricity I or instructor permission.

3120 01 TTh 09:00AM-12:00PM 3606 AYERS J

### IST 180 Machining I 5

Lab Fee: \$37.00

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(s): MAP 103-Applied Mathematics and IST 102- Technical Drawing Interpretation or instructor permission.

3126 21 TTh 05:00PM-08:00PM 3500 AUTRY B

### IST 182 Machining II 5

Lab Fee: \$37.00

Fundamentals of machining processes on lathes and vertical mills. Precision measurement with micrometers, vernier calipers, and dial indicators. Prerequisite: IST 180- Machining I or instructor permission.

3132 21 TTh 05:00PM-08:00PM 3500 AUTRY B

### IST 184 Machining Skill Enhancement 4

Lab Fee: \$29.60

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-Machining II or instructor permission.

3138 21 TTh 05:00PM-08:00PM 3500 AUTRY B

#### IST 207 Industrial Electricity II 5

Lab Fee: \$37.00

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,

3145 21 MW 04:30PM-07:30PM 3606 AYERS J

#### IST 223 Electronics III (Industrial) 5

Lab Fee: \$37.00

Instruction and training in troubleshooting, testing and repairing industrial control devices. Electrical motor drives, instrumentation, and programmable controllers will be covered. Prerequisite: IST 222- Electronics II or instructor permission.

3172 01 MW 09:00AM-12:00PM 3607 ROBERTS J

#### IST 224 Electronic Communication I 5

Lab Fee: \$37.00

Provides instruction covering the basic concepts of electronic communication equipment and systems. Emphasis is on radio frequency and other high speed data applications that are being applied in new configurations within the industrial community. Prerequisite: IST 222-Electronics II or instructor permission.

3178 21 TTh 04:30PM-07:30PM 3607 MATERN S

### IST 250 Programmable Logic Controllers II 5

Lab Fee: \$37.00

Programmable logic controller principles, hardware and operation, with emphasis on ladder logic, instruction, maintenance and troubleshooting. Prerequisite: IST 150 or instructor permission.

3190 01 TTh 12:30PM-03:30PM 3604 AUTRY B

#### Math

#### MATH 080 Basic Mathematics 5

Review and instruction in whole numbers, decimals, and fractions. Learn strategies to deal with math anxiety and test taking.

3236 01 MTWTh 11:45AM-12:50PM 1609 ERICKSON L

3238 02 MTWTh 01:00PM-02:05PM 1609 ERICKSON L

### MATH 090 Prealgebra 5

Lab Fee: \$18.00

This course includes the study of basic arithmetic and algebraic including operations with integers, fractions, decimals and percents; order of operations, measurement, the metric system, algebraic expressions, formulas and simple linear equations. Prerequisite: Appropriate placement on the BBCC math placement exam

3242 01 MTWTh 09:15AM-10:20AM 1910 ABED S

#### MATH 094 Prealgebra 5

Lab Fee: \$18.00

This course includes the study of basic arithmetic and algebraic topics including operations with integers, fractions, and percents; algebraic expressions; formulas; and simple linear equations. Prerequisite(s): one of the following: BBCC math placement exam or successful completion of MPC/MATH 080 and MPC/MATH 080 final

3248 CL1 MTWTh 08:00AM-09:05AM 1215 ADAMS S

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3249 CL2 MTWTh 09:15AM-10:20AM 1215 ADAMS S

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3250 CL3 MTWTh 10:30AM-11:35AM 1215 STAFF

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3251 CL4 MTWTh 11:45AM-12:50PM 1215 WHITNEY M

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3252 CL5 MTWTh 01:00PM-02:05PM 1215 SHERWOOD M

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3253 CL6 MTWTh 02:15PM-03:20PM 1215 STAFF

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3255 CLN MW 06:00PM-08:30PM 1215 BAUER J

### MATH 095 Elementary Algebra

Lab Fee: \$18.00

This course includes study of basic algebraic operations and concepts, and the structure and use of algebra. This includes the solutions to algebraic equations, factoring algebraic expressions, working with rational expressions and the graphing of linear equations. Prerequisite(s): BBCC placement exam or score of 70% or better on each module on the MPC/MATH 090 competency exam.

3262 01 MTWTh 01:00PM-02:05PM 1252 WHITNEY B

3264 OL1 ARR ARR WALLACE T

Section OL1: Students view class lectures and submit assignments online; exams are taken on campus. Online fee is \$10.

## MATH 096 Elementary Algebra I 5

Lab Fee: \$18.00

This course includes the study of basic algebraic operations and concepts, and the structure and use of algebra. This includes measurement and the metric system, solving and graphing linear equations, and working with polynomials. PREREQUISITE(S): one of the following: BBCC math placement exam or successful completion of at least four units in MATH 094 or Successful completion of MPC/MATH 090 (will start after Proficiency Exam #1)

3268 CL1 MTWTh 08:00AM-09:05AM 1215 ADAMS S

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3269 CL2 MTWTh 09:15AM-10:20AM 1215 ADAMS S

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3270 CL3 MTWTh 10:30AM-11:35AM 1215 STAFF

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3271 CL4 MTWTh 11:45AM-12:50PM 1215 WHITNEY M

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3272 CL5 MTWTh 01:00PM-02:05PM 1215 SHERWOOD M

3273 CL6 MTWTh 02:15PM-03:20PM 1215 STAFF

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3275 CLN MW 06:00PM-08:30PM 1215 BAUER J

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

### MATH 097 Elementary Algebra II

Lab Fee: \$18.00

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(s): one of the following: BBCC math placement exam or successful completion of at least five units in MATH 096 or successful completion of MPC/MATH 095 (will start after Proficiency Exam #2)

3278 CL1 MTWTh 08:00AM-09:05AM 1215 ADAMS S

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3279 CL2 MTWTh 09:15AM-10:20AM 1215 ADAMS S

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3280 CL3 MTWTh 10:30AM-11:35AM 1215 STAFF

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3281 CL4 MTWTh 11:45AM-12:50PM 1215 WHITNEY M

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3282 CL5 MTWTh 01:00PM-02:05PM 1215 SHERWOOD M

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3283 CL6 MTWTh 02:15PM-03:20PM 1215 STAFF

3285 CLN MW 06:00PM-08:30PM 1215 BAUER J

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

#### MATH 098 Intermediate Algebra 5

Lab Fee: \$18.00

This course includes the study of intermediate algebraic operations and concepts, and the structure and use of algebra. This includes functions, radicals and rational exponents, radical equations, complex numbers, quadratic equations and their applications, and an introduction to exponential and logarithmic functions. Prerequisite(s): one of the following: BBCC math placement exam or successful completion of at least five units in MATH 097 or Instructor Permission

3288 CL1 MTWTh 08:00AM-09:05AM 1215 ADAMS S

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3289 CL2 MTWTh 09:15AM-10:20AM 1215 ADAMS S

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3290 CL3 MTWTh 10:30AM-11:35AM 1215 STAFF

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3291 CL4 MTWTh 11:45AM-12:50PM 1215 WHITNEY M

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3292 CL5 MTWTh 01:00PM-02:05PM 1215 SHERWOOD M

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3293 CL6 MTWTh 02:15PM-03:20PM 1215 STAFF

Course will be taught in the computer lab using the inverted instruction model, watching videos and completing homework assignments on the computer. These are NOT online sections, although it is suggested you have Internet access outside of class.

3295 CLN MW 06:00PM-08:30PM 1215 BAUER J

### MATH 099 Intermediate Algebra 5

Lab Fee: \$18.00

This course includes the study of systems of equations and applications, functions, radicals and rational exponents, radical equations, complex numbers, quadratic equations and their applications, and an introduction to exponential and logarithmic functions. Prerequisite: BBCC exam or score of 65% or better on each module of MPC 095 competency exam or a P in MATH 095.

3298 01 MTWTh 01:00PM-02:05PM 1203 FARAG S

3300 OL1 ARR ARR WALLACE T

#### MATH&107 Math in Society 5

Lab Fee: \$18.00

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 099.MS/SQR

3301 01 MTWTh 10:30AM-11:35AM 1202 ABED S

3303 26H W 06:30PM-08:30PM HARBERTS B

Section 26H meets at Skillsource, 309 E. 5th Avenue, Moses Lake. Students need to have access to a reliable computer and Internet connection as this is a hybrid (online and face-to-face) course. Online fee is \$10.

### MATH&141 Precalculus I 5

Lab Fee: \$18.00

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. Prerequisites: MATH 098 or MATH 099 MS/SQR

3315 01 MTWTh 08:00AM-09:05AM 1203 WHITNEY B

3317 02 MTWTh 09:15AM-10:20AM 1252 WHITNEY B

3318 03 MTWTh 10:30AM-11:35AM 1252 FARAG S

## MATH&142 Precalculus II 5

Lab Fee: \$18.00

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 MS/SQR

3322 01 MTWTh 08:00AM-09:05AM 1219 LANE S

3324 02 MTWTh 11:45AM-12:50PM 1252 WHITNEY B

### MATH&146 Introduction to Statistics 5

Lab Fee: \$18.00

This course is 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 099. MS/SQR

3330 01 MTWTh 08:00AM-09:05AM 1202 ABED S

3331 02 MTWTh 09:15AM-10:20AM 1202 FARAG S

3332 03 MTWTh 01:00PM-02:05PM 1202 ABED S

#### MATH 147 Finite Mathematics 5

Lab Fee: \$18.00

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 or MATH 093. MS/SQR

3340 01 MTWTh 01:00PM-02:05PM 1909 WALLACE T

#### MATH&152 Calculus II 5

Lab Fee: \$18.00

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. MS/SQR

3355 01 MTWTh 10:30AM-11:35AM 1219 LANE S

## MATH 230 Differential Equations 5

Lab Fee: \$18.00

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(s): MATH& 163 or instructor permission. MS/SQR

3370 01I DAILY 08:00AM-09:00AM 1812 STAFF

## Math (Applied)

## MAP 100 Applied Mathematics (AMT) 2

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 the successful completion of the Aviation Maintenance Technology program. This course is FAA approved under 14 CFR Part 147. Prerequisite: Successful completion of MATH 080 or BBCC Math placement score into MATH 090 or above. Must be enrolled in the Aviation Maintenance Technology program.

3386 01 ARR ARR 3200 DANNENBERG K

### MAP 103 Applied Mathematics (MMT/IST) 5

This class provides review and instruction in whole numbers, decimals, fractions, measurement, ratio, 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 electricity/electronics. 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. Collaborative learning is encouraged and built into the course to give students practice in a key skill used in the workplace. Prerequisite: successful completion of MATH 080 or BBCC Math placement score of MATH 090 or above.

3400 21 MW 06:00PM-08:20PM 3606 MATERN S

### MAP 108 Applied Mathematics (MA) 3

This class provides review and instruction in whole numbers, fractions, ratios, decimals, proportions, percents, measurement and metrics, word problems (fractions, decimals, percentages) tables and graphs as they relate to employment as a Medical Assistant. Prerequisite: Successful completion of MATH080 or BBCC Math Assessment placement into Math 090 or above.

3416 21 TTh 05:30PM-06:50PM 1609 BRAVO A

Students will be taught using the I-BEST model of instruction. Two faculty will be co-teaching the class. One faculty member focuses on professional technical skills while the other focuses on basic and study skills. Pre and post CASAS testing will be required.

## Medical Assistant

#### MA 112 Clinical Procedures II 4

Lab Fee: \$30.00

This course builds on and advances the skills learned in Clinical Procedures I. It explores in detail the topics of patient history, patient interviews and documentation, asepsis, infection and disease control, basic physical exams, principles of medical equipment use, emergencies and first aid, and principles of universal precautions for blood and bodily fluids. Prerequisite: MA 111

3551 01W Sa 08:00AM-03:00PM 1722 PRAY E

#### Music

MUSC&105 Music Appreciation 5

Music Appreciation is a course designed for students who have not had formal study in music or who wish to supplement performance experience with formal study in structure and history. Emphasis is placed on repeated listening experiences to acquire a thorough knowledge of selected works of music literature. HU

3605 01 MTWTh 09:15AM-10:20AM 1134 PATTERSON P

3606 02 MTWTh 10:30AM-11:35AM 1134 PATTERSON P

## MUSC 115 Group Piano I 2

Group piano instruction for beginners and intermediates. Developmental musicianship. Prerequisite: instructor approval. HP

3630 01 MW 02:15PM-03:20PM 1134 PATTERSON P

Additional required hours are set by arrangement. Contact Pat Patterson at 793.2140 for more information.

#### MUSC 116 Group Piano II 2

Group piano instruction for beginners and intermediates. Developmental musicianship. Prerequisite: MUSC 115 or instructor approval. HP

3634 01 MW 03:30PM-04:35PM 1134 PATTERSON P

Additional required hours are set by arrangement. Contact Pat Patterson at 793.2140 for more information.

### MUSC 117 Group Piano III 2

Group piano instruction for beginners and intermediates. Developmental musicianship. Prerequisite: MUSC 116 or instructor approval. HP

3638 01 MW 03:30PM-04:35PM 1134 PATTERSON P

Additional required hours are set by arrangement. Contact Pat Patterson at 793.2140 for more information.

## MUSC 134 Beginning Group Guitar 2

This course provides a group approach to progressive instruction, for beginning, advanced beginning and intermediate level guitarists. This course may be repeated for credit up to three times. HP

3670 21 TTh 02:15PM-03:20PM 1134 PATTERSON P

Additional required hours are set by arrangement. Contact Pat Patterson at 793.2140 for more information.

## MUSC 215 Group Piano IV 2

Group piano instruction for intermediates and advanced students. Prerequisite: MUSC 117 or instructor approval. HP

3730 01 MW 03:30PM-04:35PM 1134 PATTERSON P

Additional required hours are set by arrangement. Contact Pat Patterson at 793.2140 for more information.

### MUSC 216 Group Piano V 2

Group piano instruction for intermediates and advanced students. Prerequisite: MUSC 215 or instructor approval. HP

3734 01 MW 03:30PM-04:35PM 1134 PATTERSON P

Additional required hours are set by arrangement. Contact Pat Patterson at 793.2140 for more information.

#### Nursing

## NUR 100 Nursing Assistant 9

Lab Fee: \$209.41

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. Prerequisites: Read, write, speak and understand English at the level necessary for performing duties of the nursing assistant. (Placement in English 99 or above)

3800 01 TTh 01:00PM-05:00PM 1721 ERWIN K

\*\*\*\* F ARR ERWIN K

The NAC lab fee includes: malpractice and liability insurance, drug testing, CPR certification, and registration for one state NAC test.

### NUR 120 Beginning Nursing Concepts I 6

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,

3830 01 ARR ARR 1718 BROOKS J

### NUR 121 Beginning Nursing Practicum I 4

Lab Fee: \$2.50

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.

3834 01 ARR ARR BROOKS J

3835 02 ARR ARR ELLISTON J

3836 03 ARR ARR STAFF

## NUR 136 Nursing Skills Laboratory 1

Lab Fee: \$98.80

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.

3856 01 ARR ARR 1731 BROOKS J

Two hours arranged per week. Graded on a pass/fail basis.

#### NUR 220 Advanced Nursing Concepts II 5

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 minimum 2.0 G.P.A. or above.

3916 01 ARR ARR 1722 GONZALEZ-ALL

#### NUR 221 Advanced Nursing Practicum II 5

Lab Fee: \$2.50

Clinical focus is on application of principles and skills taught in previous nursing courses and introduced in NUR 220 and NUR 236. Practicum focuses on advanced nursing care to less stable patients in a variety of settings throughout the lifespan. Prerequisite: PSYC& 200 with a minimum 2.0 G.P.A.

3920 01 ARR ARR GONZALEZ-ALL

3921 02 ARR ARR BROOKS J

3922 03 ARR ARR STAFF

### NUR 236 Nursing Skills Laboratory 1

Lab Fee: \$98.80

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.

3946 01 ARR ARR 1731 GONZALEZ-ALL

Two hours arranged per week. Graded on a pass/fail basis.

#### Nutrition

### NUTR&101 Nutrition 5

An introductory course providing the most up-to-date, accurate and scientifically sound nutrition information focusing on how nutrition and lifestyle choices influence health and disease. Prerequisite: Completion of ENGL 099 or placement in ENGL& 101.

3980 01 MTWTh 08:00AM-09:05AM 1855A CHRISTIAN M

3982 21 TTh 06:30PM-08:50PM 1252 FAIRBANKS V

3983 OL1 ARR ARR

CHRISTIAN M

Section OL1: Students view class lectures, submit assignments, and take exams online. Online fee is \$10.

## Philosophy

### PHIL&101 Intro to Philosophy 5

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. HU

4200 01 MTWTh 10:30AM-11:35AM 1608 KNEPP D

4202 02 MTWTh 01:00PM-02:05PM 1219 LANE S

#### PHIL&120 Symbolic Logic 5

Lab Fee: \$10.00

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.HU/SQR Prerequisites: Math 098 or above

4216 OL1 ARR ARR CAREY B

(Formerly PHIL& 106) Online fee is \$10.

#### PHIL 210 Ethics 5

A study of the principal ethical theories and their application to individual and social morality.  ${\tt HU}$ 

4224 01 MTWTh 11:45AM-12:50PM 1608 KNEPP D

### Physical Education

### PEH 090 Recreational Gym 0

Community Ed Fee: \$27.70

This activity permits the use of BBCC Gym facilities during available hours by individuals who are not students registered at BBCC. Must be 18 years of age to enroll in recreational gym. Community service class.

4302 21 ARR ARR 2014 DE HOOG M

## PEH 100 Lifetime Wellness 3

A course designed for the person who wishes to gain knowledge in lifetime general fitness. Review of health issues, health behavior, behavior modification, stress, exercise, nutrition, obesity, weight reduction and maintenance, cancer, cardiovascular health, alcohol, drugs, and sexually transmitted diseases. Discussions will encourage critical thinking in the development of life-long personal wellness. The role of culture will be examined in relationship to health and wellness. SE

4310 01 MTW 09:15AM-10:05AM 2031 MOFFITT R

4312 02 MTW 10:30AM-11:20AM 1721 STAFF

4314 OL1 ARR ARR NICHOLS L

Online fee is \$10.

4315 OL2 ARR ARR NICHOLS L

Online fee is \$10.

### PEH 102 Theory Of Basketball 3

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 more familiar with the responsibilities of a basketball program. SE

4320 01 MTWTh ARR 2014 POTH M

### PEH 104 Theory Of Women's Basketball 3

This course is for those students intending to teach or coach women's basketball. Focus is on technical aspects of skilled performance, selection of appropriate teaching and coaching strategies, evaluation of performance and organization of the basketball program. Emphasis will be placed on dealing with problems unique to the female participant. SE

4324 01 MTWTh ARR 2014 WILKS P

## PEH 125 Conditioning 1

Lab Fee: \$3.60

An exercise, running, weight training, and skill related program designed to provide the student with the knowledge to develop and execute a physical fitness program that will enhance individual fitness levels, health and body proportions. May be repeated for up to three (3) credits. AC

4356 01 ARR ARR 2012 BAKER A

4360 02 ARR ARR 2012 MOFFITT R

4362 03 ARR ARR 2012 DOUMIT P

## PEH 131 Circuit Weight Training 1

Lab Fee: \$3.60

This course includes warm-up, weight lifting at various circuit training stations that incorporates all major muscle groups for 30 seconds to one-minute intervals. May be repeated for up to three (3) credits. AC

4365 01 ARR ARR 2012 DE HOOG M

4366 02 ARR ARR 2012 WILKS P

#### PEH 132 Fitness 1

Lab Fee: \$3.60

An overall conditioning program with emphasis on developing strength, endurance, flexibility, and cardiovascular conditioning. May be repeated for up to three (3) credits. AC

4372 01 MW 11:45AM-12:35PM 2013 MOFFITT R

#### PEH 155 Body Toning 1

Lab Fee: \$3.60

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

4390 01 MW 11:00AM-11:50AM 2015 NIELSEN C

4391 02 TTh 11:00AM-11:50AM 2015 NIELSEN C

4394 26 ARR ARR GRAHAM M

Section 26 will be taught at Jazzercise, 824~W 3rd Ave, Moses Lake. Students enrolling in this section will pay Jazzercise for sessions. Contact Mary Graham at 765.4581 for enrollment information. AC

### PEH 158 Racquetball 1

Lab Fee: \$3.60

Designed to acquaint the student with the basic skills, rules, and knowledge of the sport of racquetball as a lifetime activity. May be repeated for up to three (3) credits. AC

5

4396 01 MW 10:30AM-11:20AM 2013 DE HOOG M

## Physics

### PHYS&110 Physics for Non-Science Majors with Lab

Lab Fee: \$18.00

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 095, 096, or placement into a higher level mathematics course.

4452 01 MTWTh 12:00PM-12:50PM 1217 HAMM J

Lab W 01:00PM-03:00PM 1217 HAMM J

### PHYS&115 General Physics II with Lab 5

Lab Fee: \$18.00

The second course in a 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

4455 01 MWTh 10:30AM-11:35AM 1217 HAMM J

Lab T 02:30PM-04:30PM 1217 HAMM J

## PHYS&222 Engineering Physics II w/Lab 5

Lab Fee: \$18.00

The second in a three-quarter calculus-based sequence in introductory physics intended for students majoring in science or engineering. Course content includes thermodynamics, waves, and optics. Prerequisite: Successful completion of Engineering Physics I (PHYS& 221)LS

4466 01 MTWTh 09:15AM-10:05AM 1217 HAMM J

Lab M 01:00PM-03:00PM 1217 HAMM J

### Psychology

### PSYC&100 General Psychology 5

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. Strongly recommend placement in MATH 095/96 or higher and Placement in ENGL 099 or higher.SS

4552 01 MTWTh 08:00AM-09:05AM 1601 RICHINS P

4553 02H MW 10:35AM-12:35PM 1601 HOLLIWAY D

This hybrid section is designed for students in our pre-med programs who require PSYC&100 as a pre-requisite for their degree (nursing, medical assistant, etc). Students must have access to a reliable internet connection. Instructor permission required. Online fee is \$10.

4554 03H ARR 03:30PM-04:35PM 1610 KOHORST A

Section 03H requires 6 on campus meetings (1/6, 1/7, 2/3, 2/4, 3/17, 3/18) and the rest of the course work will be completed online through Canvas. Students need to have access to a reliable internet connection. Mandatory orientation 1/6 in room 1610 at 3:30 p.m. Online fee is \$10.

4555 OL1 ARR ARR LEONARD R

Section OL1: All course work for this class will be completed online through Canvas. Students need to have access to a reliable internet connection. Check your Big Bend email the week before classes for further course instructions. Online fee is \$10

#### PSYC&200 Lifespan Psychology 5

Lab Fee: \$10.00

This course examines the physical, intellectual, emotional, and social growth and development that occurs throughout the human lifespan. Prerequisite: PSYC& 100. SS

4576 01H TTh 10:35AM-12:35PM 1601 HOLLIWAY D

Section 01H incorporates traditional class time and a distance education component. Students need to have access to a reliable internet connection. Check your Big Bend email the week before classes for further instructions. Instructor permission required. Online fee is \$10.

4578 21H ARR 05:00PM-06:05PM 1610 KOHORST A

Section 21H requires 6 on campus meetings (1/6, 1/7, 2/3, 2/4, 3/17, 3/18) and the rest of the course work will be completed online through Canvas. Students need to have access to a reliable internet connection. Mandatory orientation 1/6 in room 1610 at 5:00 p.m. Online fee is \$10.

## PSYC 225 Psychology & The Legal System 5

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 informed 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

4598 01 MTWTh 01:00PM-02:05PM 1611 LEONARD R

Section 01 incorporates traditional class time and a distance education component. Students need to have access to a reliable internet connection. Check your Big Bend email the week before classes & attend the first day of scheduled class for further instructions.

#### Religious Studies

### REL 211 Religion in America 5

Lab Fee: \$10.00

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

4615 OL1 ARR ARR KNEPP D

Online fee is \$10.

4618 OL2 ARR ARR KNEPP D

Online fee is \$10.

#### Science

### SCI 104 Math for Science and Engineering

Lab Fee: \$10.00

Math concepts heavily used by science and engineering coursework are covered. Topics will include (but not be 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. Prerequisites: MATH 095 or MATH 096

4634 OL1 ARR ARR PETERSON J

All coursework for this class will be completed online via Canvas. Students need to have access to a good, reliable Internet connection. Online fee is \$10.

#### Sociology

### SOC& 101 Intro to Sociology 5

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 095 or higher and placement in English 099 or higher. SS

4640 01 MTWTh 02:15PM-03:20PM 1607 HOLLIWAY D

4643 OL1 ARR ARR HOLLIWAY D

All course work for this class will be completed online through Canvas. Students need to have access to a reliable internet connection. Check your Big Bend email the week before classes for log-in information and further course instructions. Online fee is \$10.

#### Spanish

### SPAN&121 Spanish I 5

Lab Fee: \$10.50

Introduction to the language and culture of the Spanish-speaking world. Skill development in listening, speaking, reading and writing. HU

4702 01 MTWTh 01:00PM-02:05PM 1604 LEAVITT A

4704 26 MW 06:00PM-08:30PM MCLAUCHLAN N

Section 26 meets at Skillsource, 309 E. 5th Avenue, Moses Lake.

## SPAN&122 Spanish II 5

Lab Fee: \$10.50

Introduction to the language and culture of the Spanish-speaking world. Skill development in listening, speaking, reading and writing. Prerequisite: SPAN& 121 or placement for 122.  ${\tt HU}$ 

4712 01 MTWTh 10:30AM-11:35AM 1604 LEAVITT A

4714 26 MW 06:00PM-08:30PM MCLAUCHLAN N

Section 26 meets at Skillsource, 309 E. 5th Avenue, Moses Lake.

### SPAN&123 Spanish III 5

Lab Fee: \$10.50

Introduction to the language and culture of the Spanish-speaking world. Skill development in listening, speaking, reading and writing. Prerequisite: SPAN& 122 or placement for SPAN& 123. HU

4722 01 MTWTh 09:15AM-10:20AM 1604 LEAVITT A

4724 26 MW 06:00PM-08:30PM MCLAUCHLAN N

Section 26 meets at Skillsource, 309 E. 5th Avenue, Moses Lake.

#### Welding

## WLD 101 Oxy-Acetylene Welding For Auto Technicians 2

Lab Fee: \$21.00

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.

4800 01 MW 03:05PM-04:25PM 3403 STAFF

### WLD 102 Arc/Gmaw Welding For Auto Technicians 2

Lab Fee: \$21.00

This course covers the fundamentals of the GMAW semi-automatic 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.

4810 01 TTh 03:05PM-04:25PM 3403 STAFF

## WLD 103 Beginning AMT Welding 2

Lab Fee: \$21.00

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. This course is FAA approved under 14 CFR Part 147. Prerequisite: Enrollment in AMT 151 or AMT 152.

4820 01 MTWTh 12:30PM-03:00PM 3403 STAFF

Start & end date: 01/06/14 to 01/27/14

4822 02 MTWTh 12:30PM-03:00PM 3403 STAFF

Start & end date: 02/03/14 to 02/20/14

4823 03 F 08:00AM-02:30PM 3403 STAFF

Start & end date: 01/17/14 to 02/07/14

#### WLD 111 Welding Process I 3-6

Lab Fee: \$63.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

Introduction to arc welding processes; welding of E-6010 and various kinds and size of electrodes in all positions, manipulative skills including stringer beads and weave beads on plate and joints with AC and DC welding machines. Night students must earn a total of six credits before going on to the next course. These three credit courses may be repeated for credit up to six credits. Tech Prep credit available.

4840 01 MTWTh 12:30PM-03:00PM 3403 MCDANIEL S
4843 02W Sa 08:00AM-02:30PM 3403 GILBERT C
4846 21 MW 06:35PM-09:35PM 3403 GILBERT C
4848 22 TTh 06:35PM-09:35PM 3403 GILBERT C

## WLD 112 Thermal Cutting and Welding 3

Lab Fee: \$31.50

Various techniques of steel cutting with oxy-fuel, air carbon arc, shielded metal arc, plasma arc processes and oxy-acetylene welding and brazing with various metals.

4856 01 MTWTh 10:25AM-11:45AM 3403 MCDANIEL S
4858 02W Sa 08:00AM-02:30PM 3403 GILBERT C
4860 21 MW 06:35PM-09:35PM 3403 GILBERT C
4862 22 TTh 06:35PM-09:35PM 3403 GILBERT C

### WLD 120 Welding Theory II 5

Fundamentals of G.M.A.W. and F.C.A.W. processes with their related equipment. Shielding gasses, filler materials, and general welding procedures including carbon steel, stainless steel, and aluminum. Learn about steel making, elements, functions of steel, types and various steels and identification numbering system. Prerequisite: Instructor approval

4870 01 MTWTh 09:15AM-10:20AM 3401 MCDANIEL S

4872 21 TTh 04:30PM-06:35PM 3401 GILBERT C

### WLD 121 Welding Process II 3-6

Lab Fee: \$63.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

Welding open root corner joints and beveled 3/8" plate, using E-6010 electrodes and ASME performance certification plate tests. These three credit courses may be repeated for credit up to six credits. Prerequisite: WLD 111.

```
4880 01 MTWTh 12:30PM-03:00PM 3403 MCDANIEL S
4882 02W Sa 08:00AM-02:30PM 3403 GILBERT C
4884 21 MW 06:35PM-09:35PM 3403 GILBERT C
4886 22 TTh 06:35PM-09:35PM 3403 GILBERT C
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#### WLD 122 Gas Metal Arc Welding I 3

Lab Fee: \$31.50

Materials of carbon steel and stainless steel with 0.035 solid wire and aluminum with 0.030 solid wires. Various joints and thicknesses of materials welded in all positions, using different modes and gases.

4896	01	MTWTh	10:25AM-11:45AM	3403	MCDANIEL S
4898	02	ARR	12:30PM-03:00PM	3403	MCDANIEL S
4900	03W	Sa	08:00AM-02:30PM	3401	GILBERT C
4902	21	MW	06:35PM-09:35PM	3403	GILBERT C
4904	22	TTh	06:35PM-09:35PM	3403	GILBERT C

### WLD 131 Welding Process III 3-6

Lab Fee: \$63.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

Using E-7018 electrodes, weld corner joints, bevel plates in all positions and ASME and WABO performance certification tests. These three credit courses may be repeated for credit up to six credits. Prerequisite: WLD 121.

4920	01	MTWTh	12:30PM-03:00PM	3403	MCDANIEL S	
4922	02W	Sa	08:00AM-02:30PM	3403	GILBERT C	
4924	21	MW	06:35PM-09:35PM	3403	GILBERT C	
4926	22	TTh	06:35PM-09:35PM	3403	GILBERT C	

## WLD 132 Gas Tungsten Arc Welding I (TIG) 3

Lab Fee: \$31.50

The beginning G.T.A.W. process. Freehand techniques for aluminum, carbon steel, stainless steel, copper, and titanium. Using these materials, running beads, butt, lap, edge, corner and T joints in all positions. Also cup walk motion with 3/8" plate in vertical and horizontal positions.

```
4936 01
           MTWTh 10:25AM-11:45AM
                                  3403 MCDANIEL S
4938 02
           ARR
                 12:30PM-03:00PM
                                  3403 MCDANIEL S
4940 03W
           Sa
                 08:00AM-02:30PM
                                  3403 GILBERT C
4942 21
           MW
                 06:35PM-09:35PM
                                  3403 GILBERT C
4944 22
           TTh
                 06:35PM-09:35PM
                                  3403 GILBERT C
```

## WLD 152 Welding Layout I 3

Lab Fee: \$31.50

Specialized welding drafting techniques: intersections and developments; patterns for geometric shapes used in cardboard, sheet metal, and structural shapes; fabrication and model construction. Prerequisite: WLD 151.

4960 01 MTW 03:15PM-04:30PM 3401 MCDANIEL S 4962 21 MW 04:45PM-06:30PM 3401 GILBERT C

### WLD 190 Skill Improvement 1-6

Lab Fee: \$63.00

Extra welding time and instruction to enhance student's welding 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 approval.

4980	01	ARR	ARR	3403	MCDANIEL S
4982	02	ARR	ARR	3403	MCDANIEL S
4984	03W	Sa	08:00AM-02:30PM	3403	GILBERT C
4986	21	MW	06:35PM-09:35PM	3403	GILBERT C
4987	22	TTh	06:35PM-09:35PM	3403	GILBERT C

### WLD 206 Welding Codes and Standards 4

Lab Fee: \$42.00

ASME, AWS, API, and WABO code interpretation of structural steels and testing and inspection of welded structures. Prerequisite: WLD 130.

5006 01 MTWTh 08:00AM-09:05AM 3401 MCDANIEL S

## WLD 212 Gas Metal Arc Welding II 3

Lab Fee: \$31.50

Flux cored arc welding with carbon steel and stainless steel using 0.045 flux cored wire following A.W.S. and W.A.B.O. procedure code. Various joints, thicknesses of

<sup>\*</sup>Variable Credit Lab Fees are calculated at the highest rate\*

materials in all positions. Also 1" plate W.A.B.O. unlimited field certification test. Prerequisite: WLD 122.

```
5026 01 MTWTh 10:25AM-11:45AM 3403 MCDANIEL S
5028 02W Sa 08:00AM-02:30PM 3403 GILBERT C
5030 21 MW 06:35PM-09:35PM 3403 GILBERT C
5032 22 TTh 06:35PM-09:35PM 3403 GILBERT C
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#### WLD 241 Structural Weld Process I 6

Lab Fee: \$63.00

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 approval.

5040	01	MTWTh	12:30PM-03:00PM	3403	MCDANIEL S
5042	02W	Sa	08:00AM-02:30PM	3403	GILBERT C
5044	21	MW	06:35PM-09:35PM	3403	GILBERT C
5046	22	TTh	06:35PM-09:35PM	3403	GILBERT C

## WLD 242 Structural Welding I 3

Lab Fee: \$31.50

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 or instructor approval.

```
5050 01 MTWTh 10:25AM-11:45AM 3403 MCDANIEL S
5052 02W Sa 08:00AM-02:30PM 3403 GILBERT C
5054 21 MW 06:35PM-09:35PM 3403 GILBERT C
5056 22 TTh 06:35PM-09:35PM 3403 GILBERT C
```

#### WLD 243 Structural Weld Process II 6

Lab Fee: \$63.00

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 approval.

5060	01	MTWTh	12:30PM-03:00PM	3403	MCDANIEL S
5062	02W	Sa	08:00AM-02:30PM	3403	GILBERT C
5064	21	MW	06:35PM-09:35PM	3403	GILBERT C
5066	22	TTh	06:35PM-09:35PM	3403	GILBERT C

#### WLD 244 Submerged Arc Welding 3

Lab Fee: \$31.50

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 approval.

5070 01 MTWTh 10:25AM-11:45AM 3403 MCDANIEL S
5072 02W Sa 08:00AM-02:30PM 3403 GILBERT C
5074 21 MW 06:35PM-09:35PM 3403 GILBERT C
5076 22 TTh 06:35PM-09:35PM 3403 GILBERT C

#### WLD 245 Structural Weld Process III 6

Lab Fee: \$63.00

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 approval.

5080 01 MTWTh 12:30PM-03:00PM 3403 MCDANIEL S
5082 02W Sa 08:00AM-02:30PM 3403 GILBERT C
5084 21 MW 06:35PM-09:35PM 3403 GILBERT C
5086 22 TTh 06:35PM-09:35PM 3403 GILBERT C

### WLD 261 Production Weld Process I 6

Lab Fee: \$63.00

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 approval.

5096 01 MTWTh 12:30PM-03:00PM 3403 MCDANIEL S
5098 02W Sa 08:00AM-02:30PM 3403 GILBERT C
5100 21 MW 06:35PM-09:35PM 3403 GILBERT C
5102 22 TTh 06:35PM-09:35PM 3403 GILBERT C

### WLD 262 Production Welding I 3

Lab Fee: \$31.50

This course focuses on student learning of production welding within a shop setting. Prerequisite: WLD 212 or instructor approval.

5106 01 MTWTh 10:25AM-11:45AM 3403 MCDANIEL S 5108 02W Sa 08:00AM-02:30PM 3403 GILBERT C

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5110 21 MW 06:35PM-09:35PM 3403 GILBERT C
5112 22 TTh 06:35PM-09:35PM 3403 GILBERT C
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### WLD 263 Production Weld Process II 6

Lab Fee: \$63.00

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 approval.

5116	01	MTWTh	12:30PM-03:00PM	3403	MCDANIEL S
5118	02W	Sa	08:00AM-02:30PM	3403	GILBERT C
5120	21	MW	06:35PM-09:35PM	3403	GILBERT C
5122	22	TTh	06:35PM-09:35PM	3403	GILBERT C

# WLD 264 Advanced Weld Process 3

Lab Fee: \$31.50

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

5126	01	MTWTh	10:25AM-11:45AM	3403	MCDANIEL S
5128	02W	Sa	08:00AM-02:30PM	3403	GILBERT C
5130	21	MW	06:35PM-09:35PM	3403	GILBERT C
5132	22	TTh	06:35PM-09:35PM	3403	GILBERT C

#### WLD 265 Production Weld Process III 6

Lab Fee: \$63.00

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 approval.

5136	01	MTWTh	12:30PM-03:00PM	3403	MCDANIEL S
5138	02W	Sa	08:00AM-02:30PM	3403	GILBERT C
5140	21	MW	06:35PM-09:35PM	3403	GILBERT C
5142	22	TTh	06:35PM-09:35PM	3403	GILBERT C

## WLD 281 Pipe Welding I 3-6

Lab Fee: \$63.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

Students will be introduced to pipe welding 1G, 2G, 5G, and 6G positions using E-6010 electrodes with schedule 60, 80, 100, 120 and various size pipes. These three credit courses may be repeated for credit up to six credits. Prerequisite: WLD 131

```
5150 01 MTWTh 12:30PM-03:00PM 3403 MCDANIEL S

5152 02W Sa 08:00AM-02:30PM 3403 GILBERT C

5153 21 MW 06:35PM-09:35PM 3403 GILBERT C

5155 22 TTh 06:35PM-09:35PM 3403 GILBERT C
```

#### WLD 282 Gas Tungsten Arc Welding II (TIG) 3

Lab Fee: \$31.50

This course introduces students to carbon steel pipe welding in 1G, 2G, 5G, and 6G positions using cup walk methods with 1/8" electrodes on schedule 60 and other various sizes of pipe. Prerequisite: WLD 132

5160	01	MTWTh	10:25AM-11:45AM	3403	MCDANIEL S
5162	02	MTWTh	12:30PM-03:00PM	3403	MCDANIEL S
5163	03W	Sa	08:00AM-02:30PM	3403	GILBERT C
5164	21	MW	06:35PM-09:35PM	3403	GILBERT C
5165	22	TTh	06:35PM-09:35PM	3403	GILBERT C

# WLD 283 Pipe Welding II 3-6

Lab Fee: \$63.00

\*Variable Credit Lab Fees are calculated at the highest rate\*

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. These three credit courses may be repeated for credit up to six credits. Prerequisite: WLD 281

```
5170 01 MTWTh 12:30PM-03:00PM 3403 MCDANIEL S

5172 02W Sa 08:00AM-02:30PM 3403 GILBERT C

5173 21 MW 06:35PM-09:35PM 3403 GILBERT C

5174 22 TTh 06:35PM-09:35PM 3403 GILBERT C
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## WLD 284 Gas Tungsten Arc Welding (TIG) III 3

Lab Fee: \$31.50

Students will use 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

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5180 01
           MTWTh 10:25AM-11:45AM
                                 3403 MCDANIEL S
5182 02W
           Sa
                08:00AM-02:30PM
                                 3403 GILBERT C
5183 21
           MW
                06:35PM-09:35PM
                                 3403 GILBERT C
5184 22
                06:35PM-09:35PM 3403 GILBERT C
           TTh
WLD
   285
           Pipe Welding III
                                       3-6
```

Lab Fee: \$63.00

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

5190	01	MTWTh	12:30PM-03:00PM	3403	MCDANIEL S
5192	02W	Sa	08:00AM-02:30PM	3403	GILBERT C
5193	21	MW	06:35PM-09:35PM	3403	GILBERT C
5194	22	TTh	06:35PM-09:35PM	3403	GILBERT C

### WLD 290 Skill Improvement II 1-6

Lab Fee: \$63.00

Extra welding time and instruction to enhance student's welding 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 approval.

5200 01	MTWTh	10:25AM-11:45AM	3403	MCDANIEL S
5202 02	MTWTh	12:30PM-03:00PM	3403	MCDANIEL S
5204 03W	Sa	08:00AM-02:30PM	3403	GILBERT C
5206 21	MW	06:35PM-09:35PM	3403	GILBERT C
5208 22	TTh	06:35PM-09:35PM	3403	GILBERT C

## WLD 295 Work Based Learning 1-6

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. Prerequisite(s): Instructor approval and concurrent enrollment in WLD 297.

5210 01 ARR ARR 3400 MCDANIEL S

## WLD 297 Work Based Learning Seminar

<sup>\*</sup>Variable Credit Lab Fees are calculated at the highest rate\*

<sup>\*</sup>Variable Credit Lab Fees are calculated at the highest rate\*

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. Co-requisite: WLD 295.

5216 01 ARR ARR 3400 MCDANIEL S